

SCHEDULE OF RATES

FOR TERM CONTRACTS FOR BUILDING WORKS

2010 EDITION

Volume 1
(Builder's Works)



ARCHITECTURAL SERVICES DEPARTMENT
HONG KONG

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Section 00

GENERAL REGULATIONS

GENERAL REGULATIONS

Associated documents

- I. This Schedule of Rates (hereinafter referred to as “this Schedule”) shall be read and used in conjunction with : -
- (a) The General Conditions of Contract and Special Conditions of Contract adopted for the Term Contract.
 - (b) The Conditions of Tender, Form of Tender and Articles of Agreement of the Term Contract.
 - (c) Drawings, Specification and Employer’s Requirements of the Term Contract.
 - (d) The term “Specification” shall mean the General Specification, Codes of Practice and other documents referred herein below, Particular Specifications and all other specification requirements issued therein and referred to in the Term Contract.
 - (e) The General Specification and other documents for building works as listed below including all current amendments issued thereto and referred to in the Term Contract : -
 - (i) General Specification for Building issued by Architectural Services Department.
 - (ii) Appropriate Sections of General Specification for Civil Engineering Works issued by Civil Engineering and Development Department.
 - (iii) Design Manual : Barrier Free Access issued by Buildings Department.
 - (iv) Code of Practice for Fire Resisting Construction issued by Building Authority, Hong Kong.
 - (f) The General Specifications, Codes of Practice and other documents for building services installations as listed below, which are issued by Architectural Services Department or Electrical and Mechanical Services Department including all current amendments issued thereto and referred to in the Term Contract : -
 - (i) General Specification for Electrical Installation in Government Buildings of Hong Kong Special Administrative Region issued by Architectural Services Department.
 - (ii) General Specification for Air Conditioning, Refrigeration, Ventilation and Central Monitoring and Control System Installation in Government Buildings of Hong Kong Special Administrative Region issued by Architectural Services Department.
 - (iii) General Specification for Mechanical Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
 - (iv) General Specification for Fire Service Installation in Government Buildings of Hong Kong Special Administrative Region issued by Architectural Services Department.
 - (v) General Specification for Lift, Escalator and Passenger Conveyor Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.

GENERAL REGULATIONS (CONT'D)

I.	(f)	(vi)	General Specification for Liquefied Petroleum Gas Installation in Government Buildings of Hong Kong Special Administrative Region issued by Architectural Services Department.	Associated documents (Cont'd)
		(vii)	General Specification for Catering Equipment Installation in Government Buildings of Hong Kong Special Administrative Region issued by Architectural Services Department.	
		(viii)	General Specification for Swimming Pool Water Treatment Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.	
		(ix)	General Requirement for Electronic Contract (ESG01) issued by Electrical and Mechanical Services Department	
		(x)	General Specification for Broadcast Reception Installation in Government Buildings of Hong Kong Special Administrative Region issued by Architectural Services Department	
		(xi)	General Specification for Public Address Systems (ESG11) issued by Electrical and Mechanical Services Department	
		(xii)	General Technical Specification for Monochrome and Colour Closed Circuit Television Systems (ESG14) issued by Electrical and Mechanical Services Department	
		(xiii)	General Technical Specification for Uninterruptible Power Supply (UPS) (ESG15) issued by Electrical and Mechanical Services Department	
		(xiv)	Code of Practice for the Electricity (Wiring) Regulations issued by Electrical and Mechanical Services Department.	
		(xv)	Code of Practice for Energy Efficiency of Electrical Installations issued by Electrical and Mechanical Services Department.	
		(xvi)	Code of Practice for Energy Efficiency of Lighting Installations issued by Electrical and Mechanical Services Department.	
		(xvii)	Code of Practice for Energy Efficiency of Air Conditioning Installations issued by Electrical and Mechanical Services Department.	
		(xviii)	Code of Practice for Minimum Fire Services Installations and Equipment and Inspection, Testing and Maintenance of Installations and Equipment issued by Fire Services Department.	
		(xix)	Code of Practice for Energy Efficiency of Lift & Escalator Installations, issued by Electrical and Mechanical Services Department	
		(xx)	Code of Practice for Lift Works and Escalator Works issued by Electrical and Mechanical Services Department.	

GENERAL REGULATIONS (CONT'D)

Associated documents (Cont'd)

- I. (f) (xxi) Testing and Commissioning Procedure for Electrical Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxii) Testing and Commissioning Procedure for Air-conditioning, Refrigeration, Ventilation and Central Monitoring and Control System Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxiii) Testing and Commissioning Procedure for Fire Services Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxiv) Testing and Commissioning Procedure for Lift, Escalator and Passenger Conveyor Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxv) Testing and Commissioning Procedure for Liquefied Petroleum Gas Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxvi) Testing and Commissioning Procedure for Catering Equipment Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxvii) Testing and Commissioning Procedure for Swimming Pool Water Treatment Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxviii) Testing and Commissioning Procedure for Broadcast Reception Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxix) Testing and Commissioning Procedure for Burglar Alarm and Security Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxx) Testing and Commissioning Procedure for Emergency Generator Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxxi) Testing and Commissioning Procedure for Steam Boiler and Calorifier Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (g) Particular Specification(s) and all other specification requirements issued and referred to in the Term Contract.

All items of works contained in this Schedule shall be executed in accordance with the conditions and stipulations as provided in the above mentioned documents, and in compliance with all requirements on workmanship, materials, plant, measurements and any other requirements as stipulated in the above documents.

GENERAL REGULATIONS (CONT'D)

II.	Where any of the definitions given in these General Regulations are at variance with those given in the Special Conditions preceding the Sections throughout this Schedule, the definitions given in the Sections in this Schedule shall take priority.	Definitions generally
“approved”	shall mean approved in writing by the Maintenance Surveyor but this approval shall not relieve the Contractor from responsibilities imposed by the Term Contract.	
“described”	shall mean described in the Specification and all current amendments (if any) issued thereto.	
“ditto”	shall mean the whole of the work described in detail in the preceding item, except as qualified in the description in which it occurs.	
“origin”	shall mean the place or country where the material (which shall be natural material only) is originally produced.	
“proprietary”	shall mean patent owned or controlled by a supplier or contractor who will be responsible for the supply or supply and installation of the patented material, article, product or works.	
“Schedule”	shall mean this Schedule of Rates.	
“specified”	shall mean specified in the Specification and all current amendments (if any) issued thereto.	
“submission”	shall mean the submission of all document like design, calculation, working drawings, shop drawings, records, etc. as required in the Special Conditions to each Section of the Schedule including obtaining the approval of the Maintenance Surveyor on the submissions.	
“exc.”	shall mean exceeding.	Abbreviations
“n.e.”	shall mean not exceeding.	
“c/w”	shall mean complete with.	
“1.50 - 3.00”	shall mean exceeding 1.50 and not exceeding 3.00.	
“bore”	shall mean nominal internal diameter.	
“dia”	shall mean nominal diameter.	
“mm”	shall mean millimetre.	
“m”	shall mean linear metre.	
“m ² ”	shall mean square metre.	
“m ³ ”	shall mean cubic metre.	
“kg”	shall mean kilogram.	
“G.S.”	shall mean the General Specification referred to in Clause I(e) and (f) where appropriate.	
“RSE”	Registered Structural Engineer.	
“TCP”	Technical Competent Person.	

GENERAL REGULATIONS (CONT'D)

Methods of measurement

- III. All works including "Supply only of materials" measured and paid for under this Schedule shall be measured in accordance with the conditions and rules detailed herein irrespective of any local or trade customs.

All works shall be measured net as completed or fixed in its place. Due consideration has been made in the Schedule rates for works executed in small quantities, narrow widths, short lengths, isolated patches, repairs, any height or locations above or below ground, difficult positions or confined spaces or any other exceptional circumstances; and no additional payment for such circumstances shall be made except where specifically provided for in this Schedule.

All works of "Supply only of materials" shall be the net quantities specified in a Works Order. No allowance or payment will be made to the Contractor for small quantities, short lengths, breakage or damage, delivery to store or any designated location as directed by the Maintenance Surveyor or any other circumstance except where specifically provided for in this Schedule.

Any disadvantage which may be entailed by items being performed under exceptional circumstances must be regarded as being offset by other items which may be proven exceptionally advantageous.

Overtime

- IV. All works shall be deemed to be executed during any working hour in a 24 hour-day (from 00:00 hour to 24:00 hour) including Sundays and General Holidays. No additional payment will be made for any overtime including : -

- (a) Overtime which is ordered by the Maintenance Surveyor in accordance with the Conditions of Contract to expedite slow progress of the work caused by default, negligence or omission by the Contractor.
- (b) Watchmen or security guard at any time.

Deductions for voids

- V. Where a minimum area is defined for the deduction of voids, such minimum shall refer only to openings or voids detached from the boundaries of the space measured. Reductions of area caused by projections or recesses from the boundary of the area measured shall always be deducted irrespective of size.

Curved or circular works

- VI. Except where specified items are included in this Schedule for curved or circular work, all work shall be measured and priced as if straight and flat. Where specific items for curved work or circular work are included, the maximum radius stated in such description shall be the limit for which curved or circular work will be paid for and any work curved to a radius greater than this limit shall be measured and priced as if straight and flat.

GENERAL REGULATIONS (CONT'D)

- VII. Where appropriate throughout this Schedule and where specified in the Term Contract, the following categories of works shall be executed by specialist sub-contractors :-
- Works executed
by specialist
sub-contractors**
- (a) Included in the list of Approved Suppliers of Material and Specialist Contractors for Public Works maintained by Development Bureau namely :-
- (i) Air-conditioning Installation
 - (ii) Audio Electronics Installation
 - (iii) Broadcast Reception Installation
 - (iv) Burglar Alarm and Security Installation
 - (v) Catering Equipment Installation
 - (vi) Diesel Generator Installation
 - (vii) Electrical Installation
 - (viii) Electrical and Mechanical Installation for Sewage Treatment and Screening Plant
 - (ix) Electronic Timing and Display Installation
 - (x) Fire Service Installation
 - (xi) Fountain Installation
 - (xii) Landscaping including hydroseeding
 - (xiii) Landslip Preventive/Remedial Works to Slopes/Retaining Walls
 - (xiv) Lift, Escalator and Passenger Conveyor Installation
 - (xv) Liquefied Petroleum Gas Installation
 - (xvi) Low Voltage Cubicle Switchboard Installation
 - (xvii) Mechanical Handling and Lifting Installation
 - (xviii) Mechanical Plant and Equipment Installation
 - (xix) Radio Electronics Installation
 - (xx) Road Marking
 - (xxi) Steam and Compressed Air Installation
 - (xxii) Structural Steelwork
 - (xxiii) Supply of Bituminous Pavement Materials and Construction of Special Bituminous Surfacing
 - (xxiv) Swimming Pool Water Treatment Installation
 - (xxv) Uninterruptible Power Supply Installation
 - (xxvi) Video Electronics Installation

GENERAL REGULATIONS (CONT'D)

**Works executed
by specialist
sub-contractors
(Cont'd)**

- VII. (b) Approved in writing by the Maintenance Surveyor namely : -
- (i) Medical Gas
 - (ii) Town Gas
 - (iii) Curtain Walling

The above categories of specialist works are not exhaustive. Other categories of works, if specified in the Term Contract, shall also be executed by specialist sub-contractors.

Due allowance is deemed to have been made in the Contract Percentages for complying with these requirements.

**Imperial equivalents
where required or
necessary**

- VIII. Whenever practicable, the Contractor shall supply materials in metric sizes and execute the works strictly in accordance with the metric dimensions specified. Imperial equivalents may be accepted only when circumstances prohibit compliance with this sub-clause (For example, statutory obligations) or where the Maintenance Surveyor considers it impracticable, undesirable or impossible to use metric sizes or dimensions or when suitable materials are not available in metric sizes.

The provision of this sub-clause shall not apply to materials which are specified in this Schedule by their actual manufactured sizes or their metric equivalents (For example, roof tiles, plywood, building boards, p.v.c. pipes, mosaic tiles) or classified in accordance with the relevant British Standards (For example, copper pipes) or other International Standards.

Schedule rates

- IX. The rates throughout this Schedule shall include for : -
- (a) All materials supplied and works executed complying strictly with the Specification as detailed in Clause I and the provision or execution of all samples of all materials or finished works in patterns where required.
 - (b) Provision of all materials and cutting and wastage on the same, except where otherwise stated, including collection, loading, conveyance, delivery, unloading, stacking, storage of the same, multi-handling between positions as directed on site and provision of storage accommodation, handling, hoisting, lowering, distributing, etc. to specified location.
 - (c) Provision of all labour including contributions to Mandatory Provident Fund, paid leave, travelling expenses, lodging allowance or living accommodation and any other allowances as required.
 - (d) Provision of all tools, plant, temporary water, power and lighting, watching and worksheds.
 - (e) All expenses for delivery, distribution or transportation of articles, materials, labour, personnel, tools, plant, worksheds etc. by all means including land, sea or air except otherwise specifically provided for in the Special Conditions of each Section in this Schedule or when specifically required and ordered by the Maintenance Surveyor.
 - (f) Executing work in any position, location and height unless otherwise stated.

GENERAL REGULATIONS (CONT'D)

IX.	(g)	Schedule rates (Cont'd)
	Providing record of photograph, location plan and schedule of existing trees, if any, within and in close vicinity (within 2.00 m) of the site boundary and works areas including protective and preservative works/measures such as tree surgery works, temporary fencing, etc. and the like, allowance for method of operation and vehicular access for tree preservation throughout the period of Works and removing all temporary protective and preservative works/measures on completion and making good all works disturbed.	
	(h) Setting up monitor points for controlling noise, vibration, settlement and lateral movement imposed on adjoining properties including provision of equipment, technical and supervisory personnel carrying out daily monitoring and submission of records as directed by the Maintenance Surveyor.	
	(i) Provision and maintaining temporary access and road as G.S. Item 1.25 and making good to match existing.	
	(j) Provision and maintaining temporary drainage system as G.S. Item 1.26 and making good to match existing.	
	(k) Provision of drawings, operation manuals and tests on samples or finished works.	
	(l) Allowance for the works to be executed by an approved applicator where required in the Specification.	
	(m) Testing and certification including the employment of independent certification bodies wherever required or necessary.	
	(n) Provision, erection, maintenance, alterations, dismantling and clearing away of : -	
	(i) All bamboo, metal or any proprietary scaffolding, staging, ladders, trestles, cradles, gondolas, platforms and similar items necessary for the execution of the works complete with all netting, coverings, screens, dust sheets, barricades, catch-fans, protective canopies;	
	(ii) All types of non fire-rated covered walkways and hoardings complete with gateways, adequate lighting, associated power supply and electrical work as required by the Maintenance Surveyor amongst that shall include the standard covered walkways and hoardings Type A to Type H inclusive; and	
	(iii) Similar temporary measures including but not limited to protective shield coverings, fences, barriers and the like necessary to protect new works and existing surfaces or to protect the public from harm, dust or nuisance unless specifically covered by the Special Conditions of each Section in this Schedule. The Schedule rates shall also include the erection, alteration and dismantling of such temporary measures on a daily basis where required by the Maintenance Surveyor.	

GENERAL REGULATIONS (CONT'D)

Schedule rates
(Cont'd)

- IX. (n) Except for standard covered walkways and hoardings Type A to Type H, the Contractor shall submit detailed drawings together with supporting calculations certified by TCP or RSE for approval and provide operation manuals of any proprietary systems proposed. Standard drawings of covered walkways, hoardings and gateways can be found in the Steel and Metal Work Section of this Schedule and are listed as follows :-
- (a) Type A hoarding - corrugated steel fence as detailed on drawings 9711/A/A01 to 9711/A/A05 and 9711/A/S01 to 9711/A/S04.
 - (b) Type B hoarding - covered walkway as detailed on drawings 9711/B/A01 to 9711/B/A07 and 9711/B/S01 to 9711/B/S05.
 - (c) Type C hoarding - covered walkway with single deck catch platform as detailed on drawings 9711/C/A01 to 9711/C/A07 and 9711/C/S01 to 9711/C/S05.
 - (d) Type D hoarding - covered walkway with double deck catch platform as detailed on drawings 9711/D/A01 to 9711/D/A07 and 9711/D/S01 to 9711/D/S05.
 - (e) Type E hoarding - corrugated steel fence (surface-mounted footing) as detailed on drawings 9711/E/A01 to 9711/E/A05 and 9711/E/S01 to 9711/E/S04.
 - (f) Type F hoarding - covered walkway (surface-mounted footing) as detailed on drawings 9711/F/A01 to 9711/F/A07 and 9711/F/S01 to 9711/F/S05.
 - (g) Type G hoarding - covered walkway with single deck catch platform (surface-mounted footing) as detailed on drawings 9711/G/A01 to 9711/G/A07 and 9711/G/S01 to 9711/G/S05.
 - (h) Type H hoarding - covered walkway with double deck catch platform (surface-mounted footing) as detailed on drawings 9711/H/A01 to 9711/H/A07 and 9711/H/S01 to 9711/H/S05.
 - (o) Clearing away debris, surplus materials or other materials arising from the works and leaving the works and areas affected by the works clean and tidy on completion to the satisfaction of the Maintenance Surveyor.
 - (p) Provision of mechanical dump truck covers in accordance with Particular Specification for Mechanical Dump Truck Covers.
 - (q) All superintendence, establishment charges, overhead expenses and profit.
 - (r) Any cost and/or expenses incurred for carrying out the works at all times including working outside normal working hours as provided in Clause IV.
 - (s) Any other expenses incurred in conforming with the Term Contract.
 - (t) Reinstatement and making good surfaces disturbed.
 - (u) Imperial equivalents wherever required or necessary.

Where the Contractor considers any of the rate contained in this Schedule is insufficient or inadequate, the Contractor is deemed to have made all necessary allowances in the Contract Percentages adjustment and/or in any other priced items in the Term Contract for executing the works as contained in this Schedule and in compliance with all requirements as stipulated in the Term Contract.

GENERAL REGULATIONS (CONT'D)

- X. Rates for items not specifically mentioned in this Schedule shall be valued as follows :-
- Rates for items not specifically mentioned in this Schedule**
- (a) Proportional rate When an article, a material, workmanship or service is of similar form, character or quality to that detailed in the Schedule or executed under similar conditions and circumstances as described therein, then at a rate equal to a Schedule rate but with a fair adjustment for the difference in form, character and quality or in conditions and circumstances, and such rate to be agreed upon between the Maintenance Surveyor and the Contractor.
- Such proportional rate shall be subject to relevant Contract Percentage adjustment.
- (b) Star rate When an article, a material, workmanship or service is not of similar form, character or quality to that detailed in the Schedule or not executed under similar conditions and circumstances as described therein, or when work or material of any kind which is not detailed in the Schedule, then at a reasonable rate to be agreed upon between the Maintenance Surveyor and the Contractor.
- Such star rate shall not be subject to relevant Contract Percentage adjustment.
- (c) Re-applicable rate A rate fixed in accordance with the Term Contract requirements and to be re-applicable in any other Works Orders as approved by the Maintenance Surveyor for the whole duration of the Term Contract and not subject to adjustment of fluctuation and Contract Percentage adjustment.
- XI. The Schedule rates in this Schedule are derived from the basic rates of provisions of labour, materials, plant and all other provisions as stated in this Schedule including adjustments made to the basic rates giving due consideration of market trends, trade practices, procurement strategies and conditions under which term contracts works are executed, which may include but not be limited to works executed in small quantities, narrow widths, short lengths, isolated patches, repairs, any height or locations above or below ground, difficult positions or confined spaces or any other exceptional circumstances of the works.
- Adjustments made to basic rates and application of Contract Percentages**
- In all cases, Schedule rates shall be applied in the valuation of works before applying any relevant Contract Percentages contained in the Form of Tender of the Term Contract.
- The Contract Percentages contained in the Form of Tender shall include for all costs and expenses incurred in connection with the works and are necessary in fulfilling the requirements of the Term Contract where they are not separately itemized or stated in this Schedule
- XII. When materials are supplied to the Contractor by Government or other designated suppliers, no allowance will be made to the Contractor other than the payment for "Fix only" ("Lay only" or "Set only", etc.) as detailed under the appropriate items of this Schedule.
- Materials supplied by Government or other designated suppliers**

GENERAL REGULATIONS (CONT'D)

“Supply only”

- XIII. The term “Supply only” used throughout this Schedule shall mean the provision complete by the Contractor of an article, a fitting or a material. The rates for such items shall include for, where applicable, obtaining and taking delivery of the article, fitting or material, transporting by land, sea, or air to sites or Government stores or other designated locations as directed by the Maintenance Surveyor, and all necessary off-loading and moving into sites, Government stores or other designated locations.

The rates listed in the “SUPPLY ONLY OF MATERIALS” in each Section of this Schedule shall include all the foregoing charges and allowance for replacement of materials damaged during delivery to sites, off-loading and moving into sites, Government stores or other designated locations as directed by the Maintenance Surveyor.

**“Take down
 (“Take up” or
 “Take out”, etc.)
 and clear away”**

- XIV. The term “Take down (“Take up” or “Take out”, etc.) and clear away” used throughout this Schedule shall mean execution complete by the Contractor of the work of taking down, taking up or taking out of an existing article, fitting or material either in whole or in part and removing from site and disposing of the same. The rates for such items shall include for all or any of the following : -

- (a) Works executed by specialists and payment of all fees and charges when required.
- (b) Taking down, taking up or taking out of the article, fitting or material either in whole or in part together with any associated plugs, holdfasts, lugs, brackets and other fixings and all necessary cutting out and disposal.
- (c) Making good any works disturbed and any damage to surrounding surfaces and filling up all mortices, holes, etc. or alternatively leaving the same open and clean to receive readily new articles, fittings or materials.
- (d) Reinstatement and making good surfaces disturbed by specialists and payment of all charges, if required.
- (e) Preparing edges, ends or surfaces of remaining material to receive junction with new.
- (f) Taking up or removing covers, access doors, etc. and the like for the execution of the works and re-fixing the same on completion.

The articles, fittings, or materials taken down shall become property of the Contractor. Unless otherwise specified, due allowance for credit has been considered in the Schedule rates where applicable.

GENERAL REGULATIONS (CONT'D)

- XV. The term "Take down ("Take up" or "Take out", etc.) and set aside for re-use" used throughout this Schedule shall mean execution complete by the Contractor of the work of taking down, taking up or taking out of an existing article, fitting or material either in whole or in part and setting the same aside on site or transporting to Government stores or other Government sites for subsequent re-use. The rates for such items shall include for all or any of the following : -
- "Take down ("Take up" or "Take out", etc.) and set aside for re-use"**
- (a) Works executed by specialists and payment of all fees and charges when required.
 - (b) Carefully taking down, taking up or taking out of the article, fitting or material together with associated plugs, holdfasts, lugs, brackets and other fixings and all necessary cutting out and disposal.
 - (c) Thoroughly cleaning, oiling and adjusting the article, fitting or material ready for re-use, dismantling, re-assembling again as necessary, moving and stacking or putting into stores on sites or alternatively loading, transporting, unloading and moving to Government stores or other Government sites.
 - (d) Making good any works disturbed and any damage to surrounding surfaces and filling up all mortices, holes, etc. or alternatively leaving the same open and clean to receive readily re-used or new articles, fittings or materials.
 - (e) Reinstatement and making good surfaces disturbed by specialists and payment of all charges, if required.
 - (f) Preparing edges, ends or surfaces of remaining material to receive junction with re-used or new.
 - (g) Repairing or replacing at Contractor's own cost any damage caused to the articles, fittings or materials during taking down, taking up, taking out, etc. and transit.
 - (h) Taking up or removing covers, access doors, etc. and the like for the execution of the works and re-fixing the same on completion.
- XVI. The term "Fix only" ("Lay only" or "Set only", etc.) used throughout this Schedule shall mean execution complete by the Contractor of the work of fixing, laying, setting, jointing, re-fixing, re-laying, re-setting and re-jointing an article, a fitting or a material made available free of charge to the Contractor by Government or it has been previously taken down. The prior taking down of the existing articles, fittings or materials shall be measured separately and paid for at the appropriate rates under applicable Sections of this Schedule. The rates for such items shall include for any or all of the following : -
- "Fix only"
("Lay only"
or "Set only",
etc.)**
- (a) Works executed by specialists and payment of all fees and charges when required.
 - (b) Taking delivery of the articles, fittings or materials at Government stores or other designated suppliers, loading, transporting to sites, unloading, checking and examining the same and storing on sites and returning any crates and other packings to Government stores, if required.
 - (c) Taking the articles, fittings or materials from stores on sites, sorting, cutting and fitting, fabricating, assembling, moving, hoisting, distributing at locations, fixing, laying, setting, jointing, re-fixing, re-laying, re-setting and re-jointing in new or existing work, opening or position.
 - (d) Providing all fixing and jointing materials such as nails, bolts, nuts, washers, screws, gaskets, mastic, adhesive, mortar and the like or other fixing and jointing materials made available from taking down.
 - (e) Executing all plugging and screwing, jointing, cutting all mortices and grouting the same, and executing all cutting, fitting, easing or adapting necessary to the articles, fittings or materials to the positions in which the same are to be fixed, and oiling and leaving in good working order.

GENERAL REGULATIONS (CONT'D)

- “Fix only”
 (“Lay only”
 or “Set only”,
 etc.)
 (Cont'd)**
- XVI. (f) Making good any damage caused to the articles, fittings or materials and surrounding surfaces and making good new or existing finishes up to the same.
- (g) Reinstatement and making good surfaces disturbed by specialists and payment of all charges, if required.
- When the articles, fittings or materials despite having been taken down from another positions and set aside for re-use or having been delivered by Government or other designated suppliers or their agents are made available on site, no deduction will be made from the rates of “Fix only” (“Lay only” or “Set only”, etc.) for transporting the said articles, fittings or materials to site.
- Built up fittings or
 composite units**
- XVII. The rates for “Take down and clear away”, “Take down and set aside for re-use” and “Fix only” are not intended to cover built up fittings or composite units, i.e. fittings or units that are fabricated and can be moved in their entirety or broken down into fabricated components. These items are to be measured as the appropriate items in the respective Sections unless otherwise provided in this Schedule.
- Nominated
 Sub-contractors’
 accounts**
- XVIII. When works are carried out by Nominated Sub-contractors and facilities for the execution of such works are afforded to the Nominated Sub-contractors by the Contractor and accounts for such works are paid by the Contractor in accordance with the Conditions of Contract, the percentage addition allowed to the Contractor on the net cost of such works shall be as that contained in the Form of Tender for “Profit and Attendance on Nominated Sub-contractors’ Works”.
- “Making good”**
- XIX. The term “Making good” shall be understood as including all labour and materials necessary to bring the disturbed area to the same face, colour, texture, etc., in the same materials as the surrounding work and shall include for painting, colouring and/or varnishing any new work to match the surrounding existing work to the entire satisfaction of the Maintenance Surveyor.
- Daywork**
- XX. When daywork is ordered by the Maintenance Surveyor, measurement of daywork shall be made according to the rules set out in Section 17 - Labour and Section 18 - Plant Hire and Services of this Schedule.
- “Utility Connection
 And Pavement
 Works”**
- XXI. The term “Utility Connection And Pavement Works” shall mean the works of drainage connection, water supply connection, construction of run-in and reinstatement of footways which shall be executed complete by contractors selected and employed by the Contractor from the “List of Approved Contractor for Public Works in Group A, B or C for Road & Drainage Works” for the drainage connection and construction of run-in and reinstatement of footways and from the “List of Approved Contractors for Public Works in Group A, B or C for Waterworks” for the water supply connection work.
- When Utility Connection and Pavement Works are required to be executed under the Term Contract and are ordered specifically by the Maintenance Surveyor for such purpose, the Contractor will be reimbursed a lump sum fee payment as included in Item 01101 in Section 01 – Excavation for compliance with the requirements stated herein and as provided in the Term Contract for the Utility Connection and Pavement Works. This lump sum fee payment is an allowance made for all costs and expenses other than the valued works executed in connection with the Utility Connection and Pavement Works under the relevant Sections in this Schedule, and shall include for the following :-
- (a) Complying with the requirements and procedures in connection with the Utility Connection And Pavement Works specified in the Particular Specification referred to in the Term Contract and submitting assessments and reports as required.
- (b) Liaising with the relevant authorities and utility companies, preparing and submitting relevant drawings, programmes and documents and completing all the forms in connection with the Utility Connection And Pavement Works.
- (c) Submitting all the detailed particulars in connection with the granting of an Excavation Permit [Note : Excavation Permit means any excavation permit issued by the Government in respect of the Utility Connection And Pavement Works under Section 8 of the Land (Miscellaneous Provision) Ordinance] as required by the Maintenance Surveyor.
- (d) Obtaining approvals and permits from relevant utility companies or Government departments.

GENERAL REGULATIONS (CONT'D)

- XXI. (e) Complying with the conditions of any Excavation Permit applicable to the Utility Connection And Pavement Works.
- (f) Providing and maintaining temporary road or access where required for pedestrian and vehicular traffic diversions and subsequent clearing away after completion of Works.
- (g) Providing and maintaining traffic control as G.S. Item 1.18.
- (h) Locating and protecting existing services as G.S. Item 1.22.
- (i) Carrying out all necessary site inspections (including handing over inspections) jointly with the relevant authorities and utility companies.
- (j) Provision of identification tapes along the water connection mains.
- (k) Cleaning and sterilization of fresh water mains for making connections.
- (l) Provision of as built drawings and test reports as specified.
- (m) Protection of curbs, masking and unmasking of drainage channels, manhole covers, gully gratings, expansion joints, road studs and road marking.
- (n) Provision, maintenance and removal of all measures to maintain traffic flow including labour and temporary traffic diversion lighting and signs and paying all charges incurred.
- (o) Provision, maintenance and removal of temporary road, walkway, covers to trenches and the like.
- (p) Making good all surfaces, features, etc. and the like disturbed by all temporary road, access, traffic control, pedestrian footway, etc. and the like to match existing and including all requirements as stipulated in the Term Contract for carrying out the Utility Connection and Pavement Works.

**“Utility Connection
And Pavement
Works”
(Cont'd)**

This lump sum fee payment shall only be paid once for each project or each location specified in the Works Order. Works executed in connection with the Utility Connection and Pavement Works will be measured separately as in accordance with the General Regulations and the Special Conditions of the relevant Sections in this Schedule.

- XXII. Measurements shall be recorded to two decimals of an unit and quantities shall be rounded and billed to the nearest two decimals of an unit.

**Submission of
measurement
and accounts**

GENERAL REGULATIONS (CONT'D)

Materials/Products

- XXIII. All materials/products shall be based on the corresponding properties and/or performance standards as stipulated in the Specification (as defined in Clause I(d) herein) and set out in this Schedule.

Certain proprietary materials, products or works in this Schedule are specified as "proprietary" or "approved" or by their origins, properties and/or performance standards without specifying their brand names. Certificates of origins, technical literatures and catalogues, compliance test reports, manufacturers' guarantees or warranties, samples and mock-ups of these materials, products or works should be submitted or provided for the Maintenance Surveyor's written approval before bulk purchase, delivery and execution. Any of these materials, products or works delivered or executed without the Maintenance Surveyor's prior written approval should be removed or reinstated by the Contractor at their own expenses.

For all materials, products and works within the definition of "proprietary" in Clause II, the Contractor shall be further required to have the works executed by approved sub-contractors/applicators and submit technical literatures, method statements, etc. where required by the Maintenance Surveyor or as stated in the Term Contract.

Due allowance is deemed to have been made in the Contract Percentages for complying with all of the above requirements.

Materials/Products specified as "specific quality"

- XXIV. Certain materials/products in this Schedule are specified as of "specific quality". These shall generally be materials/products of significance, such as those that are safety critical, prestigious in nature, or such are required to create a specific visual impact to the completed works, or are critical to the completed works from their functionality, operation and maintenance perspectives that the quality of such materials/products exceeds the requirement generally stated in the General Specification and in the Term Contract.

The Contractor shall provide authentication of documentary evidence as specified in Clause XXIII herein to identify the properties and/or performance standards of the materials/products conform to those stipulated in the Specification and set out in this Schedule and the Contractor shall provide for the Maintenance Surveyor's approval proof to justify that the subject materials/products are generally of higher quality than that specified in the General Specification and the requirements as stated in the Specification of the Term Contract. Such proof may include carrying out appropriate quality tests to verify the quality of the subject materials/ products is of quality higher than that specified in the General Specification, or obtaining certification from an independent testing authority/expert (to be approved by the Maintenance Surveyor) confirming of such specific quality.

Prior to proceeding with the ordering of the subject materials/products, the Contractor's documentary evidence and proof of specific quality must be approved by the Maintenance Surveyor in writing and the Contractor has obtained from the Maintenance Surveyor written confirmation of inclusion of the extra allowance for specific quality requirements. Any materials/products delivered to the Site without the Maintenance Surveyor's prior written approval and prior confirmation should be removed and the works reinstated by the Contractor, all at his own expenses.

Due allowance is deemed to have been made in the Contract Percentages for complying with all of the above requirements.

GENERAL REGULATIONS (CONT'D)

- XXV. Throughout this Schedule, the payment of materials/products shall generally be assessed according to the corresponding properties or performance standards as set out in this Schedule (with reference to the Specification) regardless of the materials/products referred as "proprietary" or "approved" or by their origins, or not.
- The onus of proof is vested with the Contractor to identify the origins, properties and/or performance standards of materials/products used in the works corresponding to those set out in this Schedule (with reference to the Specification), and to provide the necessary documentary evidence including but not limiting to certificate of origins, technical literatures and catalogues, compliance test reports, manufacturers' guarantees or warranties, technical literatures, sub-contractors'/ applicators' warranties and the like of the materials/ products specified or approved for use by the Maintenance Surveyor for payment of the corresponding materials/products as set out in this Schedule.
- Failure to provide the required documentary evidence to the satisfaction of the Maintenance Surveyor or failure to conform to or comply with the requirements as stated in the submitted documentary evidence, will only entitle the Contractor for the basic costs of the materials/products, such basic costs and types of materials/ products shall be ascertained by the Maintenance Surveyor.
- As prerequisites for entitlement of payment to cover for the extra allowance for specific quality requirements, confirmation in writing shall be obtained from the Maintenance Surveyor that the valuation shall be based on Schedule rates of the corresponding items described as of specific quality; or based on basic Schedule rates plus the extra allowance expressed as a percentage addition to the basic Schedule rates of the corresponding items in this Schedule. The Contractor shall also provide authenticated documentary evidence as stipulated in Clause XXIV above.
- XXVI. Whenever the unit rate for an item exceeds \$99,999.99, it has been divided by a factor ("adjustment factor") to reduce the figure to fall within \$99,999.99 ("adjusted rate") for inclusion in this Schedule. Such unit rate before adjustment is described in the item description as the actual rate. When the adjusted rate is to be used for all purposes under the Term Contract, such adjusted rate shall be multiplied by the adjustment factor to revert it back to the actual rate before making any adjustment of the relevant Contract Percentages.
- XXVII. Discount factors, where applicable, shall be applied to the Schedule rates in accordance with the conditions as stated in the Appendix to Form of Tender of the Term Contract.
- XXVIII. This Schedule comprises Volume 1 for Builder's Works and Volume 2 for Building Services Works (B.S. Works). The compilation of unit rates in these two Volumes of Schedule of Rates are made with due consideration on the specific nature, purpose and requirements which would vary for the execution of the builder's works and the building services works.
- The application of Schedule rates contained in each Volume of the Schedule shall be restricted to valuation of works contained under that particular Volume of Schedule of Rates. Unless with the written approval by the Maintenance Surveyor, any similar Schedule rates that are found in either volume of Schedule of Rates shall not be permitted to apply for valuation of works in the other volume of the Schedule of Rates; e.g. Schedule rates in Volume 1 for Builder's Works shall apply for valuation for builder's works only and shall not be used for valuation of building services works, and vice versa.
- Where similar Schedule rates are found in different Sections within the same volume of the Schedule of Rates and such valuation shall in so far as reasonable be based on Schedule rates of the same Section under which the works are executed.

Payment for materials/products specified by their origin or specified as "proprietary" or "approved" or "specific quality"

Adjustment to unit rates exceeding \$99,999.99

Discount factors

Application of Schedule rates

GENERAL REGULATIONS (CONT'D)

Disclaimer

XXIX. This Schedule is compiled for use by Term Contracts for which the Architectural Services Department is responsible. The information contained in this Schedule is not intended to be used for other purposes nor relied upon other than for the purpose expressly stated herein. Neither the Architectural Services Department nor any other agency or entities assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information contained in this Schedule.

Entities using this Schedule for their own purposes shall use it at their own discretion and shall acknowledge and shall deem to have acknowledged any risks and consequences resulted from such use.

Section 01

EXCAVATION

EXCAVATION

SPECIAL CONDITIONS

Measurement
generally

- I. Excavation shall be measured net with no increase for working space or bulkage of material, allowance for both having been made in the rates. Blasting will not be permitted. Should occasion ever occur when blasting is permitted, no adjustment will be made to the rates in this Schedule.

Where excavation oversite to areas exceeds an average of 200 mm deep, it shall be measured as reduced level excavation from existing ground level (i.e. no top soil or surface excavation item shall first be measured). Trench for foundation, manholes, etc. and other excavation items shall be measured from the reduced levels or ground levels, whichever is the lower. The definitions of trench excavation and bulk excavation shall be in accordance with G.S. Clause 3.01(x) and (xi).

Excavation for pipes and cables shall be measured to the nearest 0.25 m average depth.

When measuring "Extra over pipe trench excavation for excavating in brickwork, concrete, solid rock etc.", the net width of trench excavation measured shall be in accordance with Table 23.2 in Drainage Section of the General Specification for Building.

Measurements for spreading or removal of spoil arising from the Contractor's excavation shall be made net on the basis of the solid contents before excavation and no allowance shall be made for increase in bulk. Where the spoil to be removed has not been excavated by the Contractor, as in the case of landslips, debris or rubbish, etc., the actual cubic contents shall be measured.

Soil, hardcore, granular or graded granular filling items shall be measured net after completion.

The girth of trees to be felled or transplanted shall be measured at a point 1.00 m above ground level.

The diameter of trees to be pruned shall be measured at a point 1.00 m above ground level.

Measurement
of steel sheet
piling

- II. Throughout this Schedule, rates for all Sections shall include for all temporary preventive, protective and supporting measures to the faces of excavation. No payment will be made for steel sheet piling and the likes under any circumstances, except where specifically ordered by the Maintenance Surveyor in writing.

Steel sheet piling including non-standard make up piles shall be measured net on the area of the piling driven. The measurement of the calculated weight shall be the length along the centre line of the alignment of completed sheet pile multiplied by the average depth from the ground level or reduced level, whichever the lower to the toe edge of the pile driven.

Extra over for corner piles and junction piles shall be the net length measured from the ground level or reduced level, whichever is the lower, to the toe edge of the piles driven.

The measurement of burning off the tops of steel piles shall be the length along the centre line of the alignment of piles driven. This item will only be paid for, if ordered by the Maintenance Surveyor in writing.

All temporary strutting and shoring to sheet piling including waling, strutting, bracing, posts and connecting members shall be found in Section 10 - Steel and Metal Work of this Schedule.

Measurement
of hydroseeding
and protective
layer

- III. Hydroseeding and protective layer shall be measured as the surface area of the face to be covered and no allowance shall be made for surface irregularities or other local peculiarities. No deduction shall be made for an area not exceeding 1.00 m².

SPECIAL CONDITIONS (CONT'D)

- | | | |
|-------|--|---|
| IV. | The measurement shall be the compacted thickness as specified by the Maintenance Surveyor, whether laid in one or more layers. No deduction shall be made for voids not exceeding 1.00 m ³ . | Measurement of earth, granular and hardcore filling |
| V. | Filter membrane shall be measured as the surface area of the face to be covered and no allowance shall be made for surface irregularities or other local peculiarities. No deduction shall be made for an area not exceeding 1.00 m ² . | Measurement of filter membrane |
| VI. | Clear and remove from the Site rubbish, grass, shrubs, undergrowths, etc. shall be measured as the surface area of the face for clearing rubbish, cutting grass, shrubs, undergrowths, vegetable or top soil etc. and no allowance shall be made for surface irregularities or other local peculiarities. No deduction shall be made for an area not exceeding 1.00 m ² . | Measurement of clearing ground, cutting undergrowths, etc. |
| VII. | Establishment Works shall only be measured where such operations are specifically ordered by the Maintenance Surveyor in a separate Works Order.

Unless otherwise stated the date for commencement of the Establishment Works shall be the day immediately following the date of completion of the Works Order where the Landscape Softworks were executed. | Measurement of Establishment Works |
| VIII. | Ornamental boulders shall be measured as the smallest square or rectangular block laid. In the case of ornamental boulders exceeding 3.00 m ³ , they shall be measured in the multiple of the largest size and the remainders shall be added. For example, a block of 10.25 m ³ shall be measured 3 times boulders 1.00 - 3.00 m ³ and the remainders are 1 times boulders of 0.75 - 1.00 m ³ and 1 times 0.25 - 0.50 m ³ . | Measurement of ornamental boulders |
| IX. | The rates for all excavation items shall include for : - | Rates for excavation items |
| | (a) Mobilization, maintenance and demobilization of excavator, roller, compaction plant, moving plant and the like. | |
| | (b) Allowance for working space and increase in bulk of all materials arising from excavation, down taking, alteration or demolition. | |
| | (c) Excavating in any type of level or sloping ground encountered including earth, clay, sand, gravel, loose boulders not exceeding 0.20 m ³ , etc. (Note : - "Extra for excavating in solid rock" as defined in Clause XIII below will be paid in addition). | |
| | (d) Setting out the work and all profiles, rods, etc., and work straight or circular on plan. | |
| | (e) Cutting down shrubs, undergrowth, etc., including trees not exceeding 150 mm girth, grubbing up roots and clearing away. | |
| | (f) Removing old drains and sealing off connections. | |
| | (g) Getting out excavated material by any means necessary and deposit excavated material in heaps including multi-handling within Site area. | |
| | (h) Keeping excavations free from water by baling, pumping, temporary diversion channels or other means. All contaminated water arising from excavation shall not be disposed into the public drainage system. All additional expenses incurred shall be included in the rates. | |

SPECIAL CONDITIONS (CONT'D)

Rates for
excavation items
(cont'd)

- IX. (i) Trimming sides, vertical or battered as required, and trimming, levelling, grading and ramming bottoms, and trimming slopes and banks.
- (j) Protecting the exposed surfaces of excavation by any means necessary.
- (k) Strutting, shoring, supporting and protecting measures for the faces of excavation. (Note : - Timbering/Steel works required to be left-in shall be paid for, if ordered by the Maintenance Surveyor in writing, at the rates contained in Section 08 - Carpentry and Joinery and Section 10 - Steel and Metal Works of this Schedule.)
- (l) Steel plates or other approved coverings to trenches or pits where required to provide crossings for pedestrian and vehicular traffic, shall comply with all regulations and requirements including providing traffic lights, warning lights, signs etc. and payment of all charges incurred.
- (m) All multi-handling and temporary spoil heaps, on or off-site between excavation and final position.
- (n) Temporarily supporting drain pipes, cables, etc., during excavation and making good any damage that may be caused to the same.
- (o) Filling with concrete or backfilling and compacting strictly in accordance with G.S. to "over excavation" areas or as a result of the Contractor's proposed method of excavation or where additional concrete is placed in lieu of trimming rock bottoms to exact level.
- (p) Making good with lean concrete any surface irregularities under the formation of rock cuttings which remain after trimming of rock excavation.
- (q) Preparation of record survey including an over Site topographical survey by a registered surveyor when ordered by the Maintenance Surveyor in writing.
- (r) Design of Temporary Works associated with earthworks, including temporary slopes, stockpiles and drainage by Registered Structural Engineers. Submit the design and calculations of the Temporary Works for the approval of the Maintenance Surveyor. Prepare and submit method statement for the erection and removal of Temporary Works as required.
- (s) Settlement monitoring points.

Rates for "Extra
for excavating
in brickwork,
concrete, etc."

- X. The rates for "Extra for excavating in brickwork, concrete, solid rock, etc." shall further include for trimming the faces or edges of the work remaining.

Rates for soil
filling and
removal

- XI. The rates for soil filling and removal shall further include for all multi-handling to final position.

Rates for soil,
hardcore,
granular and
graded granular
filling

- XII. The rates for all soil, hardcore, granular and graded granular filling items shall further include for : -
- (a) Mobilization, maintenance and demobilization of earth moving plant, rollers, compaction plant and other plant necessary for the works.

SPECIAL CONDITIONS (CONT'D)

XII.	<ul style="list-style-type: none"> (b) Deposition and compaction including compaction in layers to the required density. (c) Finishing surfaces level or to falls, gradients, crowns and cambers to exact profile required, with each successive surface finished parallel to the final finished surface. (d) Additional bulk of material required to allow for compaction and consolidation. (e) All wheeling and multi-handling of material from temporary spoil heaps to place of final incorporation in the work. (f) Forming and trimming banks and slopes. (g) Temporary retaining boards to edges and slopes and any necessary handpacking at stepping and the like. (h) Removing, replacing or making good placed or compacted filling material as required where filling material subsequently becomes damaged or unsuitable. (i) Protecting the exposed surfaces of filling by any means necessary. (j) Keeping and maintaining the exposed surfaces clean. (k) Preparation of record survey when ordered by the Maintenance Surveyor in writing. (l) Soil tests and in-situ tests including : - <ul style="list-style-type: none"> (i) Collect samples selected by the Maintenance Surveyor. (ii) Carrying out all tests of soil samples by the personnel of an approved independent firm using their own equipment and providing such labour and assistance as may be required. (iii) Preparation of test reports. (iv) Payment of all charges incurred. 	<p>Rates for soil, hardcore, granular and graded granular filling (cont'd)</p>
XIII.	<p>Solid rock shall be defined as "Rock, which in the opinion of the Maintenance Surveyor can only be excavated by means of wedging and splitting, the use of pneumatic tools or stitch core, cut, drill, core hydraulic splitter, and shall only be allowed when the net quantity to be actually cut, split and excavated in any isolated individual portion exceeds 0.20 m³, except that in the case of excavating post holes the net quantity excavated shall be paid for". For the purposes of this Schedule, excavation in solid rock has been assumed based on excavation by hand or with tools. Should occasion ever occur when blasting is permitted, no adjustment will be made to these rates but the Contractor shall submit method statement for approval, provide blast screens as necessary and take all other precautions and make good any damage caused at his own expense.</p>	<p>Rates for rock excavation</p>
XIV.	<p>Any brick, concrete, rock, etc., arising from the excavations shall become the property of the Contractor, and may if required, and approved by the Maintenance Surveyor, be broken and used for hardcore filling. For the purposes of removal, these materials shall be paid for as ordinary soils but if they are subsequently used as hardcore filling on the Site, no removal from the Site will be measured.</p>	<p>Brick, concrete, rock, etc., to become property of the Contractor</p>
XV.	<p>The item for clearing rubbish, cutting down grass, shrubs, undergrowth, etc., will only be paid for when such work is not in conjunction with excavation works.</p>	<p>Clearing ground, cutting down undergrowth, etc.</p>

SPECIAL CONDITIONS (CONT'D)

**Rates for steel
sheet piling**

- XVI. The rates for steel sheet piling shall further include for : -
- (a) Welding, jointing and splicing.
 - (b) Fabrication of non-standard make up piles.
 - (c) Initial trenching and guide frames.
 - (d) Temporary strutting and waling for driving.
 - (e) Preparing and submitting details and drawings with method statement all in accordance with G.S. Items 4.02, 4.03, 4.04, 4.06, 4.07, 4.08, 4.15 and 4.16 and by Registered Structural Engineer if required.
 - (f) Additional work and cost related to obstructions in accordance with G.S. Items 4.12 and 4.13.
 - (g) Preparing and applying protective coating or other surface treatment to sheet pile.
 - (h) Extraction of sheet piles.
 - (i) Left-in position sheet pile when ordered by the Maintenance Surveyor in writing.

**Rates for
burning off
tops of sheet
pile**

- XVII. The rates for burning off tops of sheet pile shall further include for : -
- (a) Provision, maintenance and removal from Site tools and equipment necessary for the works.
 - (b) Disposal of surplus length of piles.
 - (c) Cleaning the affected area and applying protective coatings or other surface treatment.

**Rates for
hydroseeding**

- XVIII. The rates for hydroseeding shall further include for : -
- (a) Cleaning ground and scarifying existing soil.
 - (b) Watering.
 - (c) Protection of prepared ground surfaces.
 - (d) Providing and fixing protective layers of biodegradable fabric including allowance for laps and staples.
 - (e) Making good areas not covered by approved germinated grass.
 - (f) First cut and subsequent cuts.
 - (g) Follow up fertiliser.
 - (h) Insect and disease control.
 - (i) Provision of samples and testing certificates.

SPECIAL CONDITIONS (CONT'D)

XIX	The rates for turfing shall further include for : -	Rates for turfing
	(a) Cleaning ground and scarifying existing soil.	
	(b) Cultivation and watering.	
	(c) Protection of prepared ground surfaces.	
	(d) Firming turfs with wooden beaters.	
	(e) Dressing of finely sifted topsoil mix and well brushing into joints.	
	(f) Adjusting any inequalities in finished levels.	
	(g) Making good areas not covered by approved germinated grass.	
	(h) First cut and subsequent cuts.	
	(i) Preplant fertiliser and follow up fertiliser.	
	(j) Insect and disease control.	
	(k) Provision of samples and testing certificates.	
XX.	The rates for transplanting trees shall further include for conforming to the Specification and the following : -	Rates for transplanting trees
	(a) Submission of method statement on all tree works to the Maintenance Surveyor prior to any works including excavation, crown thinning, root pruning and undercutting on the existing tree(s).	
	(b) Mobilization, maintenance and demobilization of excavator, mobile crane, lorry with lifting jibs and other plant necessary for the works.	
	(c) Cleaning ground, existing soil and contaminated ground.	
	(d) Cultivation and watering.	
	(e) Protection of prepared tree pit.	
	(f) Root pruning and undercutting of the root system of rootball to the required size.	
	(g) Crown thinning of the plant to the form and shape as required.	
	(h) Protection of trees from mechanical damages, excessive sunlight, wind and drought including dressing wounds.	
	(i) Wrapping the rootball with hessian or spraying with approved anti-transpiration spray and keeping the whole plant moist at all time.	
	(j) Pit planting tree.	
	(k) Provision of metal stakes, ties, guys and guying stakes as required.	
	(l) Preplant fertiliser and follow up fertiliser.	
	(m) Insect and disease control.	
	(n) Replacement of trees in case of death of the transplanted trees.	
	(o) Back-filling voids and making good disturbed surface to match existing.	

SPECIAL CONDITIONS (CONT'D)

Rates for Establishment Works	XXI.	The rates for Establishment Works shall include for : - (a) Maintaining the works for an establishment period of twelve months. (b) Regrassing where grass fails to become established or not conforming to the Specification. (c) Watering and carrying out operations based on the assessment of the Establishment Works required. (d) Corresponding operations for Establishment Works, likewise weeding, mulching, forking, applying fertilizers, etc.
Rates for soiling in landscape areas generally	XXII.	The rates for all soiling in landscape areas shall further include for : - (a) Mixing, depositing, compaction, spreading, levelling and beating. (b) Multiple handling. (c) Protection of prepared ground against compaction, erosion and siltation. (d) Importing soils from any source. (e) Provision of samples. (f) Additional bulk of material required to allow for compaction and consolidation. (g) Removing, replacing or making good placed or compacted soiling as required where soiling material subsequently becomes damaged or unsuitable.
Rates for fabricated soil mix	XXIII.	Further to Clause XXII, the rates for fabricated soil mix shall further include for : - (a) Testing of samples by an Approved Laboratory and provision of Certificates of Analysis of the soil conditioner. (b) Protection and storage of fabricated soil mix. (c) Replacement of fabricated soil mix which are not conforming to the Specification.
Rates for top soil	XXIV.	Further to Clause XXII, the rates for top soil shall further include for : - (a) Protection and storage of top soil.
Rates for tree surgery works	XXV.	The rates for tree surgery works to existing trees shall include for complying with General Specification 25.80 to 25.88.

SPECIAL CONDITIONS (CONT'D)

XXVI.	The rates for ornamental boulders shall further include for : -	Rates for ornamental boulders
	(a) Mobilization, maintenance and demobilization of all plants necessary for the works.	
	(b) Provision of samples if required.	
	(c) Supply, loading, transport, unloading, all multiple handling and disposal of surplus excavated material, storage and placing in final position including all necessary excavation (footing shall be measured separately).	
	(d) Marking of ornamental boulders on delivery and removing all marking after installation as instructed by the Maintenance Surveyor.	
	(e) Assembling ornamental boulders to any shape, pattern, sculptures as directed by the Maintenance Surveyor.	
XXVII.	The rates for hydro-mulching shall further include for :	Rates for hydro-mulching
	(a) Mobilization and demobilization of all plant and equipment necessary for the works.	
	(b) Carrying out survey and checking the existing conditions before applications.	
	(c) Application by a specialist approved by the Maintenance Surveyor.	
	(d) Provision of all necessary working platform.	
	(e) Carrying out establishment works after completion for a period of 12 months including all works required as stated in Clause XXI.	
	(f) Submission of manufacturer's catalogue.	
	(g) Providing specialist's guarantee for a period of a minimum of five years.	
	(h) Providing deed of warranty when required.	
XXVIII.	For payment purpose, the lump sum fee payment for "Utility Connection And Pavement Works" shall not be payable, unless the Contractor has demonstrated and substantiated by :	Payment for "Utility Connection And Pavement Works"
	(a) A copy of successfully granted Excavation Permit for the work.	
	(b) Relevant approval forms and drawings from utility companies or Government departments.	
	(c) Contractor's prior written notice to the Maintenance Surveyor of the name of the specialist contractors employed for the Utility Connection And Pavement Works when the Contractor is not included in the relevant List of Approved Contractors for Public Works to carry out the Utility Connection And Pavement Works.	
XXIX.	G.S. clauses for cleaning ground, soil filling to planting area, fertiliser, turfing, hydroseeding, transplanting trees, ornamental boulders and Establishment Works can be found in the Landscape Work Section of the General Specification for Building.	G.S. clauses for cleaning ground, soil filling to planting area, fertiliser, turfing, hydroseeding, transplanting trees, ornamental boulders and Establishment Works
XXX.	G.S. clauses for drain trench excavation can be found in Drainage Section of the General Specification for Building.	G.S. clauses for drain trench excavation
XXXI.	G.S. clauses for steel sheet piling can be found in Steel Sheet Piling Work Section of the General Specification for Building.	G.S. clauses for steel sheet piling

Item	STEEL SHEET PILING TO EXCAVATION		Item																									
	Plant : -	A \$																										
	<i>Per item</i>																											
01001	Mobilization, maintenance and demobilization of piling plant, crane, compressor and other equipment necessary for the work.....	25,304.30	01001																									
	Supplying, handling, transporting, pitching, driving and withdrawing / left in sheet piles as G.S. Item 4.01 : -																											
	<i>Per kg</i>																											
		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">Design length (m)</th> </tr> <tr> <th>N.e. 10</th> <th>10 - 20</th> <th>20 - 30</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> <tr> <td style="text-align: center;">11.00</td> <td style="text-align: center;">12.40</td> <td style="text-align: center;">12.80</td> </tr> </tbody> </table>	Design length (m)			N.e. 10	10 - 20	20 - 30	A	B	C	\$	\$	\$	11.00	12.40	12.80											
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N.e. 10	10 - 20	20 - 30																										
A	B	C																										
\$	\$	\$																										
11.00	12.40	12.80																										
01002	Steel sheet piles.....		01002																									
	<i>Per linear metre</i>																											
01003	Extra over Item 01002 for corner piles.....	994.10	01003																									
01004	Extra over Item 01002 for junction piles.....	994.10	01004																									
	Sundries : -																											
	<i>Per linear metre</i>																											
01005	Burning off tops of sheet piles.....	186.50	01005																									
	<i>Each</i>																											
		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5">Diameter (mm)</th> </tr> <tr> <th>N.e. 100</th> <th>100 - 200</th> <th>200 - 300</th> <th>300 - 400</th> <th>400 - 500</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> <td style="text-align: center;">D</td> <td style="text-align: center;">E</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> <tr> <td style="text-align: center;">62.80</td> <td style="text-align: center;">125.50</td> <td style="text-align: center;">188.20</td> <td style="text-align: center;">283.60</td> <td style="text-align: center;">346.30</td> </tr> </tbody> </table>	Diameter (mm)					N.e. 100	100 - 200	200 - 300	300 - 400	400 - 500	A	B	C	D	E	\$	\$	\$	\$	\$	62.80	125.50	188.20	283.60	346.30	
Diameter (mm)																												
N.e. 100	100 - 200	200 - 300	300 - 400	400 - 500																								
A	B	C	D	E																								
\$	\$	\$	\$	\$																								
62.80	125.50	188.20	283.60	346.30																								
01006	Cutting or burning holes through sheet piling.....		01006																									
(Note : - The above Items 01001 to 01006 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing)																												

Item	GENERAL EXCAVATION			Item	
	<i>Per square metre</i>		A \$		
01007	Excavate over Site n.e. 200 mm deep.....		21.00	01007	
	<i>Per cubic metre</i>				
01008	Excavate over Site to reduce levels average exceeding 200 mm deep.....		54.60	01008	
		That portion of excavation			
		N.e. 1.50 m deep	1.50 - 3.00 m deep	3.00 - 4.50 m deep	4.50 - 6.00 m deep
	<i>Per cubic metre</i>	A \$	B \$	C \$	D \$
01009	Excavate trenches for foundation exceeding 1.80 m wide.....	89.40	107.60	128.10	162.20
01010	Ditto but n.e. 1.80 m wide.....	93.90	113.00	134.50	170.30
01011	Excavate for foundations, manholes, pits, cesspits, etc., and the like exceeding 5.00 m ² area.....	96.10	108.10	144.10	266.10
01012	Ditto but n.e. 5.00 m ² area.....	100.90	113.50	151.40	279.40
	<i>Each</i>			A \$	
01013	Excavate for post holes not exceeding 0.30 m ³ including return, fill in and compact and remove surplus excavated material from Site.....			50.90	01013

Item	PIPE OR CABLE TRENCH EXCAVATION										Item	
	Excavate trench for pipe or cable with concrete bed (if any), including return, fill in, compact and remove surplus excavated material from Site :-	Pipe bore or cable diameter (mm)										
		Not exceeding 150	150 to 300	300 to 450	450 to 600	600 to 900	900 to 1,200	1,200 to 1,500	1,500 to 1,800	Two pipes side by side each n.e. 150	Three pipes side by side each n.e. 150	
		A	B	C	D	E	F	G	H	I	J	
		<i>Per linear metre</i>										
01014	Trench n.e. 1.50 m deep and average 0.25 m deep.....	17.20	25.10	-	-	-	-	-	-	26.30	35.40	01014
01015	Ditto average 0.50 m deep.....	37.90	54.90	74.60	102.30	-	-	-	-	58.40	78.80	01015
01016	Ditto average 0.75 m deep.....	53.70	74.30	99.20	134.90	196.30	-	-	-	81.80	110.10	01016
01017	Ditto average 1.00 m deep.....	69.30	94.10	123.80	167.50	238.80	330.90	-	-	105.30	141.50	01017
01018	Ditto average 1.25 m deep.....	148.70	177.50	212.90	263.90	344.70	449.70	548.50	-	192.60	236.60	01018
01019	Ditto average 1.50 m deep.....	177.00	209.80	250.50	309.50	400.10	517.30	625.50	740.40	209.50	256.30	01019
01020	Trench 1.50 - 3.00 m deep and average 1.75 m deep.....	206.60	243.50	289.70	357.30	458.30	588.70	706.90	830.90	266.80	326.90	01020
01021	Ditto average 2.00 m deep.....	236.60	277.50	329.50	405.50	517.40	661.60	789.40	922.90	302.10	370.10	01021
01022	Ditto average 2.25 m deep.....	271.70	317.10	374.80	459.60	582.50	740.30	878.30	1,021.50	320.00	390.20	01022
01023	Ditto average 2.50 m deep.....	312.30	362.30	425.90	519.70	653.20	825.40	974.00	1,126.60	398.70	485.00	01023
01024	Ditto average 2.75 m deep.....	343.20	397.70	467.40	570.00	715.10	901.30	1,060.60	1,222.90	438.40	533.90	01024
01025	Ditto average 3.00 m deep.....	374.70	433.90	509.90	622.10	778.90	980.40	1,150.60	1,323.10	479.70	584.50	01025
01026	Trench 3.00 - 4.50 m deep and average 3.25 m deep.....	417.10	480.80	563.20	685.00	854.20	1,070.50	1,251.90	1,435.10	531.20	645.80	01026
01027	Ditto average 3.50 m deep.....	449.40	518.10	607.30	738.90	920.30	1,152.40	1,345.30	1,538.90	573.60	698.10	01027
01028	Ditto average 3.75 m deep.....	482.20	556.20	651.80	793.40	987.30	1,235.60	1,440.10	1,644.90	616.70	751.10	01028
01029	Ditto average 4.00 m deep.....	520.40	599.50	702.00	853.90	1,060.90	1,325.10	1,541.70	1,757.60	665.10	809.70	01029
01030	Ditto average 4.25 m deep.....	554.20	638.30	748.00	910.20	1,130.20	1,411.10	1,639.80	1,866.90	709.20	864.40	01030
01031	Ditto average 4.50 m deep.....	593.80	683.70	800.50	974.20	1,207.70	1,506.00	1,747.70	1,986.60	760.10	926.10	01031

Item	EXCAVATING IN BRICKWORK, CONCRETE, ROCK, ETC.		Item
	<i>Per cubic metre</i>	A \$	
01032	Extra over Items 01007 to 01031 inclusive for excavating in chunam surfacing, cement rendering, masonry, brickwork, blockwork, bituminous surfacing, etc. and the like.....	51.20	01032
01033	Ditto for excavating in plain concrete foundations, surface beds, etc.....	179.80	01033
01034	Ditto for excavating in reinforced concrete foundations, surface beds, etc., including cutting reinforcement.....	304.20	01034
01035	Ditto for excavating in solid rock as described in Special Condition Clause XIII.....	367.20	01035
01036	Ditto for excavating in solid rock with non-explosive demolition agent..... (Note : - This item will only be paid for, if ordered by the Maintenance Surveyor in writing.)	576.10	01036
	SOIL FILLING		
	<i>Per cubic metre</i>		
01037	Return, fill in and compact suitable excavated materials around foundations, etc., and the like.....	51.70	01037
01038	Wheel, spread, level and compact suitable excavated materials in layers as filling to make up level.....	48.00	01038
01039	Approved suitable filling materials including both general filling material or special filling material as G.S. Clause 3.01(vii) and (viii) brought to Site from Contractor's own source, wheel, spread, level and compact in layers as filling around foundations, etc. and the like.....	123.00	01039
01040	Ditto but as filling to make up level..... (Note : - The above Items 01039 to 01040 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)	108.90	01040
	REMOVAL		
	<i>Per cubic metre</i>		
01041	Load surplus or unsuitable excavated material and remove from Site.....	118.00	01041
01042	Load spoil, debris, rubbish, etc., and the like not arising from the works and remove from Site..... (Note : - This item will only be paid for, if ordered by the Maintenance Surveyor in writing and the quantity agreed before removal commences)	130.60	01042
	GRANULAR FILLING		
	<i>Per cubic metre</i>		
01043	Wheel, spread, level and compact sand / fine aggregate in layers including blinding top surface with approved fine grade material.....	94.80	01043
01044	Wheel, spread, level and compact granular filling of size 75 - 150 mm coarse aggregate in layers including blinding top surface with approved fine grade material.....	130.60	01044
01045	Ditto but filling behind retaining walls.....	137.70	01045
	HARDCORE FILLING		
	Hardcore size : 28 - 150 mm in single or multi-graded size(s)		
	<i>Per cubic metre</i>		
01046	Wheel, spread, level and compact hardcore in beds under floors, pavings, etc., and the like in layers n.e. 150 mm thick including blind top surface with approved fine grade material.....	118.00	01046
01047	Ditto but in layers filled in behind retaining walls including hand packing where necessary.....	123.40	01047

Item	TURFING AND GRASSING		Item																			
	<i>Per cubic metre</i>	A \$																				
01048	Supply decomposed granite sub-soil filling materials, wheel, spread, level and compact in layers 75 mm thick to flat areas and slopes or filled into flower bed or flower boxes, including trimming and beating surface and forming mitres and curves.....	72.20	01048																			
01049	Supply fabricated soil mix ditto.....	94.00	01049																			
01050	Supply top soil ditto.....	126.90	01050																			
01051	Supply special soil mix composed of 1 part selected soil, 1 part sand and 1 part fine aggregate mixed thoroughly ditto.....	80.60	01051																			
	<i>Per square metre</i>																					
01052	Provide and lay turves each approximately 500x300x50 mm thick butt jointed on flat or slopes area.....	87.20	01052																			
01053	Lay only turves butt jointed on flat or slopes areas.....	43.80	01053																			
01054	Spray hydroseeding to surfaces of slope n.e. 30 degree from horizontal.....	18.50	01054																			
01055	Ditto exceeding 30 degree from horizontal	20.50	01055																			
01056	Carry out establishment works for grassing for a period of twelve months..... (Note : - Establishment works will only be paid for if a separate Works order is issued by the Maintenance Surveyor.)	3.20	01056																			
	CLEARING GROUND, CUTTING UNDERGROWTH AND FELLING TREES																					
	<i>Per square metre</i>																					
01057	Clear and remove from Site rubbish, grass, shrubs, undergrowth, and the like and trees n.e. 150 mm girth, including grubbing up roots and making good disturbed surfaces to match existing..... (Note : - This item will not be paid for if excavation will be executed by the Contractor subsequently.)	19.80	01057																			
01058	Ditto but to surfaces of slope, including cleaning out weep holes and clearing away any ladders, gang planks, etc. as required (ditto).....	22.00	01058																			
	<i>Each</i>																					
01059	Fell tree 150 - 450 mm girth, grub up roots, cut up and burn or clear away arisings, fill in voids and make good ground surface.....	672.40	01059																			
01060	Ditto 450 - 900 mm girth.....	1,003.90	01060																			
01061	Ditto 900 - 1,350 mm girth.....	1,564.50	01061																			
01062	Ditto 1,350 - 1,800 mm girth.....	2,353.10	01062																			
01063	Ditto 1,800 - 2,250 mm girth.....	3,128.90	01063																			
	TREE SURGERY WORKS																					
	<i>Each</i>																					
		<table border="1"> <thead> <tr> <th colspan="3">Diameter (mm)</th> </tr> <tr> <th>90 ~ 320</th> <th>320 ~ 480</th> <th>480 ~ 640</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>379.90</td> <td>567.40</td> <td>753.30</td> </tr> <tr> <td>189.20</td> <td>302.60</td> <td>378.30</td> </tr> </tbody> </table>			Diameter (mm)			90 ~ 320	320 ~ 480	480 ~ 640	A	B	C	\$	\$	\$	379.90	567.40	753.30	189.20	302.60	378.30
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A	B	C																				
\$	\$	\$																				
379.90	567.40	753.30																				
189.20	302.60	378.30																				
01064	Canopy pruning to existing trees.....		01064																			
01065	Limb reduction to existing trees.....		01065																			

Item	TRANSPLANTING TREES	Location within the Site	Location outside the Site	Item		
	<i>Each</i>	A \$	B \$			
01066	Transplant trees 150 - 450 mm girth.....	1,217.00	1,809.90	01066		
01067	Ditto 450 - 900 mm girth.....	2,446.50	3,101.80	01067		
01068	Ditto 900 - 1,350 mm girth.....	3,232.90	5,417.30	01068		
01069	Ditto 1,350 - 1,800 mm girth.....	10,984.20	17,474.90	01069		
01070	Ditto 1,800 - 2,250 mm girth.....	21,531.60	31,361.20	01070		
	<i>Each</i>					
01071	Carry out establishment works for transplanting trees for a period of twelve months..... (Note : - Establishment works will only be paid for, if a separate Works order is issued by the Maintenance Surveyor)	98.60	117.80	01071		
	FILTER MEMBRANE					
	Supply and lay proprietary thermally bonded non-woven filter membrane complying with the following specification :-					
	<i>Per square metre</i>		A \$			
01072	Proprietary filter membrane with pore size $\leq 300\mu\text{m}$; permeability (at 5cm head) $\leq 150 \text{ l/m}^2\cdot\text{s}$; wide width strip tensile strength $\geq 3.0 \text{ kN/m}$		19.20	01072		
01073	Ditto but with pore size $\leq 180\mu\text{m}$; permeability (at 5cm head) $\leq 130 \text{ l/m}^2\cdot\text{s}$; wide width strip tensile strength $\geq 6.0 \text{ kN/m}$		21.10	01073		
01074	Ditto but with pore size $\leq 150\mu\text{m}$; permeability (at 5cm head) $\leq 100 \text{ l/m}^2\cdot\text{s}$; wide width strip tensile strength $\geq 8.0 \text{ kN/m}$		25.10	01074		
01075	Ditto but with pore size $\leq 125\mu\text{m}$; permeability (at 5cm head) $\leq 75 \text{ l/m}^2\cdot\text{s}$; wide width strip tensile strength $\geq 12.5 \text{ kN/m}$		27.40	01075		
01076	Ditto but with pore size $\leq 110\mu\text{m}$; permeability (at 5cm head) $\leq 65 \text{ l/m}^2\cdot\text{s}$; wide width strip tensile strength $\geq 14.5 \text{ kN/m}$		33.30	01076		
	ORNAMENTAL BOULDERS					
	Ornamental boulders shall be natural, rounded rocks of various overall sizes and types as specified and selected by the Maintenance Surveyor, supply, lay or assemble in mortar, place and sit in soil base or concrete base (concrete base measured separately).					
	<i>Each</i>	Boulder size (m ³)				
		n.e. 0.25	0.25 - 0.50	0.50 - 0.75	0.75 - 1.00	1.00 - 3.00
		A \$	B \$	C \$	D \$	E \$
01077	Granite.....	172.40	521.20	666.90	795.80	1,837.80
01078	Great Lake rock.....	215.40	746.00	1,150.50	1,474.90	2,276.50
01079	Serpentine boulders.....	189.60	625.30	944.30	1,216.10	1,983.20
01080	Ying rock.....	163.70	458.10	591.80	756.80	1,638.10
01081	Yellow soap stone.....	206.90	720.20	1,047.90	1,349.80	2,177.20
	<i>Per cubic metre</i>					A \$
01082	Take down and clear away ornamental boulders in any sizes.....					175.80
01083	Take down and set aside for re-use ditto.....					75.40
01084	Lay only in concrete or soil (concrete base measured separately) ditto.....					126.20

Item			Item
	HYDRO-MULCHING		
	Hydro-mulching on sprayed concrete or other non-soil surface with slope gradient of not more than 70 degrees, all in strict accordance with manufacturer's instructions:-	A \$	
	<i>Per square metre</i>		
01085	Hydro-mulching on spray-concrete or other non-soil surface.....	1,148.40	01085
	MISCELLANEOUS ITEMS		
	<i>Per linear metre</i>	A \$	
01086	Clear and clean out mud, etc., from concrete rainwater channel with waterway n.e. 0.10 m ² sectional area including raising and afterwards replacing any covers, cutting back any vegetation at sides, etc., and removing from Site all arising.....	6.80	01086
01087	Add to Item 01086 for each additional 0.10 m ² or part thereof sectional area of waterway.....	1.70	01087
01088	Clear and clean out mud, etc., from earth ditch or culvert n.e. 0.20 m ² sectional area, including trimming sides and bottom, cutting back vegetation at sides and removing from Site all arising.....	10.60	01088
01089	Add to Item 01088 for each additional 0.20 m ² or part thereof sectional area.....	4.10	01089
01090	Clean out eaves gutter at any height and removing from Site all arising..... (Note : - This item will not be paid for if the gutter is required to be painted)	5.00	01090
	<i>Each</i>		
01091	Clean out mud vegetation, etc., from weep hole approximately 600 mm deep from slopes, retaining walls, etc. and remove from Site all arising.....	5.00	01091
01092	Rod out, clear and clean choked drain run including trap, gully, or manhole at either end and remove from Site all arising including taking off and afterwards replacing any covers.....	80.40	01092
01093	Ditto but choked soil, waste or rainwater downpipe including heads, bends, etc., complete.....	81.90	01093
01094	Ditto but choked trap or soil or waste branch to bath, W.C., basin, sink, etc.....	42.00	01094
01095	Clear and clean out mud, etc., from catch pit n.e. 0.30 m ³ internally and remove from Site all arising including taking off and afterwards replacing any covers.....	57.20	01095
01096	Add to Item 01095 for each additional 0.15 m ³ or part thereof internally.....	24.90	01096
01097	Supply approved sackcloth or nylon sandbag n.e. 0.10 m ³ and excavate ordinary dry earth free from stones, etc., on Site and fill bag and place in position.....	17.60	01097
01098	Ditto but filled with dry earth brought to site from Contractor's own source.....	17.30	01098
01099	Ditto but filled with clean sand and place in position.....	16.80	01099
01100	Add to either of Items 01097 to 01099 inclusive for mixing 10% cement with the dry earth or sand before filling into the bag.....	8.00	01100
	UTILITY CONNECTION AND PAVEMENT WORKS		
	(Note : - The following Item 01101 will only be paid for, if ordered by the Maintenance Surveyor in writing.)	A \$	
	<i>Per item</i>		
01101	Lump sum fee for Utility Connection And Pavement Works.....	10,000.00	01101

Section 02

CONCRETE WORK

CONCRETE WORK

SPECIAL CONDITIONS

Measurement of concrete	<p>I. Concrete shall be measured net as laid or cast.</p> <p>No deduction shall be made for : -</p> <p>(a) Voids not exceeding 0.05 m³.</p> <p>(b) The volume of reinforcement, steel joists, stanchions and the like cast in.</p> <p>(c) Openings in walls, floors, roof slabs and the like not exceeding 0.10 m².</p>
Measurement of cutting and taking down existing concrete	<p>II. Measurements of cutting and taking down existing concrete shall include the thickness of any plastering, rendering or other finish on the surface of concrete.</p> <p>The items contained in this Section shall only apply to alterations. Any demolition works with respect to whole or part of a building shall be measured separately and paid for at appropriate rates under Section 23 - Demolition of this Schedule.</p>
Measurement of formwork	<p>III. Formwork shall be measured as the actual surface in contact with concrete. No deduction shall be made for openings not exceeding 1.00 m². Boxing for opening exceeding 1.00 m² shall be measured as edges. Wrot formwork shall be measured only when a fair finished face to the concrete is specifically ordered by the Maintenance Surveyor in writing.</p>
Measurement of reinforcement	<p>IV. Reinforcement shall be measured net as fixed. No allowance shall be made in the weight for rolling margin. The weight of reinforcement shall be calculated in accordance with the weight per linear metre in Table 7 of the Memoranda in this Schedule (regardless of the actual weight).</p> <p>Fabric reinforcement shall be measured the net area covered excluding laps. No deduction shall be made for openings not exceeding 1.00 m².</p>
Measurement of injection type of concrete repair work	<p>V. Injection type of concrete repair work shall be measured the net length of the crack where drillholes or injection ports are placed along the crack (crack exceeding 150 mm long) at 150 - 200 mm centres. Only crack with drillhole(s) or port(s) placed along shall be measured. The net length of crack n.e. 200 mm shall only be measured when at least one drillhole or port is placed along the crack. All continuous cracks without any drillhole or port shall deem to be covered by the measurement of the crack with drillhole(s) or port(s).</p>
Measurement of underlays	<p>VI. Underlays shall be measured net as laid excluding laps. No deduction shall be made for openings not exceeding 1.00 m².</p>
Measurement of precast concrete	<p>VII. Precast concrete shall be measured the actual size of the item casted. Any plasterwork shall be excluded in the measurement and it will be separately measured and paid for at appropriate rates under relevant Sections of this Schedule.</p>
Rates for concrete generally	<p>VIII. The rates for all concrete shall generally include for : -</p> <p>(a) Mobilization, maintenance and demobilization of concrete mixer, tower crane, mobile crane, hoist, concrete pump, vibrator and other plant necessary for the works.</p> <p>(b) Conveying, lowering, hoisting, pumping, placing in position, compacting with vibrator, curing and protection.</p> <p>(c) Formwork to sides or edges of plain concrete.</p> <p>(d) Construction joints including formwork, water bars and waterstops.</p>

SPECIAL CONDITIONS (CONT'D)

VIII.	(e)	Laying beds level or to falls, and laying beds or slabs in alternative bays including necessary formwork to joints between bays.	Rates for concrete generally (cont'd)
	(f)	Finishing surfaces level or to falls, currents and cambers as required, and to receive pavings unless otherwise specifically stated.	
	(g)	Casting kickers monolithically with base slab where these are required at base of walls and columns.	
	(h)	Forming all necessary sinkings in or handpacking of hardcore.	
	(i)	Forming or cutting all chases, grooves, notches, rebates, mortices, holes, grouting in ends with cement mortar including making good to match existing.	
	(j)	Forming all angles, ends, junctions, intersections, outlets and similar labours to curbs, channels and the like.	
	(k)	Casting in, building in and grouting in work to concrete inserts, puddle flanges, water stops, ducts and pipes, bolts and cramps, dowels, baluster ends and the like and making good.	
	(l)	Giving adequate notice to the Maintenance Surveyor to permit inspection of relevant part of the structure before concrete is placed and prior to commencing concreting after approval has been obtained from the Maintenance Surveyor.	
	(m)	Submission of samples and testing of materials before trial mix or making concrete for use in the works.	
	(n)	Carrying out trial mixes, sampling and testing on the same.	
	(o)	Carrying out tests including making concrete cubes and testing on the same including all necessary security handling of concrete cube.	
	(p)	Sampling of fresh concrete and finished concrete including taking core samples as required from the finished concrete works and tests on the same including all necessary security handling of core samples.	
	(q)	Filling core hole, tie bar holes with cement mortar or concrete of same strength to the parent concrete and making good.	
	(r)	Providing method statement for the replacement of condemned concrete and any remedial works which may be supervised by a Registered Structural Engineer.	
	(s)	All labours and equipment required at the specified locations including any necessary hoisting, craneage, scaffolding and temporary platforms, etc. for making test cores.	
	(t)	Removing from Site any concrete work failed to conform to the Specification.	
	(u)	Recording and submitting records for ready-mixed concrete.	
	(v)	Submitting details of mix design.	
	(w)	Control of alkali-aggregate reaction in concrete.	
	(x)	Use of recycled aggregate and/or recycled water in concrete, when required.	
IX.		The rates for plain concrete shall further include for :-	Rates for plain concrete
	(a)	Erecting, maintaining and removing formwork or falsework as required.	
	(b)	Additional volume of concrete for filling over-break or working space.	

SPECIAL CONDITIONS (CONT'D)

Rates for reinforced concrete	X.	The rates for reinforced concrete shall further include for :- (a) Tamping around reinforcement.
Rates for reinforcement	XI.	The rates for reinforcement shall include for : - (a) Cleaning, cutting to length, bending (including cranks and hooked ends), hoisting, fixing and securely supporting in the required position. (b) Plastic cover spacers, spacer blocks, steel spacer rods, steel clips, steel chairs and annealed iron tying wire or tack welding. (c) All requirements of sampling and testing including security handling, stock management on Site and removal of non-compliant re-bars. (d) Extra fabric reinforcement at laps. (e) Provision of all types of test certificates. (f) Submission of bar bending schedule.
Rates for epoxy coating to reinforcement	XII.	The rates for epoxy coating to reinforcement shall further include for compliance with the Specification.
Rates for formwork	XIII.	The rates for formwork shall include for : - (a) Submission of design on formwork and falsework including supports and foundations, and where required, by a Registered Structural Engineer. (b) Erecting, maintaining and striking formwork and falsework. (c) Preventing loss of grout between joints. (d) Fixing inserts and chases. (e) Boxing out to form holes not exceeding 1.00 m ² . (f) Preparing and applying surface retarders and release agents as required. (g) Multi-handling of removing formwork and falsework when striking without overloading the finished concrete work. (h) Preparing and applying wood preservatives to all surfaces of left-in timber formwork. (i) Forming cambers and falls. (j) Individual fillets, chambers, splays, drips, rebates, recesses, grooves and the like, not exceeding 100 mm total girth measured on the faces in contact with the concrete. (k) Strutting to soffits at any height. (l) Soffits of solid slabs in any thickness. (m) Sides and soffits of beams in any depth. (n) In case of formwork materials proposed by the Contractor, all necessary preparation work other than spatterdash.

SPECIAL CONDITIONS (CONT'D)

XIV.	The rates for precast concrete items shall include for : -	Rates for precast concrete
	(a) Conveying, lowering, hoisting and multi-handling within the Site or other locations as required.	
	(b) All moulds, formwork, etc. including chamfers, throats, weathering, splayed edges, rounded tops and the like.	
	(c) Fixing or laying, jointing and pointing in position including cement mortar.	
	(d) Providing and fixing of steel reinforcement.	
XV.	The rates for surface treatment to concrete surface shall include for : -	Rates for surface treatment to concrete
	(a) Preparing plastered or unplastered surfaces ready to receive surface treatment including making good cracks with cement mortar.	
	(b) Cleaning grease or other contaminations.	
	(c) Forming fillets with cement mortar at junction between slabs and walls.	
	(d) Carrying out the works all in accordance with the manufacturer's instructions.	
XVI.	The rates for cutting and taking down existing concrete shall include for : -	Rates for cutting and taking down existing concrete
	(a) Cutting, taking down and clearing away existing concrete by hand or mechanical plant or both.	
	(b) Providing all necessary supports, props, struts and shores during taking down period or until the stability of the affected works is approved by the Maintenance Surveyor.	
	(c) Providing all necessary protection as required.	
	(d) Trimming, bending, straightening and cleaning of reinforcement for connection of new reinforcement as required.	
	(e) Providing keys for bonding of new surface.	
	(f) Preparing and applying bonding agent or primer as required.	
	(g) Making good all structures, surfaces and finishings disturbed to match existing.	
	(h) Submission of method statements for approval.	
	(i) Submission of records as required.	
XVII.	The rates for cutting chases, sinking, grooves, holes and the like shall include for : -	Rates for cutting chases, sinking, etc.
	(a) Cutting and clearing away from Site existing concrete by hand or mechanical plant or both.	
	(b) Making good all structures, surfaces and finishings disturbed to match existing.	
XVIII.	The rates for diamond coring to existing concrete shall include for : -	Rates for diamond coring to existing concrete
	(a) Mobilization, maintenance and demobilization of coring plant and other mechanical plants necessary for the works.	
	(b) Coring through existing concrete or reinforced concrete walls, floors, slabs, roofs and the like including any finishes.	

SPECIAL CONDITIONS (CONT'D)

- | | | | |
|---|--------|-----|---|
| Rates for diamond coring to existing concrete (cont'd) | XVIII. | (c) | Providing temporary water and power supplies and working platform as required. |
| | | (d) | Making good all structures, surfaces and finishings disturbed to match existing. |
| | | (e) | Clearing away all debris arose. |
| Rates for repairing to concrete | XIX. | | The rate for repairing concrete shall include for : - |
| | | (a) | Submission of method statement and proposed material information for repair work. |
| | | (b) | Preparing and applying repairing mortar or grouting in accordance with the manufacturer's instructions. |
| | | (c) | Hammering concrete surfaces to remove all loose or damaged concrete including cutting into the required depth of existing concrete. |
| | | (d) | Locating crack and drilling holes. |
| | | (e) | Preparing surface free from dirt, dust, lime, salt or other contaminants ready to receive repairing mortar including brushing surfaces with steel wire brush. |
| | | (f) | Cleaning reinforcement. |
| | | (g) | Apply primer/tact coat/bond coat to substrate and anti-corrosion primer to reinforcement. |
| | | (h) | Finishing the repaired surfaces with rendering or tiled finish to match existing. |
| | | (i) | Repairing and repainting the affected areas to match existing. |
| | | (j) | Testing of the repairing mortar prior to the works. |
| | | (k) | Testing of patch repairs and submission of record of repairs and test reports upon completion. |
| Rates for injection type of concrete repair work | XX. | | The rate for injection type of concrete repair work shall include for : - |
| | | (a) | Submission of method statement and proposed material information for repair work. |
| | | (b) | Preparing and applying epoxy gel and chemical injection including curing in accordance with the manufacturer's instructions. |
| | | (c) | Hammering concrete surfaces to remove all loose or damaged concrete including cutting into the required depth of existing cracks . |
| | | (d) | Preparing surface free from dirt, dust, lime, salt or other contaminants ready to receive epoxy gel including flushing the crack with clean water or air brush and brushing surfaces with steel wire brush. |
| | | (e) | Locating crack and drilling holes. |
| | | (f) | Installation of plastic or metal non-return packer or ports and removal of the same on completion. |
| | | (g) | Finishing the repaired surfaces with rendering or tiled finish to match existing. |
| | | (h) | Repairing and repainting the affected areas to match existing. |
| | | (i) | Testing of the repairing mortar prior to the works. |
| | | (j) | Testing of patch repairs and submission of record of repairs and test reports upon completion. |
| Rates for underlay | XXI. | | The rates for underlay shall include for : - |
| | | (a) | Allowance for laps. |

SPECIAL CONDITIONS (CONT'D)

- | | | |
|--------|--|--|
| XXII. | The rates for rebound hammer tests shall include for :- | Rates for rebound hammer tests |
| | (a) Mobilization, maintenance and demobilization of all necessary mechanical plants and instruments necessary for the works. | |
| | (b) Preparing test areas including removing loose mortar and the like before test. | |
| | (c) Providing temporary working platform and protection as required. | |
| | (d) Recording and submitting records and test reports. | |
| XXIII. | All structural concrete shall be produced and supplied in accordance with the Quality Assurance requirement for Structural Concrete as stated in the Contract. | Quality assurance for structural concrete |

Item	PLAIN CONCRETE	Concrete Grade			Item			
		10P	20P	30P				
		A \$	B \$	C \$				
	<i>Per cubic metre</i>							
02001	Mass filling, packing, thickening and the like.....	846.90	887.20	926.90	02001			
02002	Foundations.....	851.30	891.60	931.30	02002			
02003	Beds, paving slabs and the like.....	849.10	889.40	929.10	02003			
02004	Blinding under foundations.....	849.10	889.40	929.10	02004			
02005	Curbs, upstands, plinths and the like.....	907.10	947.30	987.00	02005			
	REINFORCED CONCRETE	Concrete Grade						
		20MPa or 20D	25MPa or 25D	30MPa or 30D	35MPa or 35D	40MPa or 40D	45MPa or 45D	
	<i>Per cubic metre</i>	A \$	B \$	C \$	D \$	E \$	F \$	
02006	Foundations, isolated and attached bases and the like	943.00	971.10	995.30	1,033.70	1,070.70	1,099.80	02006
02007	Ground beams, tie beams and the like.....	947.90	972.00	1,000.20	1,036.40	1,072.50	1,104.70	02007
02008	Machine bases, thrust blocks and the like.....	951.50	979.60	1,003.70	1,039.90	1,076.10	1,108.30	02008
02009	Ground slabs or suspended slabs.....	952.80	981.00	1,005.10	1,041.30	1,077.50	1,109.60	02009
02010	Sloping suspended slabs.....	956.40	984.50	1,008.60	1,044.80	1,081.00	1,113.20	02010
02011	Walls.....	962.60	990.80	1,014.90	1,051.10	1,087.30	1,119.40	02011
02012	Retaining walls.....	972.50	1,000.60	1,024.70	1,060.90	1,097.10	1,129.30	02012
02013	Piers and columns.....	1,016.70	1,062.90	1,068.90	1,105.10	1,141.30	1,173.50	02013
02014	Beams.....	982.30	1,028.50	1,034.50	1,090.80	1,127.00	1,139.10	02014
02015	Fins and the like.....	987.20	1,033.40	1,039.50	1,095.80	1,131.90	1,144.00	02015
02016	Casings to structural steelwork.....	1,001.90	1,048.20	1,054.20	1,110.50	1,146.70	1,158.70	02016
02017	Stairs.....	1,041.20	1,087.50	1,093.50	1,149.80	1,186.00	1,198.00	02017
02018	Curbs, upstands and the like.....	977.40	1,023.60	1,029.60	1,085.90	1,122.10	1,134.20	02018
	Extra over either of Items 02006 to 02018 inclusive for concrete in water retaining structures.....						10%	
	Extra over either of Items 02006 to 02018 inclusive for pulverized fuel ash						2%	
	Extra over either of Items 02006 to 02018 inclusive for concrete with recycled coarse aggregates.....						15%	

Item	COLOURING CONCRETE						Item
	Concrete Grade						
	20MPa or 20D	25MPa or 25D	30MPa or 30D	35MPa or 35D	40MPa or 40D	45MPa or 45D	
	A \$	B \$	C \$	D \$	E \$	F \$	
	<i>Per cubic metre</i>						
02019	Extra over concrete in any position for using white cement in lieu of plain cement						02019
02020	Ditto but for using colouring pigments complying with BS 1014.....						02020
	84.50	106.90	125.60	143.00	166.20	180.30	
	92.90	115.80	134.60	152.50	168.70	190.30	
	"NO FINES" CONCRETE						
	<i>Per cubic metre</i>						
02021	No-fines concrete filling.....						02021
							A \$ 519.70
	LIGHTWEIGHT CONCRETE						
	<i>Per cubic metre</i>						
02022	Cement and vermiculite (1:6) by volume or other approved lightweight concrete filling, thickening, insulation slabs and the like.....						02022
							1,045.70
	STEEL REINFORCEMENT						
	<i>Per kg</i>						
02023	Mild steel reinforcement n.e. 16 mm diameter.....						02023
02024	Ditto exceeding 16 mm diameter.....						02024
02025	High tensile steel reinforcement 10 - 40 mm diameter.....						02025
02026	Fabric reinforcement lapped at joints.....						02026
	Extra over either of Items 02023 to 02026 inclusive for epoxy coating including handling, cutting and bending, sampling and testing (as Specification)..... (Note : - The above item will only be paid for, if ordered by Maintenance Surveyor in writing.)						50%
	FORMWORK						
	<i>Per square metre</i>						
							Sawn formwork
							Wrot formwork
							A \$
							B \$
02027	Vertical surfaces of foundations, ground beams, tie beams and the like.....						02027
02028	Ditto but to casing of structural steelwork.....						02028
02029	Ditto but to machine base, thrust blocks and the like.....						02029
02030	Ditto but to piers, columns, stanchions and the like.....						02030
02031	Ditto but to fins and the like.....						02031
02032	Soffits of suspended slabs.....						02032
02033	Sloping soffits of suspended slabs.....						02033
02034	Vertical surfaces of walls.....						02034
02035	Battered surfaces of walls.....						02035
02036	Sides and soffits of beams.....						02036
							222.50
							-
							241.60
							265.20
							237.20
							260.80
							244.50
							268.10
							241.60
							265.20
							258.90
							282.50
							282.80
							306.50
							241.60
							265.20
							252.10
							275.70
							261.10
							284.80

Item	FORMWORK (CONT'D)			Item	
		Sawn formwork	Wrot formwork		
		A \$	B \$		
	<i>Per square metre</i>				
02037	Casing of steel beams.....	258.90	282.50	02037	
02038	Sloping soffits of stairs.....	282.80	306.50	02038	
02039	Edges of curbs, upstands, slabs and the like exceeding 300 mm high.....	178.60	202.20	02039	
02040	Forming upper surfaces sloping exceeding 15 degrees from horizontal.....	142.00	165.60	02040	
	<i>Per linear metre</i>				
02041	Edges, open strings or risers n.e. 75 mm wide.....	27.90	30.40	02041	
02042	Ditto, 75 - 150 mm wide.....	48.20	53.30	02042	
02043	Ditto, 150 - 225 mm wide.....	63.80	71.40	02043	
02044	Ditto, 225 - 300 mm wide.....	74.80	85.00	02044	
	Add to either of Items 02027 to 02044 inclusive if formwork ordered by the Maintenance Surveyor in writing to produce rough board finish (as G.S. Clause 6.73).....	-	50%		
	Add to either of Items 02027 to 02044 inclusive if formwork ordered by the Maintenance Surveyor in writing to be left in position.....	20%	-		
	Add to either of Items 02027 to 02044 inclusive if formwork curved on plan or elevation to a radius on face n.e. 3.00 m.....	30%	30%		
	Ditto but 3.00 - 15.00 m.....	15%	15%		
	PRECAST REINFORCED CONCRETE				
	Precast reinforced concrete Grade 20D or 20MPa placed in position with mortar or cast into concrete :-				
	<i>Per cubic metre</i>		A \$		
02045	Cooking shelf, sink, partition, slabs and the like.....		2,075.00	02045	
02046	Lintols, beams, rafters, struts and columns, cills, strings, copings, cornices, kerbs, pier caps, pit covers and the like.....		1,939.90	02046	
02047	Planters, refuse bins and the like.....		1,620.00	02047	
02048	Fencing components, posts and the like.....		2,117.80	02048	
02049	Ventilators, grilles, grille panelled walls and the like.....		2,007.40	02049	
	Extra over either of Items 02045 to 02049 inclusive for concrete Grade 30D or 30MPa.....		6%		
	<i>Per cubic metre</i>				
		Take out and clear away	Take out and set aside for re-use	Fix only	
		A \$	B \$	C \$	
02050	Precast item laid or placed in position.....	171.40	154.20	257.10	02050
02051	Ditto but cast into concrete (measured separately)	239.90	215.90	359.90	02051
02052	Ditto built in or bedded in cement mortar	214.20	193.70	322.20	02052

Item	SURFACE TREATMENT TO CONCRETE	A	Item
	<i>Per square metre</i>		
02053	Treat surfaces with an approved liquid applied waterproofing membrane to horizontal surfaces.....	172.30	02053
02054	Ditto but to vertical or sloping surfaces.....	175.00	02054
02055	Treat surfaces with an approved liquid hardener to horizontal surfaces.....	30.60	02055
02056	Ditto but to vertical or sloping surfaces.....	31.90	02056
02057	Treat surfaces with carborundum grains to horizontal surfaces.....	17.90	02057
02058	Ditto but vertical or sloping surfaces.....	19.20	02058
	FINISHINGS AND SUNDRY LABOURS ON NEW CONCRETE		
	<i>Per square metre</i>		
02059	Float surface fair and even with a wood float including any additional cement required	16.20	02059
02060	Trowel surface hard and smooth with a steel trowel including ditto	22.00	02060
02061	Score surface with parallel anti-slip grooves approximately 15 mm wide x 15 mm deep at 100 mm centres	27.00	02061
02062	Punch small anti-slip holes in surface approximately 15 mm deep at 150 mm centres staggered	12.20	02062
02063	Heavily tamp surface to form corrugated non-slip finish	10.80	02063
02064	Damp proof course of bitumen sprayed or brushed on surface at the rate of 0.50 litre/m ²	27.70	02064
	<i>Per linear metre</i>		
02065	Form channel n.e. 150 mm girth with rounded bottom finished to falls including angles, ends junctions, outlets, and similar labours and trowelling smooth	21.60	02065
02066	Ditto 150 - 300 mm girth	44.60	02066
	Add to either of Items 02065 to 02066 inclusive if curved on plan to a radius n.e. 3 m to the centre line	15%	
	TAKING DOWN CONCRETE FOR ALTERATION WORKS		
	Note : -		
	(i) The following Items 02067 to 02068 inclusive shall only apply to alteration works. All demolition works in respect of a whole or part of a building shall be measured and priced at the Demolition Section of this Schedule.		
	(ii) Saw cutting and diamond coring shall be measured separately if specifically ordered in writing by the Maintenance Surveyor.		
	<i>Per cubic metre</i>		
02067	Take down or break out and clear away concrete structural elements in any position n.e. 150 mm thick	474.80	02067
02068	Ditto exceeding 150 mm thick	533.20	02068

Concrete of any grade	
Plain concrete	Reinforced concrete
A	B
\$	\$
474.80	572.10
533.20	646.00

Item	CUTTING AND SUNDRY LABOURS ON EXISTING CONCRETE	Concrete of any grade		Item
		Plain concrete	Reinforced concrete	
		A \$	B \$	
	(Note : - Saw cutting and diamond coring shall be measured separately if specifically ordered in writing by the Maintenance Surveyor.)			
	Per cubic metre			
02069	Cut through wall, floor slab or similar, exceeding 0.05 m ³ for new door, window or other opening, or to enlarge existing opening, including trimming surfaces to receive new plaster or other finish (finishes measured separately) (net size of required opening measured)	572.10	669.30	02069
	Per square metre			
02070	Hack surface or edge to provide key for new concrete	10.80	-	02070
02071	Cut parallel anti-slip grooves approximately 15 mm wide x 15 mm deep at 100 mm centres and make good	27.00	-	02071
02072	Cut small anti-slip holes in surface approximately 15 mm deep at 150 mm centres staggered and make good.....	16.20	-	02072
02073	Cut into concrete floor all over n.e. 25 mm deep, trim and level surface to receive screed	17.60	-	02073
02074	Ditto but 25 - 50 mm deep.....	33.80	44.60	02074
02075	Add to Item 02074 for each 25 mm deep or part thereof in excess of 50 mm.....	17.60	23.00	02075
02076	Cut sinking exceeding 0.10 m ² but n.e. 25 mm deep into surface, including trimming and making good back face and edges (net size of required sinking measured)	24.30	-	02076
02077	Ditto but 25 - 50 mm deep.....	40.60	54.10	02077
02078	Add to Item 02077 for each 25 mm deep or part thereof in excess of 50 mm.....	17.60	23.00	02078
02079	Cut into spalled concrete slab, beam, wall or column n.e. 25 mm deep, trim and level surface to receive rendering in repairs	25.70	-	02079
02080	Ditto but 25 - 50 mm deep.....	32.40	41.90	02080
02081	Add to Item 02080 for each 25 mm deep or part thereof in excess of 50 mm.....	9.50	12.20	02081
	Per linear metre			
02082	Cut chase, groove or rebate n.e. 0.0005 m ² sectional area and make good, including pinning in and bedding and pointing edges of slabs, cills, steps, pipes, and similar items	17.60	20.30	02082
02083	Ditto 0.0005 - 0.01 m ² sectional area	33.80	44.60	02083
02084	Cut channel n.e. 150 mm girth with rounded bottom finished to falls, and make good including rendering with 15 mm cement and sand (1:3) and forming all angles, ends, junctions, outlets and similar labours	36.10	46.90	02084
02085	Ditto but 150 - 300 mm girth	61.40	72.20	02085
	Add to either of Items 02082 to 02085 inclusive if curved on plan to a radius n.e. 3.00 m to the centre line	20%	20%	
	Add to either of Items 02082 to 02085 inclusive if curved on plan to a radius 3.00 - 15.00 m to the centre line	10%	10%	
	Each			
02086	Cut sinking n.e. 0.01 m ² and 25 mm deep into surface including trimming and making good back face and edges (net size of required sinking measured)	8.10	10.80	02086
02087	Add to Item 02086 for each additional 25 mm or part of 25 mm in depth	4.10	5.40	02087
02088	Cut sinking as Item 02086 but 0.01 - 0.10 m ²	17.60	21.60	02088
02089	Add to Item 02088 for each additional 25 mm or part of 25 mm in depth	9.50	12.20	02089

Item	CUTTING AND SUNDRY LABOURS ON EXISTING CONCRETE (CONT'D)	Concrete of any grade		Item	
		Plain concrete	Reinforced concrete		
		A \$	B \$		
<i>Each</i>					
02090	Cut hole through concrete for pipe, air brick, access panel or similar article n.e. 0.0001 m³ (net size of pipe or article measured) and grout or render around reveals in cement mortar (1:2) and make good one or both sides	15.80	17.90	02090	
02091	Ditto 0.0001 - 0.0002 m³	22.40	24.70	02091	
02092	Ditto 0.0002 - 0.002 m³	38.60	45.80	02092	
02093	Ditto 0.002 - 0.01 m³	54.80	69.50	02093	
02094	Ditto 0.01 - 0.05 m³	99.30	123.00	02094	
02095	Cut or drill mortice in existing concrete structure for dowel, end of baluster, bracket, fixing cramp, or similar article n.e. 0.0001 m³ (net size of article for end measured) and grout in cement and sand (1:2) and make good	14.90	17.90	02095	
02096	Ditto 0.0001 - 0.0002 m³	22.40	24.70	02096	
SAW CUTTING TO EXISTING CONCRETE					
<i>Per linear metre</i>					
02097	Saw concrete of n.e. 10 mm wide and up to 25 mm deep	43.70	54.20	02097	
02098	Ditto 25 mm to 50 mm deep	81.30	100.10	02098	
02099	Ditto 50 mm to 75 mm deep	121.30	151.70	02099	
02100	Ditto 75 mm to 100 mm deep	161.00	199.90	02100	
02101	Add to Item 02100 for each additional 25 mm deep or part thereof.....	40.00	52.40	02101	
(Note : - The above Items 02097 to 02101 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)					
DIAMOND CORING ON EXISTING CONCRETE					
<i>Per linear centimetre</i>					
02102	Core diameter n.e. 25 mm.....	A \$		4.90	02102
02103	Ditto 25 - 50 mm.....			5.50	02103
02104	Ditto 50 - 75 mm.....			6.30	02104
02105	Ditto 75 - 100 mm.....			7.60	02105
02106	Ditto 100 - 125 mm.....			9.50	02106
02107	Ditto 125 - 150 mm.....			12.10	02107
02108	Ditto 150 - 175 mm.....			14.80	02108
02109	Ditto 175 - 200 mm.....			16.80	02109
02110	Ditto 200 - 225 mm.....			21.60	02110
02111	Ditto 225 - 250 mm.....			28.40	02111
02112	Ditto 250 - 275 mm.....			34.20	02112
02113	Ditto 275 - 300 mm.....			39.50	02113
(Note : - The above Items 02102 to 02113 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)					

Item	REPAIRS TO CONCRETE	Item																																				
	<i>Per square metre</i>																																					
02114	<p>Prepare and apply proprietary or site batched polymer modified concrete repair mortar complying with the following specification :-</p> <table border="1" style="width: 100%;"> <tr> <td>Compressive Strength</td> <td></td> <td>compatible with existing concrete</td> </tr> <tr> <td>Tensile Strength</td> <td></td> <td>not less than 3 Mpa</td> </tr> <tr> <td>Elastic Modulus</td> <td></td> <td>compatible with existing concrete</td> </tr> <tr> <td>Bond Strength</td> <td></td> <td>not less than 2 Mpa</td> </tr> <tr> <td>Shrinkage Cracking - Coutinho ring</td> <td>1-21 days</td> <td>Nil</td> </tr> <tr> <td>Figg Air Permeability</td> <td></td> <td>< 4 x 10⁻¹¹ m/s</td> </tr> <tr> <td>Drying Shrinkage</td> <td>7 days</td> <td><700 microstrains</td> </tr> </table> <p>Polymer modified concrete repair mortar to soffits of ceilings, sides and soffits of beams, and surfaces of walls and columns including cutting back all loose, cracked or delaminated concrete to remove all loose material, preparing reinforcement by manual wire brushing, scraping, or machine brushing, grinding, gritblasting, etc. using an approved type of reinforcement primer and applying an approved bond coat to concrete substrate, all in accordance with the manufacturer's instructions.....</p>	Compressive Strength		compatible with existing concrete	Tensile Strength		not less than 3 Mpa	Elastic Modulus		compatible with existing concrete	Bond Strength		not less than 2 Mpa	Shrinkage Cracking - Coutinho ring	1-21 days	Nil	Figg Air Permeability		< 4 x 10 ⁻¹¹ m/s	Drying Shrinkage	7 days	<700 microstrains	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="3">Thickness (mm)</th> </tr> <tr> <th>10mm</th> <th>15mm</th> <th>Additional 5mm</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> </tr> <tr> <td>224.80</td> <td>311.80</td> <td>95.80</td> </tr> </tbody> </table>	Thickness (mm)			10mm	15mm	Additional 5mm	A	B	C	\$	\$	\$	224.80	311.80	95.80
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02115	<p>Prepare and apply proprietary or site batched shrink resistant mortar complying with the following specification :-</p> <table border="1" style="width: 100%;"> <tr> <td>Compressive Strength</td> <td>28 days</td> <td>min. 40</td> <td>N/mm²</td> </tr> <tr> <td>Unrestrained plastic expansion</td> <td></td> <td>1-4</td> <td>%</td> </tr> <tr> <td>Drying Shrinkage</td> <td>28 days</td> <td><50</td> <td>microstrains</td> </tr> </table> <p>Shrink resistant mortar to soffits of ceilings, sides and soffits of beams, and surfaces of walls and columns including cutting back all loose, cracked or delaminated concrete to remove all loose material, preparing reinforcement by manual wire brushing, scraping, or machine brushing, grinding, gritblasting, etc. using an approved type of reinforcement primer and applying an approved bond coat to concrete substrate, all in accordance with the manufacturer's instructions.....</p>	Compressive Strength	28 days	min. 40	N/mm ²	Unrestrained plastic expansion		1-4	%	Drying Shrinkage	28 days	<50	microstrains	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="3">Thickness (mm)</th> </tr> <tr> <th>10mm</th> <th>15mm</th> <th>Additional 5mm</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> </tr> <tr> <td>234.20</td> <td>285.80</td> <td>99.80</td> </tr> </tbody> </table>	Thickness (mm)			10mm	15mm	Additional 5mm	A	B	C	\$	\$	\$	234.20	285.80	99.80									
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02116	<p>Prepare and apply proprietary or site batched high build polymer modified concrete repair mortar complying with the following specification :-</p> <table border="1" style="width: 100%;"> <tr> <td>Compressive Strength</td> <td></td> <td>compatible with existing concrete</td> </tr> <tr> <td>Tensile Strength</td> <td></td> <td>not less than 3 Mpa</td> </tr> <tr> <td>Elastic Modulus</td> <td></td> <td>compatible with existing concrete</td> </tr> <tr> <td>Bond Strength</td> <td></td> <td>not less than 2 Mpa</td> </tr> <tr> <td>Shrinkage Cracking - Coutinho ring</td> <td>1-21 days</td> <td>Nil</td> </tr> <tr> <td>Figg Air Permeability</td> <td></td> <td>< 4 x 10⁻¹¹ m/s</td> </tr> <tr> <td>Drying Shrinkage</td> <td>7 days</td> <td><700 microstrains</td> </tr> </table> <p>High build polymer modified concrete repair mortar applying overhead to soffits of ceilings, sides and soffits of beams, and surfaces of walls and columns including cutting back all loose, cracked or delaminated concrete to remove all loose material, preparing reinforcement by manual wire brushing, scraping, or machine brushing, grinding, gritblasting, etc. using an approved type of reinforcement primer and applying an approved bond coat to concrete substrate, all in accordance with the manufacturer's instructions.....</p>	Compressive Strength		compatible with existing concrete	Tensile Strength		not less than 3 Mpa	Elastic Modulus		compatible with existing concrete	Bond Strength		not less than 2 Mpa	Shrinkage Cracking - Coutinho ring	1-21 days	Nil	Figg Air Permeability		< 4 x 10 ⁻¹¹ m/s	Drying Shrinkage	7 days	<700 microstrains	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">Thickness (mm)</th> </tr> <tr> <th>40mm</th> <th>Additional 5mm</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> </tr> <tr> <td>\$</td> <td>\$</td> </tr> <tr> <td>292.20</td> <td>95.80</td> </tr> </tbody> </table>	Thickness (mm)		40mm	Additional 5mm	A	B	\$	\$	292.20	95.80					
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Item	REPAIRS TO CONCRETE (CONT'D)		Item																				
	<i>Per linear metre</i>																						
02117	Prepare and apply proprietary epoxy gel surface sealing of cracks prior to chemical injection complying with the following specification : - <table border="1" style="margin-top: 10px;"> <tr> <td>Tensile Strength (BS6319:Part 7:1983)</td> <td>4 hours</td> <td>>7.4 N/mm²</td> </tr> <tr> <td rowspan="3">Compressive Strength (BS6319:Part 2:1983)</td> <td>4 hours</td> <td>>39.0 N/mm²</td> </tr> <tr> <td>24 hours</td> <td>>60.5 N/mm²</td> </tr> <tr> <td>7 days</td> <td>>82.5 N/mm²</td> </tr> </table> <p>For dry and wet cracks or structures subject to vibrational stress. For structural purpose.</p>	Tensile Strength (BS6319:Part 7:1983)	4 hours	>7.4 N/mm ²	Compressive Strength (BS6319:Part 2:1983)	4 hours	>39.0 N/mm ²	24 hours	>60.5 N/mm ²	7 days	>82.5 N/mm ²	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <th>Wall surface</th> <th>Ceiling surface</th> </tr> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> </table>	Wall surface	Ceiling surface	A	B	\$	\$					
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Wall surface	Ceiling surface																						
A	B																						
\$	\$																						
	Epoxy gel of any thickness to surface sealing of cracks.....	186.80	208.80	02117																			
02118	Prepare and apply proprietary extra low viscosity epoxy chemical injection complying with the following specification : - <table border="1" style="margin-top: 10px;"> <tr> <td>Tensile Strength (ASTM D-638)</td> <td colspan="2" style="text-align: center;">29 N/mm²</td> </tr> <tr> <td>Modulus Elasticity (ASTM D-638)</td> <td colspan="2" style="text-align: center;">1.1 kN/mm²</td> </tr> <tr> <td>Compression Strength (BS6319:Part 2:1983)</td> <td>14 days</td> <td>>120 N/mm²</td> </tr> <tr> <td rowspan="2">Bond Strength (Dumb-bell Briquettes)</td> <td>3 days</td> <td>3.0 N/mm²</td> </tr> <tr> <td>7 days</td> <td>3.2 N/mm²</td> </tr> <tr> <td rowspan="2">Flexural strength (BS6319: Part 3:1986)</td> <td>7 days</td> <td>>60 N/mm²</td> </tr> <tr> <td>28 days</td> <td>>90 N/mm²</td> </tr> </table> <p>For dry and damp cracks or structures subject to vibrational stress. For structural purpose.</p>	Tensile Strength (ASTM D-638)	29 N/mm ²		Modulus Elasticity (ASTM D-638)	1.1 kN/mm ²		Compression Strength (BS6319:Part 2:1983)	14 days	>120 N/mm ²	Bond Strength (Dumb-bell Briquettes)	3 days	3.0 N/mm ²	7 days	3.2 N/mm ²	Flexural strength (BS6319: Part 3:1986)	7 days	>60 N/mm ²	28 days	>90 N/mm ²			
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	Epoxy chemical injection to cracks of any size and thickness.....	357.40	399.50	02118																			
02119	Prepare and apply proprietary flexible polyurethane grout injection complying with the following specification : - <table border="1" style="margin-top: 10px;"> <tr> <td>Specific gravity</td> <td>1.1 @ 25 °C</td> </tr> <tr> <td>Elongation</td> <td>> 34 %</td> </tr> <tr> <td>Bond Strength (Dumb-bell @ 24 hours)</td> <td>> 0.28 N/mm²</td> </tr> </table> <p>Pass full test of effect on water quality, BS 6920. Suitability in contact of drinking water. Suitability for movement to crack, fracture or joint. For non-structural purpose. For water seepage cracks and patches.</p>	Specific gravity	1.1 @ 25 °C	Elongation	> 34 %	Bond Strength (Dumb-bell @ 24 hours)	> 0.28 N/mm ²																
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	Flexible polyurethane grout injection to cracks of any size and thickness.....	469.40	507.80	02119																			

Item	REPAIRS TO CONCRETE (CONT'D)	Item																
	Per square metre																	
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Thickness (mm)																		
15 mm	20 mm	Additional 5 mm																
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\$	\$	\$																
02120	Prepare and apply proprietary general purpose non-shrink cementitious grout to existing concrete surfaces all in accordance with the manufacturer's instructions	<table border="1"> <tr> <td style="text-align: center;">268.50</td> <td style="text-align: center;">369.20</td> <td style="text-align: center;">100.60</td> </tr> </table>	268.50	369.20	100.60													
268.50	369.20	100.60																
	Per linear metre																	
02121	Prepare and apply proprietary anti-corrosion primer, tack coat and bond coat to steel reinforcement of all diameters all in accordance with the manufacturer's instructions. The rate shall include cleaning of reinforcement. (Note : - The above Items 02114 to 02121 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)	<table border="1"> <tr> <td style="text-align: center;">A</td> </tr> <tr> <td style="text-align: center;">\$</td> </tr> <tr> <td style="text-align: center;">5.20</td> </tr> </table>	A	\$	5.20													
A																		
\$																		
5.20																		
	EXPANSION JOINTS, ETC.																	
	Per linear metre																	
02122	Form horizontal or vertical expansion joint through full thickness of slab or wall n.e. 75 mm thick including formwork to one edge, providing approved centre bulb type plastic water stop 150 mm (minimum) wide and casting in one edge. coating concrete edge with bitumen at the rate of 0.50 litre/m ² or with approved proprietary primer at rate recommended by the manufacturer when formwork removed, supporting and casting in the other edge of the water stop to the abutting slab or wall, and forming cut and welded joints at all junctions of the water stop in accordance with the manufacturer's instructions	<table border="1"> <tr> <td style="text-align: center;">182.30</td> </tr> </table>	182.30															
182.30																		
02123	Add to Item 02122 for each additional 75 mm thickness, or part thereof, of slab or wall	<table border="1"> <tr> <td style="text-align: center;">16.70</td> </tr> </table>	16.70															
16.70																		
02124	Cover expansion joint with approved "T" or "Y" section P.V.C. or rubber cover strip pressed firmly into the joint including forming groove in concrete or wall plaster and fixing clips at 300 mm centres	<table border="1"> <tr> <td style="text-align: center;">149.40</td> </tr> </table>	149.40															
149.40																		
02125	Thoroughly rake out existing mastic pointing to expansion joint and enlarge groove in plaster, paving, concrete, etc., as necessary ready for re-pointing (measured separately)	<table border="1"> <tr> <td style="text-align: center;">6.50</td> </tr> </table>	6.50															
6.50																		
	Per linear metre																	
		<table border="1"> <thead> <tr> <th colspan="4">Filler thickness (mm)</th> </tr> <tr> <th>9.50</th> <th>12.50</th> <th>19.00</th> <th>25.00</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>	Filler thickness (mm)				9.50	12.50	19.00	25.00	A	B	C	D	\$	\$	\$	\$
Filler thickness (mm)																		
9.50	12.50	19.00	25.00															
A	B	C	D															
\$	\$	\$	\$															
02126	Proprietary performed rigid joint filler placed and supported in position against horizontal or vertical slab edge, wall end, etc., n.e. 75 mm thick, including splitting into two widths if necessary to accommodate plastic water stop (measured separately).....	<table border="1"> <tr> <td style="text-align: center;">7.40</td> <td style="text-align: center;">7.90</td> <td style="text-align: center;">8.90</td> <td style="text-align: center;">9.90</td> </tr> </table>	7.40	7.90	8.90	9.90												
7.40	7.90	8.90	9.90															
02127	Ditto 75 - 150 mm thick.....	<table border="1"> <tr> <td style="text-align: center;">12.00</td> <td style="text-align: center;">13.70</td> <td style="text-align: center;">16.40</td> <td style="text-align: center;">19.60</td> </tr> </table>	12.00	13.70	16.40	19.60												
12.00	13.70	16.40	19.60															
02128	Ditto 150 - 225 mm thick.....	<table border="1"> <tr> <td style="text-align: center;">16.80</td> <td style="text-align: center;">19.60</td> <td style="text-align: center;">24.10</td> <td style="text-align: center;">29.50</td> </tr> </table>	16.80	19.60	24.10	29.50												
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02129	Ditto 225 - 300 mm thick.....	<table border="1"> <tr> <td style="text-align: center;">18.50</td> <td style="text-align: center;">25.30</td> <td style="text-align: center;">31.70</td> <td style="text-align: center;">39.20</td> </tr> </table>	18.50	25.30	31.70	39.20												
18.50	25.30	31.70	39.20															

Item	EXPANSION JOINTS, ETC. (CONT'D)	Joint size (mm)							Item
		5 x 15	5 x 25	15 x 15	15 x 25	15 x 50	25 x 25	25 x 50	
		A	B	C	D	E	F	G	
	Point horizontal or vertical joint with one of the following joint sealants as ordered or approved, including cleaning and preparing surfaces of joint to receive the sealant :								
	<i>Per linear metre</i>								
02130	General purpose, oil based standard grade mastic joint sealant of strong adhesion property and high durability, body of sealant to remain flexible under paintable skin which forms between 24-48 hours, sealant to give weathertight seal and for general pointing, bedding and joint sealant up to 20 mm wide.....	10.90	15.50	24.70	38.60	73.10	-	-	02130
02131	Cold applied, two part elastomeric polyurethane black sealant for joint in concrete paved area, self levelling, resistant to fuel, oil and hydraulic fluid spillage, to BS5212:1990, tack free and accept traffic after 16-24 hours of application.....	9.20	12.80	20.00	30.90	57.40	48.00	94.40	02131
02132	Thermoplastic bitumen based black putty joint sealant, hot applied, for joint in water retaining structures including vertical and inclined joints of width up to 40 mm wide, weather resistant seal, resistant to bacteriological attack, for permanent immersion in water, joint surfaces to be primed with compatible primer from the same manufacturer and allowed to dry.....	11.90	16.50	25.80	40.30	75.80	63.80	123.60	02132
02133	Hot poured, black rubber bitumen horizontal joint sealant, for movement and construction joints of width up to 65 mm (non trafficking) in concrete pavements and floor slabs including water retaining structures, potable water tanks, strong adhesion to concrete and asphalt surfaces, resistant to grit, porous surfaces to be primed with compatible primer from the same manufacturer and allowed to dry.....	9.10	12.10	17.80	26.40	47.90	40.70	76.60	02133
02134	Proprietary liquid polysulphide polymer joint sealant, including backing rod, for sealing joints of 5-50 mm wide in brickwork, floors, retaining walls, basements, subways and expansion joints, strong adhesion to most common substrates, to ISO11600:1993, BS4254:1983 and ASTM C920-87, Type M, Class 25, surfaces to be primed with compatible primer from the same manufacturer as required.....	18.70	27.70	44.40	70.50	101.00	113.70	162.10	02134

Item	EXPANSION JOINTS, ETC. (CONT'D)		Item																																			
		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Diameter (mm)</th> </tr> <tr> <th>15</th> <th>20</th> <th>25</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>16.90</td> <td>20.90</td> <td>24.10</td> </tr> </tbody> </table>		Diameter (mm)			15	20	25	A	B	C	\$	\$	\$	16.90	20.90	24.10																				
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16.90	20.90	24.10																																				
	<i>Per linear metre</i>																																					
02135	Form expansion joint with polyethylene foam backing rod.....	16.90	02135																																			
		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="7">Joint size (mm)</th> </tr> <tr> <th>5 x 15</th> <th>5 x 25</th> <th>15 x 15</th> <th>15 x 25</th> <th>15 x 50</th> <th>25 x 25</th> <th>25 x 50</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>12.10</td> <td>17.70</td> <td>21.90</td> <td>28.90</td> <td>46.90</td> <td>43.00</td> <td>71.20</td> </tr> </tbody> </table>		Joint size (mm)							5 x 15	5 x 25	15 x 15	15 x 25	15 x 50	25 x 25	25 x 50	A	B	C	D	E	F	G	\$	\$	\$	\$	\$	\$	\$	12.10	17.70	21.90	28.90	46.90	43.00	71.20
Joint size (mm)																																						
5 x 15	5 x 25	15 x 15	15 x 25	15 x 50	25 x 25	25 x 50																																
A	B	C	D	E	F	G																																
\$	\$	\$	\$	\$	\$	\$																																
12.10	17.70	21.90	28.90	46.90	43.00	71.20																																
	<i>Per linear metre</i>																																					
02136	Point horizontal or vertical joint with approved epoxy mortar including cleaning and preparing surfaces of joint and priming surfaces with approved epoxy primer before applying epoxy mortar.....	12.10	02136																																			
	REBOUND HAMMER TEST																																					
	<i>Per set</i>		A \$																																			
02137	Carry out rebound hammer test on existing concrete surface in accordance with BS EN 12504-2:2001 including set up equipment, calibrate, carry out test and submit reports.....	38.20	02137																																			
	UNDERLAYS																																					
	<i>Per square metre</i>																																					
02138	Reinforced waterproof building paper laid on surfaces.....	6.00	02138																																			
02139	Ditto but fixed to edges of slabs or tops of walls with and including mastic	14.70	02139																																			
02140	0.08 mm Thick polythene sheet laid on surfaces.....	6.90	02140																																			
02141	Ditto but fixed to edges of slabs or tops of walls with and including mastic	15.80	02141																																			
	SUPPLY ONLY OF MATERIALS																																					
	<i>Per cubic metre</i>																																					
02142	40 mm Granite aggregate.....	83.40	02142																																			
02143	20 mm Ditto.....	83.40	02143																																			
02144	Granite fines.....	106.50	02144																																			
02145	Sand.....	107.80	02145																																			
	<i>Per 100 kg</i>																																					
02146	Ordinary Portland cement.....	67.70	02146																																			
02147	Coloured cement.....	133.10	02147																																			

Section 03

BRICKWORK AND BLOCKWORK

BRICKWORK AND BLOCKWORK

SPECIAL CONDITIONS

- Measurement of brickwork and blockwork generally**
- I. Brickwork and blockwork shall generally be measured net as built. Where exceeding 225 mm or one brick thick, it shall be measured cubic metres, and where 225 mm or one brick thick or less, it shall be measured square metres. Flues and chimney breasts shall be measured solid. Apertures and voids for ranges, grates, coppers, boilers, etc., shall be deducted. Deductions shall also be made for string courses, cills, lintols, etc., but only to the extent of a full brick course in height.
- No deduction shall be made for :-
- (a) Openings not exceeding 0.10 m².
 - (b) Flues not exceeding 0.25 m² in sectional area.
 - (c) String courses, cills, lintols, etc., less than a full brick course in height.
- Apart from face work, no additional rate will be allowed for brickwork or blockwork curved on plan or built battered.
- Measurement of facings to brickwork**
- II. Facing brickwork shall be measured net over the whole exposed surface including additional girth of top and bottom returns of oversailing and receding courses, top of copings and the like. Exposed surfaces of all fair axed arches shall not be deducted from the area of general facings and measured separately as "Extra over" general brickwork for arches.
- On no account will facing be measured where the work is to be plastered, rendered or otherwise covered up, or left rough as in trenches, backs, retaining walls and the like.
- Measurement of fair face to blockwork**
- III. Fair face work shall be measured net as "Extra over" the general blockwork over the whole exposed surface including additional girth of top and bottom returns of oversailing and receding courses, top of copings and the like.
- On no account will fair face work be measured where the work is to be plastered, rendered or otherwise covered up, or left rough as in trenches, backs, retaining walls and the like.
- Measurement for cutting and taking down brickwork and blockwork**
- IV. Measurement for cutting, etc., and taking down existing brickwork and blockwork shall include the thickness of any plastering, rendering, or other finishes on both sides. In the case of taking down walls 300 mm thick and less, the net thickness of the brickwork or blockwork shall be stated.
- Rates for brickwork and blockwork**
- V. The rates for all new brickwork, blockwork and facings shall include for :-
- (a) Rough and fair cuttings and bonding at angles, intersections, etc..
 - (b) Oversailing and receding courses.
 - (c) Rough relieving and discharging arches.
 - (d) Wedging and pinning.
 - (e) Raking out joints to form key.
 - (f) Raking out and enlarging joints, and cement and sand pointing to flashings and the like.
 - (g) Bedding and pointing frames, plates and the like in cement and sand.

SPECIAL CONDITIONS (CONT'D)

V.	<ul style="list-style-type: none"> (h) Eaves filling. (i) Plumbing angles. (j) Forming square or rebated reveals. (k) Cutting squints, birdsmouths, splays, chamfers and the like. (l) Leaving or cutting chases, notches, holes, mortices and the like, and grouting in ends, pipes and the like, and making good. (m) Cutting and pinning ends and making good. (n) Mild steel rod reinforcement or bonding rods painted with two coats of bituminous paint, galvanised mild steel fabric reinforcement and the like. (o) Special bonding and tying for conduit installation. (p) Bonding to existing work. (q) Bonding to walls of different construction. (r) Protection to faced and fair faced work until completion of the Works. (s) Sundry items of like nature to any of the above. 	Rates for brickwork and blockwork (cont'd)
VI.	<p>The rates for new blockwork shall further include for :-</p> <ul style="list-style-type: none"> (a) Special quoin blocks, plain reveal blocks, closers and the like. (b) In the case of hollow blocks, filling cavities solid with cement mortar at ends, opening reveals, intersections and similar positions if necessary. 	Rates for blockwork
VII.	<p>The rates for cutting and taking down brickwork or blockwork shall include for removal and all materials arising from these operations shall become the property of the Contractor. Rates for taking down brickwork or blockwork shall include for taking down plastering, rendering or other finishes on one or both sides.</p>	Rates for cutting and taking down brickwork or blockwork
VIII.	<p>The rates for cutting chases, sinkings, grooves, rebates, holes and the like shall include for removing debris and making good any existing finish.</p>	Rates for cutting chases, sinkings, etc.
IX.	<p>Hollow glass block panelling can be found in Section 14 - Glazing of this Schedule.</p>	Glass blocks

Item	GENERAL BRICKWORK		Item																						
	Note : - The nominal size of standard brick is 225 x 112.5 x 75 mm. Thus nominal thickness of : - One brick wall is 225 mm thick. Half brick wall is 112.5 mm thick. Brick on edge wall is 75 mm thick.	A \$																							
	Brickwork built in cement/lime mortar or cement mortar :-																								
	<i>Per cubic metre</i>																								
03001	Solid brickwork exceeding one brick thick.....	1,213.20	03001																						
	<i>Per square metre</i>																								
03002	Brick-on-edge wall.....	117.50	03002																						
03003	Ditto built honeycomb.....	96.40	03003																						
03004	Half brick wall.....	143.10	03004																						
03005	Ditto built honeycomb.....	98.60	03005																						
03006	One brick wall.....	249.80	03006																						
03007	One brick staining to well.....	314.30	03007																						
03008	Ditto with mortar bed joints but open vertical joints.....	310.20	03008																						
03009	Half brick lining to stone or concrete wall bonded to same with and including flushing up solid between the brick wall and stone or concrete with mortar.....	140.30	03009																						
03010	One brick lining ditto.....	252.50	03010																						
	<i>Per linear metre</i>																								
03011	Brick-on-edge coping, upstand kerb or similar 75 mm wide including angles and ends.....	58.90	03011																						
03012	Ditto but 225 mm wide.....	89.90	03012																						
	<i>Per square metre</i>																								
03013	Form cavity between brick walls, including providing and building in wall tiles in accordance with G.S. items 9.14 and 9.36.....	21.70	03013																						
	BRICK PITS																								
	<i>Each</i>																								
		<table border="1"> <thead> <tr> <th colspan="3">Internal girth (m)</th> </tr> <tr> <th>N.e. 0.90</th> <th>0.90 - 1.35</th> <th>1.35 - 1.80</th> </tr> <tr> <th>A \$</th> <th>B \$</th> <th>C \$</th> </tr> </thead> <tbody> <tr> <td>92.60</td> <td>124.60</td> <td>149.70</td> </tr> <tr> <td>117.90</td> <td>165.60</td> <td>203.40</td> </tr> <tr> <td>228.90</td> <td>323.90</td> <td>420.80</td> </tr> <tr> <td>26.10</td> <td>33.30</td> <td>50.80</td> </tr> </tbody> </table>			Internal girth (m)			N.e. 0.90	0.90 - 1.35	1.35 - 1.80	A \$	B \$	C \$	92.60	124.60	149.70	117.90	165.60	203.40	228.90	323.90	420.80	26.10	33.30	50.80
Internal girth (m)																									
N.e. 0.90	0.90 - 1.35	1.35 - 1.80																							
A \$	B \$	C \$																							
92.60	124.60	149.70																							
117.90	165.60	203.40																							
228.90	323.90	420.80																							
26.10	33.30	50.80																							
03014	Small pit for stop-cock, etc., n.e. 300 mm deep internally constructed of 75 mm thick concrete Grade 10P base extending to outside face of sides and trowelled smooth and half brick sides in cement mortar finished fair and pointed, or rendered in 15 mm cement and sand (1:3) internally, including all excavation, disposal and formwork (cover measured separately).....		03014																						
03015	Ditto 300 - 600 mm deep internally.....		03015																						
03016	Ditto 600 - 900 mm deep internally.....		03016																						
03017	Add to either of Items 03014 to 03016 for 75 mm thick precast concrete Grade 20P cover slab extending to outside face of sides, reinforced with and including expanded mesh fabric, finished fair and placed in position including all moulds and additional excavation.....		03017																						

Item	FACING BRICKWORK				Item
		English bond	Flemish bond	Stretcher bond	
		A	B	C	
		\$	\$	\$	
	<i>Per square metre</i>				
03018	Extra over brickwork exceeding one brick thick for facing and pointing with a neat struck or flush joint as the work proceeds.....	212.30	205.50	-	03018
03019	Ditto but battered.....	205.50	195.20	-	03019
03020	Half brick wall faced and pointed with a neat struck or flush joint as the work proceeds one side.....	-	-	228.70	03020
03021	Ditto both sides.....	-	-	291.00	03021
03022	One brick wall faced and pointed with a neat struck or flush joint as work proceeds one side.....	424.40	411.40	-	03022
03023	Ditto both sides.....	428.50	415.50	-	03023
	Add to either of Items 03018 to 03023 inclusive for work built circular on plan to a radius n.e. 1.50 m.....	15%	15%	15%	
	Add to ditto for work built circular on plan to a radius 1.50 - 15.00 m.....	10%	10%	10%	
	<i>Per linear metre</i>			A	
				\$	
03024	Brick-on-edge coping, upstand kerb or similar 75 mm wide including angles and ends.....			70.10	03024
03025	Ditto but 225mm wide.....			114.60	03025
03026	Extra over brickwork for one brick axed arch in facings (or arch of purpose made bricks) jointing and pointing.....			143.70	03026
	Add to either of Items 03024 to 03026 inclusive for work built circular on plan to a radius n.e. 1.50 m.....			15%	
	Add to ditto for work built circular on plan to radius 1.50 - 15.00 m.....			10%	
	GENERAL FIRE BRICKWORK AND SUNDRY WORK TO FLUES				
	Brickwork in approved imported firebricks set and jointed in approved fire cement or in a mortar composed of one part of high-alumina cement to two parts of finely crushed firebrick by volume :-				
	<i>Per cubic metre</i>			A	
				\$	
03027	Solid brickwork exceeding one brick thick in linings to flues, boilers, grates, cookers, and similar positions.....			5,334.90	03027
	<i>Per square metre</i>				
03028	Brick-on-edge wall.....			416.00	03028
03029	Half brick wall.....			587.50	03029
03030	One brick wall.....			1,280.00	03030
	<i>Per square metre</i>				
03031	Rendering to flues in approved fire cement or in mortar composed of one part of high-alumina cement to two parts of finely crushed firebrick by volume 25mm thick.....			400.20	03031

Item	GENERAL FIRE BRICKWORK AND SUNDRY WORK TO FLUES (CONT'D)		A \$	Item					
	<i>Per linear metre</i>								
03032	150 mm Internal diameter concrete tube lining to flue including all cuttings, bends, etc., and building in and setting and jointing in cement mortar or fire cement or fireclay mortar as described for fire brickwork.....		326.30	03032					
03033	225 mm Internal diameter ditto.....		534.30	03033					
03034	Clean flue or chimney of any sectional area including provision of brushes, rods, and other equipment and removal of soot.....		16.40	03034					
	BLOCKWORK								
	<i>Per cubic metre</i>								
03035	Solid concrete block walling exceeding 225 mm thick in cement mortar.....		1,239.80	03035					
03036	Hollow concrete block walling ditto.....		1,390.30	03036					
		Thickness of wall (mm)							
		75 100 140 190 220							
		A B C D E							
		\$ \$ \$ \$ \$							
03037	Solid concrete block walling in cement mortar.....	116.30 131.20 - - -		03037					
03038	Hollow concrete block ditto.....	124.00 156.40 226.30 261.50 332.40		03038					
03039	Solid vermiculite or other approved lightweight aggregate concrete block walling in cement/lime/sand (1:2:9) by volume.....	110.30 149.90 - - -		03039					
	<i>Per square metre</i>								
03040	Extra over either of Items 03035 to 03039 inclusive for finishing with a fair face and pointing with a neat flush or struck joint as the work proceeds.....		13.50	03040					
	Add to Item 03040 for work built circular on plan to a radius n.e. 1.50 m.....		15%						
	Add to ditto for work built circular on plan to a radius 1.50 - 15.00 m.....		10%						
	FIRE RESISTING LIGHTWEIGHT CONCRETE BLOCKS								
	Proprietary solid concrete lightweight concrete blocks in any size and thickness in accordance with BS 6073: Part 1 and :-								
	<table border="1" style="margin:auto;"> <tr> <td style="padding:2px;">Density (kg/m³)</td> <td style="padding:2px;">Compressive Strength</td> <td style="padding:2px;">Thermal Conductivity</td> </tr> <tr> <td style="padding:2px;">500 - 700</td> <td style="padding:2px;">5.0 Mpa</td> <td style="padding:2px;">0.16 W/mC</td> </tr> </table>	Density (kg/m ³)	Compressive Strength	Thermal Conductivity	500 - 700	5.0 Mpa	0.16 W/mC		
Density (kg/m ³)	Compressive Strength	Thermal Conductivity							
500 - 700	5.0 Mpa	0.16 W/mC							
	<i>Per square metre</i>								
03041	Proprietary fire resisting lightweight concrete block walling bedded and pointed in fireproof mortar.....	190.70 205.50 225.70 290.40		03041					
	<i>Per square metre</i>								
03042	Extra over Item 03041 for sealing one side of wall with moisture sealer.....		2.60	03042					
	(Note : The above Items 03041 and 03042 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing)								

Item	PERFORATED CONCRETE SCREEN BLOCKS		Item												
	<i>Per square metre</i>	A													
		\$													
03043	90 mm Perforated concrete screen blocks to a standard pattern in cement mortar pointed with neat flush or struck joint both sides as the work proceeds.....	148.40	03043												
03044	90 mm Ditto but built honeycomb.....	98.90	03044												
	SUNDRIES														
	<i>Per square metre</i>														
03045	Hack off and clear away existing glass bottling bonded in mortar and make good in cement mortar.....	53.80	03045												
	<i>Per linear metre</i>														
	(Note : - The following Items 03046 and 03047 inclusive will not be paid for, if working on new works item.)														
03046	Fillet in cement/lime mortar or cement mortar n.e. 0.002 m ² sectional area.....	10.60	03046												
03047	Add to Item 03046 for each additional 0.001 m ² or part thereof in sectional area.....	5.30	03047												
		<table border="1"> <thead> <tr> <th colspan="3">Width (mm)</th> </tr> <tr> <th>N.e. 150</th> <th>150 - 300</th> <th>300 - 450</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </tbody> </table>		Width (mm)			N.e. 150	150 - 300	300 - 450	A	B	C	\$	\$	\$
Width (mm)															
N.e. 150	150 - 300	300 - 450													
A	B	C													
\$	\$	\$													
	<i>Per linear metre</i>														
03048	One course plain clay tile cill set weathering to project 25 mm from finished wall face, bedded, jointed and pointed in cement mortar including angles, ends and similar labours.....	90.90	145.30	199.20	03048										
03049	Two course ditto.....	145.30	236.30	342.10	03049										
03050	One course plain clay tile creasing or capping to wall projecting 25 mm from both sides of finished wall face, bedded, jointed and pointed in cement mortar including angles, ends and similar labours.....	90.10	144.60	199.20	03050										
03051	One course quarry tile cill set weathering to project 25 mm from finished wall face, bedded, jointed and pointed in cement mortar including angles, ends and similar labours.....	94.00	151.80	208.90	03051										
	<i>Each</i>	A													
		\$													
03052	Glass or cement "tell-tale" executed complete including inscribing in legible figures the date of fixing, and removing old "tell-tale" where necessary.....	24.10	03052												
03053	Add to Item 03052 if cutting is necessary on stone or concrete wall for fixing.....	12.80	03053												

Item	DAMP PROOF COURSE					Item	
	<i>Per square metre</i>				A \$		
03054	One course bituminous felt damp proof course laid on, under, or to vertical face of, walls, lapped 150 mm at joints, and including cement mortar levelling bed on wall or concrete under (measured net).....				138.30	03054	
<p>CUTTING AND SUNDRY LABOURS ON EXISTING BRICKWORK OR BLOCKWORK IN CEMENT OR CEMENT/LIME MORTAR</p> <p>(Note : - The following Items 03055 to 03092 inclusive will not be paid for, if working on new works item.)</p>							
	<i>Per cubic metre</i>						
		Brick-work	Hollow clay block	Solid concrete block	Hollow concrete block	Solid vermicu-lite block	
		A \$	B \$	C \$	D \$	E \$	
03055	Cut through wall exceeding 0.05 m³ for new door, window or other opening, or to enlarge existing opening including any necessary strutting and shoring required, levelling for cills, cutting toothings and providing and bonding in any new bricks required, and making out jambs and heads ready to receive new plaster or other finish, cutting and pinning in ends of new cills, lintols, fixing lugs, cramps, bolts, etc., and clearing away all debris (net size of required opening including allowance for lintol or arch and cill but excluding pockets for fixing lugs, cramps, bolts, etc., measured. New lintol, arch, plastering, decoration or "Extra for facing" all measured separately).....	1,081.10	743.30	946.00	918.90	878.40	03055
	<i>Per square metre</i>						
03056	Rake out joints 10 mm deep and re-point in cement or cement/lime mortar with a neat struck weathered or flush joint.....	43.60	39.10	34.40	34.40	34.40	03056
03057	Level and prepare top of wall for raising.....	46.50	41.90	37.20	37.20	37.20	03057
03058	Cut sinking exceeding 0.10 m² but n.e. 25 mm deep into surface, including trimming and making good back face and edges (net size of required sinking measured).....	76.40	-	62.60	53.40	50.80	03058
03059	Add to Item 03058 for each additional 25 mm or part of 25 mm in depth.....	67.90	-	55.70	47.50	45.30	03059
03060	Wedge and pin up top of wall to new soffit.....	145.80	147.10	165.90	163.60	173.40	03060
03061	Bed corrugated roof sheeting on top of wall in cement mortar including pointing edges if required.....	97.70	97.70	97.70	97.70	97.70	03061
03062	Make good end or face of wall where existing wall which was bonded in has been removed including providing selected bricks or blocks and jointing in and pointing if required to match existing (any new plaster, etc. measured separately).....	142.80	115.30	127.60	126.70	122.80	03062
03063	Cut out decayed or broken bricks or blocks of any thickness and replace with new selected bricks or blocks and joint in and point, if required, to match existing (in areas where more than seven adjacent bricks or one block are replaced) (any new plaster, etc. measured separately).....	264.50	199.10	242.10	221.40	215.80	03063

Item	CUTTING AND SUNDRY LABOURS ON EXISTING BRICKWORK OR BLOCKWORK IN CEMENT OR CEMENT/LIME MORTAR (CONT'D)	Brick- work	Hollow clay block	Solid concrete block	Hollow concrete block	Solid vermicu- lite block	Item
	<i>Each</i>						
03081	Cut hole or sinking n.e. 0.01 m ² and 25 mm deep into surface including trimming and making good back face and edges. (net size of required sinking measured).....	10.80	8.10	12.20	10.80	8.10	03081
03082	Add to Item 03081 for each additional 25 mm or part of 25 mm in depth.....	6.80	5.40	8.10	6.80	5.40	03082
03083	Cut sinking as Item 03081 but 0.01 - 0.10 m ²	23.00	18.90	25.70	21.60	18.90	03083
03084	Add to Item 03083 for each additional 25 mm or part 25 mm in depth.....	13.50	10.80	14.90	13.50	10.80	03084
03085	Cut hole through brickwork or blockwork for pipe, airbrick or similar, n.e. 0.0001 m ³ (net size of pipe or article measured) and grout in or render round reveals in cement mortar (1:2) and make good one or both sides.....	6.80	5.40	8.10	6.80	5.40	03085
03086	Ditto 0.0001 - 0.0002 m ³	10.80	8.10	12.20	10.80	8.10	03086
03087	Ditto 0.0002 - 0.0020 m ³	23.00	18.90	25.70	21.60	18.90	03087
03088	Ditto 0.0020 - 0.0100 m ³	33.80	27.00	37.80	32.40	27.00	03088
03089	Ditto 0.0100 - 0.0500 m ³	44.60	35.10	48.70	41.90	35.10	03089
03090	Cut out decayed or broken brick or block of any thickness and replace with new selected brick or block and joint in and point if required to match existing (in area where not more than seven adjacent bricks or one block is replaced) (any new plaster, etc., measured separately).....	37.80	29.70	41.90	36.50	32.40	03090
	(Note : - Rates for ragbolts, rawbolts, etc., in Section 10 - Steel and Metal Work of this Schedule include for all mortices and grouting.)						
03091	Cut or drill mortice for dowel, baluster end, bracket end, fixing cramp, bolt or similar articles n.e. 0.0001 m ³ (net size of article or end measured) and grout in cement and sand (1:2) and make good.....	6.80	5.40	8.10	6.80	5.40	03091
03092	Ditto 0.0001 - 0.0002 m ³	10.80	8.10	12.20	10.80	9.50	03092
	TAKING DOWN BRICKWORK OR BLOCKWORK BUILT IN CEMENT/LIME OR CEMENT MORTAR						
	<i>Per cubic metre</i>						
03093	Take down and clear away wall in any position exceeding 300 mm thick.....	257.10	192.80	251.90	244.20	231.40	03093
	<i>Per square metre</i>						
03094	Take down and clear away wall in any position n.e. 100 mm thick.....	21.40	16.30	21.40	20.60	19.70	03094
03095	Ditto 100 - 200 mm thick.....	38.60	29.10	37.70	36.90	35.10	03095
03096	Ditto 200 - 300 mm thick.....	68.60	51.40	66.80	65.10	61.70	03096

Item	FIXING GRATES, RANGES, FIRE SURROUNDS, BOILERS AND SIMILAR	Take down and clear away	Take down and set aside for re-use	Fix only	Item			
						A	B	C
						\$	\$	\$
	<i>Each</i>							
03097	Combined cast iron grate and mantel with fireclay slab cheeks and back, and cast iron fret.....	102.80	108.00	176.90	03097			
03098	Tiled slab fireplace surround complete with fireclay slab cheeks and back, and cast iron fret.....	145.70	153.40	217.00	03098			
03099	Cast iron grate with separate wood, stone or metal mantel, tiled slab surround, fireclay slab cheeks and back, and cast iron fret.....	137.10	144.00	176.90	03099			
03100	Wood, stone or metal mantel only.....	85.70	90.00	121.90	03100			
03101	Fireclay slab cheeks and back only.....	38.60	40.30	62.40	03101			
03102	Tiled slab raised or flush hearth only.....	25.70	27.40	41.60	03102			
03103	Tiled slab curb only.....	12.90	13.70	20.80	03103			
03104	Slow combustion type grates (without mantel or tiled surround) complete with heavy fireclay slab cheeks and back, and back hearth.....	51.40	54.00	81.80	03104			
03105	Free standing slow combustion type closed stove with flue pipe.....	38.60	40.30	62.40	03105			
03106	Free standing range or kitcheners, with single or double ovens, side or high-pressure boilers, and feed cistern if required.....	85.70	90.00	102.60	03106			
03107	Domestic boiler, copper, rice container or similar.....	55.70	58.30	81.80	03107			
03108	Range or kitcheners (not free-standing) with single or double ovens, side or high-pressure boilers, feed cistern if required.....	137.10	144.00	176.90	03108			
03109	Damper and frame, soot door, fire door, fireplace fret or similar (when not included with any of the above fittings).....	12.90	13.70	20.80	03109			
	FIXING SUNDRY METAL WORK ITEMS							
	Fix or place in position (fixing material measured separately) :-							
	<i>Each</i>							
03110	Combined gate, tree grilles, covers, fireplace surround, mantel, range, damper and frame, soot door, fire door, fireplace fret, fire bar and the like except manhole covers and frames n.e. 3 kg to concrete, brickwork, blockwork or masonry	12.90	13.70	34.20	03110			
03111	Ditto 3 - 12 kg.....	25.70	27.40	41.60	03111			
03112	Ditto 12 - 24 kg.....	34.30	35.10	55.00	03112			
03113	Add to Item 03112 for each additional 12 kg or part thereof n.e. 100 kg.....	8.60	9.40	14.90	03113			
03114	Safe in any weight.....	557.00	585.30	839.90	03114			

Item	SUPPLY ONLY OF MATERIALS		A	\$	Item																				
	<i>Per 1,000</i>																								
03115	Bricks.....	958.70			03115																				
03116	Facing bricks.....	2,645.00			03116																				
03117	Firebricks.....	4,458.30			03117																				
<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="5">Thickness (mm)</th> </tr> <tr> <th>75</th> <th>100</th> <th>140</th> <th>190</th> <th>220</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </tbody> </table>						Thickness (mm)					75	100	140	190	220	A	B	C	D	E	\$	\$	\$	\$	\$
Thickness (mm)																									
75	100	140	190	220																					
A	B	C	D	E																					
\$	\$	\$	\$	\$																					
	<i>Per 100</i>																								
03118	390 x 190 mm Solid concrete blocks.....	267.00	356.00	-	-	03118																			
03119	390 x 190 mm Hollow concrete blocks.....	256.10	341.50	693.00	808.50	1,155.00	03119																		

Section 04

MASONRY

MASONRY

SPECIAL CONDITIONS

Measurement generally	<p>I. All unsquared random rubble walling, hearthing or backing to face of walls shall be measured net and grouped together irrespective of thickness.</p> <p>All squared rubble walling shall be measured net as fixed.</p> <p>No deduction shall be made for : -</p> <p>(a) Openings not exceeding 0.10 m².</p> <p>(b) String courses, cills, lintols and the like not exceeding 100 mm high.</p> <p>Apart from fair facing, no additional rate will be allowed for random rubble walling built curved on plan or battered.</p>
Measurement of squared rubble walls	<p>II. Squared rubble walls as facing to brick, concrete or random rubble hearthing or backing, shall be measured net thickness. No addition shall be measured for the additional volume of the bond stones projecting into or through the hearthing or backing and no deduction shall be made from the hearthing or backing for the volume of such bond stones.</p>
Measurement of polygonal rubble walling or "Kentish Rag"	<p>III. Unless other stated, polygonal rubble walling or "Kentish Rag" shall be measured net as "Extra over" the random rubble walls for fair facing over the whole exposed surface including additional girth of top and bottom returns of oversailing and receding coursed, top of the copings and the like.</p> <p>On no account will this "Extra over" item for fair facing be measured where the work is to be plastered, rendered, or otherwise covered up or left rough as trenches, backs, retaining walls and the like.</p>
Measurement of extra over for fair face	<p>IV. Fair facing shall be measured net as "Extra over" the random rubble walls over the whole exposed surface including additional girth of top and bottom returns of oversailing and receding courses, top of copings and the like.</p> <p>On no account will fair facing be measured where the work is to be plastered, rendered, or otherwise covered up or left rough as trenches, backs, retaining walls and the like.</p>
Measurement of battered face	<p>V. Battered faces shall be measured net over the exposed surface area on line of batter as "Extra over" stone wall. Battered faces shall not be measured on random rubble hearthing or backing.</p>
Measurement of cutting opening through walls	<p>VI. The measurement of cutting opening through walls shall be the net size required including allowance for lintel or arch. New lintel or arch shall be measured separately.</p>
Measurement of fully dressed stone	<p>VII. Fully dressed stone shall be measured the smallest square or rectangular shaped block from which it can be worked.</p>
Measurement for cutting, etc., or taking down existing stone	<p>VIII. Measurement for cutting mortices and the like, or taking down existing stone shall include the thickness of any rendering or other surfacing.</p>

SPECIAL CONDITIONS (CONT'D)

- | | | |
|-----|---|--|
| IX. | The rates for all random and squared rubble walling, facework and fully dressed stone shall generally include for : - | Rates for all random and squared rubble walling, facework and fully dressed stone generally |
| | <ul style="list-style-type: none"> (a) Irregular shaped roughly cut random rubble or roughly squared rubble walling. (b) Preparing all existing beds and joints, hoisting, setting, jointing and pointing the work in any position including all joggles, templates, ties, dowels, cramps, other fixing devices and the like. (c) Oversailing and receding courses. (d) Rough and fair cutting and bonding at angles, intersections and the like. (e) Rough relieving and discharging arches. (f) Raking out joints for and pointing as the work proceeds. (g) Bedding and pointing frames, plates and the like. (h) Plumbing angles. (i) Forming reveals, returns, rounded, coved, moulded angles and the like. (j) Leaving or forming chases, notches, holes, grooves, rebates, throats, chamfers, arrises, splays, sinkings, margins, mortices and the like and building in ends, pipes and the like (work where cutting on the face involved shall be measured). (k) Casing or protecting work with slurry, cleaning off and rubbing down on completion if required. (l) Bonding into existing work. (m) Marking for identification and delivery in any matching sequence. (n) Temporary protection and subsequent removal. | |
| X. | The rates for extra over random rubble walling, polygonal rubble walling or "Kentish Rag" for fair face shall further include for : - | Rates for extra over random rubble walling for fair face |
| | <ul style="list-style-type: none"> (a) Selected quality of random granite rubble in evenness, texture, stainless and sharpness of arrises. (b) Cutting in, replacing with approved quality rubbles and removing inferiority from Site. | |
| XI. | The rates for squared rubble walling shall further include for : - | Rates for squared rubble walling |
| | <ul style="list-style-type: none"> (a) Preparation of joint faces of each stone to a square and true plane surfaces, free from hollow or rough area. (b) Building quoins and jambs in selected stones each 175 to 250 mm high to bond in with the wall courses if required. (c) Flushing up backing with cement mortar. (d) Making good affected works to match existing. (e) Removal from Site all arisings. | |

SPECIAL CONDITIONS (CONT'D)

Rates for take down and set aside for re-use

- XII. The rates for take down and set aside for re-use shall include for : -
- (a) Taking down stonework at any locations.
 - (b) Providing, maintaining and dismantling all necessary strutting, shoring and the like, and working platform.
 - (c) Cleaning stonework free from mortar or other contaminations.
 - (d) Multi-handling, storage and delivery of stoneworks to designated locations including that as directed by the Maintenance Surveyor.

Rates for fully dressed granite

- XIII. The rates for fully dressed granite shall further include for : -
- (a) Dressing and fine punching on all exposed surfaces accurately.
 - (b) Forming squared back and punching bed and other sides to produce joints not exceeding 3 mm thick.
 - (c) Setting, bedding, jointing and pointing with flush, struck or recessed joints in cement and granite fines (1:3) mortar.

Rates for cutting opening through walls

- XIV. The rates for cutting opening through walls shall include for : -
- (a) Providing, maintaining and dismantling all necessary strutting, shoring and the like.
 - (b) Levelling, cutting, cutting toothing, dressing and the like.
 - (c) Providing and bonding in new stone, making out jambs, heads and facing and pointing the same to match existing.
 - (d) Cutting and pinning in ends of new walls, lintels and the like.
 - (e) Making good affected works to match existing.
 - (f) Removal from Site all arisings.

Rates for cutting toothings

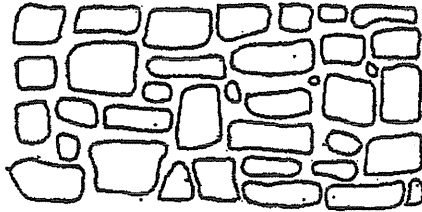
- XV. The rates for cutting toothings shall include for : -
- (a) Providing, maintaining and dismantling all necessary strutting, shoring and the like.
 - (b) Cutting, dressing and the like.
 - (c) Providing and bonding new stone as required.
 - (d) Making good affected works to match existing.
 - (e) Removal from Site all arisings.

SPECIAL CONDITIONS (CONT'D)

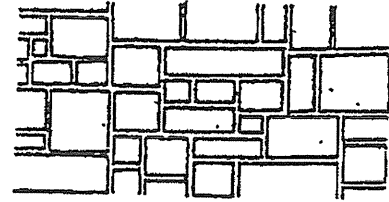
XVI.	The rates for cutting holes shall include for : -	Rates for cutting holes
(a)	Mobilization, maintenance and demobilization of coring plant and other mechanical plant necessary for the works.	
(b)	Coring through existing stone works including any finishes.	
(c)	Providing temporary water and power supplies and working platform as required.	
(d)	Grouting in pipes or articles and rendering around reveals with cement mortar as required.	
(e)	Making good disturbed surfaces to match existing.	
(f)	Removal from Site all arisings.	

TYPES OF RUBBLE WALLING

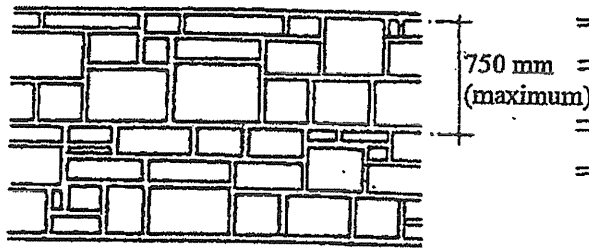
A. Random rubble



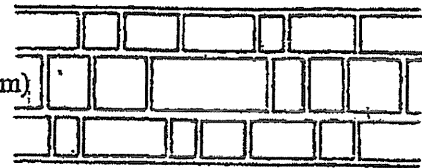
B. Squared uncoursed rubble



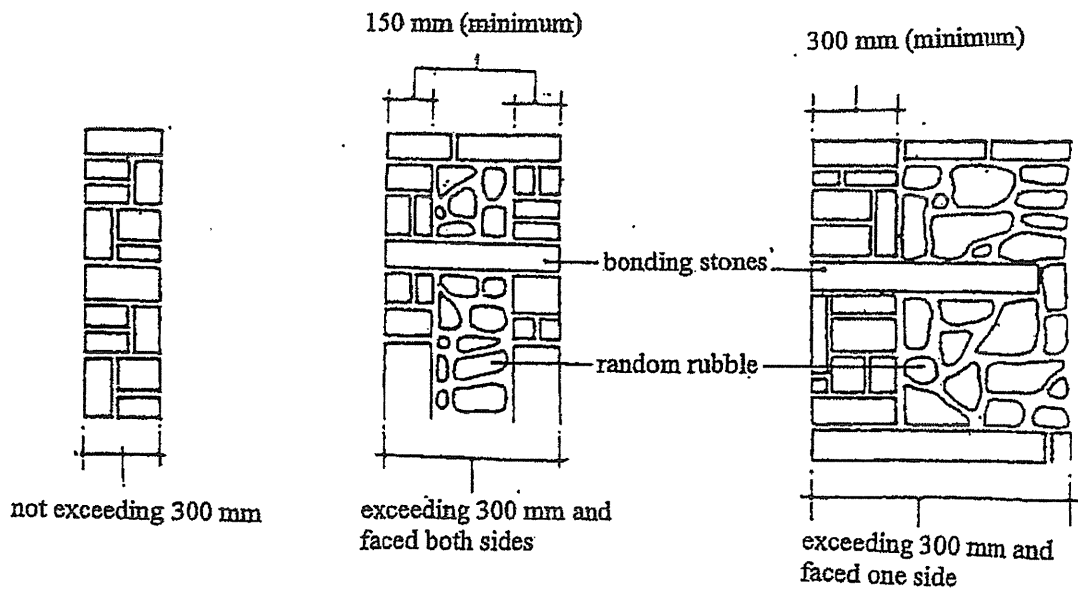
C. Squared rubble brought up to courses

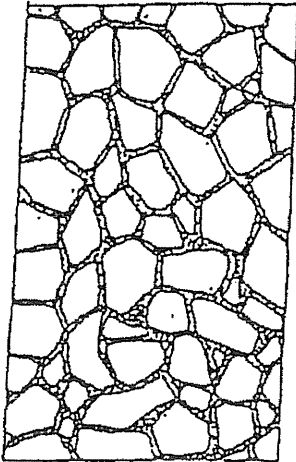


D. Squared coursed rubble

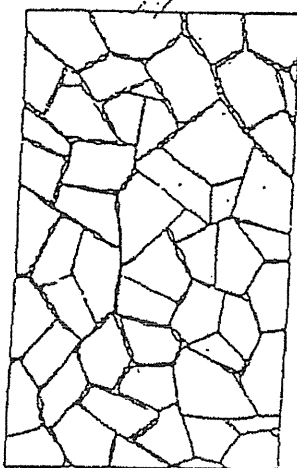


E. Squared rubble walls - sections :-





F. rough-picked polygonal walling



G. close-picked polygonal walling

Item	RANDOM RUBBLE WALLING BUILT DRY	Supply and lay	Take down and clear away	Take down and set aside for re-use	Lay only	Item
	<i>Per cubic metre</i>	A \$	B \$	C \$	D \$	
04001	Walling of any thickness.....	1,101.80	171.40	218.80	443.10	04001
	RANDOM RUBBLE WALLING SOLIDLY BEDDED AND JOINTED IN CEMENT MORTAR					
	<i>Per cubic metre</i>					
04002	Walling of any thickness.....	1,328.10	189.00	254.90	607.00	04002
04003	Hearthings or backing of any thickness to squared rubble face wall (measured separately).....	1,328.10	189.00	254.90	607.00	04003
	<i>Per square metre</i>				A \$	
04004	Extra over random rubble walling or hearthing for fair face in the form as sketch "A".....				14.60	04004
04005	Ditto in the form as sketch "F" (rough - picked polygonal walling).....				17.40	04005
04006	Ditto in the form as sketch "G" (close - picked polygonal walling).....				19.00	04006
04007	Add to either of Items 04004 to 04006 for battered face.....				53.40	04007
	Add to Items 04004 to 04007 inclusive for work built circular on plan to radius n.e. 1.50 m.....				20%	
	Ditto but 1.50 - 15.00 m.....				10%	
	UNCOURSED SQUARED RUBBLE WALLING (AS SKETCH "B") SOLIDLY BEDDED AND JOINTED IN CEMENT MORTAR					
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
04008	Walling n.e. 75 mm thick.....	114.50	19.00	28.80	65.70	04008
04009	Ditto but as facing to brick, concrete or random rubble backing (measured separately) including bonding screed.....	158.50	18.40	12.50	90.00	04009
04010	Add to either of Items 04008 to 04009 for each additional 25 mm or part thereof in thickness	39.90	6.10	3.80	24.40	04010
04011	Extra over walling for battered face.....	50.80	-	-	43.10	04011
	Add to either of Items 04008 to 04011 inclusive for work built circular on plan to radius n.e. 1.50 m.....	20%	-	-	20%	
	Ditto but 1.50 - 15.00 m.....	10%	-	-	10%	

Item	SQUARED RUBBLE WALLING BROUGHT UP TO COURSES (AS SKETCH "C") SOLIDLY BEDDED AND JOINTED IN CEMENT MORTAR				Item	
	Supply and lay	Take down and clear away	Take down and set aside for re-use	Lay only		
	A \$	B \$	C \$	D \$		
<i>Per square metre</i>						
04012	Walling n.e. 75 mm thick.....	134.60	20.50	32.10	71.70	04012
04013	Ditto but as facing to brick, concrete or random rubble hearthing or backing (measured separately).....	167.50	20.00	31.10	96.10	04013
04014	Add to either of Items 04012 to 04013 for each additional 25 mm or part thereof in thickness.....	43.20	6.60	10.20	26.80	04014
04015	Extra over walling for battered face.....	50.80	-	-	43.10	04015
	Add to Items 04012 to 04015 inclusive for work built circular on plan to radius n.e. 1.50 m.....	20%	-	-	20%	
	Ditto but 1.50 - 15.00 m.....	10%	-	-	10%	
SQUARED COURSED RUBBLE WALLING (AS SKETCH "D") SOLIDLY BEDDED AND JOINTED IN CEMENT MORTAR						
<i>Per square metre</i>						
04016	Walling n.e. 75 mm thick.....	144.20	22.10	35.30	72.60	04016
04017	Ditto but as facing to brick, concrete or random rubble hearthing (measured separately).....	174.20	24.20	38.00	109.00	04017
04018	Add to either of Items 04016 to 04017 for each additional 25 mm or part thereof in thickness (up to a maximum of 250 mm).....	47.20	8.30	13.30	27.10	04018
04019	Extra over walling for battered face.....	50.80	-	-	42.90	04019
	Add to Items 04016 to 04019 inclusive for work built circular on plan to radius n.e. 1.50 m.....	20%	-	-	20%	
	Ditto but 1.50 - 15.00 m.....	10%	-	-	10%	

Item	PREPARATION OF SURFACING FINISH TO RUBBLE WALLING					Item
		Random rubble walling as Sketch "A", "F" or "G"	Un-coursed squared rubble walling	Squared rubble walling brought up to courses	Regular coursed squared rubble walling	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
04020	Prepare surface to regular convex "rock faced" finish including allowance for additional thickening.....	108.60	55.20	55.20	55.20	04020
04021	Prepare surface finish as G.S. item 10.17 including allowance for additional thickening.....	317.80	157.50	157.50	157.50	04021
	FULLY DRESSED GRANITE					
		Supply and lay	Take down and clear away	Take down and set aside for re-use	Lay only	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
04022	Ashlar walling or facing not exceeding 100 mm thick.....	168.00	20.10	28.00	66.50	04022
04023	Ditto 100 mm to 300 mm thick.....	336.10	40.30	56.10	133.00	04023
	Add to either of Item 04022 to 04023 inclusive for work circular on plan to radius n.e. 1.50 m.....	20%	-	-	20%	
	Ditto but 1.50 - 15.00 m.....	10%	-	-	10%	

Item	CUTTING AND SUNDRY LABOURS ON EXISTING STONE					Item			
	(Note : - The following Items 04024 to 04037 will not be paid for, if working on new works item.)								
	Random rubble walling	Un-coursed squared rubble walling	Squared rubble walling brought up to courses	Regular coursed squared rubble walling	Fully dressed granite				
	A	B	C	D	E				
	\$	\$	\$	\$	\$				
04024	642.40	665.50	665.50	665.50	1,033.10	04024			
04025	1,806.30	1,872.00	1,872.00	1,872.00	3,271.30	04025			
	<i>Per cubic metre</i>								
04026	51.10	38.90	38.90	38.90	33.00	04026			
04027	-	37.30	37.30	37.30	52.30	04027			
04028	31.10	31.10	31.10	31.10	-	04028			
04029	118.40	159.80	159.80	159.80	248.20	04029			
04030	58.80	59.30	59.30	59.30	68.90	04030			
	<i>Per square metre</i>								
04031					A				
04031					\$				
04031					10.40	04031			
04032					18.00	04032			
	<i>Each</i>								
					Thickness of stone (mm)				
					N.e. 150	150 - 300	300 - 450	450 - 600	
					A	B	C	D	
					\$	\$	\$	\$	
04033					22.50	45.30	67.80	90.60	04033
04034					29.00	56.60	84.50	113.80	04034
04035					45.30	91.00	136.80	182.10	04035

Item	CUTTING AND SUNDRY LABOURS ON EXISTING STONE (CONT'D)		Random rubble walling	Un-coursed squared rubble walling	Squared rubble walling brought up to courses	Regular coursed squared rubble walling	Fully dressed granite	Item
	<i>Per linear metre</i>		A \$	B \$	C \$	D \$	E \$	
04036	Rake out single detached joint not less than 15 mm deep and re-point with flush, struck, recessed or keyed joint as required in cement mortar.....		6.70	6.70	6.70	6.70	6.70	04036
04037	Rake out from wall crack, etc., cut back edges as required and point with flush joint in cement mortar.....		10.10	10.10	10.10	10.10	10.10	04037
CUTTING LETTERS IN NEW OR EXISTING STONE								
	<i>Each</i>		Height of letter or number (mm)					
			N.e. 75	75 - 150	150 - 225	225 - 300		
			A \$	B \$	C \$	D \$		
04038	Cut plain block letter or number in face of stone including picking out with painting.....		43.10	73.70	93.40	105.40		04038
04039	Cut Chinese character ditto.....		52.20	90.00	115.20	129.10		04039
	Add to either of Items 04038 to 04039 inclusive for working on existing stonework.....	10%						

Section 05

ROOFING

ROOFING

SPECIAL CONDITIONS

- | | |
|---------------------------------------|---|
| Definition of whole roof slope | <p>I. Whole roof slope shall mean an area extending from one gable wall to another, from gable wall to hip or valley between two hips, between two valleys, or between hip and valley in length, and from eaves to ridge in breadth and shall include any subsidiary features such as roofs to dormers which may be contained within such area.</p> |
| Rates for roofing generally | <p>II. The rates for roofing shall generally include for : -</p> <ul style="list-style-type: none"> (a) Works at any height and locations. (b) Works to new or existing surfaces in repairs. (c) Forming and including joints and allowing for laps including side and end laps when required. (d) Allowing for cutting, waste and breakage including those at abutments, top edges, verges, hips and valleys. (e) Preparing, cleaning and protection of surfaces to receive roofing materials. (f) Fixing or laying to falls and currents. (g) Sealing at edges, joints and around intersections and projections. (h) All narrow widths and small areas. (i) Cleaning and priming to surfaces prior to applying roofing materials all in accordance with the manufacturer's instructions. (j) Cutting back existing roofing materials to provide joints for new roofing when required. (k) Allowing all cutting, fitting, dressing and making good around rainwater outlets, pipes, flues, openings and the like. (l) Sampling and testing of roofing materials. (m) Providing shop drawings as necessary for the works. (n) Providing waterproofed rain shelter or any other covers completed with rigid framing when required throughout the progress of the work to roof areas to prevent the ingress of rain or other water. (o) Providing temporary drainage system throughout the progress of the work. (p) Making good affected areas to match existing. (q) Temporary protective measures, cleaning and removing all arisings. (r) Infra-red thermograph testing when required. (s) Keep a register of all dangerous substances including those hazardous to health, which are delivered to and stored on Site for use on the Works. The register include information physical and chemical properties, hazards, safe handling and storage, precautionary measures to be taken, first aid measures, disposal of containers and surplus of waste materials, and measures to be taken in case of accidents. (t) Leaving roof clean, windproof and watertight on completion and cleaning out rainwater outlets and gutters. (u) Provision of manufacturer's guarantee. (v) Provision of warranty. |

SPECIAL CONDITIONS (CONT'D)**CHINESE TILE ROOFING**

(Note :- Refer to attached sketches for details.)

- | | | |
|------|---|---|
| III. | Roof tiling shall be measured as the net area covered. No deduction shall be made for openings not exceeding 0.50 m ² .

Timber battens, screeds on concrete or other sub-roofs shall be measured separately under Section 08 - Carpentry and Joinery or Section 11 - Plasterwork and other Floor, Wall and Ceiling Finishes of this Schedule. | Measurement of tiling |
| IV. | Any repair work to double layer tiling where only the top layer affected will be paid for at the rates for repair work to single layer tiling. | Measurement of repair work to double layer tiling |
| V. | The rates for Chinese tile roofing shall further include for : -

(a) Roofing to flat, sloping or curved roofs.

(b) Allowing all bedding materials, nails, and labour including covering all rolls, ridges and hip cappings and valleys with mortar.

(c) Spot bedding edges of pan tiles and solid bedding of roll tiles with cement/lime mortar cement, lime putty and sand (1:1:6) and 15 mm thick covers.

(d) Allowing for all lapping between tiles. | Rates for Chinese tile roofing |
| VI. | The rates for ridges and hip cappings and valleys shall further include for all mitred angles, junctions and ends. | Rates for ridges and hip cappings and valleys |
| VII. | The rates for taking down and removing Chinese roof tiling (unglazed/glazed) shall include for : -

(a) Taking down and removing from Site pan and roll tiles, ridges and cappings, valleys, double eave courses and the like.

(b) Taking down and removing from Site timber battens if required.

(c) Taking down and removing from Site all nails, bedding materials and the like. | Rates for taking down and removing Chinese roof tiling (unglazed/glazed) |

CORRUGATED OR PROFILED SHEET ROOFING

- | | | |
|-------|--|--|
| VIII. | Corrugated or profiled sheet roofing shall be measured flat over the net area covered (girth of corrugations not measured) including ridges, hips, valleys, channels, gutters and the like. In the case of sloping roof, it shall be measured flat over the exposed surfaces (girth of corrugations not measured). No deduction shall be made for openings not exceeding 0.50 m ² . | Measurement of corrugated or profiled sheet roofing |
| IX. | The rates for corrugated or profiled sheet roofing shall further include for : -

(a) Allowing all notching and fitting edges of sheets and mitring corners as required, and all mitred angles, junctions and ends on ridges and hips.

(b) Allowing all eaves, jambs, lintel filling pieces, barges boards, corner pieces and the like. | Rates for corrugated or profiled sheet roofing |

SPECIAL CONDITIONS (CONT'D)

CORRUGATED OR PROFILED SHEET ROOFING (CONT'D)

Rates for corrugated or profiled sheet roofing (Cont'd)	IX.	(c)	Spot, fillet or seam welding, brazing or soldering.
		(d)	Drilling holes for and providing all drive screws, self-tapping screws, rivets, bolts, hook bolts, nuts, metal and rubber washers, and plastic caps for fixing to purlins or framing spaced at any interval.
		(e)	Drilling holes to existing or new purlins or framing spaced at any interval for the fixing of corrugated or profiled sheet roofing as required.
		(f)	Forming and including holes for pipes or articles.
		(g)	Recommended fixing method in accordance with the manufacturer's instructions.
		(h)	Forming movement joints as required.
		(i)	Forming sheets to required curvature on curved roofs.
		(j)	In the case of profiled compressed particle sheet roofing, ridge cappings and hip cappings.
		(k)	In the case of proprietary steel/aluminium sheet roofing, design and submission of calculations and shop drawings including provision of sub-frames.
		(l)	All necessary testing to ensure integrity and water-tightness of the whole roofing system.

PROPRIETARY GREEN ROOFING SYSTEM

Measurement of proprietary green roofing system	X.		Supply and installation of proprietary green roofing system shall be measured as the net surface area of the face to be covered. No deduction shall be made for voids not exceeding 0.5 m ² .
Rates for proprietary green roofing system	XI.		The rates for proprietary green roofing system shall further include for :
		(a)	Preparation and making good existing roof.
		(b)	Condition and structural survey to existing roof including preparation and submission of records and reports.
		(c)	Engagement of a Registered Structural Engineer for checking and verifying the imposed loading of the Proprietary Green Roof System onto the existing structure including preparation and certification of all required structural submissions.
		(d)	Including, but not limited to, roof barrier system, moisture retention layer, drainage layer, drainage inspection chamber, filter layer and light weight growing medium.
		(e)	Groundcovers of approved species and spacing including necessary fertilizers.
		(f)	Submission of shop drawings, working drawings and as-built drawings.
		(g)	Submission of samples with composition report for growing mediums and groundcovers.
		(h)	Provision of automatic irrigation system but excluding electrical installation (measured separately).
		(i)	Submission of photographic records.

SPECIAL CONDITIONS (CONT'D)**PROPRIETARY GREEN ROOFING SYSTEM (CONT'D)**

XI.	(j) Establishment works after completion for a period of 12 months including replacement of vegetations upon failure of vegetations for becoming established.	Rates for proprietary green roofing system (Cont'd)
	(k) Provision of warranty as specified in Particular Specification.	
	(l) Submission of working programme.	
	(m) Submission of maintenance and operation manual.	

BITUMEN FELT BUILT-UP AND BITUMINOUS EMULSION ROOFING

XII.	Bitumen felt built-up and bituminous emulsion roofing shall be measured net over the whole exposed finished top surface, additional girth of vertical or sloping faces and sides or ends of upstands, gutters, flashings, skirtings, edge coverings, steps in roof level and the like. No deduction shall be made for openings not exceeding 0.50 m ² .	Measurement of bitumen felt built-up and bituminous emulsion
XIII.	The rates for bitumen felt built-up and bituminous emulsion roofing shall further include for : -	Rates for bitumen felt built-up and bituminous emulsion roofing
	(a) Roofing to flat, sloping or curved roofs.	
	(b) Allowing for all laps, cutting and waste on felts and glass fibre membrane where applicable.	
	(c) Dressing to sides or ends of upstands, gutters, flashings, skirtings, edge coverings, steps in roof level and the like, including angles, junctions, turn-in edges, welted drips and the like.	
	(d) Making good surfaces including filling cracks not exceeding 5 mm wide with bitumen or emulsion.	
	(e) Checking the felt roofing works with infra-red thermo-scanning equipment or other testing equipment on watertightness as the work proceeds.	
	(f) Replacement of roofing installation if failing in the non-destructive test.	
XIV.	Measurement of "strip off existing bitumen felt build-up roofing" shall not be measured when the backing screed, sheet roofing or insulation layer is also taking down simultaneously unless it is specifically ordered by the Maintenance Surveyor in writing.	Measurement of strip off existing bitumen felt build-up roofing and bituminous emulsion roofing

MASTIC ASPHALT (ROCK ASPHALT) ROOFING

XV.	All works shall be measured the net area covered. No deduction shall be made for voids not exceeding 0.50 m ² .	Measurement of mastic asphalt (rock asphalt) roofing
XVI.	Skirtings shall be measured the height or part thereof of the exposed face girth. Skirtings exceeding 300 mm high shall be measured as vertical work.	Measurement of skirtings

SPECIAL CONDITIONS (CONT'D)**MASTIC ASPHALT (ROCK ASPHALT) ROOFING (CONT'D)**

**Rates for
mastic asphalt
(rock asphalt)
roofing**

- XVII. The rates for mastic asphalt (rock asphalt) roofing shall further include for : -
- (a) Bringing the boiler or other plant to Site and relocating at different locations when required including fuel, hoisting in positions as necessary and removing from Site on completion.
 - (b) Cleaning and preparing the roof or base for application.
 - (c) Forming grooves for turning in of asphalt.
 - (d) All temporary rules.
 - (e) Arrises, fair and rounded edges and turn-ins.
 - (f) All angles, stop ends, etc., to internal angle fillets, skirtings, channels, coverings to curbs, upstands and the like.
 - (g) Cleaning and priming to metal surfaces prior to applying asphalt work.
 - (h) Tests at regular intervals both on selected asphalt blocks as delivered to Site and on samples taken from the boiler or cauldron.
 - (i) Allowing laps for isolating membrane and expanded metal lathing reinforcement.
 - (j) Brought to Site cauldrons so as to cause minimum inconvenience and nuisance to occupied premises considered to be air sensitive receivers as determined under EPD's guidelines for air quality assessment.
 - (k) Hoisting the boiler to any height, depth or location and working from that position when so ordered by the Maintenance Surveyor where :-
 - (i) A nuisance may be caused when working from other positions.
 - (ii) Loss of heat to the materials would occur through the distance from any other positions.
 - (l) Multi-handling of boiler and stacking of materials to avoid overloading existing structure.

PROPRIETARY ROOFING SYSTEMS

**Measurement
of proprietary
roofing systems**

- XVIII. Proprietary roofing systems shall be measured net over the whole exposed finished top surface, additional girth of vertical or sloping faces and sides or ends of upstands, gutters, flashings, skirtings, edge coverings, steps in roof level and the like. No deduction shall be made for openings not exceeding 0.50 m².

Drip flashing, fascia flashing, eave flashing, toothed plate, fascia corner flashing, ridge flashing, verge flashing, fascia capping, gutters and the like shall be measured the net length as fixed.

Proprietary roofing system referred hereinafter shall mean the waterproof roofing covering materials approved by the Maintenance Surveyor.

For avoidance of doubt, all rates in this sub-section shall deem to apply to works executed by the specialists approved by the Maintenance Surveyor for the proprietary roofing system.

SPECIAL CONDITIONS (CONT'D)**PROPRIETARY ROOFING SYSTEMS (CONT'D)**

- | | | |
|------|---|--|
| XIX. | Measurement of strip off existing proprietary roofing systems shall not be measured when the backing screed, sheet roofing or insulation layer is also taking down simultaneously unless it is specifically ordered by the Maintenance Surveyor in writing. | Measurement of strip off existing proprietary roofing systems |
| XX. | The rates for proprietary roofing systems shall further include for : - | Rates for proprietary roofing systems |
| | (a) Roofing to flat, sloping or curved roofs. | |
| | (b) Inspection, preparing, cleaning and drying surfaces including removing all contaminants, dusts, loose stones, debris and the like. | |
| | (c) Dressing to sides or ends of upstands, gutters, flashings, skirtings, edge coverings, steps in roof level and the like, including angles, junctions, turn-in edges, welted drips and the like all in accordance with the manufacturer's instructions. | |
| | (d) Making good surfaces of substrate including filling cracks with bitumen, emulsion or any other materials recommended by the manufacturer's recommendations. | |
| | (e) Replacement of roofing installation if failing in the non-destructive test. | |
| | (f) Providing protective boarding in accordance with the manufacturer's instructions, if required. | |
| | (g) Submission of catalogues, technical literature and other documentation covering the materials supplied. | |
| | (h) Providing all reports, maintenance manuals and deeds of warranty. | |

ROOF TILING AND INSULATION BOARD

- | | | |
|-------|---|--|
| XXI. | Roof tiling and insulation board shall generally be measured as the net area covered when fixed or laid. No deduction shall be made for voids not exceeding 0.50 m ² . | Measurement of roof tiling and insulation board generally |
| XXII. | The rates for roof tiling and insulation board shall generally include for : - | Rates for roof tiling and insulation board generally |
| | (a) Working at any height and locations. | |
| | (b) Working to new or existing surfaces in repairs. | |
| | (c) All straight or raking cutting and waste. | |
| | (d) Narrow widths and small quantities. | |
| | (e) Forming and including all joints between new and existing materials. | |
| | (f) Laying level or to slopes and finishing to falls and currents. | |
| | (g) Mitred edges to external corners and the like. | |
| | (h) Covering up and protecting where necessary. | |

SPECIAL CONDITIONS (CONT'D)**ROOF TILING AND INSULATION BOARD (CONT'D)**

Rates for clay tiles, concrete tiles, insulating roofing tiles and foam board roofing tiles	XXIII.	The rates for clay tiles, concrete tiles, insulating roofing tiles and foam board roofing tiles shall, except otherwise specified in the Schedule, further include for forming and including expansion joints to roofing tiles as G.S. Item 18.105.
Screeds to roofing or tiling	XXIV.	Screeds to roofing or tiling can be found in Section 11 - Plasterwork and Other Floor, Wall and Ceiling Finishes of this Schedule.

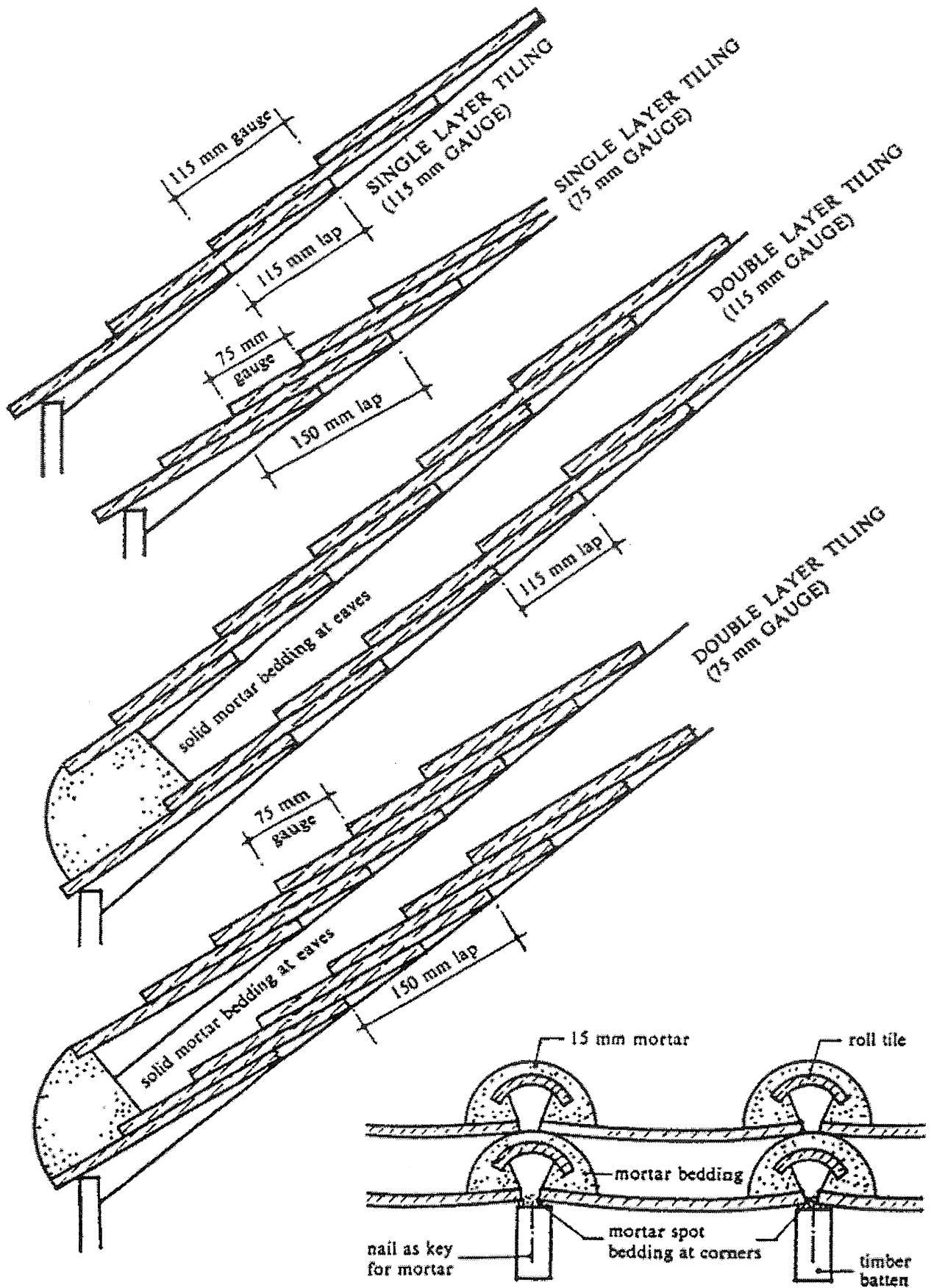
NON-DESTRUCTIVE TEST

Rates for non-destructive test	XXV.	The rates for non-destructive test shall include for : -
	(a)	Constructing temporary dams to compartmentalize large roofs as required and subsequent removal.
	(b)	Temporary blocking to all outlets flooding the roof, releasing water and subsequent removal of blockages.
	(c)	Carrying out test of infra-red scanning by an approved independent specialist in accordance with the Particular Specification referred in the Contract including providing all necessary labour, supervisory staff and equipment.
	(d)	In the case of new roofing system, re-testing up to the satisfaction of the Maintenance Surveyor.
	(e)	Submission of reports.

SPECIFICATION FOR ROOFING

G.S. clauses	XXVI.	G.S. clauses for concrete roof tiles and red clay tiles can be found in the Plasterwork and Other Floor, Wall and Ceiling Finishes Section of the General Specification for Building.
Acceptable List for proprietary roofing systems	XXVII.	The List of Non-destructive Test Specialists for Roofing Systems can be found in the Particular Specification for Roofing System in the Contract.

CHINESE TILE ROOFING



DOUBLE LAYER TILING—CROSS SECTION

Item	CHINESE TILE ROOFING					Item
		Single layer tiling		Double layer tiling		
		115 mm gauge	75 mm gauge	115 mm gauge	75 mm gauge	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
05001	Chinese pan and roll roof tiling laid complete on battens or screed (both measured separately) to sloping roofs.....	232.00	294.40	459.00	583.20	05001
	<i>Per linear metre</i>					
05002	Extra over roof tiling for double course of tiles at eaves.....	17.90	17.90	29.40	29.40	05002
05003	Extra over roof tiling for forming valley with special pan tiles size 225 x 300 mm bedded solid and covered with 25 mm thick minimum cement/lime mortar finished smooth.....	106.10	145.30	212.80	291.20	05003
05004	Extra over roof tiling for forming ridge or hip capping with row of inverted pan tiles with row of roll tiles over, the whole bedded solid and covered with 25 mm thick minimum cement/lime mortar finished smooth.....	62.00	76.90	109.90	138.10	05004
05005	Extra over roof tiling for additional Chinese roll tiles or tile slips placed centrally between rolls to support upper layer of double layer tiling at lowest course at eaves, bedded solid in cement/lime mortar.....	-	-	14.60	14.60	05005
	<i>Each</i>					
05006	Extra over roof tiling for 325 x 225 x 5 mm glass pan tiles.....	31.90	29.40	63.90	58.80	05006
	REPAIRS TO EXISTING; CHINESE TILE ROOFING					
	<i>Per square metre</i>					
05007	Take down and remove from Site Chinese roof tiling and associated double eaves course ridge and hip cappings and valleys and battens if required.....	30.90	34.30	45.40	51.40	05007
05008	Ditto but in repairs in areas n.e. 5.00 m ² where whole roof slope not completely stripped.....	24.00	27.40	37.70	42.90	05008
05009	Ditto but in repairs in areas exceeding 5.00 m ² where whole roof slope not completely stripped.....	21.40	23.10	34.30	37.70	05009
	<i>Per linear metre</i>					
05010	Take down and replace Chinese roll tiles including bedding and covering in cement/lime mortar and clear away arising.....	57.40	62.60	76.30	85.70	05010
05011	Take down and replace ridge or hip capping including bedding and clear away arising.....	85.70	97.70	114.00	137.10	05011
05012	Rake out and re-point edge of tiling at eaves or verges in cement/lime mortar.....	21.40	21.40	34.30	34.30	05012
	<i>Each</i>					
05013	Take down and replace glass pan tiles size 325 x 225 x 5 mm thick including bedding edges in cement/lime mortar and clear away arising.....	76.30	85.70	143.10	156.80	05013

Item	GLAZED CHINESE TILE ROOFING					Item
	<i>Per square metre</i>	A \$				
05014	Glazed flat tiles laid complete on battens or screed (both measured separately) to sloping roofs.....	414.80				05014
	<i>Per linear metre</i>					
05015	Extra over for forming ridge capping including fittings bedded solid with 25 mm thick minimum cement/lime mortar.....	185.40				05015
05016	Extra over for forming gable capping including fittings bedded solid with 25 mm thick minimum cement/lime mortar.....	96.10				05016
05017	Extra over for forming eaves including fittings bedded solid with 25 mm thick minimum cement/lime mortar.....	117.30				05017
	REPAIRS TO EXISTING; GLAZED CHINESE TILE ROOFING					
	<i>Per square metre</i>					
05018	Take down and remove from Site glazed Chinese tile roofing and associated ridge cappings, gable capping, eaves and fittings and battens if required.....	30.90				05018
	<i>Per linear metre</i>					
05019	Take down and replace glazed ridge capping including fittings, bedding in cement/lime mortar and clear away arising.....	228.80				05019
05020	Take down and replace gable capping including fittings, bedding in cement/lime mortar and clear away arising.....	114.00				05020
05021	Take down and replace eaves including fittings, bedding in cement/lime mortar and clear away arising.....	128.50				05021
05022	Rake out and re-point edge of tiling at eaves in cement/lime mortar.....	27.40				05022
	PROFILED UNREINFORCED RIGID PVC SHEET ROOFING					
	<i>Per square metre</i>					
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
05023	0.80 mm Profiled unreinforced rigid pvc roofing sheet in any profile, colour and transparency fixed to timber framing (measured separately).....	65.60	5.10	7.70	31.70	05023
05024	Ditto but fixed to curved timber framing.....	65.80	5.70	8.50	34.30	05024
05025	0.80 mm Profiled unreinforced rigid pvc roofing sheet in any profile, colour and transparency fixed to steel framing (measured separately).....	66.40	5.40	8.10	33.30	05025
05026	Ditto but fixed to curved steel framing.....	69.10	5.70	8.50	34.90	05026
	<i>Each</i>					
05027	Cut hole through existing sheet roofing for pipes or articles in any size and thickness.....	8.90				05027

Item	PROFILED GLASS-FIBRE REINFORCED PLASTIC (GRP) SHEET ROOFING					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	<i>Per square metre</i>					
05028	6 mm Profiled glass-fibre reinforced plastic (GRP) sheet roofing in any profile, colour and transparency fixed to timber framing (measured separately).....	250.60	11.10	17.10	67.30	05028
05029	Ditto but 8 mm thick.....	314.90	11.70	18.00	70.60	05029
05030	Ditto but 10 mm thick.....	369.40	12.20	18.90	74.00	05030
05031	Ditto but 12 mm thick.....	433.80	12.80	19.70	77.40	05031
05032	6 mm Profiled glass-fibre reinforced plastic (GRP) sheet roofing in any profile, colour and transparency fixed to curved timber framing (measured separately).....	271.50	12.20	18.90	74.00	05032
05033	Ditto but 8 mm thick.....	333.10	12.90	19.80	77.70	05033
05034	Ditto but 10 mm thick.....	390.20	13.50	20.70	81.40	05034
05035	Ditto but 12 mm thick.....	452.40	14.10	21.70	85.10	05035
05036	6 mm Profiled glass-fibre reinforced plastic (GRP) sheet roofing in any profile, colour and transparency fixed to steel framing (measured separately).....	256.00	11.70	18.00	70.60	05036
05037	Ditto but 8 mm thick.....	315.50	12.30	18.90	74.20	05037
05038	Ditto but 10 mm thick.....	374.90	12.90	19.80	77.70	05038
05039	Ditto but 12 mm thick.....	434.30	13.40	20.70	81.20	05039
05040	6 mm Profiled glass-fibre reinforced plastic (GRP) sheet roofing in any profile, colour and transparency fixed to curved steel framing (measured separately).....	271.20	12.90	19.80	77.70	05040
05041	Ditto but 8 mm thick.....	338.60	13.50	20.80	81.60	05041
05042	Ditto but 10 mm thick.....	400.90	14.10	21.80	85.50	05042
05043	Ditto but 12 mm thick.....	463.20	14.80	22.80	89.40	05043
	<i>Each</i>					
05044	Cut hole through existing sheet roofing for pipes or articles in any size and thickness.....				20.30	05044

Item	PROFILED COMPRESSED PARTICLE SHEET ROOFING					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
05045	12 mm Profiled compressed particle roofing sheet in any profile fixed to timber framing (measured separately).....	142.10	11.10	17.10	63.50	05045
05046	Ditto but fixed to curved timber framing.....	151.80	12.20	18.90	69.80	05046
05047	12 mm Profiled compressed particle roofing sheet in any profile fixed to steel framing (measured separately).....	142.70	11.70	18.00	66.60	05047
05048	Ditto but fixed to curved steel framing.....	157.30	12.90	19.80	73.30	05048
					A \$	
05049	Each Cut hole through existing sheet roofing for pipes or articles in any size and thickness.....				16.50	05049
	GALVANISED STEEL SHEET ROOFING	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	Steel sheet roofing as G.S. item 12.72 : -					
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
05050	0.60 mm Corrugated steel sheet roofing in any corrugation fixed to timber framing (measured separately).....	93.20	6.00	7.70	27.20	05050
05051	Ditto but 0.70 mm thick.....	98.00	6.20	7.90	28.00	05051
05052	Ditto but 0.80 mm thick.....	102.80	6.40	8.20	28.80	05052
05053	Ditto but 0.90 mm thick.....	107.60	6.50	8.40	29.60	05053
05054	Ditto but 1.00 mm thick.....	117.00	6.70	8.60	30.50	05054

Item	GALVANISED STEEL SHEET ROOFING (CONT'D)				Item	
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
05055	0.60 mm Corrugated steel sheet roofing in any corrugation fixed to curved timber framing (measured separately).....	97.30	6.60	8.50	29.90	05055
05056	Ditto but 0.70 mm thick.....	102.00	6.80	8.80	30.80	05056
05057	Ditto but 0.80 mm thick.....	111.80	7.00	9.00	31.70	05057
05058	Ditto but 0.90 mm thick.....	116.80	7.20	9.30	32.60	05058
05059	Ditto but 1.00 mm thick.....	121.80	7.40	9.50	33.50	05059
05060	0.60 mm Corrugated steel sheet roofing in any corrugation fixed to steel framing (measured separately).....	93.40	6.20	7.90	28.00	05060
05061	Ditto but 0.70 mm thick.....	98.20	6.40	8.20	28.90	05061
05062	Ditto but 0.80 mm thick.....	107.60	6.60	8.40	29.70	05062
05063	Ditto but 0.90 mm thick.....	109.70	6.70	8.70	30.50	05063
05064	Ditto but 1.00 mm thick.....	117.20	6.90	8.90	31.40	05064
05065	0.60 mm Corrugated steel sheet roofing in any corrugation fixed to curved steel framing (measured separately).....	102.00	6.80	8.80	30.80	05065
05066	Ditto but 0.70 mm thick.....	103.90	7.00	9.00	31.70	05066
05067	Ditto but 0.80 mm thick.....	112.00	7.20	9.30	32.70	05067
05068	Ditto but 0.90 mm thick.....	121.80	7.40	9.50	33.60	05068
05069	Ditto but 1.00 mm thick.....	124.10	7.60	9.80	34.50	05069
	<i>Each</i>				A \$	
05070	Cut hole through existing sheet roofing for pipes or articles in any size and thickness.....				18.90	05070

Item	PROPRIETARY PROFILED STEEL SHEET ROOFING					Item
	Proprietary steel profiled sheet cladding in concave or convex shapes, maximum length of sheet that can be curved is 12 m, to Australian Standard AS1397-1993 and Malaysian Standard MS1196, 0.42 mm BMT with minimum yield strength of 550 MPA, sheets coating shall comprise alloy of zinc, aluminium and silicon applied by hot dip process, thickness 0.05 mm thick to AS1397 for coating class AZ150, paint coating to AS2728 :	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
05071	0.47 mm Thick steel profiled sheeting fixed to timber framing.....	244.30	6.00	7.70	26.00	05071
05072	Ditto but fixed to curved timber framing.....	261.30	6.60	8.50	28.60	05072
05073	0.47 mm Thick steel profiled sheeting fixed to steel framing.....	245.10	6.20	7.90	26.80	05073
05074	Ditto but fixed to curved steel framing.....	247.80	6.80	8.80	29.50	05074
	Proprietary steel profiled roof sheet or wall cladding with concealed fastening, available in two thickness (0.48 mm & 0.6 mm BMT) with minimum yield strength of 550 MPA, metallic hot dip coated with alloy of zinc, aluminium and silicon, coating mass to be 150 g/m2 coated both sides, to Australian Standard AS1397-1993 and Malaysian Standard MS1196, wind pressure capacities to AS1562.1-1992 and AS4040.2-1992 :					
	<i>Per square metre</i>					
05075	0.53 mm Thick steel profiled sheeting fixed to timber framing.....	286.70	6.20	7.90	26.80	05075
05076	Ditto but 0.65 mm thick.....	321.80	6.30	8.10	27.30	05076
05077	0.53 mm Thick steel profiled sheeting fixed to curved timber framing.....	288.50	6.60	8.50	28.60	05077
05078	Ditto but 0.65 mm thick.....	324.60	6.90	8.90	30.00	05078
05079	0.53 mm Thick steel profiled sheeting fixed to steel framing.....	286.70	6.20	7.90	26.80	05079
05080	Ditto but 0.65 mm thick.....	322.70	6.50	8.30	28.10	05080
05081	0.53 mm Thick steel profiled sheeting fixed to curved steel framing.....	289.30	6.80	8.80	29.50	05081
05082	Ditto but 0.65 mm thick.....	345.10	7.10	9.20	30.90	05082
	PROPRIETARY GALVANISED STEEL FLASHING, CAPPING, ETC.					
	Proprietary steel profiled sheeting with XRW colourbond finish matching with proprietary steel sheet roofing fixing in fasteners or screws in accordance with the manufacturer's recommendations :					
	<i>Per linear metre</i>					
05083	0.60 mm Thick steel flashing or capping n.e. 200 mm girth.....	33.10	2.40	2.40	5.40	05083
05084	Ditto 200 - 400 mm girth.....	98.60	4.70	5.90	15.40	05084
05085	Ditto 400 - 600 mm girth.....	164.00	7.10	13.00	25.40	05085
05086	Ditto 600 - 800 mm girth.....	218.70	11.80	16.60	33.90	05086
05087	Ditto 800 - 1000 mm girth.....	277.60	14.20	20.10	46.60	05087
	Add to either of Items 05083 to 05087 inclusive for curved works.....	10%	-	-	10%	

Item	GALVANISED STEEL SHEET RIDGING, GUTTERS, ETC.				Item	
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A	B	C	D	
		\$	\$	\$	\$	
	1 mm Thick galvanised mild steel sheet (painting measured separately) :-					
	<i>Per linear metre</i>					
05088	Ridge or hip plain capping of approximately 450 mm girth with 75 mm roll, lapped 150 mm at end joints (measured net).....	55.60	6.00	8.60	23.60	05088
05089	Ditto but both edges corrugated, cut and scribed as necessary to suit sheet roofing (measured net).....	61.40	7.70	11.10	29.60	05089
05090	Half-octagonal shaped valley gutter of approximately 300 x 175 mm deep, lapped 150 mm at end joints (measured net).....	72.80	7.70	11.10	27.20	05090
	ALUMINIUM SHEET ROOFING					
	<i>Per square metre</i>					
05091	0.60 mm Corrugated aluminium sheet roofing in any corrugation and colour fixed to timber framing (measured separately)	401.60	5.10	6.90	21.30	05091
05092	Ditto but 0.70 mm thick.....	484.90	5.30	7.10	21.90	05092
05093	Ditto but 0.80 mm thick.....	540.40	5.50	7.30	22.60	05093
05094	Ditto but 0.90 mm thick.....	605.20	5.60	7.50	23.20	05094
05095	Ditto but 1.00 mm thick.....	670.10	5.80	7.70	23.80	05095
05096	0.60 mm Corrugated aluminium sheet roofing in any corrugation and colour fixed to curved timber framing (measured separately).....	409.60	5.70	7.60	23.40	05096
05097	Ditto but 0.70 mm thick.....	494.50	5.80	7.80	24.10	05097
05098	Ditto but 0.80 mm thick.....	555.90	6.00	8.00	24.80	05098
05099	Ditto but 0.90 mm thick.....	617.30	6.20	8.20	25.50	05099
05100	Ditto but 1.00 mm thick.....	684.00	6.30	8.50	26.20	05100
05101	0.60 mm Corrugated aluminium sheet roofing in any corrugation and colour fixed to steel framing (measured separately).....	401.70	5.30	7.10	21.90	05101
05102	Ditto but 0.70 mm thick.....	485.50	5.50	7.30	22.60	05102
05103	Ditto but 0.80 mm thick.....	541.10	5.60	7.50	23.20	05103
05104	Ditto but 0.90 mm thick.....	605.40	5.80	7.70	23.90	05104
05105	Ditto but 1.00 mm thick.....	670.20	5.90	7.90	24.50	05105
05106	0.60 mm Corrugated aluminium sheet roofing in any corrugation and colour fixed to curved steel framing (measured separately).....	409.70	5.80	7.80	24.10	05106
05107	Ditto but 0.70 mm thick.....	494.70	6.00	8.00	24.80	05107
05108	Ditto but 0.80 mm thick.....	560.80	6.20	8.20	25.60	05108
05109	Ditto but 0.90 mm thick.....	617.50	6.30	8.50	26.30	05109
05110	Ditto but 1.00 mm thick.....	684.10	6.50	8.70	27.00	05110

Item	ALUMINIUM SHEET ROOFING (CONT'D)					Item
	<i>Each</i>	A \$				
05111	Cut hole through existing sheet roofing for pipes or articles in any size and thickness.....	18.90				05111
ALUMINIUM FLASHING, CAPPING, ETC.						
0.60 mm Thick aluminium colorbond finish matching with aluminium sheet roofing fixing in fasteners or screws : -		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
<i>Per linear metre</i>		A \$	B \$	C \$	D \$	
05112	0.60 mm Thick steel flashing or capping n.e. 200 mm girth.....	78.60	1.70	2.60	5.90	05112
05113	Ditto 200 - 400 mm girth.....	100.80	4.30	6.00	17.70	05113
05114	Ditto 400 - 600 mm girth.....	180.80	6.90	13.70	27.20	05114
05115	Ditto 600 - 800 mm girth.....	270.70	12.90	17.10	37.80	05115
05116	Ditto 800 - 1000 mm girth.....	314.40	13.70	19.70	47.30	05116
	Add to either of Items 05112 to 05116 inclusive for curved works.....	10%	-	-	10%	
ALUMINIUM SHEET RIDGING, GUTTERS, ETC.						
1.00 mm Thick aluminium colorbond finish fixing in fasteners or screws : -						
<i>Per linear metre</i>						
05117	Ridge or hip plain capping of approximately 450 mm girth with 75 mm roll, lapped 150 mm at end joints (measured net).....	171.00	6.00	8.60	23.60	05117
05118	Ditto but both edges corrugated, cut and scribed as necessary to suit sheet roofing (measured net).....	190.70	7.70	11.10	29.60	05118
05119	Half-octagonal shaped valley gutter of approximately 300 x 175 mm deep, lapped 150 mm at end joints (measured net).....	237.40	8.60	10.30	31.90	05119
PROPRIETARY STEEL/ALUMINIUM SHEET ROOFING						
Proprietary sheet roofing system comprising 0.75 mm thick trapezoidal profiled steel shell with specialist coating 25 microns thick on visible sides and protective layer (RSL) 10 microns thick on the reverse side to DIN 18807 in any colour including subgrit, purlins and fixing with approved stainless steel fasteners to level or sloping framing all in accordance with the manufacturer's recommendations :						
<i>Per square metre</i>						
05120	Roofing panels.....	502.00	6.90	9.40	31.90	05120

Item	PROPRIETARY STEEL/ALUMINIUM SHEET ROOFING (CONT'D)					Item
	Proprietary sandwich roofing system, comprising 0.75 mm thick trapezoidal profiled steel outer shell and 0.55 mm thick slightly profiled inner shell with specialist coating 25 microns thick on visible sides and protective layer (RSL) 10 microns thick on the reverse side to DIN 18807 in any colour enclosing a continuous core of polyurethane rigid foam (HCFC –free), thermal resistance to 1.74 m ² K/W heat transfer coefficient 0.52 W/m ² K to EN ISO6946, including subgrit, purlins and concealed fixing with integral roof clamps in the longitudinal joint and approved stainless steel fasteners to level or sloping framing all in accordance with the manufacturer's recommendations :	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
05121	Roofing panels..... 0.75 mm Thick proprietary steel sheeting with proprietary coating (25 microns thick) on visible sides and proprietary protective layer on the reverse side (10 microns thick) in matching colour to the sandwich roofing system, including forming into any component shape and required girth including subgrit, purlins and fixing with all necessary clamps and approved stainless steel fasteners all in accordance with the proprietary supplier's recommendations : <i>Per linear metre</i>	4,717.20	25.70	28.30	98.10	05121
05122	Drip flashing..... <i>Per linear metre</i>	409.70	7.70	10.30	35.50	05122
05123	Fascia flashing.....	548.30	8.60	11.10	37.80	05123
05124	Eave flashing.....	354.20	6.90	8.60	31.90	05124
05125	Toothed plate complete with foam filler at ridge.....	361.80	8.60	11.10	37.80	05125
05126	Fascia corner flashing, ridge flashing, verge flashing and the like.....	457.10	8.60	11.10	37.80	05126
05127	Fascia capping, ridge capping and the like.....	342.80	8.60	11.10	37.80	05127
05128	Proprietary profiled sheet roofing system of galvanized and plastic coated steel sheet, processed in roll to form trapezoidal profiles, comprising 0.75 mm thick steel (S280/S320 GD to EN 10326) with zinc galvanizing (Z275), with 25 microns polyester coating on the exterior surface and 10 microns reverse side coating (RSL) on the interior surface including subgrit, purlins and fixing with stainless steel self-tapping screws with stainless steel washer (with vulcanized EDPM layer) to level or sloping framing all in accordance with the manufacturer's recommendations : <i>Per square metre</i> Roofing panels.....	571.90	6.90	9.40	31.90	05128

Item	PROPRIETARY STEEL/ALUMINIUM SHEET ROOFING (CONT'D)					Item
	0.75 mm Thick proprietary steel (S350 GD to EN 10326) flashing with zinc galvanizing (55% AlZn AZ 185 to EN 10326), with 25 microns polyester coating on the exterior surface with matching colour to cladding profile and 10 microns reverse side coating (RSL) on the interior surface including press-forming to the shape and girth including subgrit, purlins and fixing with all necessary stainless steel self-tapping screws all in accordance with the manufacturer's recommendations :	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per linear metre</i>	A \$	B \$	C \$	D \$	
05129	Drip flashing.....	295.30	7.70	10.30	35.50	05129
05130	Fascia flashing.....	477.00	8.60	11.10	37.80	05130
05131	Eave flashing.....	330.80	6.90	9.40	31.90	05131
05132	Toothed plate complete with foam filler at ridge.....	334.80	8.60	11.10	37.80	05132
05133	Fascia corner flashing, ridge flashing, verge flashing and the like.....	402.70	8.60	11.10	37.80	05133
05134	Fascia capping, ridge capping and the like.....	298.40	8.60	11.10	37.80	05134
	Proprietary sandwich roofing panel (concealed fixing type) comprising 0.75 mm thick coil-galvanized (S350 GD+Z275 to EN 10326) trapezoidal profile steel outer shell with 25 microns PVF2 coating, continuous core of rigid CFC- and HCFC-free polyurethane foam, 0.55 mm thick coil-galvanized slightly profiled steel inner shell with 10 microns polyester coating (RSL), proprietary factory-applied EDPM sealing profile along longitudinal joint including subgrit, purlins and fixing with all necessary stainless steel self-tapping screws with spherical cap, proprietary roll-formed steel concealed fixing capping with matching colour on every pitch of sandwich panel all in accordance with the manufacturer's recommendations :					
	<i>Per square metre</i>					
05135	Roofing panels.....	4,478.10	23.10	27.40	94.60	05135
	0.75 mm Thick proprietary coil-galvanized (S350 GD+Z275 to EN 10326) steel flashing with 25 microns PVF2 coating on weather side with matching colour to sandwich roof panel and 10 microns protective coating (RSL) on the other side, including press-forming to the shape and girth including subgrit, purlins and all necessary stainless steel self-tapping screws all in accordance with the manufacturer's recommendations :					
	<i>Per linear metre</i>					
05136	Drip flashing.....	310.00	7.70	10.30	35.70	05136
05137	Fascia flashing.....	504.20	8.60	11.10	37.80	05137
05138	Eave flashing.....	347.40	6.90	9.40	31.90	05138
05139	Toothed plate complete with foam filler at ridge.....	317.30	8.60	11.10	37.80	05139
05140	Fascia corner flashing, ridge flashing, verge flashing and the like.....	383.50	8.60	11.10	37.80	05140
05141	Fascia capping, ridge capping and the like.....	298.40	8.60	11.10	37.80	05141

Item	PROPRIETARY STEEL/ALUMINIUM SHEET ROOFING (CONT'D)				Item	
	Proprietary aluminium roofing system comprising 1.00 mm thick in 65/400 profile with PVDF 2 coats finish (23-25microns) on weather side for outer liner in one single sheet for the whole roof run (no end laps allowed) and 0.80 mm thick Kaibau TR 35/200 of the same material as the outer liner with polyester coating on underside as the inner liner infilled evenly with 100 mm thick mineral wool with fire performance complying BS476 Part compressed to 85 mm at a density of 40 kg/m ³ with vapour barrier including subgirt, purlins and fixing with necessary ST-Clips and approved self-tapping screws all in accordance with proprietary supplier's recommendations, on site fabricated system to achieve a maximum thermal insulation U-value of 0.4W/m ² K and minimum Weighted Sound Reduction Index of 31dB with test report showing the compliance to BS 5821 Part 3:1984 and minimum 10 years of material warranty is to be provided on completion.	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	<i>Per square metre</i>					
05142	Proprietary series insulated roofing system	3,410.00	27.40	34.30	118.20	05142
	<i>Per linear metre</i>					
05143	Flashing to fascia.....	360.10	9.40	11.10	37.80	05143
05144	Flashing to drip.....	466.30	7.70	10.30	34.30	05144
05145	Flashing to eave.....	361.10	6.90	9.40	31.90	05145
05146	Flashing to corner flashing, ridge flashing and verge flashing, etc.....	518.90	8.60	11.10	37.80	05146
05147	Flashing to capping, ridge capping and the like.....	380.90	8.60	11.10	37.80	05147
05148	Toothed plate complete with foam filler n.e. 1.00 m high.....	361.20	9.40	11.10	37.80	05148
05149	Gutter in any size.....	285.10	9.40	7.70	10.60	05149
	PROPRIETARY GREEN ROOFING SYSTEM					
	Proprietary green roofing system comprising root barrier, moisture retention layer, drainage layer, drainage inspection chamber, filter layer, light weight growing medium, groundcovers of approved species and spacing, and including provision of automatic irrigation system but excluding electrical installation (measured separately), submission of drawings, samples, photographic records, programme, maintenance and operation manual, provisions of 12-month establishment period, warranty as specified in Particular Specification and approved Registered Structural Engineer checking on calculation of loadings, all in accordance with the manufacturer's recommendation.				A \$	
	<i>Per square metre</i>					
05150	Proprietary green roofing system				2,188.80	05150
	BITUMEN FELT BUILT-UP ROOFING					
				Nominal weight		
				1.8 kg/m ²	2.5 kg/m ²	
	<i>Per square metre</i>			A \$	B \$	
05151	Underlayer of bitumen felt fixed to timber roof including nails.....			46.20	64.20	05151
05152	Ditto but laid on screed or concrete roof including primer and bonding.....			57.80	80.30	05152
05153	Subsequent underlayer of bitumen bonded to underlayer including bonding compound.....			57.80	80.30	05153
05154	Top layer bonded to underlayers with bonding compound.....			-	80.30	05154

Item	BITUMEN FELT BUILT-UP ROOFING (CONT'D)		Item
	<i>Per square metre</i>	A \$	
05155	Surface dressing with stone chippings on and including base coat of bitumen compound.....	115.50	05155
	REPAIRS TO EXISTING; BITUMEN FELT BUILT-UP ROOFING		
	<i>Per square metre</i>		
05156	Strip off existing bitumen felt built-up roofing (any number of layers) fixed on timber battens.....	11.60	05156
05157	Ditto but laid on screed or concrete surfaces.....	16.20	05157

	BITUMINOUS EMULSION ROOFING	Concrete		Concrete, Canton tiled roof surface	Corrugated steel roof surface	Profiled particle sheet roof surface	Bitumen felt built- up roof surface	Item
		roof surface	vertical surface					
		A \$	B \$					
	<i>Per square metre</i>							
05158	Apply wash coat, priming coat, two coats Type 3 Bitumen Emulsion.....	52.00	62.40	72.80	-	72.80	-	05158
05159	Ditto but with three coats to last.....	67.60	78.00	88.40	-	88.40	-	05159
05160	Apply wash coat, priming coat, one coat Type 3 Bitumen Emulsion, one layer of glass fibre membrane and two coats Type 3 Bitumen Emulsion as G.S. item 12.31.....	93.60	104.00	124.70	-	124.70	-	05160
05161	Ditto but with three coats Type 3 Bitumen Emulsion to last as G.S. item 12.32.....	104.00	124.70	135.10	-	135.10	-	05161
05162	Apply wash coat and primer to grooves, filling grooves with Type 3 Bitumen Emulsion and sand (1:3) by volume, apply one coat PF4 Solution and two coats Type 5 Bitumen Emulsion including cutting out cracks exceeding 5 mm wide as G.S. item 12.33.....	-	-	-	-	-	93.60	05162
05163	Apply one coat PF4 Solution, one coat Type 3 Bitumen Emulsion, one layer of glass fibre membrane and two coats Type 3 Bitumen Emulsion as G.S. item 12.34.....	-	-	-	104.00	-	-	05163

	<i>Per square metre</i>	Thickness of base coat		Item
		3 mm	5 mm	
		A \$	B \$	
05164	Surface dressing with clean and sharp sand, one base coat of compound composed of cement, Type 3 Bitumen Emulsion and sand (1:8:32) volume.....	26.00	31.20	05164
05165	Surface dressing with two coats bituminous based aluminium protective coating.....	46.80	52.00	05165
05166	Surface dressing with two coats water borne with mineral fibre coloured coating.....	52.00	57.20	05166

Item	REPAIRS TO EXISTING; BITUMINOUS EMULSION ROOFING		Item	
	<i>Per square metre</i>	A \$		
05167	Strip and clean off existing bituminous emulsion roofing (any number of coats) complete with any glass fibre membrane on screed or concrete roofs, and remove from Site including making good surfaces to receive new surfacing if required.....	10.40	05167	
05168	Ditto but on corrugated steel or profiled compressed particle sheet (measured flat over corrugations or profiles).....	14.40	05168	
	<i>Per linear metre</i>			
05169	Point joints of corrugated steel or profiled compressed particle sheet with Type 5 Bitumen Emulsion, apply PF4 Solution, apply one coat Type 3 Bitumen Emulsion, apply one layer glass fibre membrane and apply two coats Type 3 Bitumen Emulsion, 150 mm wide.....	31.20	05169	
	MASTIC ASPHALT (ROCK ASPHALT) ROOFING			
		Thickness (mm)		
		13	20	
	<i>Per square metre</i>	A \$	B \$	
05170	Two coats covering on screed or concrete, horizontal.....	-	88.40	05170
05171	Ditto, sloping.....	-	93.60	05171
05172	Two coats covering with and including isolating membrane on screed or concrete, horizontal.....	-	114.40	05172
05173	Ditto, sloping.....	-	119.60	05173
05174	Two coats covering with and including isolating membrane and plain expanded metal lathing on screed or concrete, horizontal	-	145.50	05174
05175	Ditto, sloping.....	-	155.90	05175
	<i>Per linear metre</i>			
05176	Two coats covering to skirting on screed or concrete n.e. 150 mm high.....	36.40	-	05176
05177	Ditto, 150 - 225 mm high.....	46.80	-	05177
05178	Ditto, 225 - 300 mm high.....	52.00	-	05178
05179	Two coats covering to linings of channels and the like on screed or concrete n.e. 150 mm girth.....	39.30	-	05179
05180	Ditto, 150 - 300 mm girth.....	52.00	-	05180
05181	Ditto, 300 - 450 mm girth.....	-	72.80	05181
	SOLAR PROTECTION			
	<i>Per square metre</i>	A \$		
05182	Dress surface with bitumen compound and stone chippings.....	36.40	05182	
05183	Prepare and apply two coats reflective paint on asphalt surfaces, sloping.....	31.20	05183	
05184	Ditto, vertical.....	31.20	05184	

Item	REPAIRS TO EXISTING; MASTIC ASPHALT ROOFING					Item
	<i>Per square metre</i>	A \$				
05185	Strip and clean off existing mastic asphalt roofing (any thickness) and associated isolating membrane and reinforcement on screed or concrete roof, and remove from Site including making good surfaces to receive new surfacing if required.....	20.80				05185
	<i>Each</i>					
05186	Cut through complete thickness of mastic asphalt roofing, prepare for inspection by the Maintenance Surveyor in patch approximately 0.10 m ² and reseal after inspection the position as directed by the Maintenance surveyor..... (Note : - This item will only be paid for, if ordered by the Maintenance Surveyor in writing.)	67.60				05186
05187	Make good mastic asphalt dressing around pipes, rainwater outlets, etc. and the like.....	16.50				05187
PROPRIETARY ROOFING SYSTEMS		Sheet material		Liquid applied material		
Apply sheet membrane or liquid applied waterproofing roofing coverings as ordered to the following new or existing surfaces :-		requir- ing pro- tection	self fin- ished	requir- ing pro- tection	self fin- ished	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
05188	Concrete, screed, asphalt/felt membrane covering roof	112.90	150.30	130.90	165.20	05188
05189	Corrugated steel/compressed particle sheet covering roof.....	-	-	145.50	187.70	05189
05190	Chinese tiled roof (measured flat over tiles)	-	-	145.50	187.70	05190
REPAIRS TO EXISTING; PROPRIETARY ROOFING SYSTEM						
	<i>Per square metre</i>					
05191	Strip off and clean existing waterproofing roof coverings and associated skirtings, flashings, etc., and the like, remove from Site including making good surfaces to receive new surfacing if required.....	19.60	19.60	19.60	19.60	05191
CLAY TILES		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
Red clay tiles 300 to 400 mm square and 30 to 35 mm thick :-						
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
05192	Tiling laid, bedded solid and jointed and pointed in cement mortar (1:4) on screed or roof covering (measured separately).....	159.60	8.60	9.40	16.50	05192
05193	Ditto but bedded, jointed and pointed in hot bitumen.....	179.80	9.40	10.30	18.90	05193

Item	CONCRETE ROOFING TILES				Item	
	Concrete roofing tiles and fitting as BS EN 490 and BS EN 491 :-					
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
05194	Tiling laid with 15 mm wide open joints and bedded solid and pointed in cement mortar (1:4) on screed or roof covering (measured separately) size 300 x 300 x 30 mm thick.....	105.60	8.60	9.40	16.50	05194
05195	Ditto but bedded, jointed and pointed in hot bitumen.....	125.60	9.40	10.30	19.00	05195
05196	Tiling laid with 15 mm wide open joints and bedded solid and pointed in cement mortar (1:4) on screed or roof covering (measured separately) size 400 x 400 x 35 mm thick.....	115.20	8.60	8.60	15.20	05196
05197	Ditto but bedded, jointed and pointed in hot bitumen.....	135.00	8.60	9.40	16.50	05197
	INSULATING ROOFING TILES					
	Insulating roofing tiles 300 or 400 mm square and 40 mm thick :-					
	<i>Per square metre</i>					
05198	Tiling laid with 15 mm wide open joints and bedded solid and pointed in cement mortar (1:4) on screed or roof covering (measured separately).....	160.40	8.60	9.40	16.50	05198
05199	Ditto but bedded, jointed and pointed in hot bitumen.....	179.40	9.40	10.30	19.00	05199
	<i>Per linear metre</i>					
05200	Extra over for pointing joints of tiling, size 15 x 15 mm, with proprietary liquid polysulphide polymer joint sealant including backing rod, cleaning, preparing and priming surfaces with compatible primer from the same manufacturer as required.....	40.00	-	-	-	05200
05201	Ditto, size 15 x 25 mm.....	66.50	-	-	-	05201
05202	Ditto, size 15 x 50 mm.....	84.80	-	-	-	05202
	(Note :- Items 05200 to 05202 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)					
	FOAM BOARD ROOFING TILES					
	Approved concrete foam board roofing tiles of any size and minimum embedded with extruded cellular polystyrene foam which is free from halogenated hydrocarbon, CFCs, HCFCs or HFCs Burning behaviour is to be Class B1, non readily ignitable. Maximum compressive load shall not be less than 300 kN m ⁻² . Temperature difference between both sides when tile is heated on one side for 1 hour shall not be greater than 15°C.					
	<i>Per square metre</i>					
05203	Tiling laid with 15 mm wide open joints and bedded solid and pointed in cement mortar (1:4) on screed or roof covering (measured separately).....	263.80	8.60	9.40	25.40	05203
05204	Ditto but bedded, jointed and pointed in hot bitumen.....	286.10	9.40	10.30	44.40	05204
	<i>Per linear metre</i>					
05205	Extra over for pointing joints of tiling, size 15 x 15 mm, with proprietary liquid polysulphide polymer joint sealant including backing rod, cleaning, preparing and priming surfaces with compatible primer from the same manufacturer as required.....	40.00	-	-	-	05205
05206	Ditto, size 15 x 25 mm.....	66.50	-	-	-	05206
05207	Ditto, size 15 x 50 mm.....	84.80	-	-	-	05207
	(Note :- Items 05205 to 05207 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)					

Item	EXTRUDED POLYSTYRENE FOAM BOARD	Item															
	<p>Extruded cellular polystyrene foam board shall be free from halogenated hydrocarbon, CFCs, HCFCs or HFCs Burning behaviour is to be Class B1, non readily ignitable. Density is not less than 33 kg/m³. Thermal conductivities are 28, 27, and 27mW.m⁻¹.k⁻¹ for 25 mm, 40 mm and 50 mm thick respectively :-</p> <p><i>Per square metre</i></p>																
		<table border="1"> <thead> <tr> <th colspan="3">Thickness (mm)</th> </tr> <tr> <th>25</th> <th>40</th> <th>50</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> <tr> <td style="text-align: center;">78.00</td> <td style="text-align: center;">109.70</td> <td style="text-align: center;">127.10</td> </tr> </tbody> </table>	Thickness (mm)			25	40	50	A	B	C	\$	\$	\$	78.00	109.70	127.10
Thickness (mm)																	
25	40	50															
A	B	C															
\$	\$	\$															
78.00	109.70	127.10															
05208	Extruded cellular polystyrene foam board laid on screed or concrete (measured separately).....	05208															
	<i>Per linear metre</i>																
05209	Extra over for pointing joints of tiling, size 25 x 25 mm, with proprietary liquid polysulphide polymer joint sealant including backing rod, cleaning, preparing and priming surfaces with compatible primer from the same manufacturer as required.....	05209															
05210	Ditto, size 25 x 40 mm.....	05210															
05211	Ditto, size 25 x 50 mm.....	05211															
	(Note : - Items 05209 to 05211 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)																
	NON-DESTRUCTIVE TEST																
	<i>Each</i>																
05212	Flooding test in accordance with G.S. item 12.117.....	05212															
05213	Ditto for inspection of existing roofing system.....	05213															

Section 06

TANKING

TANKING

SPECIAL CONDITIONS

Measurement of asphalt tanking	<p>I. Measurement of asphalt tanking shall be : -</p> <p>(a) All works shall be measured the net area covered.</p> <p>(b) Work inclined to more than 15 degrees to the horizontal is described as sloping. If less than 15 degrees, it is included in horizontal.</p> <p>(c) No deduction shall be made for voids not exceeding 0.50 m².</p>
Measurement of skirtings	<p>II. Skirtings shall be measured the height or part thereof of the exposed face girth.</p> <p>Skirting exceeding 300 mm high shall be measured as vertical work.</p>
Measurement of covering to sides and bottom of sumps, cesspools and the like	<p>III. Covering to sides and bottom of sumps, cesspools and the like shall be measured net on the area covered. Covering where exceeding 2.00 m², to sides and bottom of a sump, cesspool and the like, shall be measured as covering to general surfaces.</p>
Rates generally	<p>IV. The rates for asphalt tanking shall include for : -</p> <p>(a) Bringing the boiler or other plant to Site and relocating at different locations when required including fuel, hoisting in positions as necessary and removing from Site on completion.</p> <p>(b) Works at any height, depth and locations.</p> <p>(c) Preparing, cleaning and protection of surfaces to receive mastic asphalt.</p> <p>(d) Forming grooves for turning in of asphalt.</p> <p>(e) All temporary rules.</p> <p>(f) Laying to falls and currents.</p> <p>(g) All narrow widths.</p> <p>(h) Arrises, fair and rounded edges and turn-ins.</p> <p>(i) All angles, stop ends, etc., to internal angle fillets, skirtings, channels, coverings to curbs, upstands and the like.</p> <p>(j) Dressing around pipes and any services installations and making good.</p> <p>(k) Cleaning and priming to metal surfaces prior to applying asphalt work.</p> <p>(l) Cutting back existing asphalt tanking to provide joints for new asphalt tanking.</p> <p>(m) Tests at regular intervals both on selected asphalt blocks as delivered to Site and on samples taken from the boiler or cauldron.</p> <p>(n) Sampling and testing of flexible sheet membrane.</p> <p>(o) Allowing laps for flexible sheet membrane and expanded metal lathing reinforcement.</p> <p>(p) In the case of metal lathing reinforcement, providing reinforcement in accordance with G.S. Item 12.59 and approved fixing method other than nailing.</p>

SPECIAL CONDITIONS (CONT'D)

- | | | |
|-----|---|--|
| IV. | (q) Locating and relocating cauldrons to minimize inconvenience and nuisance to occupied premises considered to be air sensitive receivers as determined under the Environmental Protection Department's guidelines for air quality assessment. | Rates generally
(cont'd) |
| | (r) Hoisting the boiler to any height, depth or location and working from that position when so ordered by the Maintenance Surveyor where : -

(i) A nuisance may be caused when working from other positions.

(ii) Loss of heat to the materials would occur through the distance from any other positions. | |
| | (s) Multi-handling of boiler and stacking of materials to avoid overloading existing structure. | |
| | (t) Providing shop drawings showing construction details including angles, corners, construction joints, pipe intrusions, jointing to existing asphalt tanking and the like. | |
| | (u) Providing temporary coverings throughout the progress of the work to prevent the ingress of rain or other water. | |
| | (v) Providing temporary drainage system and dewatering system throughout the progress of the work. | |
| | (w) Temporary protection, cleaning and removing all arisings. | |
| V. | Protective brickwork or blockwork can be found in Section 03 - Brickwork and Blockwork of this Schedule. | Protective brickwork
or blockwork items |

Item	ASPHALT TANKING	Thickness (mm)		Item
		20	30	
		A	B	
	<i>Per square metre</i>	\$	\$	
06001	Three coats covering on concrete, horizontal surfaces.....	-	218.40	06001
06002	Ditto, sloping surfaces.....	-	230.50	06002
06003	Ditto, vertical surfaces.....	211.20	-	06003
06004	Three coats covering with and including flexible membrane on concrete, horizontal surfaces.....	-	285.50	06004
06005	Ditto, sloping surfaces.....	-	297.70	06005
06006	Ditto, vertical surfaces.....	278.50	-	06006
06007	Three coats covering with and including flexible membrane and metal lathing reinforcement on concrete, horizontal surfaces.....	-	338.60	06007
06008	Ditto, sloping surfaces.....	-	351.40	06008
06009	Ditto, vertical surfaces.....	312.10	-	06009
	<i>Per linear metre</i>			
06010	Three coats skirting n.e. 150 mm high.....	66.30	-	06010
06011	Ditto 150 - 225 mm high.....	80.00	-	06011
06012	Ditto 225 - 300 mm high.....	92.70	-	06012
06013	Three coats skirting with and including flexible membrane n.e. 150 mm high.....	72.10	-	06013
06014	Ditto 150 - 225 mm high.....	96.00	-	06014
06015	Ditto 225 - 300 mm high.....	113.80	-	06015
06016	Three coats skirting with and including flexible membrane and metal lathing reinforcement n.e. 150 mm high.....	75.50	-	06016
06017	Ditto 150 - 225 mm high.....	106.20	-	06017
06018	Ditto 225 - 300 mm high.....	123.30	-	06018

Item	ASPHALT TANKING (CONT'D)	A \$	Item
	<i>Each</i>		
06019	Three coats covering to sides and bottom of sumps, cesspools, etc., and the like n.e. 0.50 m ²	223.00	06019
06020	Ditto 0.50 - 1.00 m ²	288.10	06020
06021	Ditto 1.00 - 1.50 m ²	431.30	06021
06022	Ditto 1.50 - 2.00 m ²	473.00	06022
06023	Three coats covering with and including flexible membrane to sides and bottom of sumps, cesspools, etc., and the like n.e. 0.50 m ²	243.90	06023
06024	Ditto 0.50 - 1.00 m ²	339.50	06024
06025	Ditto 1.00 - 1.50 m ²	529.70	06025
06026	Ditto 1.50 - 2.00 m ²	625.70	06026
06027	Three coats covering with and including flexible membrane and metal lathing reinforcement to sides and bottom of sumps, cesspools, etc. and the like n.e. 0.50 m ²	256.60	06027
06028	Ditto 0.50 - 1.00 m ²	379.30	06028
06029	Ditto 1.00 - 1.50 m ²	583.10	06029
06030	Ditto 1.50 - 2.00 m ²	688.70	06030

Section 07

SCAFFOLDING AND STAGING

SCAFFOLDING AND STAGING

SPECIAL CONDITIONS

- Scaffolding, screens and staging generally**
- I. Throughout this Schedule, rates for all trades shall include for use and waste of all types of scaffolding and staging for the execution of the Works. No payment will be made for scaffolding and staging under any circumstances except for the following : -
- (a) Scaffolding and staging are specifically ordered by the Maintenance Surveyor in writing and stating that the scaffolding and staging are for the exclusive use of the Maintenance Surveyor for carrying out design inspections or the exclusive use of the Employer and other contractor employed by the Employer within the Works Order period.
- In the event where the scaffolding and staging mentioned in sub-clause (a) above are subsequently used by the Contractor himself, no payment will be made.
- Similarly, rates for all trades shall include for screens covering up and protecting works from damage caused by dust, sun, rain and similar hazards, and protecting the public from dust, nuisance, falling rubbish and the like.
- No payment will be made for screens under any circumstance except where specifically ordered by the Maintenance Surveyor in writing and stating that they are for the exclusive use of the Employer.
- Measurement of scaffolding**
- II. Scaffolding shall be measured net face area as erected between the two outmost uprights of the scaffolding. The height of the scaffolding shall be measured from the average founding levels to the top continuous effective horizontal rails. No deduction for opening shall be made.
- Measurement of "Extra over" for screens**
- III. "Extra over" for screens fixed to scaffolding shall be measured net to the areas as fixed. No deduction shall be made for opening not exceeding 2.00 m².
- Measurement of tower scaffolding**
- IV. Tower scaffolding of any form shall be measured net volume based on net plan area as erected between the outmost supporting members of the scaffolding and the height of the top member of the scaffolding.
- Measurement of staging**
- V. Staging to soffits of building or structure shall be measured net plan area as erected between the outmost supporting members of the staging. The height of the staging shall be measured from the working platform to the average founding level where it is erected. No deduction shall be made for opening not exceeding 1.00 m².
- Rates for scaffolding generally**
- VI. The rates for scaffolding shall generally include for : -
- (a) Provision and erection on Site of all materials including poles, uprights, rails, bracings, etc., timber, lashings, struts, wedges, boarding, toe boards, spikes, screws, bolts, straps, brackets, clamps and the like and any safety nettings, safety fans, sloping catch fans, protective canopy all as specified in the Particular Specifications in the Contract.
- (b) Making good any damage caused to walls and other surfaces during use, erection and taking down.
- (c) Repairing and maintaining throughout the period of use in first or subsequent positions. Providing all necessary inspection report(s) as required by the Construction Site (Safety) Regulations.
- (d) Complying with codes and standards of G.S. Items 1.34 and 1.39.1 to 1.39.8.
- (e) Certification by Authorised Persons or Registered Structural Engineers.

SPECIAL CONDITIONS (CONT'D)

- VII. The rates for metal scaffolding shall further include for : - **Rates for metal scaffolding**
- (a) Delivery to and erection on Site, repairing and maintaining throughout the period of use in first or subsequent positions and taking down and setting aside for re-erection or removing from Site.
 - (b) Proprietary or non-proprietary type.
 - (c) Providing and assembling all materials including poles, rails, supports, struts, ladders, bracings, working platform and any other accessories in accordance with the recommendations of the system.
- VIII. The rates for "Extra over" for screens shall include for : - **Rates for "Extra over" for screens**
- (a) Providing and fixing screens to scaffolding, repairing and maintaining throughout the period of use in first or subsequent positions and taking down and setting aside for re-erection or removing from Site.
 - (b) All fixing accessories.
 - (c) Sealing up joints, forming opening and finishing any portion as doors or flaps.
 - (d) Allowing for laps.
 - (e) Making good any damage caused during use, erection and taking down.
- IX. The rates for staging shall include for : - **Rates for staging**
- (a) Delivery to and erection on Site, repairing and maintaining throughout the period of use in first or subsequent positions, and taking down and setting aside for re-erection or removing from Site.
 - (b) Providing and assembling all materials including poles, rails, supports, struts, ladders, bracings, working platform, swivel casters with brake, jack base and any other accessories to support any imposed loads in accordance with the recommendations of the staging.
 - (c) Proprietary or non-proprietary type.
 - (d) Making good any damage during use including replacement if required.
 - (e) Allowance for ensuring no overloading the staging.

Item	SCAFFOLDING AND SCREENS (OTHER THAN METAL SCAFFOLDING)		Item
	Erect, maintain, take down and clear away :-	A	
	<i>Per square metre</i>	\$	
07001	Scaffolding comprising a single framework of uprights and horizontal rails.....	37.60	07001
07002	Scaffolding comprising a double framework of uprights and horizontal rails of free standing scaffolding.....	42.50	07002
07003	Extra over either of Items 07001 to 07002 inclusive for providing screens of woven polyethylene sheet (nei lung tso pao), tarpaulin or other suitable coverings.....	15.00	07003
07004	Extra over either of Items 07001 to 07002 inclusive for providing safety net; one layer.....	6.10	07004
07005	Ditto; two layers.....	15.80	07005
07006	Blast or landslip protection screen constructed of steel framings closely erected, and braced and strutted at not more than 1.20 m centres, or other approved construction covered with expanded metal or chain link mesh and fixed screen including concrete footings or movable concrete blocks and make good after completion.....	396.70	07006
07007	Woven polyethylene sheet (nei lung tso pao) or tarpaulin laid on slopes, etc. as protection including stakes, pegs, bamboo supports, etc. as necessary.....	11.40	07007
	<i>Per cubic metre</i>		
07008	Tower scaffolding.....	146.00	07008
	METAL SCAFFOLDING AND SCREENS		
	Erect, maintain, take down and clear away :-		
	<i>Per square metre</i>		
07009	Metal scaffolding comprising a single framework of uprights and horizontal rails.....	125.80	07009
07010	Metal scaffolding comprising a double framework of uprights and horizontal rails of free standing scaffolding.....	143.90	07010
07011	Extra over either of Items 07009 to 07010 inclusive for providing screens of woven polyethylene sheet, tarpaulin or other suitable coverings recommended by the system.....	9.10	07011
07012	Extra over either of Items 07009 to 07010 inclusive for providing safety net; one layer.....	7.90	07012
07013	Ditto; two layers.....	14.70	07013
	<i>Per cubic metre</i>		
07014	Tower scaffolding.....	595.30	07014
	STAGING		
	Erect, maintain, take down and clear away :-		
	<i>Per square metre</i>		
07015	Metal staging n.e. 4.00 m high.....	176.50	07015
07016	Ditto 4.00 - 8.00 m high.....	201.70	07016
07017	Ditto 8.00 - 11.00 m high.....	285.80	07017
07018	Ditto 11.00 - 15.00 m high.....	369.80	07018
07019	Ditto 15.00 - 19.00 m high.....	453.80	07019

Section 08

CARPENTRY AND JOINERY

CARPENTRY AND JOINERY

SPECIAL CONDITIONS

TEMPORARY BARRIERS

Temporary barriers

- I. Throughout this Schedule, rates for all trades shall include for all temporary preventive and protective measures necessary for the execution of the work, such as to protect new or existing works, and to protect the public from harm, dust or nuisance. No payment will be made for temporary barriers under any circumstance, with the following exceptions : -

- (a) Temporary barriers specifically ordered by the Maintenance Surveyor in writing and specifically stating that the temporary barriers are for the exclusive use of the Employer and other contractor employed directly by the Employer within the Works Order period.

In the event that the temporary barriers mentioned in sub-clause (a) above are subsequently used as preventive and protective measures by the Contractor themselves, no payment will be made.

The temporary barriers shall be measured the length on plan as fixed.

No measurement shall be made for anchor bolts.

Rates for temporary barriers

- II. The rates for temporary barriers shall include for : -
- (a) Delivering to and erecting on Site, repairing and maintaining throughout the period of use in first or subsequent positions, and taking down and setting aside for re-erection or clearing away.
- (b) Providing all materials including poles, struts, cover boarding and the like.
- (c) Preparing and applying or touching up paint to all surfaces including writings and logos in single or multi-colour paints.
- (d) Providing and fixing anchor bolts, nuts and washers.
- (e) Providing adequate lighting and warning lights and payment of all charges incurred.
- (f) Making good any damage caused to pavings and other surfaces during use, erection and taking down.

CARPENTRY AND JOINERY WORK

Measurement generally

- III. All sizes and thicknesses shall be finished sizes and thicknesses.

Measurement of carpentry and joinery timber

- IV. Carpentry and joinery timber shall be measured as the net length or area fixed, of the smallest finished square or rectangular section from which the piece can be cut. Timber members shall be measured flush over joints, no allowance shall be made for tenon and housing, tongue and groove, and the like at joints.

Fillets, shelving, lining and the like exceeding 150 mm wide shall be measured as boarding.

The depth and thickness of sawn or wrot scantlings shall be measured and rounded up to the nearest 5 mm. Scantlings of intermediate sizes will be paid for pro-rata on sectional area basis.

SPECIAL CONDITIONS (CONT'D)

V.	Boarding, weather boarding, floor boarding, wood block and parquet flooring, plywood and all other building boards, wood wool slabs, wood panels and the like shall all be measured as the net area covered when fixed or laid. No deduction shall be made for openings not exceeding 0.50 m ² . When stated, the width of boarding shall mean the exposed face width when fixed. Timber members shall be measured flush over joints, no allowance shall be made for tenon and housing, tongue and groove, and the like at joints. Timber boarding shall be measured and rounded up to the nearest 5 mm. Where teak is supplied and fixed, it will only be paid when specifically ordered by the Maintenance Surveyor.	Measurement of boarding, flooring, plywood, etc.
VI.	Fibreglass insulating quilts shall be measured as the net area covered. No deduction shall be made for openings not exceeding 0.50 m ² .	Measurement of fibreglass quilts
VII.	Each leaf of doors hung folding or in two heights shall be measured separately. Plastic folding doors shall be measured as the net area of the clear opening with reference to drawing or reference to manufacturer's catalogue excluding any linings, tracks, rails and the like.	Measurement of folding doors, etc.
VIII.	Ironmongery items can be found in Section 09 - Ironmongery of this Schedule.	Ironmongery items
IX.	Circular windows shall be measured square, semi-circular or segmental portion of windows and doors with semi-circular or segmental heads shall be measured rectangular, i.e. net width by net height from springing.	Measurement of circular, semi-circular or segmental heads to doors and windows
X.	Measurement of screen fabric and synthetic leather covering shall be the net covered areas as fixed.	Measurement of screen fabric and synthetic leather covering
XI.	Unless specifically stated, medium density fibreboard boardings shall be measured as boardings used in furniture and fittings.	Measurement of medium density fibreboard
XII.	Proprietary solid surfacing materials shall be measured as the net plane area inclusive of fittings. The area of any backplash, bullnose, front apron and inlay or the like shall not be measured. No deduction shall be made for openings not exceeding 0.50 m ² . Backsplash, bullnose, front apron and inlay, integral wash basin or sink bowls and the like shall be measured as "Extra over" solid surfacing material in which they occur. The rates for such items shall include the labour and material and other costs necessary for the items.	Measurement of proprietary solid surfacing material
XIII.	The rates shall generally include for any or all of the following as applicable : - (a) Setting out, framing up and straight, raking or circular cutting and waste. (b) Fixing items complete, true and level including scribing to new or existing work in any position, fixing in clips or to cramps, embedding in concrete, screeds and the like, or screwing or bolting to steel. (Special clips, bolts, cutting rebates in concrete or other surfaces and drilling steel, etc., all measured separately.) (c) Fixing items in piecing out and replacing existing defective material which has been cut out and removed. (Cutting out of defective material measured separately.) (d) Providing all nails, pins, tacks, screws, cups and screws, adhesive, mastics, white lead and any other fixing and jointing materials.	Rates generally

SPECIAL CONDITIONS (CONT'D)

- | | | |
|--|-------|---|
| Rates generally
(cont'd) | XIII. | <ul style="list-style-type: none"> (e) Notching, cutting and fitting, drilling for screws and boring for bolts including counter-sinking screw, bolt heads and nuts, and pelleting when required. (f) Executing all plugging required for fixing to new or existing concrete, brick, stone or other surfaces, with rawplugs or other approved proprietary plugs including all drilling and cutting mortices or alternatively using "Ramset" or other similar approved power operated fixing system. (g) Narrow widths and small quantities. (h) Gluing, forming splayed or rounded edges, holes, housing ends, ship-lap joints, mitres, ends and shaped ends, angles, junctions, heading joints, short lengths and the like. (i) Forming tongued angles, chamfers, rebates, grooves and the like. (j) Forming all mortices and tenons, housed, dovetailed and other framed joints and providing hardwood or teak pins, wedges, keys and the like when required. (k) Submission of an authenticated certificate from the Forest Stewardship Council (FSC) or other approved authority to substantiate the source of supply from a sustainable forest or plantation. |
| Rates for
boarding and
flooring | XIV. | <p>The rates for boarding and flooring shall further include for : -</p> <ul style="list-style-type: none"> (a) Providing and fixing boards in matching widths of any face width required. (b) Cramping and wedging up if required. (c) Forming cross-tongued in lieu of tongued and grooved boarding if required. (d) In the case of tongued and grooved or cross-tongued boarding, ripping off tongue, cutting back grooves and planning edges flat and square exposed surfaces. |
| Rates for opening
sashes, jalousies
and doors | XV. | <p>The rates for opening sashes, jalousies and doors shall further include for : -</p> <ul style="list-style-type: none"> (a) Hanging on hinges, rising butts, sliding track, pivots and the like (ironmongery measured separately). |
| Rates for wrot
timber | XVI. | <p>The rates for wrot timber shall further include for : -</p> <ul style="list-style-type: none"> (a) Punching nail heads, counter sinking screws and the like. (b) Stopping and sanding to exposed surfaces. (c) Preparing surfaces for painting or polishing. (d) In the case of wrot softwood, notwithstanding the botanical classification, it shall include beech, birch, cherry, chestnut, maple, ash, oak, pine and zen. |
| Rates for
proprietary fire
resisting doors | XVII. | <p>The rates for proprietary fire resisting doors shall further include for : -</p> <ul style="list-style-type: none"> (a) Supply and installation in accordance with the manufacturer's instructions. (b) Providing and fixing all accessories, ironmongeries (except emergency panic device with alarm system and digital locking device), intumescent materials for protection, etc. recommended by the manufacturer. |

SPECIAL CONDITIONS (CONT'D)

- | | | |
|--------|--|---|
| XVII. | <ul style="list-style-type: none"> (c) Providing and fixing door frames where required. (d) Sealing edges with door seals. (e) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required. (f) Grouting into new or existing mortice or holes. (g) Finishing all surfaces. (h) Making good disturbed surfaces. (i) Providing test certificate, operation manual and manufacturer's guarantee. | Rates for proprietary fire resisting doors (cont'd) |
| XVIII. | <p>The rates for plastic folding doors shall further include for :-</p> <ul style="list-style-type: none"> (a) Cutting mortice, sinking or drilling in concrete, brick, stone or other surfaces as required. (b) Grouting into new or existing mortice or holes. (c) Providing and fixing with nuts and washers. (d) Providing and fixing rail, locking device, lock and all necessary ironmongeries. (e) Making good disturbed surfaces. | Rates for plastic folding doors |
| XIX. | <p>The rates for folding partitions shall further include for where applicable :-</p> <ul style="list-style-type: none"> (a) Supply and installation in accordance with the manufacturer's instructions, including submission of all necessary design, calculations and shop drawings as required. (b) Providing and fixing all accessories, ironmongeries, suspension system, etc. recommended by the manufacturer. (c) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required. (d) Grouting into new or existing mortice or holes. (e) Finishing all surfaces, if required. (f) Making good disturbed surfaces. (g) Sealing with vinyl acoustical seals and twin-finger contact type vinyl strips sweep seals as G.S. Items 22.83 and 22.84. (h) Providing test certificate, operation manual and manufacturer's guarantee. | Rates for folding partitions |
| XX. | <p>The rates for screen fabric and synthetic leather covering shall further include for :-</p> <ul style="list-style-type: none"> (a) All straight or raking cutting and waste, holes and fittings. (b) Executing work in any position, at any height and on new or existing surfaces. (c) All staples, adhesive and the like. (d) Covering up and protecting. | Rates for screen fabric and synthetic leather covering |

SPECIAL CONDITIONS (CONT'D)

**Rates for
proprietary solid
surfacing material**

- XXI. The rates for proprietary solid surfacing materials shall further include for :-
- (a) All accessories necessary for the works.
 - (b) Pointing, jointing and sealing edges with sealant.
 - (c) Forming holes for pipes, watertaps, building services installations, basin, sink and the like.
 - (d) Providing and fixing all necessary brackets for sinks, basins and the like.
 - (e) Submission of catalogues, technical literature, samples, shop drawings and manufacturer's guarantee.

**Rates for acoustic
doors**

- XXII. The rates for acoustic doors shall further include for :-
- (a) Supply and installation in accordance with the manufacturer's instructions.
 - (b) Providing and fixing all accessories, ironmongeries, sound proof/absorbing materials, etc. recommended by the manufacturer.
 - (c) Providing and fixing door frames where required.
 - (d) Sealing door edges with acoustic door seals.
 - (e) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
 - (f) Grouting into new or existing mortice or holes.
 - (g) Finishing all surfaces.
 - (h) Making good disturbed surfaces.
 - (i) Providing test certificate, operation manual and manufacturer's guarantee.

**Rates for
proprietary sport
flooring system**

- XXIII. The rates for proprietary sport flooring system shall further include for :-
- (a) Submission of shop drawings.
 - (b) Providing samples of flooring showing complete range of colours and all components.
 - (c) Preparing mock up as required by Maintenance Surveyor.
 - (d) Providing operating and maintenance manuals, and manufacturer's guarantee.
 - (e) Applying and obtaining accreditation/certification from recognized international sports organizations when required.

**G.S. clauses for
folding partition**

- XXIV. The G.S. clauses for folding partition can be found in the Internal Fitting and Fixtures Section of the General Specification for Building.

Item	TEMPORARY BARRIERS				Item	
		Erect, maintain, take down and clear away	Erect, maintain and left-in position	Take down and clear away		
	<i>Per cubic metre</i>	A \$	B \$	C \$		
08001	Sawn hardwood in scantlings and boarding in temporary barriers.....	6,578.30	6,364.00	214.20	08001	
	<i>Per square metre</i>					
08002	25 mm Plywood covering.....	110.50	103.60	6.90	08002	
CARPENTRY AND JOINERY						
SAWN SCANTLINGS						
Sawn timber scantlings exceeding 0.004 m ² sectional area and not less than 40 mm thick fixed in rafters, trusses, purlins, floor joists, unexposed wall and partition studs, frames and the like : -						
	<i>Per linear metre</i>	Sawn hardwood				
		Thickness (mm)				
		40	50	75	100	150
		A \$	B \$	C \$	D \$	E \$
08003	Depth 75 mm.....	-	-	35.50	39.10	46.20
08004	Ditto 100 mm.....	-	34.40	39.10	43.80	53.30
08005	Ditto 125 mm.....	34.40	36.70	42.60	48.50	60.40
08006	Ditto 150 mm.....	36.30	39.10	46.20	53.30	67.50
08007	Ditto 200 mm.....	40.00	43.80	53.30	62.70	81.60
08008	Ditto 250 mm.....	43.80	48.50	60.40	72.20	95.80
08009	Ditto 300 mm.....	47.60	53.30	67.50	81.60	110.00
	Add to either of Items 08003 to 08009 inclusive for scantlings cut curved from solid timber including dowelling and keying sections together					35%

Item	SAWN SCANTLINGS (CONT'D)										Item															
	<table border="1"> <thead> <tr> <th colspan="3">Sawn hardwood</th> </tr> <tr> <th colspan="3">Sectional area (m²)</th> </tr> <tr> <th>0.004 - 0.008</th> <th>0.008 - 0.016</th> <th>Exc. 0.016</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>										Sawn hardwood			Sectional area (m ²)			0.004 - 0.008	0.008 - 0.016	Exc. 0.016	A	B	C	\$	\$	\$	
Sawn hardwood																										
Sectional area (m ²)																										
0.004 - 0.008	0.008 - 0.016	Exc. 0.016																								
A	B	C																								
\$	\$	\$																								
	<i>Per linear metre</i>																									
08010	Take down and clear away scantlings exceeding 0.004 m ² sectional area and not less than 40 mm thick.....										4.10	6.90	11.10	08010												
08011	Take down and set aside for re-use ditto.....										4.30	8.60	12.90	08011												
08012	Fix only scantlings including making all joints.....										10.20	17.60	29.30	08012												
	<table border="1"> <thead> <tr> <th>Sawn hardwood</th> <th>Sawn teak</th> </tr> <tr> <th>A</th> <th>B</th> </tr> <tr> <th>\$</th> <th>\$</th> </tr> </thead> </table>										Sawn hardwood	Sawn teak	A	B	\$	\$										
Sawn hardwood	Sawn teak																									
A	B																									
\$	\$																									
	<i>Per square metre</i>																									
08013	Plane and sand down surface of existing scantlings in position to produce wrot face including punching nail heads.....										54.20	84.90	08013													
	WROT SCANTLINGS																									
	Wrot timber scantlings exceeding 0.004 m ² sectional area and not less than 40 mm thick fixed in rafters, trusses, purlins, floor joists, unexposed wall and partition studs, frames and the like :-																									
	<i>Per linear metre</i>																									
	Wrot hardwood					Wrot teak																				
	Thickness (mm)																									
	40	50	75	100	150	40	50	75	100	150																
	A	B	C	D	E	F	G	H	I	J																
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$																
08014	Depth 75 mm.....	-	-	35.80	39.40	46.60	-	-	77.80	95.50	130.70	08014														
08015	Ditto 100 mm.....	-	34.60	39.40	44.20	53.80	-	71.90	95.50	119.00	166.00	08015														
08016	Ditto 125 mm.....	34.60	37.00	43.00	49.00	61.10	71.90	83.70	113.10	142.50	201.30	08016														
08017	Ditto 150 mm.....	36.50	39.40	46.60	53.80	68.30	81.40	95.50	130.70	166.00	236.60	08017														
08018	Ditto 200 mm.....	40.30	44.20	53.80	63.50	82.80	100.20	119.00	166.00	213.10	307.20	08018														
08019	Ditto 250 mm.....	44.20	49.00	61.10	73.10	97.30	119.00	142.50	201.30	260.10	377.70	08019														
08020	Ditto 300 mm.....	48.00	53.80	68.30	82.80	111.70	137.80	166.00	236.60	307.20	448.30	08020														
	Add to either of Items 08014 to 08020 inclusive for scantlings cut curved from solid timber including dowelling and keying sections together										35%															

Item	WROT SCANTLINGS (CONT'D)							Item
		Wrot hardwood			Wrot teak			
		Sectional area (m ²)			Sectional area (m ²)			
		0.004 - 0.008	0.008 - 0.016	Exc. 0.016	0.004 - 0.008	0.008 - 0.016	Exc. 0.016	
		A	B	C	D	E	F	
		\$	\$	\$	\$	\$	\$	
	<i>Per linear metre</i>							
08021	Take down and clear away wrot timber scantlings exceeding 0.004 m ² sectional area and not less than 40 mm thick.....	4.10	6.90	11.10	5.10	7.70	12.00	08021
08022	Take down and set aside for re-use ditto.....	4.30	8.60	12.90	5.10	9.40	14.60	08022
08023	Fix only ditto including making all joints.....	24.90	36.60	48.30	27.80	41.00	52.70	08023
	SAWN SMALL SCANTLINGS, GROUNDS, FILLETS AND THE LIKE							
	Sawn timber small scantlings n.e. 0.004 m ² sectional area and not more than 150 mm wide fixed in grounds, fillets and the like : -	Sawn hardwood						
		Thickness (mm)						
		15	20	25	30	40	50	
		A	B	C	D	E	F	
		\$	\$	\$	\$	\$	\$	
	<i>Per linear metre</i>							
08024	Depth 5 mm.....	7.50	7.60	7.70	7.80	7.90	8.00	08024
08025	Ditto 15 mm.....	7.80	7.90	8.00	8.20	8.50	13.10	08025
08026	Ditto 20 mm.....	7.90	8.10	8.30	8.50	8.80	13.60	08026
08027	Ditto 25 mm.....	8.00	8.30	8.50	8.80	9.20	14.10	08027
08028	Ditto 40 mm.....	8.50	8.80	9.20	9.60	10.40	15.50	08028
08029	Ditto 50 mm.....	13.10	13.60	14.10	14.60	15.50	16.50	08029
08030	Ditto 75 mm.....	13.90	14.60	15.30	16.00	17.40	18.80	08030
08031	Ditto 100 mm.....	14.60	15.50	16.50	17.40	19.30	-	08031
08032	Ditto 150 mm.....	16.00	17.40	18.80	-	-	-	08032
	Add to either of Items 08024 to 08032 inclusive for small scantlings bent to curve to radius n.e. 15 m during fixing by means of saw cuts, steam bending, etc.....							20%
	Ditto for small scantlings cut curved from solid timber including dowelling and keying sections together.....							35%

Item	SAWN SMALL SCANTLINGS, GROUNDS, FILLETS AND THE LIKE (CONT'D)	Item	
		Sawn hard-wood	
		A \$	
08033	Take down and clear away sawn timber scantlings n.e. 0.004 m ² sectional area and not more than 150 mm wide.....	4.30	08033
08034	Take down and set aside for re-use ditto.....	6.90	08034
08035	Fix only ditto including making all joints.....	7.30	08035
	<i>Per square metre</i>		
08036	Plane and sand down surface of existing scantling in position to produce wrot face including punching nail heads as necessary.....	54.20	08036

WROT SMALL SCANTLINGS, FILLETS AND THE LIKE

Wrot timber small scantlings n.e. 0.004 m² sectional area and not more than 150 mm wide fixed in fillets, bearers, framing to cupboard and fittings, louvre blades, skirtings, architraves, beads, stops and the like :-

Per linear metre

	Wrot hardwood						Wrot teak							
	Thickness (mm)						Thickness (mm)							
	15	20	25	30	40	50	15	20	25	30	40	50		
	A	B	C	D	E	F	G	H	I	J	K	L		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
08037	Depth 5 mm.....	11.90	12.00	12.10	12.20	12.30	12.40	12.70	13.10	13.40	13.70	14.40	15.10	08037
08038	Ditto 15 mm.....	12.20	12.30	12.40	12.60	12.90	16.10	14.70	15.80	16.80	17.80	19.80	24.70	08038
08039	Ditto 20 mm.....	12.30	12.50	12.70	12.90	13.30	19.50	15.80	17.10	18.40	19.80	22.50	31.00	08039
08040	Ditto 25 mm.....	12.40	12.70	12.90	13.20	13.60	20.00	16.80	18.40	20.10	21.80	25.20	34.40	08040
08041	Ditto 40 mm.....	12.90	13.30	13.60	14.00	14.80	21.40	19.80	22.50	25.20	27.90	33.20	44.40	08041
08042	Ditto 50 mm.....	16.10	19.50	20.00	20.50	21.40	22.40	24.70	31.00	34.40	37.70	44.40	51.20	08042
08043	Ditto 75 mm.....	19.80	20.50	21.20	21.90	23.40	24.80	32.70	37.70	42.80	47.80	57.90	68.00	08043
08044	Ditto 100 mm.....	27.80	28.70	29.70	30.70	32.60	-	45.10	51.80	58.50	65.20	78.70	-	08044
08045	Ditto 150 mm.....	29.20	30.70	32.10	-	-	-	55.10	65.20	75.30	-	-	-	08045

Item	WROT SMALL SCANTLINGS, FILLETS AND THE LIKE (CONT'D)						Item																														
	Wrot softwood small scantlings n.e. 0.004 m2 sectional area and not more than 150 mm wide fixed in fillets, bearers, framing to cupboard and fittings, louvre blades, skirtings, architraves, beads, stops and the like :- <i>Per linear metre</i>																																				
	<table border="1"> <thead> <tr> <th colspan="6">Wrot softwood</th> </tr> <tr> <th colspan="6">Thickness (mm)</th> </tr> <tr> <th>15</th> <th>20</th> <th>25</th> <th>30</th> <th>40</th> <th>50</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>						Wrot softwood						Thickness (mm)						15	20	25	30	40	50	A	B	C	D	E	F	\$	\$	\$	\$	\$	\$	
Wrot softwood																																					
Thickness (mm)																																					
15	20	25	30	40	50																																
A	B	C	D	E	F																																
\$	\$	\$	\$	\$	\$																																
08046	Depth 5 mm.....	12.00	12.10	12.20	12.40	12.50	12.70	08046																													
08047	Ditto 15 mm.....	12.50	12.80	13.00	13.30	13.80	20.20	08047																													
08048	Ditto 20 mm.....	12.80	13.10	13.40	13.80	14.50	21.00	08048																													
08049	Ditto 25 mm.....	13.00	13.40	13.90	14.30	15.20	21.90	08049																													
08050	Ditto 40 mm.....	13.80	14.50	15.20	15.90	17.30	24.50	08050																													
08051	Ditto 50 mm.....	20.20	21.00	21.90	22.80	24.50	26.30	08051																													
08052	Ditto 75 mm.....	21.50	22.80	24.10	25.40	28.00	30.60	08052																													
08053	Ditto 100 mm.....	30.10	31.90	33.60	35.30	38.80	-	08053																													
08054	Ditto 150 mm.....	32.70	35.30	37.90	-	-	-	08054																													
	Add to either of Items 08037 to 08054 inclusive for small scantlings bent to curve to radius n.e. 15 m during fixing by means of saw cuts, steam bending, etc.....						20%																														
	Ditto for small scantlings cut curved from solid timber including dowelling and keying sections together.....						35%																														
	<table border="1"> <thead> <tr> <th></th> <th>Wrot hard-wood</th> <th>Wrot teak</th> <th>Wrot soft-wood</th> </tr> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th></th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>							Wrot hard-wood	Wrot teak	Wrot soft-wood		A	B	C		\$	\$	\$																			
	Wrot hard-wood	Wrot teak	Wrot soft-wood																																		
	A	B	C																																		
	\$	\$	\$																																		
08055	Take down and clear away wrot timber scantlings n.e. 0.004 m ² sectional area and not more than 150 mm wide.....			4.30	5.10	4.30	08055																														
08056	Take down and set aside for re-use ditto.....			6.90	7.70	6.90	08056																														
08057	Fix only ditto including making all joints.....			8.80	10.20	10.20	08057																														

Item **BOARDING**

Item

Boarding in furniture, coverings, fittings, linings, window reveals and similar positions, including weather boarding, exceeding 150 mm in width :-

Hardwood							Teak						
Thickness (mm)							Thickness (mm)						
15	20	25	30	40	45	50	15	20	25	30	40	45	50
A	B	C	D	E	F	G	H	I	J	K	L	M	N
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
119.30	134.70	150.10	165.40	196.20	211.60	226.90	-	-	-	-	-	-	-
132.00	147.60	163.30	179.00	210.40	226.10	241.70	226.10	273.10	320.10	367.20	461.30	508.30	555.40
170.90	187.40	203.80	220.30	253.20	269.70	286.20	269.70	319.10	368.50	417.90	516.70	566.10	615.50
184.10	200.60	217.00	233.50	266.40	282.90	299.40	282.90	332.30	381.70	431.10	529.90	579.30	628.70
186.50	203.70	221.00	238.20	272.70	289.90	307.20	290.00	341.70	393.50	445.20	548.70	600.50	652.20

Per square metre

08058	Sawn boarding.....	119.30	134.70	150.10	165.40	196.20	211.60	226.90	-	-	-	-	-	-	08058	
08059	Wrot boarding.....	132.00	147.60	163.30	179.00	210.40	226.10	241.70	226.10	273.10	320.10	367.20	461.30	508.30	555.40	08059
08060	Ditto tongued and grooved.....	170.90	187.40	203.80	220.30	253.20	269.70	286.20	269.70	319.10	368.50	417.90	516.70	566.10	615.50	08060
08061	Ditto tongued, grooved and "V" or bead jointed one face.....	184.10	200.60	217.00	233.50	266.40	282.90	299.40	282.90	332.30	381.70	431.10	529.90	579.30	628.70	08061
08062	Ditto tongued, grooved and "V" or bead jointed both faces.....	186.50	203.70	221.00	238.20	272.70	289.90	307.20	290.00	341.70	393.50	445.20	548.70	600.50	652.20	08062

Softwood						
Thickness (mm)						
15	20	25	30	40	45	50
A	B	C	D	E	F	G
\$	\$	\$	\$	\$	\$	\$
137.00	154.40	171.80	189.10	223.90	241.20	258.60
176.30	194.50	212.70	231.00	267.40	285.70	303.90
189.40	207.70	225.90	244.10	280.60	298.90	317.10
192.00	211.20	230.20	249.30	287.60	306.70	325.80

Per square metre

08063	Wrot boarding.....	137.00	154.40	171.80	189.10	223.90	241.20	258.60	08063
08064	Ditto tongued and grooved.....	176.30	194.50	212.70	231.00	267.40	285.70	303.90	08064
08065	Ditto tongued, grooved and 'V' or bead jointed one face.....	189.40	207.70	225.90	244.10	280.60	298.90	317.10	08065
08066	Ditto tongued, grooved and 'V' or bead jointed both faces.....	192.00	211.20	230.20	249.30	287.60	306.70	325.80	08066

Add to either of Items 08058 to 08066 inclusive for boarding bent to curve to radius n.e. 15 m during fixing by means of saw cuts, steam bending, etc..... 20%

Ditto for boarding cut curved from solid timber including dowelling and keying sections together..... 35%

Item **BOARDING (CONT'D)**

Item

Sawn hard- wood	Wrot hard- wood	Wrot teak
A \$	B \$	C \$
54.20	38.10	60.00

Per square metre

08067 Plane and sand down surface of existing boarding in position to produce wrot face including punching nail heads as necessary..... 08067

Hardwood		Teak		Softwood	
Square edge boarding	Tongued and grooved boarding	Square edge boarding	Tongued and grooved boarding	Square edge boarding	Tongued and grooved boarding
A \$	B \$	C \$	D \$	E \$	F \$
17.10	18.00	21.40	22.30	21.40	22.30
21.40	32.60	28.30	42.90	28.30	42.90
73.20	121.50	84.90	121.50	84.90	121.50

Per square metre

08068 Take down and clear away existing sawn or wrot boarding of any thickness..... 08068

08069 Take down and set aside for re-use ditto..... 08069

08070 Fix only ditto..... 08070

Hard- wood	Teak	Soft- wood
A \$	B \$	C \$
7.30	11.70	10.20
11.70	24.90	19.00

Per linear metre

08071 Forming rebate, groove, splay, chamfer, bead, rounded angle, tongue, flute, cove, moulding or similar labour on existing boarding in position..... 08071

08072 Ditto but circular to radius n.e. 15.00 m..... 08072

CARPENTRY AND JOINERY

08067 - 08072

Item	STRIP FLOORING			Item	
	<i>Per square metre</i>	Teak	Softwood		
		A	B		
		\$	\$		
08073	Flooring of 20 mm thick in any size wood strips matched for colour, tongued, grooved and "V" jointed all round and laid in basket or herringbone pattern with straight borders as ordered, laid on bitumen/rubber latex waterproofing emulsion coated screed or blockboard backing (paint, screed and blockboard backing measured separately), including preparing surface for polishing	734.50	595.70	08073	
08074	Take up and clear away wood strip flooring (blockboard backing measured separately)	28.30	28.30	08074	
08075	Take up and set aside for re-use wood strip flooring (ditto)	42.90	42.90	08075	
08076	Lay only wood strip flooring (ditto)	219.70	219.70	08076	
	WOOD BLOCK FLOORING				
	<i>Per square metre</i>	Thickness (mm)			
		20	25		
		Teak	Softwood		
		A	B		
		\$	\$		
08077	Flooring of the stated thickness in any size wood blocks matched for colour, tongued and grooved all round and laid in basket or herringbone pattern with straight borders as ordered, fixed with cold bitumen/rubber emulsion adhesive to screeds, including preparing surfaces for polishing.....	462.90	550.10	08077	
08078	Take up and clear away wood block flooring.....	21.40	25.70	08078	
08079	Take up and set aside for re-use wood block flooring.....	28.30	32.60	08079	
08080	Lay only wood block flooring.....	146.40	183.00	08080	
	PARQUET FLOORING				
	<i>Per square metre</i>	Hard-wood	Teak	Soft-wood	
		A	B	C	
		\$	\$	\$	
08081	Parquet flooring of 8 mm thick in any size wood blocks matched for colour, tongued and groove and laid in pattern as ordered, fixed with cold bitumen/rubber emulsion adhesive to screeds, including preparing surfaces for polishing.....	380.10	433.90	407.00	08081
08082	Take up and clear away parquet flooring.....	14.60	18.90	18.90	08082
08083	Take up and set aside for re-use parquet flooring.....	21.40	28.30	28.30	08083
08084	Lay only parquet flooring.....	146.40	183.00	183.00	08084
	<i>Per square metre</i>			A	
				\$	
08085	Plane as necessary, sand down, clean off existing wood block or parquet flooring of any type and prepare surface for polishing.....			19.00	08085

Item	PROPRIETARY LAMINATED FLOORING	Item
	Supply and lay proprietary laminated flooring of various series tongued and grooved and laid in basket or herringbone pattern as ordered, including coating screeded sub-floor with approved bitumen/rubber latex waterproofing emulsion as ordered, fibreglass or polyethylene backing as required all in accordance with the manufacturer's recommendations : -	
		Boarding thickness (mm)
		n.e. 10
		exc. 10
		A
		B
		\$
		\$
08086	Proprietary laminated flooring.....	573.40
		663.90
08086		
08087	Take up and clear away laminated flooring complete with fittings.....	21.40
		21.40
08087		
08088	Take up and set aside for re-use ditto.....	31.70
		31.70
08088		
08089	Fix only ditto.....	183.00
		183.00
08089		
		A
		\$
08090	Aluminium T-strip cover for expansion joint.....	216.00
08090		
08091	Aluminium end edging strip.....	142.10
08091		
08092	Laminated skirting 82 mm high.....	187.10
08092		
08093	Laminated T-strip cover for expansion joint.....	284.10
08093		
08094	Laminated end edging strip.....	112.00
08094		

CARPENTRY AND JOINERY

08086 - 08094

Item SASHES

Item

Sashes for solid or cased frames, fanlights, lanterns and skylights, etc., with styles, head and bottom rails of required widths, divided into squares of any size with glazing bars including all rebates, splays, throats, mouldings and similar labours (solid or cased frames, glass, glazing beads and ironmongery all measured separately) : -

Per square metre

	Wrot hardwood					Wrot teak					Wrot softwood					
	Thickness (mm)					Thickness (mm)					Thickness (mm)					
	40	45	50	55	65	40	45	50	55	65	40	45	50	55	65	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
08095	Fixed sash including screwing to frame and bedding in white lead if required.....															08095
	508.90	529.90	550.40	572.00	613.00	711.90	748.80	786.20	825.10	899.40	648.50	677.60	707.00	738.00	796.40	
08096	Opening sash including hanging or hanging folding on hinges, pivots or to slides vertically or horizontally, providing and fixing parting beads and stops required.....															08096
	530.80	551.10	572.50	592.90	635.50	737.90	774.70	813.40	849.90	926.60	674.40	703.60	734.20	762.80	823.70	
JALOUSIES																
<i>Per square metre</i>																
08097	Jalousie with fixed wood louvre blades at angle of 45 degrees rounded or splayed on edges and spaced at about 40 mm centres, framed up in panels with styles, head and bottom rails of required widths including all rebates, splays, throats, mouldings and similar labours, louvre blades notched and housed into styles and secured with small fillet around back edges of styles, and hanging or hanging folding (ironmongery measured separately).....															08097
	704.00	719.40	736.70	753.10	787.00	984.20	1,011.40	1,041.40	1,070.80	1,130.20	896.60	918.20	942.20	965.50	1,013.00	
08098	Ditto but with wood louvre blades movable and spaced at about 65 mm centres including ends pivoted into styles and movable operating bar secured to louvres with pairs of eyes.....															08098
	851.90	868.60	884.80	901.70	935.00	1,138.10	1,167.60	1,196.70	1,210.40	1,285.30	1,061.20	1,085.10	1,108.00	1,120.20	1,178.80	

Add to either of Items 08095 to 08098 inclusive for semi-circular, segmental or elliptical head to rectangular sash or jalousie (circular sash measured square, semi-circular, segmental or elliptical portion only measured rectangular net width by net height from springing).....

35%

Item LEDGED, OR LEDGED AND BRACED DOORS

Item

Ledged, or ledged and braced doors covered with boarding including ledges and braces of required widths and 5 mm thicker than boards, and hanging (ironmongery measured separately) : -

Wrot hardwood																
Square edge boarding				Tongued and grooved boarding				Tongued, grooved and "V" or bead jointed one side boarding				Tongued, grooved and "V" or bead jointed both sides boarding				
Thickness of boarding (mm)				Thickness of boarding (mm)				Thickness of boarding (mm)				Thickness of boarding (mm)				
20	25	30	40	20	25	30	40	20	25	30	40	20	25	30	40	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
08099	Ledged door with open spaced boarding (maximum 30 mm between boards).....															08099
	317.70	357.90	396.80	476.00	-	-	-	-	-	-	-	-	-	-	-	-
08100	Ditto but with close jointed boarding.....															08100
	346.80	393.60	432.60	518.40	375.90	421.40	467.00	559.50	386.40	432.10	477.60	570.10	403.70	449.30	494.80	587.30
08101	Ledged and braced door with open spaced boarding (maximum 30 mm between boards).....															08101
	356.00	401.60	445.90	531.60	-	-	-	-	-	-	-	-	-	-	-	-
08102	Ditto but with close jointed boarding.....															08102
	383.90	436.00	483.00	574.10	411.70	463.90	516.00	613.80	427.60	479.80	530.60	629.70	439.40	491.70	543.90	643.00
08103	Add to either of Items 08099 to 08102 inclusive if door hung folding or in two heights including rebates and beads.....															08103
	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60

FRAMED, LEDGED AND BRACED DOORS

Framed, ledged and braced doors covered with boarding including styles, head, middle and bottom rails, and braces of required widths, and hanging (ironmongery measured separately) : -

Wrot hardwood				Wrot teak				Wrot softwood				
Overall door thickness (mm)				Overall door thickness (mm)				Overall door thickness (mm)				
45	50	55	65	40	50	55	65	40	50	55	65	
A	B	C	D	E	F	G	H	I	J	K	L	
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
08104	Door with 20 mm tongued and grooved boarding.....											08104
	498.70	507.70	516.80	525.90	739.80	804.50	836.90	901.70	675.00	733.30	762.50	820.70
08105	Ditto but boarding "V" or bead jointed on one side.....											08105
	522.10	531.20	540.20	549.30	761.80	826.50	858.90	923.60	697.00	755.30	784.40	842.70
08106	Ditto but boarding "V" or bead jointed on both sides.....											08106
	545.50	554.60	563.70	572.70	785.20	849.90	882.30	947.10	720.40	778.70	807.80	866.10
08107	Add to either of Items 08104 to 08106 inclusive if door hung folding or in two heights including rebates and beads.....											08107
	12.60	12.60	12.60	12.60	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
08108	Extra over either of Items 08104 to 08106 inclusive if door prepared with wicket gate including fitting and hanging the same.....											08108
	171.50	172.70	173.90	175.00	205.80	206.90	208.10	209.40	205.80	206.90	208.10	209.40

Add to either of Items 08104 to 08106 inclusive for semi-circular, segmental or elliptical head to framed, ledged and braced door (semi-circular, segmental or elliptical portion only measured rectangular net width by net height from springing).....

35%

CARPENTRY AND JOINERY

08099 - 08108

SOLID DOORS

Item

Wrot hardwood				
Overall door thickness (mm)				
40	45	50	55	65
A	B	C	D	E
\$	\$	\$	\$	\$
632.40	687.30	740.00	780.30	883.30
648.80	705.90	761.30	794.30	897.80
667.10	721.70	778.60	807.80	908.30

Per square metre

08109	Solid door of tongued and grooved boarding clamped with and including three 16 mm diameter horizontal mild steel rods each 15 mm shorter than door width and threaded and fitted with nuts and washers both ends, drilling boarding for rods, countersinking for nuts, pelleting and hanging (ironmongery measured separately).....	632.40	687.30	740.00	780.30	883.30	08109
08110	Ditto but tongued and grooved boarding "V" or bead jointed on one side.....	648.80	705.90	761.30	794.30	897.80	08110
08111	Ditto but tongued and grooved boarding "V" or bead jointed on both sides.....	667.10	721.70	778.60	807.80	908.30	08111

FRAMED AND PANELLED DOORS

Framed and panelled doors with styles, muntin, head, intermediate and bottom rails of required widths and 20 mm thick panels, and hanging (ironmongery measured separately) :-

	Wrot hardwood					Wrot teak					Wrot softwood						
	Overall door thickness (mm)					Overall door thickness (mm)					Overall door thickness (mm)						
	40	45	50	55	65	40	45	50	55	65	40	45	50	55	65		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O			
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$			
08112	Door square and flat both sides.....	597.10	629.80	656.30	675.60	732.20	1,139.00	1,197.30	1,266.50	1,303.60	1,407.40	909.90	949.80	992.80	1,029.70	1,114.40	08112
08113	Add if framing stop chamfered or rounded (per side).....	29.70	29.70	29.70	29.70	29.70	35.90	35.90	35.90	35.90	35.90	35.90	35.90	35.90	35.90	35.90	08113
08114	Add if framing moulded on solid (per side).....	39.70	39.70	39.70	39.70	39.70	48.10	48.10	48.10	48.10	48.10	47.90	47.90	47.90	47.90	47.90	08114
08115	Add if bolecion moulded and planted on around panels (per side).....	114.80	114.80	114.80	114.80	114.80	173.80	173.80	173.80	173.80	173.80	148.30	148.30	148.30	148.30	148.30	08115
08116	Add if panels raised and thickened with sunk and splayed margins (per side).....	99.10	99.10	99.10	99.10	99.10	154.50	154.50	154.50	154.50	154.50	136.20	136.20	136.20	136.20	136.20	08116
08117	Add if door hung folding or in two heights including rebates and beads.....	15.10	15.10	15.10	15.10	15.10	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	08117

Add to either of Items 08112 to 08116 inclusive for semi-circular, segmental, or elliptical head to framed and panelled door (semi-circular, segmental or elliptical portion only measured rectangular net width by net height from springing).....

35%

Item	FRAMED, PANELLED AND GLAZED DOORS										Item
	Framed and panelled doors, wholly or partly glazed, with styles (diminished if required), head, intermediate and bottom rails of required widths, glazing beads where required, 20 mm thick panels where not glazed, and hanging (glass and ironmongery all measured separately) :-										
	Wrot hardwood										
	One panel door with panel left open for full glazing					Two or three panel door with upper panel left open for full glazing					
	Overall door thickness (mm)					Overall door thickness (mm)					
	40	45	50	55	65	40	45	50	55	65	
	A	B	C	D	E	F	G	H	I	J	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
08118	291.70	309.30	328.90	348.40	373.00	394.70	416.30	433.70	441.70	494.00	08118
08119	16.20	16.20	16.20	16.20	16.20	9.80	9.80	9.80	9.80	9.80	08119
08120	16.20	16.20	16.20	16.20	16.20	9.80	9.80	9.80	9.80	9.80	08120
08121	26.30	26.30	26.30	26.30	26.30	40.40	40.40	40.40	40.40	40.40	08121
08122	72.60	75.60	76.30	76.70	77.30	127.60	131.00	132.20	134.80	140.50	08122
08123	-	-	-	-	-	58.60	58.60	58.60	58.60	58.60	08123
08124	-	-	-	-	-	56.90	56.90	56.90	56.90	56.90	08124
08125	15.40	15.40	15.40	15.40	15.40	15.40	15.40	15.40	15.40	15.40	08125
	Wrot teak										
	One panel door with panel left open for full glazing					Two or three panel door with upper panel left open for full glazing					
	Overall door thickness (mm)					Overall door thickness (mm)					
	40	45	50	55	65	40	45	50	55	65	
	A	B	C	D	E	F	G	H	I	J	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
08126	520.10	549.00	585.10	634.70	689.90	824.00	856.50	909.20	956.40	1,062.00	08126
08127	18.30	18.30	18.30	18.30	18.30	11.90	11.90	11.90	11.90	11.90	08127
08128	18.30	18.30	18.30	18.30	18.30	11.90	11.90	11.90	11.90	11.90	08128
08129	30.40	30.40	30.40	30.40	30.40	47.90	47.90	47.90	47.90	47.90	08129
08130	108.90	115.80	119.00	122.80	131.10	148.20	155.40	156.30	158.60	164.80	08130
08131	-	-	-	-	-	81.40	81.40	81.40	81.40	81.40	08131
08132	-	-	-	-	-	84.30	84.30	84.30	84.30	84.30	08132
08133	17.90	17.90	17.90	17.90	17.90	-	-	-	-	-	08133

FRAMED, PANELLED AND GLAZED DOORS (CONT'D)

Item

Wrot softwood												
One panel door with panel left open for full glazing					Two or three panel door with upper panel left open for full glazing							
Overall door thickness (mm)					Overall door thickness (mm)							
40	45	50	55	65	40	45	50	55	65			
A	B	C	D	E	F	G	H	I	J			
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$			
08134	Door square and flat both sides.....	421.50	445.40	482.40	514.10	574.60	676.40	719.80	766.00	804.40	856.10	08134
08135	Add if framing rebated for glass.....	18.80	18.80	18.80	18.80	18.80	11.80	11.80	11.80	11.80	11.80	08135
08136	Add if framing stop chamfered or rounded (per side).....	18.80	18.80	18.80	18.80	18.80	11.80	11.80	11.80	11.80	11.80	08136
08137	Add if framing moulded on solid (per side).....	31.30	31.30	31.30	31.30	31.30	46.10	46.10	46.10	46.10	46.10	08137
08138	Add if open panel for glazing divided into squares (any number) with and including plain, rebated or moulded glazing bars.....	102.00	102.80	103.70	107.50	114.00	143.60	147.80	148.30	152.30	156.10	08138
08139	Add if bolection moulded and planted on around wood panels (per side).....	102.40	102.40	102.40	102.40	102.40	74.50	74.50	74.50	74.50	74.50	08139
08140	Add if wood panels raised and thickened with sunk and splayed margins.....	146.20	146.20	146.20	146.20	146.20	71.80	71.80	71.80	71.80	71.80	08140
08141	Add if door hung folding or in two heights including rebates and beads.....	17.60	17.60	17.60	17.60	17.60	17.60	17.60	17.60	17.60	17.60	08141

Add to either of Items 08118 to 08124 inclusive, Items 08126 to 08132 inclusive and Items 08134 to 08140 inclusive for semi-circular, segmental or elliptical head to framed, panelled and glazed door (semi-circular, segmental, or elliptical portion only measured rectangular net width by net height from springing)..... 35%

FLUSH DOORS

Flush doors lipped all round with 15 mm tongued fillet and hanging (ironmongery measured separately) :-

Door covered both sides with 3.2 mm standard hardwood							
Overall door thickness (mm)							
25	30	40	45	50			
A	B	C	D	E			
\$	\$	\$	\$	\$			
08142	Skeleton core flush door with 75 or 100 mm hardwood styles, top and bottom rails, solid blocking for lock fittings and egg-crate core of 25 mm hardwood filling pieces at 150 mm centres both ways.....	399.40	436.90	478.00	502.60	555.30	08142
08143	Solid core flush door with 75 or 100 mm hardwood styles, top and bottom rails, solid blocking for lock fittings and solid core of 20 mm wide vertical or horizontal filling pieces bonded together under pressure and machine thicknessed.....	432.70	446.60	491.80	518.20	577.00	08143
08144	Add to either of Items 08142 to 08143 inclusive if door hung folding or in two heights including rebates, beads and additional thickness of edge fillet required.....	25.70	27.80	31.30	33.00	35.40	08144

Per square metre

Item	FLUSH DOORS (CONT'D)	Door covered both sides with 3.2 mm standard hardwood					Item
	Flush doors lipped all round with 15 mm tongued fillet and hanging (ironmongery measured separately) :- (cont'd)	Overall door thickness (mm)					
		25	30	40	45	50	
		A	B	C	D	E	
		\$	\$	\$	\$	\$	
08145	Extra over Items 08142 and 08143 inclusive for cover one side with 4 mm luan faced internal quality plywood.....	11.60	11.60	11.60	11.60	11.60	08145
08146	Extra over Items 08142 and 08143 inclusive for cover one side with 4 mm teak faced internal quality plywood.....	38.60	38.60	38.60	38.60	38.60	08146
08147	Extra over Items 08142 and 08143 inclusive for cover one side with 4 mm beech wood faced internal quality plywood.....	45.80	45.80	45.80	45.80	45.80	08147
08148	Extra over Items 08142 and 08143 inclusive for cover one side with 4 mm maple faced internal quality plywood.....	59.80	59.80	59.80	59.80	59.80	08148
08149	Extra over Items 08142 and 08143 inclusive for cover one side with 4 mm oak wood faced internal quality plywood.....	55.20	55.20	55.20	55.20	55.20	08149
08150	Extra over Items 08142 and 08143 inclusive for cover one side with 4 mm zen wood faced internal quality plywood.....	43.60	43.60	43.60	43.60	43.60	08150
08151	Extra over Items 08142 and 08143 inclusive for cover one side with 4 mm aneigre wood faced internal quality plywood.....	76.30	76.30	76.30	76.30	76.30	08151
08152	Extra over Items 08142 and 08143 inclusive for cover one side with 4 mm sycamore wood faced internal quality plywood.....	103.20	103.20	103.20	103.20	103.20	08152
08153	Extra over Items 08142 and 08143 inclusive for cover one side with 4 mm bird eye maple wood faced internal quality plywood..... (Note :- The above Item 08153 will only be paid for if ordered in writing by the Maintenance Surveyor)	290.90	290.90	290.90	290.90	290.90	08153
08154	Extra over Items 08142 and 08143 inclusive for cover one side with 0.7 mm laminated plastic sheet.....	98.90	98.90	98.90	98.90	98.90	08154
08155	Extra over Items 08142 and 08143 inclusive for cover one side with 1.0 mm laminated plastic sheet.....	106.80	106.80	106.80	106.80	106.80	08155

CARPENTRY AND JOINERY

08145 - 08155

Item	FLUSH DOORS (CONT'D)	Overall door thickness (mm)					Item
	<i>Each</i>	25	30	40	45	50	
		A	B	C	D	E	
		\$	\$	\$	\$	\$	
08156	Form observation or vent panel opening n.e. 0.20 m ² (net opening size) through skeleton core, hollow core or solid core flush door, with and including 25 mm timber fillet all round, twice rebated for plywood or hardboard door covering and rebated for glass including glazing beads, etc., if required (door area not deducted - glass and louvre blades all measured separately).....	37.30	41.40	44.20	48.30	50.40	08156
08157	Ditto but opening 0.20 - 0.40 m ²	54.30	60.20	66.60	72.10	75.70	08157
PROPRIETARY FIRE RESISTING DOORS							
Supply and fix approved proprietary fire resisting timber doors tested in accordance with BS 476 : Pt. 20-23 and Health and Safety at Work etc. Act 1974 including any finish : -							
	<i>Per square metre</i> (door panel size measured net)	Fire rated period					
		½ hour	1 hour	1½ hours	2 hours		
		A	B	C	D		
		\$	\$	\$	\$		
08158	Proprietary single leaf fire resisting door without door frames.....	1,408.80	2,173.70	2,915.00	3,716.00		08158
08159	Ditto, with and including door frames.....	1,652.60	2,432.00	3,237.40	4,029.70		08159
08160	Proprietary double leaf fire resisting door without door frames.....	1,292.60	2,101.10	2,902.00	3,684.50		08160
08161	Ditto, with and including door frames.....	1,652.60	2,432.10	3,211.10	4,019.30		08161
	<i>Per linear metre</i>						
08162	Proprietary fire and smoke seals, tested in accordance with BS 476 : Pt. 20 - 22 and Pt. 31 Section 31.1, including any finish.....	155.50	155.50	155.50	155.50		08162
	<i>Each</i>						
08163	Extra over either of Items 08158 to 08161 inclusive for observation panel n.e. 0.10 m ²	95.30	132.80	178.90	309.60		08163
08164	Ditto but 0.10 - 0.20 m ²	82.30	111.40	146.00	253.20		08164
08165	Ditto but 0.20 - 0.40 m ²	65.30	88.00	116.30	204.60		08165
	<i>Each or per leaf</i>						
08166	Take down and clear away fire resisting door without door frames.....	19.50	19.50	19.50	19.50		08166
08167	Take down and clear away fire resisting door with and including door frames.....	29.50	29.50	29.50	29.50		08167
08168	Take down and set aside for re-use fire resisting door without door frames.....	45.40	45.40	45.40	45.40		08168
08169	Take down and set aside for re-use fire resisting door with and including door frames.....	79.60	79.60	79.60	79.60		08169
08170	Fix only fire resisting door without door frames.....	470.60	470.60	470.60	470.60		08170
08171	Fix only fire resisting door with and including door frames.....	1,003.20	1,003.20	1,003.20	1,003.20		08171
(Note : - The above Items 08158 to 08171 inclusive will only be paid for if ordered in writing by the Maintenance Surveyor)							
ACOUSTIC DOORS							
Acoustic doors including any finish : -							
	<i>Per square metre</i> (door panel size measured net)	Door					
		with frames		without frames			
		A	B				
		\$	\$				
08172	Single leaf acoustic door.....			7,700.00	7,042.20		08172
08173	Double leaf acoustic door.....			6,416.70	5,803.60		08173

Item	ACOUSTIC DOORS (CONT'D)										Item	
	Acoustic doors including any finish : - (cont'd) <i>Per square metre</i> (door size measured net)	Door										
		with frames	without frames	A	B							
			\$	\$								
08174	Take down and clear away acoustic door.....	29.30	19.00									08174
08175	Take down and set aside for re-use acoustic door.....	77.60	46.90									08175
08176	Fix only acoustic door.....	1,171.50	533.00									08176
(Note : - The above Items 08172 to 08176 inclusive will only be paid for, if ordered in writing by the Maintenance Surveyor.)												
REPAIRS, ETC., TO SASHES, JALOUSIES AND DOORS												
Execute the following to hardwood or teak sashes, jalousies, drawers and doors of any size and thickness, single or folding (any new ironmongery measured separately) :-												
		Fixed sash	Opening sash	Jalousie with fixed louveres	Jalousie with movable louveres	Ledged, or ledged and braced door	Framed, ledged and braced door	Solid door	Framed and panelled, or framed, panelled and glazed door	Flush door	Cup-board door	
	<i>Each or per leaf</i>	A	B	C	D	E	F	G	H	I	J	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
08177	Take down (complete with ironmongery, sash cords, etc., required) and clear away.....	23.80	23.80	27.40	27.40	32.90	36.00	36.00	36.00	36.00	19.50	08177
08178	Take down and set aside for re-use.....	26.00	26.00	31.50	31.50	39.90	45.50	45.50	45.50	45.50	29.00	08178
08179	Fix only including screwing to frame and bedding in white lead if required.....	26.30	-	-	-	-	-	-	-	-	-	08179
08180	Hang only including fixing any sash cord, etc.....	-	31.30	39.10	39.10	42.10	62.70	62.70	62.70	62.70	38.70	08180
08181	Ease and adjust in position including re-securing, tightening existing or providing new screws to hinges, pivots, sliding gear, etc., cleaning and oiling the same, and planning, sanding down, painting one coat of hard gloss paint and polishing edges as required.....	-	13.80	17.10	17.10	18.80	21.70	21.70	21.70	21.70	15.30	08181
08182	Ditto but including taking down and afterwards re-fixing.....	-	71.30	89.30	89.30	101.50	131.70	131.70	131.70	131.70	84.60	08182
08183	Repair angle or junction of framing with and including 150 x 150 x 25 x 5 mm galvanized steel flat tee or angle, let in flush and screwed (per angle or tee).....	-	32.10	32.10	32.10	32.10	32.10	32.10	39.30	-	-	08183
08184	Clamp up and repair or re-make joint with glue or white lead including re-wedging or re-pinning with new wedges or pins if required (taking down and re-hanging measured separately).....	47.20	47.20	91.40	91.40	87.10	87.10	25.00	87.40	-	-	08184
08185	Ditto but including taking down, removing or cutting out defective parts and preparing to receive new parts (new parts measured separately as boarding, fillets, plywood, etc., supplied and fixed under the appropriate schedule items).....	152.70	152.70	252.80	252.80	249.90	249.90	156.20	255.20	-	-	08185

Item	REPAIRS, ETC., TO SASHES, JALOUSIES AND DOORS (CONT'D)												Item	
	<i>Per linear metre</i>												A	
													\$	
08186	Provide and fix new 16, 22 or 29 mm circumference white Manila or other approved sash cord.....												9.80	08186
	<i>Each</i>													
08187	Small hardwood pieces let in or plug holes for making good where door fitting has been removed from sash or door frames, doors, sashes, etc. including painting patch to match existing..... (Note : - This item will not be paid for, if removal of door fitting and making good have been measured elsewhere.)												16.20	08187
WINDOW, DOOR, PARTITION AND PANEL FRAMES														
Solid window, door, or exposed partition or panel frames, transoms, mullions, styles, rails or cills, etc., framed up and fixed complete including rebates, grooves, throats, rounded angles, chamfers, splays, mouldings on solid and similar labours and all framed joints : -														
Wrot hardwood						Wrot teak								
Thickness (mm)						Thickness (mm)								
30	50	65	75	90	100	30	50	65	75	90	100			
A	B	C	D	E	F	G	H	I	J	K	L			
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$			
<i>Per linear metre</i>														
08188	Width 40 mm.....	-	-	-	30.40	34.50	37.00	-	-	-	51.60	58.40	63.50	08188
08189	Width 45 mm.....	-	-	29.50	32.80	37.60	40.20	-	-	50.70	55.80	64.40	70.20	08189
08190	Width 50 mm.....	-	26.80	31.00	34.80	38.60	42.40	-	44.50	52.80	60.50	70.80	74.80	08190
08191	Width 65 mm.....	22.70	31.00	36.90	41.10	47.20	52.10	36.50	52.80	65.40	73.00	84.30	92.60	08191
08192	Width 75 mm.....	25.50	34.80	41.10	46.70	53.30	58.10	42.70	60.50	73.00	86.00	101.40	105.30	08192
08193	Width 100 mm.....	30.50	42.40	52.10	58.10	66.60	71.60	51.50	74.80	92.60	105.30	123.60	136.00	08193
08194	Width 125 mm.....	34.90	50.20	61.20	69.20	78.50	87.60	60.70	96.30	117.90	126.20	148.80	164.80	08194
08195	Width 150 mm.....	40.60	58.90	70.80	80.30	93.80	99.10	70.90	106.10	135.20	156.20	180.70	202.80	08195
08196	Width 200 mm.....	51.50	72.90	91.30	102.70	115.80	127.70	95.50	142.90	183.30	205.10	232.00	259.80	08196
Wrot softwood						Wrot softwood								
Thickness (mm)						Thickness (mm)								
30	50	65	75	90	100	30	50	65	75	90	100			
A	B	C	D	E	F	A	B	C	D	E	F			
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$			
<i>Per linear metre</i>														
08197	Width 40 mm.....	-	-	-	41.00	47.30	50.80	-	-	-	41.00	47.30	50.80	08197
08198	Width 45 mm.....	-	-	39.10	46.30	54.00	58.00	-	-	39.10	46.30	54.00	58.00	08198
08199	Width 50 mm.....	-	37.80	44.40	46.40	56.60	62.70	-	37.80	44.40	46.40	56.60	62.70	08199
08200	Width 65 mm.....	32.00	44.40	53.10	58.50	65.70	74.40	32.00	44.40	53.10	58.50	65.70	74.40	08200
08201	Width 75 mm.....	35.60	46.40	58.50	67.10	77.00	82.60	35.60	46.40	58.50	67.10	77.00	82.60	08201
08202	Width 100 mm.....	42.40	62.70	74.40	83.80	94.40	106.70	42.40	62.70	74.40	83.80	94.40	106.70	08202
08203	Width 125 mm.....	49.10	73.70	86.40	102.10	112.90	128.40	49.10	73.70	86.40	102.10	112.90	128.40	08203
08204	Width 150 mm.....	60.40	82.20	100.10	118.20	134.20	145.10	60.40	82.20	100.10	118.20	134.20	145.10	08204
08205	Width 200 mm.....	73.30	109.80	134.70	152.50	175.10	195.30	73.30	109.80	134.70	152.50	175.10	195.30	08205

Item	WINDOW, DOOR, PARTITION AND PANEL FRAMES (CONT'D)		Item																		
	Solid window, door, or exposed partition or panel frames, transoms, mullions, styles, rails or cills, etc., framed up and fixed complete including rebates, grooves, throats, rounded angles, chamfers, splays, mouldings on solid and similar labours and all framed joints : -																				
	Add to either of Items 08188 to 08205 inclusive for frames, etc., bent to curve to radius n.e. 15 m during fixing by means of saw cuts, steam bending, etc.....	20%																			
	Ditto for frames, etc., cut circular from solid timber including dowelling and keying sections together.....	35%																			
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Wrot hard-wood</th> <th style="width: 33%;">Wrot teak</th> <th style="width: 33%;">Wrot soft-wood</th> </tr> <tr> <th style="text-align: center;">A</th> <th style="text-align: center;">B</th> <th style="text-align: center;">C</th> </tr> <tr> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> </tr> </thead> </table>	Wrot hard-wood	Wrot teak	Wrot soft-wood	A	B	C	\$	\$	\$										
Wrot hard-wood	Wrot teak	Wrot soft-wood																			
A	B	C																			
\$	\$	\$																			
	Per linear metre																				
08206	Take down and clear away solid window, door, or exposed partition or panel frames, transoms, mullions, styles, rails or cills, etc., of any size.....	7.90	9.20	9.20	08206																
08207	Take down and set aside for re-use ditto.....	10.70	12.90	12.90	08207																
08208	Fix only ditto.....	15.50	18.80	18.80	08208																
			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 100%;"></th> <th style="text-align: center;">A</th> </tr> <tr> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> </tr> </thead> </table>		A	\$	\$														
	A																				
\$	\$																				
08209	Repair angle or junction of frames, etc., with and including 150 x 150 x 25 x 5 mm galvanized steel flat tee or angle, let in flush and screwed (per angle or tee).....		30.20		08209																
08210	Clamp up and repair or re-make joint with glue or white lead including re-wedging or re-pinning with new wedges or pins if required (taking down and re-fixing measured separately).....		31.30		08210																
	PLASTIC FOLDING DOOR																				
	Plastic folding doors in any colour and series including door frames and all necessary accessories, screwed to wood or plugged and screwed to concrete, brickwork and the like in accordance with the manufacturer's recommendations : -																				
	Per square metre (door panel size measured flat)			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 100%;"></th> <th style="text-align: center;">A</th> </tr> <tr> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> </tr> </thead> </table>		A	\$	\$													
	A																				
\$	\$																				
08211	Plastic folding door.....		269.50		08211																
	FOLDING OR OPENABLE PARTITIONS																				
	Construct folding partitions as G.S. Items 22.81, 22.82(a) and 22.83 to 22.86 : -																				
	Per square metre																				
				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: center;">Surface finish</th> </tr> <tr> <th style="width: 25%;">Paint</th> <th style="width: 25%;">Wood veneers</th> <th style="width: 25%;">Plastic laminate</th> <th style="width: 25%;">Vinyl cloth</th> </tr> <tr> <th style="text-align: center;">A</th> <th style="text-align: center;">B</th> <th style="text-align: center;">C</th> <th style="text-align: center;">D</th> </tr> <tr> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> </tr> </thead> </table>	Surface finish				Paint	Wood veneers	Plastic laminate	Vinyl cloth	A	B	C	D	\$	\$	\$	\$	
Surface finish																					
Paint	Wood veneers	Plastic laminate	Vinyl cloth																		
A	B	C	D																		
\$	\$	\$	\$																		
08212	Folding partitions, 45 mm thick.....	841.80	1,029.20	978.10	842.60	08212															
08213	Extra over for infilling with mineral wool.....	32.80	32.80	32.80	32.80	08213															
	Each																				
08214	Extra over for single pass door.....	586.80	910.70	836.50	693.70	08214															
08215	Extra over for double pass door.....	1,162.30	1,899.90	1,682.30	1,379.80	08215															

Item	SCREEN FABRIC			Item							
	Screen fabric of 1.5 mm thick in any colours covered to panel or backing (panel or backing measured separately) :-										
		Supply and fix	Take down and clear away								
	<i>Per square metre</i>	A \$	B \$								
08216	Screen fabric.....	162.20	38.70	08216							
	SYNTHETIC LEATHER										
	Synthetic leather of n.e. 3 mm thick in any colours covered to panel or backing (panel or backing measured separately) :-										
	<i>Per square metre</i>										
08217	Synthetic leather covering with 5 mm foam.....	448.30	27.40	08217							
08218	Synthetic leather covering without 5 mm foam.....	389.80	20.50	08218							
	STAIRCASES										
		Wrot hardwood					Wrot teak				
		Thickness (mm)					Thickness (mm)				
		20	25	30	40	50	20	25	30	40	50
	<i>Per square metre</i>	A	B	C	D	E	F	G	H	I	J
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
08219	Tread (including winder tread) with rounded nosing, grooved for risers and wedged, glued, blocked and fixed complete (exposed top surface area measured).....	-	-	287.00	375.20	442.20	-	-	499.50	660.90	786.00
08220	Riser (including winder riser) with rebated or tongued edges, and wedged, glued and fixed complete (exposed face area measured).....	207.60	243.90	273.20	-	-	357.40	433.40	485.80	-	-
	<i>Each</i>										
08221	Extra over tread for returned mitred nosed end.....	-	-	48.00	48.00	48.00	-	-	58.10	58.10	58.10
08222	Extra over riser for mitred end.....	17.20	17.20	17.20	-	-	20.90	20.90	20.90	-	-
08223	Extra over tread for projecting semi-circular end to lower step (tread measured full length as square).....	-	-	63.30	63.30	63.30	-	-	77.40	77.40	77.40
08224	Extra over riser for ditto (riser measured full length as square).....	63.70	63.70	63.70	-	-	78.60	78.60	78.60	-	-

Item	STAIRCASES (CONT'D)										Item			
	Wrot hardwood					Wrot teak								
	Thickness (mm)					Thickness (mm)								
	20	25	30	40	50	20	25	30	40	50				
	A	B	C	D	E	F	G	H	I	J				
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$				
08225	<i>Per linear metre</i>													
08225	Wall string 225 mm wide housed for treads and risers including rebates, grooves, moulded edges and similar labours, and fixing.....	-	-	141.10	185.60	201.30	-	-	202.50	272.80	305.60	08225		
08226	Ditto ramped or circular.....	-	-	139.00	196.40	222.60	-	-	213.60	287.20	322.00	08226		
08227	Ditto wreathed.....	-	-	165.50	208.60	223.80	-	-	227.60	303.30	338.20	08227		
08228	Outer string 225 mm wide housed for treads and risers, fixed and framed to newel posts, and notched for landings, including rebates, grooves, moulded, edges and similar labours.....	-	-	150.00	193.00	208.00	-	-	211.50	282.20	316.70	08228		
08229	Ditto ramped or circular.....	-	-	157.40	205.60	225.20	-	-	219.90	297.40	330.10	08229		
08230	Ditto wreathed.....	-	-	168.90	220.00	239.40	-	-	236.80	314.50	349.70	08230		
08231	Cut outer string 225 mm wide with upper edge cut for treads, fixed and framed to newel posts, and notched to landings including rebates, grooves, moulded edges and similar labours.....	-	-	63.10	65.90	69.00	-	-	77.00	80.30	86.00	08231		
08232	Ditto ramped or circular.....	-	-	65.70	70.90	74.60	-	-	80.30	85.10	91.00	08232		
08233	Ditto wreathed.....	-	-	68.80	76.60	79.50	-	-	85.10	89.80	95.80	08233		
08234	Add to either of Items 08225 to 08233 inclusive for each additional 25 mm or part thereof in width.....	-	-	4.00	5.70	7.20	-	-	8.70	12.30	15.80	08234		
	Overall width or diameter (mm)													
	Wrot hardwood						Wrot teak							
	25	40	45	50	55	65	25	40	45	50	55	65		
	A	B	C	D	E	F	G	H	I	J	K	L		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
08235	<i>Per linear metre</i>													
08235	Square or rectangular baluster with rounded or chamfered edges if required, housed or tenoned to string and handrail.....	27.80	35.70	39.00	43.80	47.90	55.90	36.50	51.40	57.40	66.00	72.90	89.30	08235
08236	Baluster turned or moulded to detail and housed or tenoned to ditto.....	31.80	40.20	44.20	49.00	53.40	61.90	42.40	58.00	64.60	73.40	80.60	97.20	08236
											Wrot hard-wood	Wrot teak		
											A	B		
											\$	\$		
08237	<i>Per linear metre</i>										77.00	122.10	08237	
08238	Newel post n.e. 0.006 m ² sectional area, square, rounded, chamfered or moulded to detail, and morticed for strings and handrails.....										13.60	24.50	08238	
	<i>Each</i>													
08239	Extra over newel post for cap or pendant, with ball ornament if required, turned and moulded to detail.....										78.20	96.30	08239	

Item	STAIRCASES (CONT'D)			Item																															
		Wrot hard - wood	Wrot teak																																
		A \$	B \$																																
08240	Rounded or "mopstick" handrail n.e. 0.004 m ² sectional area, framed and fixed level or raking, housed for balusters or rung for metal core rail, tenoned to newel posts, and jointed with and including double nut handrail screws, including splayed or rounded ends.....	72.70	109.80	08240																															
08241	Ditto ramped or circular.....	74.80	113.00	08241																															
08242	Ditto wreathed.....	76.80	115.50	08242																															
08243	Add to either of Items 08240 to 08242 inclusive for each additional 0.001 m ² or part thereof in sectional area.....	18.00	26.80	08243																															
08244	Handrail n.e. 0.004 m ² sectional area all as last described but moulded to detail.....	76.30	116.90	08244																															
08245	Ditto ramped or circular.....	78.60	119.70	08245																															
08246	Ditto wreathed.....	83.90	133.30	08246																															
08247	Add to either of Items 08244 to 08246 inclusive for each additional 0.001 m ² or part thereof in sectional area.....	20.50	31.30	08247																															
08248	75 x 30 or 40 mm Rounded nosing fixed to edge of landing to match stair tread nosing, rebated to match thickness of flooring, and tongued and grooved to the same.....	76.30	106.60	08248																															
	REPAIRS TO STAIRCASES																																		
	Execute the following to hardwood or teak staircase parts of any size and thickness :-	Take down and clear away	Take down and set aside for re-use	Fix only																															
		A \$	B \$	C \$																															
08249	Treads and risers complete with wedges and blocks if required.....	30.80	45.70	103.60	08249																														
	<i>Per linear metre</i>																																		
08250	String of any type, straight or to any sweep.....	27.50	42.80	116.20	08250																														
08251	Handrail ditto.....	14.20	27.50	40.50	08251																														
	<i>Each</i>																																		
08252	Baluster.....	20.90	21.30	27.80	08252																														
08253	Newel post complete with cap or pendant if any.....	22.30	22.50	34.30	08253																														
		<table border="1"> <thead> <tr> <th colspan="3">Wrot hardwood</th> <th colspan="3">Wrot teak</th> </tr> <tr> <th colspan="3">Thickness (mm)</th> <th colspan="3">Thickness (mm)</th> </tr> <tr> <th>30</th> <th>40</th> <th>50</th> <th>30</th> <th>40</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>A \$</td> <td>B \$</td> <td>C \$</td> <td>D \$</td> <td>E \$</td> <td>F \$</td> </tr> <tr> <td>75.70</td> <td>91.90</td> <td>102.80</td> <td>101.70</td> <td>130.80</td> <td>149.30</td> </tr> </tbody> </table>			Wrot hardwood			Wrot teak			Thickness (mm)			Thickness (mm)			30	40	50	30	40	50	A \$	B \$	C \$	D \$	E \$	F \$	75.70	91.90	102.80	101.70	130.80	149.30	
Wrot hardwood			Wrot teak																																
Thickness (mm)			Thickness (mm)																																
30	40	50	30	40	50																														
A \$	B \$	C \$	D \$	E \$	F \$																														
75.70	91.90	102.80	101.70	130.80	149.30																														
08254	Cut out tread nosing for width of about 125 mm and clear away and provide and fix new nosing glued and dowelled to existing tread.....				08254																														

Item	SUNDRY ITEMS			Item	
		Wrot hard- wood	Wrot teak		
		A \$	B \$		
08255	<i>Per linear metre</i> Curtain pole 40 mm to 50 mm diameter with ends turned to 65 mm diameter and fixing.....	85.50	127.80	08255	
	<i>Each</i>				
08256	Turned caps and knobs 25 mm diameter and fixing.....	18.80	23.00	08256	
08257	Ditto but 50 mm diameter.....	24.00	30.70	08257	
08258	Ditto but 75 mm diameter.....	34.40	46.20	08258	
08259	Hatpegs of any length or size, square, shaped or turned.....	15.00	18.30	08259	
08260	Square or rectangular blocks with chamfered edges n.e. 40 mm thick for latches, bell pushes, door stops and the like, and fixing	21.60	26.50	08260	
08261	Circular ditto.....	26.30	35.10	08261	
08262	25 mm Thick backboard to cistern n.e. 450 x 300 mm chamfered all round and fixing.....	62.00	-	08262	
	SUNDRY LABOURS	Diameter or average length of side (mm)			
		N.e. 50	50 - 100	Each additional 100	
	<i>Each</i>	A \$	B \$	C \$	
08263	Bore or cut round hole through hardwood or teak n.e. 25 mm thick.....	3.00	9.20	5.90	08263
08264	Add to Item 08263 for each additional 25 mm or part thereof in thickness.....	2.30	6.90	4.70	08264
08265	Cut square or rectangular hole through hardwood or teak n.e. 25 mm thick.....	6.00	12.10	6.20	08265
08266	Add to Item 08265 for each additional 25 mm or part thereof in thickness.....	4.60	8.90	4.60	08266
	<i>Each</i>			A \$	
08267	Cut oval shaped hole with rounded edges through timber or plywood for latrine seat.....			30.40	08267
08268	Cut dishes housing in timber for rifle butt and the like.....			15.30	08268
08269	Cut rounded notch in timber for rifle, revolver barrel and the like.....			6.20	08269
08270	Cut pointed or rounded head to fencing post.....			6.20	08270

Item	BUILDING BOARDS AND SUNDRY ITEMS												Item	
	PLYWOOD	Internal quality						External quality						
		Thickness (mm)						Thickness (mm)						
		4	6	9	12	15	18	4	6	9	12	15	18	
		A	B	C	D	E	F	G	H	I	J	K	L	
<i>Per square metre</i>		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
08271	Grade 2 plywood, luan faced, finished for painting or polishing if required, and fixed with nails, panel pins, screws or adhesive as ordered, in wall or ceiling lining, fittings, doors, or any other position.....	67.50	77.80	92.00	99.60	119.00	124.60	89.60	103.30	125.00	135.90	163.90	171.90	08271
08272	Ditto but teak faced one side.....	126.70	137.30	151.10	160.00	181.80	186.70	161.00	174.80	196.60	207.30	235.30	244.00	08272
08273	Ditto but teak faced both sides.....	-	188.30	196.30	213.00	221.70	243.00	-	246.20	268.10	278.90	306.90	315.60	08273
08274	Ditto but beech faced one side.....	115.90	125.70	139.40	151.60	169.20	173.90	150.30	161.50	183.40	194.10	222.10	230.80	08274
08275	Ditto but beech faced both sides.....	-	172.70	189.30	199.70	216.60	222.70	-	219.60	241.50	252.30	280.30	289.00	08275
08276	Ditto but maple faced one side.....	116.10	127.60	142.50	151.60	168.80	173.70	148.40	162.20	184.00	194.90	222.90	231.40	08276
08277	Ditto but maple faced both sides.....	-	175.60	191.40	203.00	217.50	224.40	-	221.20	243.00	253.70	281.80	290.40	08277
08278	Ditto but oak faced one side.....	133.70	144.30	159.20	169.20	184.60	191.00	169.20	182.90	204.80	215.60	243.60	252.30	08278
08279	Ditto but oak faced both sides.....	-	210.80	227.30	233.10	252.70	256.20	-	262.70	284.50	295.20	323.20	331.90	08279
08280	Ditto but zen wood faced one side.....	102.40	114.10	128.10	136.10	152.10	160.60	131.10	144.80	166.70	177.50	205.50	214.20	08280
08281	Ditto but zen wood faced both sides.....	-	147.10	164.50	168.50	187.00	197.90	-	186.30	208.30	219.00	247.00	255.70	08281
08282	Grade 2 plywood, luan faced one side and aneiger wood faced other side, finished for painting or polishing if required, and fixed with nails, panel pins, screws or adhesive as ordered, in wall or ceiling lining, fittings, doors, or any other position.....	152.40	163.60	178.50	183.50	204.40	211.30	191.00	204.70	226.60	237.40	265.30	274.10	08282
08283	Ditto but aneigre wood faced both sides.....	-	246.30	259.50	274.30	291.20	294.80	-	306.30	328.00	338.80	366.90	375.60	08283
08284	Ditto but sycamore wood faced one side.....	185.10	195.80	210.10	221.20	239.00	248.10	230.80	244.50	266.40	277.20	305.20	313.90	08284
08285	Ditto but sycamore wood faced both sides.....	-	317.60	326.80	337.30	360.60	367.50	-	385.90	407.70	418.40	446.50	455.10	08285

Item	BUILDING BOARDS AND SUNDRY ITEMS (CONT'D)												Item
	PLYWOOD (CONT'D)												
	Internal quality						External quality						
	Thickness (mm)						Thickness (mm)						
	4	6	9	12	15	18	4	6	9	12	15	18	
	A	B	C	D	E	F	G	H	I	J	K	L	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
08286	<i>Per square metre</i>												
	222.70	235.70	246.60	258.70	272.00	279.90	232.10	239.90	260.50	271.20	287.70	299.50	08286
08287	Ditto but bird eye maple faced one side.....												
	-	389.30	398.80	417.40	422.10	437.20	-	393.90	408.80	426.30	443.50	453.50	08287
	Ditto but bird eye maple faced both sides.....												
	PLASTERBOARD												
	<i>Per square metre</i>												
	Thickness (mm)												
	9 18												
	A B												
	\$ \$												
08288	Marine plywood to BS 1008 bonded with W.B.P. adhesive between plys, finished for painting or polishing if required, and fixed with nails, panel pins, screws or adhesive as ordered, in wall or ceiling lining, fittings, doors, or any other position.....												08288
													129.80 168.50
	PLASTERBOARD												
	<i>Per square metre</i>												
	Thickness (mm)												
	9.50 12.50												
	A B												
	\$ \$												
08289	Plasterboard of "Gypsum basedboard" or "Gypsum lath", fixed with nails panel pins, screws or adhesive as ordered, in walls or any other vertical position.....												08289
													80.30 85.10
08290	Ditto in soffits, or any other sloping or horizontal position.....												08290
													86.90 92.60
	FIBRE INSULATION BOARD												
	<i>Per square metre</i>												
	Thickness (mm)												
	9 12 19												
	A B C												
	\$ \$ \$												
08291	Natural finish fibre insulating board fixed with nails, screws or adhesive as ordered, in wall or ceiling lining, position, including chamfered edges to boards and fixing in symmetrical patterns if required.....												08291
													84.90 86.40 108.50
	BLOCKBOARD AND MEDIUM DENSITY FIBREBOARD (MDF)												
	<i>Per square metre</i>												
	Blockboard				MDF								
	Grade 2 veneer bonded with Type M.R. adhesive as G.S.13.14 with luan faced both sides				Moisture resistant grade as G.S.13.17.1 including plain or melamine faced boarding								
	Thickness (mm)				Thickness (mm)								
	15		18		15		18						
	A		B		C		D						
	\$		\$		\$		\$						
08292	Boarding in furniture, coverings, fittings, linings and similar position.....												08292
													100.30 115.50 82.90 95.40
	WOOD CHIPBOARD												
	<i>Per square metre</i>												
	Thickness (mm)												
	9 12 18 32												
	A B C D												
	\$ \$ \$ \$												
08293	Wood chipboard fixed with nails, screws, or adhesive as ordered, in wall or ceiling lining, fittings, doors, or any other position.....												08293
													76.60 81.70 98.90 138.70
08294	Ditto but faced for painting one side.....												08294
													- 116.30 134.70 -
08295	Ditto but faced for painting both sides.....												08295
													- 145.50 164.20 -
08296	Ditto but faced one side with and including laminated decorative plastic sheeting (Class VG or HG as specified)												08296
													- 199.10 221.10 -

Item	LAMINATED PLASTIC DECORATIVE SHEETING		Item																											
	Laminated plastic decorative sheeting fixed with adhesive to bench tops, fittings, doors or any other position : -	<table border="1"> <thead> <tr> <th colspan="3">Thickness (mm)</th> </tr> <tr> <th>0.7</th> <th>1.0</th> <th>1.3</th> </tr> </thead> <tbody> <tr> <td>\$</td> <td>\$</td> <td>\$</td> </tr> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> </tbody> </table>		Thickness (mm)			0.7	1.0	1.3	\$	\$	\$	A	B	C															
Thickness (mm)																														
0.7	1.0	1.3																												
\$	\$	\$																												
A	B	C																												
	<i>Per square metre</i>																													
08297	Standard laminated plastic decorative sheeting (Class HG or VG as specified).....	90.30	163.30	238.50	08297																									
	<i>Per square metre</i>																													
08298	1.3 mm Thick laminated plastic decorative sheeting cigarette proof or chemical resistance.....				270.80	08298																								
08299	0.7 mm (overall) Thick laminated plastic decorative sheeting (raw finished wood grains series).....				328.20	08299																								
08300	Ditto (PU finished wood grains series).....				409.40	08300																								
08301	0.8 mm Thick laminated decorative sheeting faced with polished finish aluminium sheet fixed with adhesive to bench tops, fittings, doors or any position.....				320.70	08301																								
08302	1.3 mm (overall) Thick laminated plastic in aluminium sheet with engraved pattern, in stainless steel or copper finish fixed with adhesive to bench tops, fittings, doors or any position.....				547.50	08302																								
08303	Ditto brushed aluminium finish ditto.....				558.40	08303																								
	PROPRIETARY COMPACT LAMINATED PLASTIC DECORATIVE PANEL (Note : - The following Item 08304 will only be paid for, if ordered by the Maintenance Surveyor in writing.)																													
	Proprietary compact grade multi-layered laminated plastic decorative panel highly resistant to withstand inclement weather, vandalism, fire and graffiti and general wear and tear, in wall panels, partitions, and wall cladding fixed in any position : -	<table border="1"> <thead> <tr> <th colspan="5">Plain colour or pattern</th> </tr> <tr> <th colspan="5">Thickness (mm)</th> </tr> <tr> <th>3</th> <th>6</th> <th>8</th> <th>9</th> <th>12</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </tbody> </table>				Plain colour or pattern					Thickness (mm)					3	6	8	9	12	A	B	C	D	E	\$	\$	\$	\$	\$
Plain colour or pattern																														
Thickness (mm)																														
3	6	8	9	12																										
A	B	C	D	E																										
\$	\$	\$	\$	\$																										
	<i>Per square metre</i>																													
08304	Proprietary compact grade multi-layered laminated plastic panel.....	528.30	746.10	907.90	1,367.80	1,740.30	08304																							
	FLAT FIBROUS REINFORCED CEMENT SHEETING																													
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\$	\$	\$																												
	<i>Per square metre</i>																													
08305	Sheeting butt jointed and fixed to vertical or horizontal timber framing (measured separately) with 30 mm galvanized nails at 300mm centres around all edges.....				130.00	134.40	183.80	08305																						
08306	Ditto but fixed to flat or sloping soffits.....				137.50	142.50	191.70	08306																						
08307	Add to either of Items 08305 to 08306 inclusive if fixed with screws in lieu of nails.....				15.20	15.20	15.20	08307																						
08308	Add to ditto if fixed to steel framing (measured separately) with screws, or bolts, nuts and washers, including drilling steel and tapping if required.....				7.10	7.30	7.70	08308																						
	<i>Per linear metre</i>																													
08309	6 mm Thick fibrous reinforced cement cover strip 75 mm wide fixed at joints.....				12.00	12.40	16.70	08309																						

Item	GLAZED FIBROUS REINFORCED CEMENT COLOURED SHEETING	Item																																	
	<i>Per square metre</i>	A \$ 133.90																																	
08310	4 mm Thick approved glazed fibrous reinforced cement coloured sheeting fixed with screws or adhesive in wall or ceiling lining, fittings, doors, or any other position.....	08310																																	
	WOOD WOOL SLABS																																		
	<i>Per square metre</i>																																		
		<table border="1"> <thead> <tr> <th colspan="4">Thickness (mm)</th> </tr> <tr> <th>25</th> <th>40</th> <th>50</th> <th>75</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>86.20</td> <td>102.10</td> <td>111.60</td> <td>151.90</td> </tr> </tbody> </table>	Thickness (mm)				25	40	50	75	A	B	C	D	\$	\$	\$	\$	86.20	102.10	111.60	151.90													
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25	40	50	75																																
A	B	C	D																																
\$	\$	\$	\$																																
86.20	102.10	111.60	151.90																																
08311	Slabs set on edge or end, and jointed in cement/lime mortar if required in partition including building in panels between timber or other framing if necessary.....	08311																																	
	SUNDRY LABOURS																																		
	Note : - The following Items 08312 to 08313 inclusive will not be paid for, if working on new works item.																																		
	<i>Each</i>																																		
		<table border="1"> <thead> <tr> <th colspan="3">Girth of hole or opening (mm)</th> </tr> <tr> <th>N.e. 150</th> <th>150 - 300</th> <th>Each additional 100</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>1.20</td> <td>3.60</td> <td>2.40</td> </tr> <tr> <td>2.40</td> <td>4.90</td> <td>3.60</td> </tr> </tbody> </table>	Girth of hole or opening (mm)			N.e. 150	150 - 300	Each additional 100	A	B	C	\$	\$	\$	1.20	3.60	2.40	2.40	4.90	3.60															
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N.e. 150	150 - 300	Each additional 100																																	
A	B	C																																	
\$	\$	\$																																	
1.20	3.60	2.40																																	
2.40	4.90	3.60																																	
08312	Bore or cut round hole through any type of boarding or sheeting in any thickness.....	08312																																	
08313	Cut square or rectangular hole through any type of boarding or sheeting in any thickness.....	08313																																	
	WRITING BOARD / NOTICE BOARD / CHALKBOARD																																		
	Proprietary writing or notice board in any colour with or without magnetic effect including aluminium frame, bottom rail, all necessary accessories and fixing all in accordance with the manufacturer's recommendations : -																																		
	<i>Per square metre</i>																																		
		<table border="1"> <thead> <tr> <th colspan="3">Supply and fix</th> <th rowspan="2">Take down and clear away</th> <th rowspan="2">Take down and set aside for re-use</th> <th rowspan="2">Fix only</th> </tr> <tr> <th colspan="3">Board size (m²)</th> </tr> <tr> <th>n.e. 1.0</th> <th>1.0 - 2.0</th> <th>exc. 2.0</th> <th>D</th> <th>E</th> <th>F</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>871.90</td> <td>869.80</td> <td>831.60</td> <td>16.00</td> <td>16.60</td> <td>50.10</td> </tr> <tr> <td>484.60</td> <td>458.50</td> <td>432.60</td> <td>18.20</td> <td>18.90</td> <td>53.80</td> </tr> </tbody> </table>	Supply and fix			Take down and clear away	Take down and set aside for re-use	Fix only	Board size (m ²)			n.e. 1.0	1.0 - 2.0	exc. 2.0	D	E	F	A	B	C	\$	\$	\$	871.90	869.80	831.60	16.00	16.60	50.10	484.60	458.50	432.60	18.20	18.90	53.80
Supply and fix			Take down and clear away	Take down and set aside for re-use	Fix only																														
Board size (m ²)																																			
n.e. 1.0	1.0 - 2.0	exc. 2.0	D	E	F																														
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871.90	869.80	831.60	16.00	16.60	50.10																														
484.60	458.50	432.60	18.20	18.90	53.80																														
08314	Proprietary writing or notice board in either ceramic or painted-surface board with writing surface painted with silica polyester compound and baked through the process, with or without magnetic effect including aluminium frame, bottom rail, complete with all necessary accessories and fixing.....	08314																																	
08315	Proprietary triple coated writing board with acrylic resin top-coat over a galvanized steel base sheet, rustproof, surface hardness to 8H, smooth, magnetic, no discoloration ; optional green chalk board with grid pattern ; notice board to have 10 mm insulation board core with 5 mm plywood backing, Hessian fabric cover and extruded anodized aluminium frame, including bottom rail, complete with all necessary accessories and fixing.....	08315																																	

Item	WRITING BOARD / NOTICE BOARD / CHALKBOARD (CONT'D)		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	Item
	Proprietary chalkboard stand on floor or fixed to wall all as recommended by the manufacturer :		A	B	C	D	
	<i>Per square metre</i>		\$	\$	\$	\$	
08316	Proprietary chalkboard comprising 4 mm high pressure laminated (HPL) based boards of standard green colour, stain resistant and to NEMA LD3 standard, properties on resistance to wear, impact, scratch, on flatness dimensional stability and reaction to immersion in boiling water to meet BS EN458, stand on floor or fixed to wall (framework and backing measured separately).....		484.10	9.90	10.80	69.10	08316
08317	Proprietary revolving surface writing board, stand on floor and fixed to the wall with fixing plates supplied, chalk writing surface to be magnetic, in black or green, standard framework for roller boards supplied in top quality timber, aluminium or medium density fibreboard.....		1,620.20	47.00	46.40	103.70	08317
08318	Proprietary magnetic green/white board , 4 feet standard width, facing sheet to be vitreous porcelain enamel 2 coats enamel 0.004 mm minimum thickness and base metal 0.37 mm, 15 mm plywood core, perimeter trim in extruded anodized aluminium channel 25 x 30 mm with rounded rubber corner, completed with aluminium tube 58 x 93 mm chalk trough installed with concealed bracket fastener, stand on floor or fixed to wall.....		886.40	44.10	43.50	97.60	08318
						Supply and fix	
						A	
						\$	
08319	Extra over Item 08318 for music ruling.....					346.50	08319
	BAIZE OR NOTICE BOARD FELT					A	
	<i>Per square metre</i>					\$	
08320	Good quality red, green, blue or black baize or fine felt, fixed to doors, notice and directory boards and the like with adhesive or brass nails as required.....					347.90	08320
08321	Ditto but fixed to grooved plastic name plates and notice boards (measured separately) including working into grooves (measured flat overall grooves).....					354.90	08321
08322	Ditto but fixed to grooved plywood or timber name and directory boards (measured separately) including cutting grooves in plywood or timber and working the baize or felt into the same (measured flat overall grooves).....					362.00	08322
	GLASS FIBRE INSULATION						
	<i>Per square metre</i>						
08323	Glass fibre mat in rolls laid butt jointed on slab.....			-	18.10	26.10	08323
08324	Ditto but fixed to timber floor joists, timber wall battening or partitions, or soffits of ceiling joists or bearers, with clout headed nails or fixing fillets (measured separately).....			-	22.50	31.00	08324
08325	Extra over glass fibre mat for faced on one side with aluminium foil.....			-	21.30	22.40	08325
08326	Glass fibre resin bonded slabs laid butt jointed on slab under screed (measured separately).....			31.70	47.70	74.80	08326
08327	Ditto but fixed with approved adhesive to slabs, face of walls, ducts, etc.....			48.80	64.60	91.60	08327
08328	Extra over glass fibre resin bonded slab for faced on one side with aluminium foil.....			21.60	22.50	22.50	08328

Item	FIRE RESISTING INSULATION BOARD					Item	
	Fire resisting insulation board fixed to position (horizontally or vertically) in any form :-						
		45 kg/m ³	60kg/m ³	80kg/m ³	100kg/m ³	125kg/m ³	
		A	B	C	D	E	
		\$	\$	\$	\$	\$	
	<i>Per square metre</i>						
08329	30 mm thick.....	34.50	39.80	44.30	45.50	52.80	08329
08330	50 mm thick.....	71.50	79.80	87.10	95.90	109.00	08330
08331	75 mm thick.....	121.70	133.20	142.90	156.00	175.40	08331
08332	100 mm thick.....	168.20	183.90	196.80	213.30	238.30	08332
	REPAIRS TO BUILDING BOARDS AND SUNDRY ITEMS						
				Take down and clear away	Take down and set aside for re-use	Fix only	
				A	B	C	
				\$	\$	\$	
	<i>Per square metre</i>						
08333	Detached solid or slat shelving complete with bearers and wood or steel brackets (top surface area of shelving measured).....			14.90	12.60	46.50	08333
08334	Plywood of any type or thickness, and in any position.....			11.10	11.40	44.40	08334
08335	Plasterboard ditto.....			11.10	11.40	44.40	08335
08336	Fibre or fire resisting insulating board ditto.....			9.30	9.00	37.40	08336
08337	Blockboard ditto.....			11.10	11.40	44.40	08337
08338	Wood chipboard ditto.....			11.10	13.50	44.40	08338
08339	Laminated plastic decorative sheeting ditto.....			9.50	11.40	49.80	08339
08340	Flat fibrous reinforced cement sheeting ditto.....			9.90	11.40	58.40	08340
08341	Glazed fibrous reinforced cement sheets ditto.....			9.90	11.40	53.50	08341
08342	Wood wool slabs of any thickness fixed to any position.....			11.80	13.40	24.90	08342
08343	Baize or fine felt fixed to any boarding in any position.....			5.80	6.80	32.40	08343
08344	Glass fibre insulation of any type and thickness laid on or fixed to any component.....			5.50	2.70	5.90	08344
08345	Notice and directory boards, pin board and the like fixed to or hung on wall or column.....			16.20	16.90	50.20	08345
				Take down and clear away	Take down and set aside for re-use	Place in position	
				A	B	C	
				\$	\$	\$	
	<i>Per cubic metre</i>						
08346	Cupboard, wardrobe, dresser, storage rack, fixtures, furniture, fittings, electrical appliances and the like fixed to wall or floor.....			112.70	28.00	37.20	08346

Item	PROPRIETARY SPORT HALL FLOORING SYSTEMS	Item
		Supply and fix
		Take down and clear away
		A \$
		B \$
Per square metre		
08347	Proprietary sports flooring with 174 x 57 x 10 mm nominal thickness timber blocks on a consolidated yard broom finished concrete levelled subfloor, total thickness of cement sand fixing bed and timber flooring blocks to be 20 mm, grout all joint with mid-grey compound from the same manufacturer, machine sand the whole floor and apply polyurethane seal from the same manufacturer.....	866.30 9.40 08347
08348	Proprietary cushioned sleeper sports floor system enhanced with 12 mm exterior grade plywood subfloor, on 50 x 75 mm sleepers spruce at 300 mm centres, pine or fir, CCA pressure treated, cushion pad by the same manufacturer for increased shock absorption and added resiliency, finished with hard maple flooring 19 x 57 mm, tongue and groove joints, supplied by the same manufacturer, 6 mm polyethylene vapour barrier (measured separately), to DIN 18032 Part 2, and include machine sanding and applying three coats of polyurethane paint and any necessary wood preservative on wood before fixing all as recommended by the manufacturer.....	1,185.00 11.10 08348
08349	Proprietary two-layer plywood subfloor sports floor system with 2 layers of 12 mm exterior grade plywood nailed together, low profile system for blending with existing floor levels, fixed on 10 mm thick ISO cushion pad by the same manufacturer, finished with hard maple flooring 19 x 57 mm, tongue and groove joints, supplied by the same manufacturer, 6 mm polyethylene vapour barrier (measured separately), to DIN 18032 Part 2, and include machine sanding and applying three coats of polyurethane paint and any necessary wood preservative on wood before fixing all as recommended by the manufacturer.....	1,277.40 11.10 08349
08350	Proprietary sports flooring system with first grade maple strip flooring of 19 x 57 mm, random length on two layers of 12 mm exterior grade plywood crossed and tacked with 19 mm thick pneumatic conical natural rubber pads at 300 mm centres affixed to the bottom, laid on 6 mm thick polyethylene sheet vapour barrier (measured separately) and include machine sanding and applying three coats of polyurethane paint and any necessary wood preservative on wood before fixing all as recommended by the manufacturer.....	1,269.90 11.10 08350
08351	Proprietary sports flooring system with 22 x 129 x 1830 / 3700 mm (L) solid beech floor board, to DIN 18032 Part 2, floorboard weight 16.2 kg/m ² , tongue and groove joints, controlled equilibrium moisture content 8% (+/-2%) and factory finished with 2 coats of Iso-lacquer, fully sprung batten system with single layer battens from the same manufacturer including resilient rubber strips with integrated progressive shock absorption, 32 kg/m ³ sound absorption fiberglass blanket laid between battens, together with 0.20 mm PE-foil moisture barrier laid on sub-floor all as recommended by the manufacturer.....	1,444.90 11.10 08351
08352	Proprietary sports flooring system with 22 x 129 x 1830 / 3700 mm(L) solid beech floor board, to DIN 18032 Part 2, floorboard weight 16.2 kg/m ² , tongue and groove joints, controlled equilibrium moisture content 8% (+/-2%) and factory finished with 2 coats of Iso-lacquer held together by clips by the same manufacturer on the underside, supported by an intermediate layer of 5 or 10 mm resilient foam of extruded polyethylene cellular plastic, together with 0.20 mm PE-foil moisture barrier laid on sub-floor all as recommended by the manufacturer.....	1,208.90 11.10 08352
		Supply and fix
		A \$
Per linear metre		
08353	100 x 75 x 10 mm Thick 'L' shape vent cove rubber wall base skirting.....	276.10 08353
08354	12 x 100 mm Maple wood skirting with two coats of polyurethane paint.....	101.60 08354

Item	GLUE - LAMINATED TIMBER			Item		
	Glue - laminated timber shall be manufactured from plantation grown Radiata Pine, CCA (Copper Chromium Arsenate) treated to Hazard Class as described in accordance with NZMP 3640 (1988). Glue laminated timber shall comply with NZS3603, NZS3606 and NZS3616. All glue shall be Resorcinol or Phenol, Resorcinol used to manufacturer's instructions. Moisture content at the time of lamination shall be 12-16%.	CCA-H3	CCA-H4			
		A	B			
		\$	\$			
	Per linear metre					
08355	90 x 65 mm.....	190.00	197.40	08355		
08356	135 x 65 mm.....	272.80	289.40	08356		
08357	180 x 65 mm.....	355.90	374.10	08357		
08358	230 x 65 mm.....	446.80	464.60	08358		
08359	180 x 90 mm.....	481.70	504.80	08359		
08360	230 x 90 mm.....	599.00	653.60	08360		
08361	280 x 90 mm.....	701.60	727.00	08361		
08362	230 x 113 mm.....	791.20	833.60	08362		
08363	280 x 113 mm.....	948.70	978.90	08363		
	Add to either of Items 08355 to 08363 inclusive for members cut curved from solid timber including dowelling and keying sections.....		20%			
	Ditto for members bent to curve to radius n.e. 15.00 m during fixing by means of saw cuts, steaming bending, etc.....		20%			
	Ditto for members cut rounded or mopstick from solid timber including dowelling and keying sections.....		35%			
	Per linear metre		A			
			\$			
08364	Take down and clear away glue laminated timber in any size.....		6.20	08364		
08365	Take down and set aside for re-use ditto.....		6.70	08365		
08366	Fix only ditto.....		55.00	08366		
	LANDSCAPE TIMBER					
		Structural Select Grade CCA - H3	Structural Select Grade CCA - H4	No. 2 Framing Grade CCA - H3	No. 2 Framing Grade CCA - H4	
		A	B	C	D	
		\$	\$	\$	\$	
08367	Wrot landscape timber scantling n.e. 0.02 m ² sectional area.....	23,945.30	31,094.40	20,667.90	21,863.60	08367
08368	Ditto exceeding 0.02 m ² sectional area.....	16,826.00	17,801.10	14,514.40	15,395.40	08368
	Add to either of Items 08367 to 08368 inclusive for members cut curved from solid timber dowelling and keying sections.....				20%	
	Ditto for members bent to curve to radius n.e. 15.00 m during fixing by means of saw cuts, steaming bending, etc.....				20%	
	Ditto for members cut rounded or mopstick from solid timber including dowelling and keying sections.....				35%	

Item	LANDSCAPE TIMBER (CONT'D)			Item
		N.e. 0.02 m ³	Exc. 0.02 m ³	
	<i>Per linear metre</i>	A \$	B \$	
08369	Take down and clear away landscape timber in any size.....	6.20	9.80	08369
08370	Take down and set aside for re-use ditto.....	6.80	11.40	08370
08371	Fix only ditto.....	46.10	78.10	08371
	RECYCLED PLASTIC SCANTLINGS	Square / rectangular sectional area (m ²)		
		n.e. 0.02	exc. 0.02	
	<i>Per cubic metre</i>	A \$	B \$	
08372	Recycled plastic scantlings.....	28,235.30	54,990.80	08372
08373	Take down and clear away recycled plastic scantlings in any size.....	294.10	248.70	08373
08374	Take down and set aside for re-use ditto.....	494.70	410.40	08374
08375	Fix only ditto including making all joints.....	1,470.70	1,223.70	08375

Item	PROPRIETARY SOLID SURFACING MATERIALS	Supply and fix	Item
	Counter top of proprietary solid surfacing material; non-porous surfacing material homogeneously composed of +1/3 acrylic resin (also known as PolyMehtyl MethAcrylate or PMMA), and + 2/3 natural minerals composed of Aluminum TriHydrate (ATH) derived from bauxite, an ore from which aluminum is extracted; (Elongation : DIN 53 445 (ISO/DIS 527-78 0.36-0.49%):	A	
	<i>Per square metre</i>	\$	
08376	12.3 mm Thick counter top.....	3,289.30	08376
	<i>Per linear metre</i>		
08377	Extra over Item 08376 for bull nose 40 mm wide.....	37.20	08377
08378	Ditto for backsplash 50 mm high.....	223.40	08378
08379	Ditto for backsplash 100 mm high.....	427.50	08379
08380	Ditto for front apron 100 mm high.....	222.50	08380
08381	Ditto for front apron 200 mm high.....	796.30	08381
08382	Ditto for inlay n.e. 20 mm wide.....	352.60	08382
	<i>Each</i>		
08383	Extra over Item 08376 for integral single bowl sink; external size : 469 mm (L) x 382 mm (W) x 183 mm (D); internal size : 418 mm (L) x 331 mm (W) x 134 mm (D).....	1,377.90	08383
08384	Ditto for integral single bowl sink; external size : 445 mm (L) x 445 mm (W) x 223 mm (D); internal size : 401 mm (L) x 401 mm (W) x 206 mm (D).....	2,638.10	08384
08385	Ditto for integral single bowl sink; external size : 583 mm (L) x 450 mm (W) x 201 mm (D); internal size : 533 mm (L) x 400 mm (W) x 187 mm (D).....	2,940.80	08385
	Counter top of proprietary solid surfacing material, a homogeneous thermoset polymer alloy, comprised of both acrylic and polyester co-polymer components and filled with Aluminum TriHydrate (ATH) under the license of the diller corporation with hardness Rockwell M95 at ASTM test D785 and barcol 61 at ASTM test 2583; and complies with NSF-51, NEMA LD-3, ASTM tested:		
	<i>Per square metre</i>		
08386	12.7 mm Thick counter top.....	2,977.80	08386
	<i>Per linear metre</i>		
08387	Extra over Item 08386 for bull nose 40 mm wide.....	110.90	08387
08388	Ditto for backsplash 50 mm high.....	238.50	08388
08389	Ditto for backsplash 100 mm high.....	423.00	08389
08390	Ditto for front apron 100 mm high.....	366.10	08390
08391	Ditto for front apron 200 mm high.....	813.20	08391

Item	PROPRIETARY SOLID SURFACING MATERIALS (CONT'D)	Item	
	Counter top of proprietary solid surfacing material, a homogeneous thermoset polymer alloy, comprised of both acrylic and polyester co-polymer components and filled with Aluminum TriHydrate (ATH) under the license of the diller corporation with hardness Rockwell M95 at ASTM test D785 and barcol 61 at ASTM test 2583; and complies with NSF-51, NEMA LD-3, ASTM tested: (Cont'd)	Supply and fix	
	<i>Each</i>	A \$	
08392	Extra over Item 08386 for integral single bowl basin; oval shape; overall internal size : 432 mm x 346 mm x 146 mm deep.....	1,346.60	08392
08393	Ditto for integral single bowl basin; oval shape with one straight side; overall internal size : 381 mm x 267 mm x 146 mm deep.....	1,572.30	08393
08394	Ditto for integral single bowl basin; oval shape; overall internal size : 543 mm x 346 mm x 146 mm deep.....	2,359.70	08394
08395	Ditto for integral single sink; rectangular shape; internal size : 406 mm x 406 mm x 210 mm deep.....	1,353.20	08395
08396	Ditto for integral double sinks; rectangular shape; overall internal size : 838 (381 & 381) mm x 406 mm x 210 mm deep.....	3,056.20	08396
08397	Ditto for integral double sinks; rectangular shape; overall internal size : 787 (483 & 279) mm x 406 mm x 210 mm deep.....	3,056.20	08397
	Proprietary solid surfacing material fixed to wall of various colour range and finish including curved corner, round edge, fixing bracket, accessories, cut holes, pointing, jointing and sealing edges with sealant, etc. :		
	<i>Per square metre</i>		
08398	12.7 mm Thick proprietary solid surfacing material fixed to wall of non-porous surfacing material, acrylic-modified based (ISSFA recommended), acrylic modified blinder (ISO-NPG type resin), Aluminum Hydroxide filler, non-toxic pigment, patented additives; and providing maximum protection to all hygiene areas by Nano Sliver Anti-bacterial Technology.....	2,732.70	08398
08399	12.3 mm Thick proprietary solid surfacing material fixed to wall of non-porous surfacing material homogeneously composed of +1/3 acrylic resin (also known as PolyMehtyl MethAcrylate or PMMA), and + 2/3 natural minerals composed of Aluminum TriHydrate (ATH) derived from bauxite, an ore from which aluminum is extracted. (Elongation : DIN 53 445 (ISO/DIS 527-78) 0.36-0.49%).....	3,422.90	08399
08400	12.7 mm Thick proprietary solid surfacing material fixed to wall, a homogeneous thermoset polymer alloy, comprised of both acrylic and polyester co-polymer components and filled with Alumina Trihydrate (ATH) under the license of the diller corporation with hardness Rockwell M95 at ASTM test D785 and barcol 61 at ASTM test 2583; and complies with NSF-51, NEMA LD-3, ASTM test.....	3,345.10	08400
	PROPRIETARY SAFETY WALL PADDING		
	Proprietary padding for indoor use; 60mm overall thickness; constructed of vinyl covering with 60 mm thick foam and 12mm thick plywood backing, vinyl should be PVC coated fabric, certified to NFPA 701 and ULC S-109 Large-scale Test requirement for flame retardancy; and foam should be with density minimum 58 Kg/m³, certified to Fire Test BS 5852 : Part 2, contains no Class I nor Class II Ozone Depleting Chemicals (ODC) as listed under the Clean Air Act Amendments 1990		
	<i>Per square metre</i>		
08401	Proprietary padding to wall.....	1,992.30	08401
08402	Ditto to column.....	2,606.10	08402

Item	PROPRIETARY SAFETY WALL PADDING (CONT'D)		Item																
	<p>Proprietary padding; 22 mm overall thickness; backed with polyether and polyester-foam granule, density is approximately 240 kg/m³, the tensile strength (at break) is 100 kPa = N/cm² at minimum, elongation at a break is at minimum of 35%, the flame rate is less than 100 mm per minute which according to FMVSS 302, the force absorption is in average rate of 61.74% which according to DIN 18032; covered with flame retardant vinyl in any colour (exclude plywood backing), the weight is about 725 g/m², the material composition is made up with about 88% PVC compound and about 12% PES, the leather has the flame retardant property according to BS476 Class 1 and DIN 53 438, thickness is about 0.90 mm to 1.15 mm, the data on the tensile strength (at break) is ≥ 230 N / 5 cm; $q \geq 120$ N / 5 cm and the tear strength is ≥ 20 N; $q \geq 10$ N :</p> <p><i>Per square metre</i></p>	<table border="1"> <tr> <td>Supply and fix</td> </tr> <tr> <td>A \$</td> </tr> </table>	Supply and fix	A \$															
Supply and fix																			
A \$																			
08403	Proprietary padding to wall.....	2,587.80	08403																
08404	Ditto to column.....	2,693.90	08404																
	<p>Take down and clear away safety wall padding of any thickness including backing, if any :</p> <p><i>Per square metre</i></p>																		
08405	Padding fixed to wall or column.....	32.10	08405																
	PROPRIETARY ANTI-RICOCHAT SURFACES																		
	<p>Proprietary anti-ricochat tiles for flooring, walling and ceiling, size of 1000 mm x 500 mm (+/- 1%), thickness at 43 mm, weight approximately 35 kg/m²; can be fixed or loose laid, with 2-component polyurethane adhesive or with stainless steel screws to ceiling; tensile strength of approximately 1/mm² and the elongation at break is approximately 75% according to DIN 53 571; tear resistance at approximately 11 N/mm according to DIN 53 515 Graves; with heat resistance is up to 80°C, shortly up to 100°C; water permeability at 0.34 cm/s that comply with the standard of DIN 18 035 Part 6; stress at 20% compression at approximately 0.74 N/mm² according to DIN 53 577; can meet the fire resistance standard according to DIN 4102 Class B2; certified with the standard DIN EN ISO 9001:2000 and ISO 14001:2004 :</p> <p><i>Per square metre</i></p>	<table border="1"> <thead> <tr> <th>Supply and fix</th> <th>Take down and clear away</th> <th>Take down and set aside for re-use</th> <th>Fix only</th> </tr> <tr> <th>A \$</th> <th>B \$</th> <th>C \$</th> <th>D \$</th> </tr> </thead> <tbody> <tr> <td>1,491.70</td> <td>17.80</td> <td>63.80</td> <td>136.40</td> </tr> <tr> <td>804.00</td> <td>8.90</td> <td>32.00</td> <td>68.30</td> </tr> </tbody> </table>	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	A \$	B \$	C \$	D \$	1,491.70	17.80	63.80	136.40	804.00	8.90	32.00	68.30	
Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only																
A \$	B \$	C \$	D \$																
1,491.70	17.80	63.80	136.40																
804.00	8.90	32.00	68.30																
08406	Proprietary anti-ricochat tile.....		08406																
	<i>Each</i>																		
08407	Proprietary anti-ricochat tile, total area not exceeding 0.50m ² of each Works Order.....		08407																

Section 09

IRONMONGERY

IRONMONGERY

SPECIAL CONDITIONS

Measurement for
ironmongery

- I. Various items of ironmongery shall be measured as follows : -
- (a) Butt, rising or falling butt, backflap, counter or Parliament hinge - Length along joint
 - (b) Cross garnet, tee or hook and ride hinge - Length from joint or knuckle to point
 - (c) Spring hinge and helical door spring - Length along spring
 - (d) Tower or barrel bolt - Length of shoot
 - (e) Monkey tail bolt - Length overall
 - (f) Flush bolt - Length of plate
 - (g) Casement stay - Length from hinge to point
 - (h) Cabin hook - Length of hook
 - (i) Hasp and staple - Length from hinge to point
 - (j) Fibre track and channel, sliding door gear track and channel, curtain track and valance rail - Net length fixed

Measurement
for signage
generally

- II. Circular or irregular shaped signs shall be measured as the smallest square or rectangle from which the sign can be cut.
- Cutting plastic sign shall be measured as a single cut and is only applicable to cutting shapes, features and the like other than for letters and characters.
- Cutting out letters, numbers or Chinese characters shall include for all full stops and commas. No separate payment shall be made. All punctuations other than full stops and commas shall be treated as letters. Logos, graphics and the like shall be measured as Chinese characters of the same size.

Finishes to
ironmongery

- III. The rates for articles of ironmongery of a certain specified material shall include for any of the following materials and surfaces as required : -

Article specified as	Materials and surfaces included in the rate for the article specified
Plastic	Polythene, A.B.S., acrylics, P.V.C., polystyrene, nylon, melamine or similar materials
Steel	Steel or wrot iron left plain or with black Japanned finish
Galvanized	Galvanized or sherardized steel or wrot iron
Brass	Plain and lacquered, sanded and lacquered, or polished or buffed and lacquered
B.M.A.	Polished B.M.A. finish on brass or polished bronze
Plated brass	Polished nickel bronze plated or chromium plated brass, or satin nickel bronze plated or satin chromium plated brass
Aluminium	Mill finished or rough or soft textured finish, or polished, silver, bronzed or lustre anodised aluminium
Stainless steel	Polished surface or satin surface

Rates for
ironmongery
generally

- IV. The rates for ironmongery shall generally include for : -
- (a) Submission of samples, catalogues and certificates.
 - (b) Provision of ironmongery schedule as G.S. Item 14.09.

SPECIAL CONDITIONS (CONT'D)

IV.	<ul style="list-style-type: none"> (c) Requirements for key-alike or master-keying, if required. (d) Fixing to any type of timber or building board or other surfaces. (e) Provision of all necessary screws to match the ironmongery and all bolts, nuts, washers, nails, pins and the like. (f) Protecting with approved intumescent sheets or intumescent paint where required. (g) All housing, sinking, drilling and similar labours required to timber or other surface to which the article is being fixed. (h) All plugging in concrete, brick, stone or other floors, walls, columns, soffits and the like. (i) Cutting and grouting all mortices, pockets, etc., for bolts, bolt sockets, floor spring boxes and the like. (j) Oiling, easing and adjusting, and leaving ironmongery in perfect working order. (k) Making good disturbed surfaces. 	Rates for ironmongery generally (Cont'd)
V.	<p>The rates for bolts shall further include for : -</p> <ul style="list-style-type: none"> (a) All sockets, staples plates, thimbles, etc. and all necessary accessories. (b) Square or circular, straight or necked shoot. 	Rates for bolts
VI.	<p>The rates for locks shall further include for : -</p> <ul style="list-style-type: none"> (a) Provision of knob with or without rose, lever handles with cover plates, key hole escutcheon, etc. and the like. (b) Provision of keys and identification discs. (c) Stamping number on lock face. 	Rates for locks
VII.	<p>The rates for taking down ironmongery shall include for : -</p> <ul style="list-style-type: none"> (a) Piecing out and filling all old housing, sinking, screw holes, mortices and the like. (b) Finishing surface fair and spot painting, polishing or making good. 	Rates for taking down ironmongery
VIII.	<p>The rates for plastic or metal signs, silkscreen printing and translucent film signage shall generally include for : -</p> <ul style="list-style-type: none"> (a) Setting out, cutting to size, bevelling and polishing edges, and anodising after manufactured as required. (b) Drilling, plugging and screwing with brass, chromium plated or stainless steel screws, or fixing with approved adhesive or fixing on a special suspension system (measured separately). (c) Providing backing plate with colour coating, powder coating, anodized or polished finish on all exposed surfaces before silkscreen printing or after cut out or cut through signage. (d) Temporary protection with mask as required. (e) Making good disturbed surfaces. (f) Design, submission of shop drawings, samples and the like. 	Rates for plastic or metal signs, silkscreen printing and translucent film signage generally

SPECIAL CONDITIONS (CONT'D)

Rates for silkscreen printing and translucent film signage to existing surfaces	IX.	The rates for silkscreen printing and translucent film signage to existing surfaces shall further include for : - (a) Preparing substrate surface to receive silkscreen printing or translucent film.
Rates for plastic signs with cut through letters, Chinese characters and the like	X.	The rates for plastic signs with cut through letters, Chinese characters and the like shall further include for : - (a) Cutting through for letters, numbers, Chinese characters, graphics, punctuations and the like. (b) Plastic sign plate of any colour or finishes. (c) Finishing with polished edges.
Rates for letter or number signs cut from plastic or metal sheet	XI.	The rates for letter or number signs cut from plastic or metal sheet shall further include for : - (a) Cutting out from sheets. (b) In the case of plastic signs, any colour or finishes. (c) Finishing with polished edges. (d) Fixing with moulded metal/plastic pegs or projecting plastic. (e) In the case of anodised aluminium signs, re-anodise after fabrication.
Rates for engraved plastic sign face	XII.	The rates for engraved plastic sign face shall further include for : - (a) Picking out with paint either in single or multi-colour for engraved letters, number, Chinese characters, graphics, punctuations and the like. (b) Provision of plastic backing plate. (c) Finishing with mirror face when engraved on the back of the plastic.
Rates for acid etched stainless steel sign face	XIII.	The rates for acid etched stainless steel sign face shall further include for : - (a) Picking out with paint either in single or multi-colour for acid etched letters, number, Chinese characters, graphics, punctuations and the like. (b) Provision of stainless steel backing plate. (c) Finishing with polished face.
Government stores or other designated suppliers	XIV.	Where ironmongery is obtained from Government stores or other designated suppliers, the rates for "Fix only" will be paid.

Item	HINGES	Supply and fix						Take down and clear away	Take down and set aside for re-use	Fix only	Item	
		Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium					Stainless steel
		A	B	C	D	E	F					G
	<i>Per pair</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$		
09001	40 mm Butt hinges.....	16.50	-	26.80	27.40	28.00	-	24.40	2.20	5.00	12.20	09001
09002	50 mm Ditto.....	17.30	-	29.70	30.50	31.20	-	26.80	2.20	5.00	12.20	09002
09003	65 mm Ditto.....	21.50	-	38.00	39.00	40.00	-	34.10	2.90	5.70	14.60	09003
09004	75 mm Ditto.....	29.70	-	54.60	56.10	57.50	-	48.70	3.60	6.50	19.50	09004
09005	100 mm Ditto.....	41.40	-	82.90	85.30	87.70	-	73.10	4.30	8.60	24.40	09005
09006	125 mm Ditto.....	-	-	136.00	140.40	144.90	-	118.20	5.70	8.60	29.30	09006
09007	100 mm Butt hinges with nylon bushes.....	-	50.00	85.80	88.30	90.90	-	75.60	4.30	7.20	24.40	09007
09008	125 mm Ditto.....	-	75.70	140.80	145.50	150.10	-	122.20	5.70	8.60	29.30	09008
09009	75 mm Rising or falling butt hinges.....	-	-	103.30	106.60	109.90	-	-	4.30	7.20	24.40	09009
09010	100 mm Ditto.....	-	-	131.60	135.90	140.10	-	114.50	5.70	8.60	29.30	09010
09011	40 mm Backflap hinges.....	33.50	-	85.30	88.30	-	-	-	2.20	5.00	12.20	09011
09012	50 mm Ditto.....	34.40	-	88.20	91.40	-	-	-	2.20	5.00	12.20	09012
09013	75 mm Ditto.....	46.80	-	113.10	117.00	-	-	-	3.60	6.50	19.50	09013
09014	25 mm Counter hinges.....	-	-	79.50	82.30	-	-	88.20	2.20	5.00	12.20	09014
09015	30 mm Ditto.....	-	-	82.40	85.30	-	-	-	2.20	5.00	12.20	09015
09016	40 mm Ditto.....	-	-	85.30	88.30	-	-	-	2.20	5.00	12.20	09016
09017	75 mm Parliament hinges.....	-	-	134.50	140.40	-	-	-	4.10	9.30	21.90	09017
09018	100 mm Ditto.....	-	-	171.30	177.20	-	-	124.10	5.60	12.20	29.30	09018
09019	150 mm Ditto.....	-	-	204.20	213.10	-	-	149.90	8.00	17.60	41.40	09019
09020	Cranked or semi-concealed cupboard hinges.....	-	68.90	96.00	-	100.90	-	81.50	2.70	6.10	14.60	09020
09021	Fully concealed cupboard hinges.....	-	35.80	47.90	-	49.80	-	41.70	2.70	6.10	14.60	09021

IRONMONGERY

09001 - 09021

Item **HINGES (CONT'D)**

Item

IRONMONGERY

		Supply and fix						Take down and clear away	Take down and set aside for re-use	Fix only			
		Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium	Stainless steel					
		A	B	C	D	E	F	G	H	I	J		
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
	<i>Per pair</i>												
09022	Cross garnet or tee hinges up to 150 mm long.....	25.30	28.00	-	-	-	-	-	2.20	4.30	11.00	09022	
09023	Ditto 150 - 225 mm long.....	56.10	59.70	-	-	-	-	-	2.90	5.70	14.60	09023	
09024	Ditto 225 - 300 mm long.....	90.50	95.60	-	-	-	-	-	2.90	7.20	17.10	09024	
09025	Ditto 300 - 450 mm long.....	131.50	137.80	-	-	-	-	-	4.30	8.60	21.90	09025	
09026	Ditto 450 - 600 mm long.....	169.40	176.60	-	-	-	-	-	5.70	11.50	29.30	09026	
09027	Hook and ride hinges, local made heavy pattern, with hook riveted to plate up to 300 mm long.....	84.80	89.90	-	-	-	-	126.90	2.90	7.20	17.10	09027	
09028	Ditto 300 - 450 mm long.....	124.30	131.70	-	-	-	-	187.40	4.30	10.00	24.40	09028	
09029	Ditto 450 - 600 mm long.....	155.50	164.70	-	-	-	-	234.20	5.70	11.50	29.30	09029	
09030	Ditto 600 - 750 mm long.....	192.10	203.70	-	-	-	-	290.10	7.20	14.30	36.60	09030	
09031	Ditto 750 - 900 mm long.....	231.60	245.60	-	-	-	-	350.60	7.20	17.20	43.90	09031	
09032	Add to either of Items 09027 to 09031 inclusive if hook plate is flanged for and cast into concrete, brick or stone wall including cutting mortice and grouting.....	7.30	7.30	-	-	-	-	7.30	2.20	5.00	7.30	09032	
09033	75 mm Single action spring hinges.....	43.80	54.10	-	-	-	-	88.80	3.60	6.50	19.50	09033	
09034	100 mm Ditto.....	64.80	82.10	-	-	-	-	139.90	4.30	7.20	24.40	09034	
09035	150 mm Ditto.....	89.90	115.90	-	-	-	-	202.50	5.70	8.60	29.30	09035	
09036	75 mm Double action spring hinges.....	72.90	93.70	-	-	-	-	163.00	3.60	6.50	24.40	09036	
09037	100 mm Ditto.....	110.10	144.80	-	-	-	-	260.30	4.30	7.20	29.30	09037	
09038	150 mm Ditto.....	155.40	207.40	-	-	-	-	380.60	5.70	8.60	34.10	09038	
	<i>Per pair</i>												
									Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
									A	B	C	D	
									\$	\$	\$	\$	
09039	75 mm Wrot iron safety hinges								17.70	2.20	4.30	12.20	09039
09040	100 mm Ditto								25.00	2.90	6.50	17.10	09040

Item **HINGES (CONT'D)**

Item

Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only
A \$	B \$	C \$	D \$
82.60	4.30	10.00	24.40
91.00	4.30	10.00	24.40
95.50	4.30	10.00	24.40
103.90	4.30	10.00	24.40

Per linear metre

09041	Stainless steel piano hinge	82.60	4.30	10.00	24.40	09041
09042	Ditto but with mirror face finish	91.00	4.30	10.00	24.40	09042
09043	Stainless steel self-closing piano hinge	95.50	4.30	10.00	24.40	09043
09044	Ditto but with mirror face finish	103.90	4.30	10.00	24.40	09044

BOLTS

Supply and fix							Take down and clear away	Take down and set aside for re-use	Fix only
Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium	Stainless steel			
A \$	B \$	C \$	D \$	E \$	F \$	G \$	H \$	I \$	J \$
22.10	24.00	51.00	57.90	61.30	32.00	44.00	1.70	4.30	9.80
27.30	29.50	62.60	71.00	75.20	39.30	48.90	2.20	5.00	12.20
32.40	35.10	74.20	84.10	89.10	46.70	52.40	2.90	5.70	14.60
44.60	48.60	108.80	124.00	134.00	-	75.40	2.90	6.50	15.90
49.80	54.20	120.40	137.20	145.60	-	86.10	3.60	7.20	18.30
63.30	68.20	140.20	-	-	-	113.60	5.70	11.50	29.30
73.20	78.50	156.50	-	-	-	137.50	6.50	14.30	36.60
78.40	84.10	168.10	-	-	-	156.80	7.20	17.20	39.00
83.60	89.70	-	-	-	-	175.90	7.90	18.60	41.40
88.70	95.20	-	-	-	-	211.80	8.60	18.60	43.90
40.60	42.90	-	-	-	-	73.00	4.30	10.00	24.40
55.50	58.50	-	-	-	-	96.10	7.20	14.30	36.60
74.60	78.80	-	-	-	-	131.30	8.60	18.60	43.90
84.70	89.50	-	-	-	-	149.60	9.30	21.50	48.70

Each

09045	Tower or barrel bolt n.e. 75 mm long.....	22.10	24.00	51.00	57.90	61.30	32.00	44.00	1.70	4.30	9.80	09045
09046	Ditto 75 - 150 mm long.....	27.30	29.50	62.60	71.00	75.20	39.30	48.90	2.20	5.00	12.20	09046
09047	Ditto 150 - 225 mm long.....	32.40	35.10	74.20	84.10	89.10	46.70	52.40	2.90	5.70	14.60	09047
09048	Ditto 225 - 300 mm long.....	44.60	48.60	108.80	124.00	134.00	-	75.40	2.90	6.50	15.90	09048
09049	Ditto 300 - 450 mm long.....	49.80	54.20	120.40	137.20	145.60	-	86.10	3.60	7.20	18.30	09049
09050	Ditto 450 - 600 mm long.....	63.30	68.20	140.20	-	-	-	113.60	5.70	11.50	29.30	09050
09051	Ditto 600 - 750 mm long.....	73.20	78.50	156.50	-	-	-	137.50	6.50	14.30	36.60	09051
09052	Ditto 750 - 900 mm long.....	78.40	84.10	168.10	-	-	-	156.80	7.20	17.20	39.00	09052
09053	Ditto 900 - 1,050 mm long.....	83.60	89.70	-	-	-	-	175.90	7.90	18.60	41.40	09053
09054	Ditto 1,050 - 1,200 mm long.....	88.70	95.20	-	-	-	-	211.80	8.60	18.60	43.90	09054
09055	Monkey tail bolt n.e. 450 mm long.....	40.60	42.90	-	-	-	-	73.00	4.30	10.00	24.40	09055
09056	Ditto 450 - 600 mm long.....	55.50	58.50	-	-	-	-	96.10	7.20	14.30	36.60	09056
09057	Ditto 600 - 750 mm long.....	74.60	78.80	-	-	-	-	131.30	8.60	18.60	43.90	09057
09058	Ditto 750 - 900 mm long.....	84.70	89.50	-	-	-	-	149.60	9.30	21.50	48.70	09058

IRONMONGERY

09041 - 09058

Item	BOLTS (CONT'D)	Supply and fix						Take down and clear away	Take down and set aside for re-use	Fix only	Item	
		Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium					Stainless steel
		A	B	C	D	E	F					G
	<i>Each</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$		
09059	Monkey tail bolt 900 - 1,050 mm long.....	99.00	105.10	-	-	-	-	182.50	10.00	22.90	56.10	09059
09060	Ditto 1,050 - 1,200 mm long.....	106.80	111.90	-	-	-	-	196.00	11.50	25.80	60.90	09060
09061	Flush bolt with sunk slide n.e. 75 mm long.....	-	-	75.90	83.60	87.40	54.70	59.20	5.70	11.50	29.30	09061
09062	Ditto 75 - 150 mm long.....	-	-	83.90	92.30	96.50	61.90	67.10	6.50	14.30	34.10	09062
09063	Ditto 150 - 225 mm long.....	-	-	91.80	101.00	105.50	68.00	73.70	7.20	14.30	39.00	09063
09064	Ditto 225 - 300 mm long.....	-	-	99.90	109.70	114.70	74.20	80.20	7.90	17.20	43.90	09064
09065	Lever flush bolt n.e. 75 mm long.....	-	-	78.30	86.00	89.70	57.10	61.50	5.70	14.30	31.70	09065
09066	Ditto 75 - 150 mm long.....	-	-	86.20	94.70	99.00	63.00	73.10	6.50	14.30	36.60	09066
09067	Ditto 150 - 225 mm long.....	-	-	93.00	102.20	108.30	67.90	78.90	6.50	14.30	36.60	09067
09068	Ditto 225 - 300 mm long.....	-	-	102.20	112.10	119.20	74.90	80.60	7.90	17.20	43.90	09068
09069	Ditto 300 - 450 mm long.....	-	-	117.30	127.90	136.00	-	94.20	9.30	21.50	53.60	09069
09070	Ditto 450 - 600 mm long.....	-	-	127.70	139.00	144.60	-	102.90	10.80	22.90	60.90	09070
09071	Indicating bolt.....	-	-	131.50	137.60	140.60	-	98.00	7.30	16.60	40.20	09071
09072	Mortise dead bolt with indicator and long lever turn for handicap.....	-	-	-	-	-	-	499.70	7.30	16.60	40.20	09072
09073	Panic bolt Class B to BS EN 1125 Part 1 comprising horizontal activating bar and vertical shoots to suit single door.....	-	-	-	883.90	-	-	1,068.50	15.80	35.30	87.70	09073
09074	Ditto but to suit pair of doors.....	-	-	-	1,499.10	-	-	1,812.90	24.40	53.60	131.60	09074
09075	Add to either of Items 09073 to 09074 for cylinder locking device from outside.....	-	-	-	-	-	-	703.50	12.20	26.80	68.20	09075
09076	Flat bolt plate for any size shoot.....	-	-	7.00	8.40	11.10	-	6.20	0.80	1.60	4.20	09076
09077	Bolt socket of any size for surface fixing.....	-	-	12.60	15.30	20.80	-	10.20	0.80	1.60	4.20	09077
09078	Bolt socket of any size for letting into and including cutting mortice in concrete, brick, stone or similar surface and grouting in and making good.....	-	-	20.00	-	-	-	17.80	0.80	4.60	11.70	09078
(Note : The items 09076 - 09078 will only be paid if ordered by the Maintenance Surveyor in writing for repairs)												

Item **BOLTS (CONT'D)**

Item

Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only
A \$	B \$	C \$	D \$
1,134.20	8.50	18.30	43.90
1,301.20	8.50	18.30	43.90
3,697.50	54.80	123.10	292.50
4,708.00	54.80	123.10	292.50

Per set
09079 Proprietary handicap indicator bolts with long lever operated, specially designed for use by the physically disabled and visually impaired with range of colour available for contrast purpose.....

09080 Proprietary toilet door lock enables one handed operation with flip-up locking/opening function for handicapped use, also with outside level handle to operate latch bolt and inside level handle to operate both the latch and deadbolt ; featuring outside colour indicator showing locked or unlocked condition ; outside override function in case of emergency, and provided with option of right hand or left hand side installation to door.....

Each
09081 The proprietary emergency panic bolt featuring with push bar, alarm system operated by 9-volt battery with back up device at sound level approximately 100 dB piezo alarm ; tamper resistant housing, saw-resistant deadbolt, corrosion-resistant alloy lock body, optional two-point locking device, can resist at least 2,000 lbs. outside pull force, signages available in different languages, different colour option, ten year warranty, and complies with standard of "U.L .Listed panic hardware exceeds all Life Safety, ADA, California Title 19, ANSI/BHMA for all building codes".....

09082 Proprietary rim exit device for single doors or pairs of doors constructed of metal, wood or composite materials ; non-handed ; with deadlocking latchbolt engages roller strike ; coupled with battery operated and completely self-contained audible alarm with sounds continuously UL/cUL Listed : FVSR/FVSR7–Panic hardware GXHX/FXHX7–Fire exit hardware.....

Each
09083 Panic bolt Class A to BS EN 1125 Part 1 comprising horizontal activating bar and vertical shoots to suit single door.....

09084 Ditto but to suit double leaf door.....

Supply and fix			Take down and clear away	Take down and set aside for re-use	Fix only
Cast alloy silver finish	Brass	Stainless steel			
A \$	B \$	C \$	D \$	E \$	F \$
897.10	1,709.30	1,651.90	18.30	40.20	92.60
1,512.30	2,901.40	2,797.90	28.00	59.70	141.40

09079

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09084

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09079 - 09084

Item **KEY IN THE KNOB TYPE LOCK AND LATCH SETS**

Item

	Supply and fix							Take down and clear away	Take down and set aside for re-use	Fix only	Item
	Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium	Stainless steel				
	A	B	C	D	E	F	G				
<i>Each</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
09085 Latch with knob set in stainless steel.....	-	-	-	-	-	-	99.40	8.50	18.30	43.90	09085
09086 Bathroom lock including knob set with push button on one side and emergency device on the other side.....	-	-	-	-	-	-	107.80	9.30	20.70	48.70	09086
09087 Lock including knob set with push button on one side and locking device on the other side.....	-	-	-	-	-	-	110.00	9.30	20.70	48.70	09087
09088 Combined latch and dead lock including knob set with thumb turn on one side and locking device on the other side.....	-	-	-	-	-	-	285.90	14.60	32.90	78.00	09088

LOCKS AND LATCHES

	Supply and fix							Take down and clear away	Take down and set aside for re-use	Fix only	Item
	Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium	Stainless steel				
	A	B	C	D	E	F	G				
<i>Each</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
09089 Suffolk latch with 200 x 50 mm plate.....	152.20	-	-	-	-	-	-	6.80	15.40	36.60	09089
09090 Rim latch with case, staple and brass spring bolt.....	109.60	-	-	-	-	-	136.30	8.50	18.30	43.90	09090
09091 Upright mortice latch with brass spring bolt and striking plate.....	152.50	-	-	-	-	-	202.90	11.00	25.60	58.50	09091
09092 Horizontal ditto.....	181.10	-	-	-	-	-	215.60	11.00	25.60	58.50	09092
09093 150 mm Rim dead lock with case, staple, brass bolt and three lever mechanism.....	72.80	-	-	-	-	-	140.80	7.60	17.10	42.70	09093
09094 150 mm Rim lock with case, staple, brass dead and spring bolt and three lever mechanism.....	72.80	-	-	-	-	-	140.80	7.60	17.10	42.70	09094
09095 Horizontal mortice dead lock with brass bolt, keeper and four lever mechanism.....	155.90	-	-	-	-	-	189.50	12.20	28.00	68.20	09095
09096 Ditto but with rebated fore-end.....	186.00	-	-	-	-	-	218.80	13.40	30.50	75.60	09096
09097 Upright mortice lock with brass dead and spring bolt, striking plate and four lever mechanism.....	178.20	-	-	-	-	-	248.80	12.20	28.00	75.60	09097
09098 Ditto but with rebated fore-end.....	258.70	-	-	-	-	-	366.60	13.40	30.50	97.50	09098
09099 Horizontal mortice lock with brass dead and spring bolt, striking plate and four lever mechanism.....	191.60	-	-	-	-	-	248.80	12.20	28.00	75.60	09099
09100 Ditto but with rebated fore-end.....	261.50	-	-	-	-	-	366.60	13.40	30.50	97.50	09100

Item **LOCKS AND LATCHES (CONT'D)**

Item

Supply and fix							Take down and clear away	Take down and set aside for re-use	Fix only		
Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium	Stainless steel					
A	B	C	D	E	F	G	H	I	J		
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
09101	Cylinder rim night latch (reversible) with staple, brass bolt, cylinder, thumb slide, knob and three keys.....	123.60	-	-	-	-	165.50	14.10	32.90	73.10	09101
09102	Cylinder mortice night latch with brass bolt, cylinder, thumb turn and three keys.....	216.30	-	-	-	-	266.90	18.30	40.20	97.50	09102
09103	Flush cupboard, drawer or desk lock with four lever mechanism.....	55.20	-	-	-	-	-	7.30	15.80	39.00	09103
09104	Ditto but with four pin tumbler mechanism.....	48.70	-	-	-	-	62.10	7.30	15.80	39.00	09104
09105	Self locking flush cupboard, drawer or desk lock with brass spring bolt and four pin tumbler mechanism.....	50.70	-	-	-	-	62.10	7.30	15.80	39.00	09105
09106	50 mm Padlock with hardened steel shackle and four lever mechanism.....	-	42.40	52.00	-	-	-	-	-	4.40	09106
09107	75 mm Ditto.....	-	52.00	61.70	-	-	-	-	-	4.40	09107
09108	50 mm Padlock with hardened steel shackle and five pin tumbler mechanism.....	-	-	61.70	-	-	59.70	-	-	4.40	09108
09109	75 mm Ditto.....	-	-	94.70	-	-	-	-	-	4.40	09109

Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only			
A	B	C	D			
\$	\$	\$	\$			
09110	Mechanical digital lock	1,595.10	17.10	39.00	85.30	09110
09111	Proprietary mechanical push button heavy-duty lock with heavy-duty cylindrical and mortise locksets ; optional mechanical key override, passage allows access, lockout (privacy) to disable the lock and access by key override only ; and different finish options ; and conform to ANSI specifications.....	2,611.40	23.10	40.20	87.70	09111
09112	Proprietary grade 2 key-in-lever lockset with chassis constructed of heavy gauge steel and cast components, plated to protect against rust and corrosion ; locksets shall be adjustable for different door thickness ; non-handed ; with separate anti-rotation through bolts ; no exposed mounting screws ; in solid one piece ; cast levers without plastic inserts ; independent operated lever ; inside and outside lever return springs ; vandal resistant lever and be free wheeling in the locked condition ; stainless steel latch bolt ; optional and complies with certifications of ASNI A156.2 Series 4000, Grade 2, UL 3 Hour Fire Rating.....	402.70	11.00	26.80	60.90	09112

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09101 - 09112

Item **DOOR FURNITURE**

Item

Replacement parts only : -

Supply and fix								Take down and clear away	Take down and set aside for re-use	Fix only			
Plastic	Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium	Stainless steel						
A	B	C	D	E	F	G	H	I	J	K			
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$			
09113	Key hole escutcheon.....	-	-	-	18.10	19.70	20.50	11.20	17.70	0.90	1.80	4.40	09113
09114	Ditto with cover.....	-	-	-	23.30	23.90	24.90	13.80	22.10	0.90	1.80	4.40	09114
09115	Single knob with rose if required.....	-	19.60	-	37.40	38.90	39.90	26.00	36.00	1.30	3.20	7.10	09115
09116	Single lever handle with cover plate if required.....	-	-	-	109.90	122.80	130.70	72.00	105.30	1.30	3.20	8.20	09116
09117	Set of knob furniture complete with roses or cover plates and spindle.....	-	29.70	-	49.50	56.70	58.80	38.80	48.00	2.90	6.30	14.60	09117
09118	Set of lever handles ditto.....	-	-	-	224.70	251.30	267.10	147.00	215.00	2.90	6.30	14.60	09118

DOOR SEALS

Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only			
A	B	C	D			
\$	\$	\$	\$			
09119	Proprietary aluminium acoustic door seal with neoprene inserts	139.80	2.20	5.00	12.20	09119
09120	Ditto aluminium adjustable perimeter door seal with neoprene	184.00	2.20	5.00	12.20	09120
09121	Ditto aluminium door perimeter seal with neoprene inserts for door meeting stile	110.40	2.20	5.00	12.20	09121
09122	Ditto perimeter sound/smoke/weather/draught/dust door seal with neoprene inserts	139.80	2.20	5.00	12.20	09122
09123	Ditto aluminium door bottom seal for automatic door with neoprene inserts	387.60	2.20	5.00	12.20	09123
09124	Ditto aluminium door bottom seal with neoprene inserts	124.80	2.20	5.00	12.20	09124
09125	Ditto aluminium bumper thresholds door seal with neoprene inserts	312.50	2.20	5.00	12.20	09125
09126	Ditto aluminium door head seal with neoprene inserts	124.80	2.20	5.00	12.20	09126

Per linear metre

Item **DOOR SPRINGS AND HOLDERS**

Item

		Supply and fix							Take down and clear away	Take down and set aside for re-use	Fix only		
		Plastic	Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium	Stainless steel				
<i>Each</i>		A	B	C	D	E	F	G	H	I	J	K	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
09127	Single action floor spring and top centre with or without check.....	-	-	-	-	-	-	-	1,050.70	21.50	57.30	146.20	09127
09128	Double action ditto.....	-	-	-	-	-	-	-	1,276.80	21.50	57.30	146.20	09128
09129	Spring action type floor door holder with rubber door stop.....	-	-	-	108.40	-	120.80	-	-	1.90	4.40	9.80	09129
09130	Door holder, clip pattern.....	-	55.10	-	-	-	-	-	-	1.70	3.80	8.50	09130
09131	40 mm Diameter rubber door stop.....	5.50	-	-	-	-	-	-	12.60	0.40	1.10	2.40	09131
09132	40 mm Ditto but with plate fixing.....	-	6.90	-	10.80	-	-	7.70	-	0.60	1.20	2.90	09132
09133	Door stopper, dome shape with rubber buffer, chrome plated.....	-	-	-	-	-	22.70	-	-	1.40	3.60	9.80	09133

		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
<i>Each</i>		A	B	C	D	
		\$	\$	\$	\$	
09134	Overhead door closer, light duty non-hold open	290.00	14.30	28.60	60.90	09134
09135	Overhead door closer, heavy duty non-hold open	375.70	14.30	28.60	60.90	09135
09136	Extra over Items 09134 - 09135 inclusive with delayed action	104.90	-	-	-	09136
09137	Concealed door closer, light duty non-hold open	324.40	14.30	43.00	97.50	09137
09138	Concealed door closer, heavy duty non-hold open	422.90	14.30	43.00	97.50	09138
09139	Extra over Items 09137 - 09138 inclusive with delayed action	120.60	-	-	-	09139

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09127 - 09139

Item **FITTINGS FOR SASHES AND FANLIGHTS, ETC.**

Item

	<i>Each</i>	Supply and fix						Take down and clear away	Take down and set aside for re-use	Fix only	Item	
		Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium					Stainless steel
		A \$	B \$	C \$	D \$	E \$	F \$					G \$
09140	75 mm Cleat hook.....	-	-	15.50	17.70	22.10	-	-	1.40	2.20	4.90	09140
09141	Spring catch with projecting ring and strike plate or staple.....	-	-	32.90	43.80	54.80	-	-	2.90	5.00	12.20	09141
09142	Staple only for spring catch.....	-	-	13.30	15.50	17.70	-	-	1.40	2.20	4.90	09142
09143	15 mm Internal diameter screw eye.....	-	-	9.30	10.40	11.50	-	-	0.60	1.10	2.90	09143
09144	Casement fastener with 115 mm handle and hook or mortice plate.....	-	35.50	76.80	87.70	94.40	52.60	-	2.90	5.00	12.20	09144
09145	200 mm Casement stay with two stud pins.....	27.60	-	42.90	47.80	-	32.10	35.30	3.70	6.10	15.90	09145
09146	250 mm Ditto.....	29.80	-	46.70	52.10	-	34.90	38.40	3.90	6.80	16.60	09146
09147	300 mm Ditto.....	32.10	-	50.60	56.40	-	37.70	41.60	4.10	7.30	17.10	09147
09148	Single stud pins.....	11.10	-	18.60	20.80	-	13.80	15.30	1.50	2.40	6.30	09148
09149	250 mm Sliding bar type casement stay.....	50.90	-	82.00	88.70	-	56.30	64.10	3.20	5.40	13.70	09149
09150	300 mm Ditto.....	55.50	-	90.50	99.30	-	62.30	70.70	3.70	6.10	15.90	09150
09151	Fanlight opener with 300 mm long rack and pinion, worm wheel, pulley and endless cord.....	-	-	242.30	-	-	-	-	8.60	14.30	24.40	09151
09152	Ditto but with 375 mm long rack and pinion.....	-	-	255.50	-	-	-	-	8.60	14.30	24.40	09152
09153	Ditto but with 450 mm long rack and pinion.....	-	-	268.70	-	-	-	-	8.60	14.30	24.40	09153
09154	Set of two sash pivots and sockets.....	-	-	97.60	-	-	-	-	7.20	12.90	31.70	09154
09155	Pair of 150 mm long quadrant stays.....	-	-	54.00	60.70	-	-	-	3.60	5.70	15.90	09155
09156	Ditto but 200 mm long.....	-	-	61.50	69.30	-	-	-	3.60	6.50	17.10	09156
09157	Ditto but 250 mm long.....	-	-	69.00	77.80	-	-	-	4.30	7.20	17.10	09157

Item	FITTINGS FOR SASHES AND FANLIGHTS, ETC. (CONT'D)					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Each</i>	A \$	B \$	C \$	D \$	
09158	Stainless steel sliding bar type casement stay for aluminium window sashes 350 mm long	77.10	4.20	6.80	17.10	09158
09159	Ditto but 400 mm long	83.60	4.60	7.80	20.00	09159
09160	Ditto but 450 mm long	90.10	4.90	8.00	21.90	09160
09161	Ditto but 500 mm long	96.60	5.40	9.80	23.90	09161
09162	Ditto but 550 mm long	103.20	6.10	10.20	25.60	09162
09163	Ditto but 600 mm long	109.60	6.30	11.00	26.80	09163
	PROPRIETARY WINDOW OPENERS					
	Proprietary mechanical systems for the window remote control comprises with torque rod in a tubular aluminium section 21 mm in diameter mounted at sill or transom in aluminium or nylon bearings, the lever arm coupling the control to the torque rod constructed of cast aluminium, the torque arms connecting the sash to the torque rod constructed of cast aluminium, these arms are grub screwed and pinned to the torque rod giving permanent fixing, sash arm in the link between the torque arm and the sash made of stainless steel rod coupled to the torque arm by a clevis pin and to the sash by a cast aluminium trunnion and vent bracket ; all steel and brass components, screws and pin are electroplated to resist corrosion ; and with a damper unit consists of a spring type universal joint which to control to smoothly follow the arc of the moving lever arm :					
	<i>Each</i>					
09164	Proprietary window opener for 1 sash high level window	1,309.30	13.90	19.00	25.60	09164
09165	Ditto but 2 sashes	1,636.50	26.80	37.80	52.40	09165
09166	Ditto but 3 sashes	1,963.80	41.40	56.10	80.40	09166
09167	Ditto but 4 sashes	2,291.00	56.10	75.60	104.80	09167
09168	Add to Item 09167 for each additional sash	327.40	13.40	19.00	24.40	09168

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09158 - 09168

Item **PROPRIETARY WINDOW OPENERS (CONT'D)**

Item

Proprietary electrically operated systems for the window remote control comprises with torque rod in a tubular aluminium section 21 mm in diameter mounted at sill or transom in aluminium or nylon bearings, the lever arm coupling the control to the torque rod constructed of cast aluminium, the torque arms connecting the sash to the torque rod constructed of cast aluminium, these arms are grub screwed and pinned to the torque rod giving permanent fixing, sash arm in the link between the torque arm and the sash made of stainless steel rod coupled to the torque arm by a clevis pin and to the sash by a cast aluminium trunnion and vent bracket ; all steel and brass components, screws and pin are electroplated to resist corrosion ; and with a damper unit consists of a spring type universal joint which to control to smoothly follow the arc of the moving lever arm :

Each

09169	Proprietary window opener for 1 sash high level window	1,745.60	17.10	21.90	34.10	09169
09170	Ditto but 2 sashes	2,072.90	31.70	43.90	68.20	09170
09171	Ditto but 3 sashes	2,400.20	48.70	68.20	104.80	09171
09172	Ditto but 4 sashes	2,727.50	65.80	87.70	136.50	09172
09173	Add to Item 09172 for each additional sash	327.40	16.60	21.90	34.10	09173

Proprietary mechanical systems for the window remote control composed with control operators with painted steel handle with options of flat, concealed, mini, simple or geared operator ; transmission line formed by a steel helical cable running inside a steel conduit externally coated in PVC with an internal antifriction polyethylene tube ; chain opening mechanisms both for top and bottom hinged windows with painted or anodized aluminium casing ; available stroke 250 mm and 380 mm, steel forks and swivel 250 mm stroke for sun louvre blades ; painted aluminium locking openers for bottom hinged windows, maximum stroke 250 mm ; and with other accessories allow a correct installation :

Each

09174	Proprietary window opener for 1 sash high level window	1,455.90	13.70	18.30	25.60	09174
09175	Ditto but 2 sashes	2,139.90	26.80	37.80	51.20	09175
09176	Ditto but 3 sashes	2,689.50	41.40	56.10	78.00	09176
09177	Ditto but 4 sashes	3,306.30	53.60	73.10	102.40	09177
09178	Add to Item 09177 for each additional sash	683.90	13.40	19.00	25.60	09178

Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only
A \$	B \$	C \$	D \$
1,745.60	17.10	21.90	34.10
2,072.90	31.70	43.90	68.20
2,400.20	48.70	68.20	104.80
2,727.50	65.80	87.70	136.50
327.40	16.60	21.90	34.10
1,455.90	13.70	18.30	25.60
2,139.90	26.80	37.80	51.20
2,689.50	41.40	56.10	78.00
3,306.30	53.60	73.10	102.40
683.90	13.40	19.00	25.60

Item **PROPRIETARY WINDOW OPENERS (CONT'D)**

Item

Proprietary electrically operated systems for the window remote control composed with control operators with painted steel handle with options of flat, concealed, mini, simple or geared operator; transmission line formed by a steel helical cable running inside a steel conduit externally coated in PVC with an internal antifriction polyethylene tube ; chain opening mechanisms both for top and bottom hinged windows with painted or anodized aluminium casing ; available stroke 250 mm and 380 mm, steel forks and swivel 250 mm stroke for sun louvre blades ; painted aluminium locking openers for bottom hinged windows, maximum stroke 250 mm ; and with other accessories allow a correct installation :

Each

Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only
A	B	C	D
\$	\$	\$	\$
2,911.70	16.60	21.90	58.50
3,539.50	31.70	43.90	117.00
4,167.20	48.70	68.20	177.90
4,795.00	63.40	90.20	238.80
613.50	16.60	21.90	58.50

09179	Proprietary window opener for 1 sash high level window	2,911.70	16.60	21.90	58.50	09179
09180	Ditto but 2 sashes	3,539.50	31.70	43.90	117.00	09180
09181	Ditto but 3 sashes	4,167.20	48.70	68.20	177.90	09181
09182	Ditto but 4 sashes	4,795.00	63.40	90.20	238.80	09182
09183	Add to Item 09182 for each additional sash	613.50	16.60	21.90	58.50	09183

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09179 - 09183

Item **FITTINGS FOR SLIDING SASHES, ETC.**

Item

	Supply and fix							Take down and clear away	Take down and set aside for re-use	Fix only	Item
	Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium	Stainless steel				
	A	B	C	D	E	F	G				
<i>Each</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
09184 15 mm Diameter sash rollers with frame and face plate.....	-	-	89.90	-	-	-	-	3.90	6.60	16.60	09184
09185 20 mm Diameter ditto.....	-	-	105.20	-	-	-	-	4.10	7.30	17.10	09185
09186 Sash axle pulley with brass face, galvanized steel frame and 40 mm diameter brass wheel.....	-	-	130.40	-	-	-	-	4.60	7.80	19.50	09186
09187 Ditto but with 50 mm diameter brass wheel.....	-	-	151.40	-	-	-	-	4.90	8.50	20.70	09187
09188 25 mm Internal diameter sash eye on plate.....	-	-	44.60	50.30	-	-	-	1.50	2.70	6.80	09188
09189 Sash hook pattern lift on 50 mm plate.....	-	-	39.50	48.10	59.40	-	-	1.70	2.90	7.30	09189
09190 Sash flush pattern lift size 75 x 40 mm overall.....	-	-	66.50	77.90	86.30	-	-	3.20	5.60	13.40	09190
09191 Iron sash weight with hook or plate for cord attachment weighing 1.50 kg including providing and fixing cord.....	77.70	-	-	-	-	-	-	5.10	8.00	20.70	09191
09192 Add for each additional 0.50 kg or part thereof in weight.....	20.40	-	-	-	-	-	-	0.50	0.90	2.10	09192
09193 Pair of spiral rods and tension spring sash balances for sash weighing n.e. 13 kg and height of run n.e. 2 m.....	-	384.80	-	-	-	-	-	12.70	21.90	51.20	09193
09194 Ditto but for sash weighing 13 kg - 20 kg.....	437.30	-	-	-	-	-	-	13.90	23.10	56.10	09194
09195 Ditto but for sash weighing 20 kg - 27 kg.....	480.40	-	-	-	-	-	-	14.60	25.60	63.40	09195

Item	FITTINGS FOR JALOUSIES AND TYPHOON BARS										Item	
	Supply and fix								Take down and clear away	Take down and set aside for re-use		Fix only
	Plastic	Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium	Stainless steel				
A	B	C	D	E	F	G	H	I	J	K		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
	<i>Each</i>											
09196	Wrot iron turn buckle comprising 150 x 25 x 5 mm plate flanged one end with 15 x 15 mm pin 75 mm long filed circular for half the length and fitted with 75 x 25 x 5 mm turn buckle splayed one end and holed for 15 x 15 mm pin.....										09196	
09197	Bar clip 150 x 40 x 5 mm twice bent and three times holed for screws.....										09197	
09198	Eye for movable louvre.....										09198	
09199	8 mm Diameter butterfly headed thumb screw 150 mm long.....										09199	
09200	Ditto but 200 mm long.....										09200	
09201	50 x 50 x 3 mm Plate holed for thumb screw and four fixing screws.....										09201	
09202	Ditto with tapped shoulder to receive 8 mm diameter screw.....										09202	
	FITTINGS FOR DOOR AND CUPBOARD											
	<i>Per square metre</i>											
09203	1.60 mm Kicking plate with bevelled edges if required and holed for screws.....										09203	
	<i>Each</i>											
09204	Local pattern "Magic Eye" observation eyehole fitting.....										09204	
09205	Cupboard door pull knob.....										09205	
09206	Ditto with 50 mm diameter back plate.....										09206	
09207	Bales catch with plate size 28 x 10 mm.....										09207	
09208	Ditto but plate size 40 x 15 mm.....										09208	
09209	Ditto but plate size 50 x 20 mm.....										09209	
09210	45 x 18 mm Magnetic door catch.....										09210	
09211	Drawer, wardrobe or cupboard pull handle 100 mm long.....										09211	
09212	Ditto but 150 mm long.....										09212	

Item	FITTINGS FOR DOOR AND CUPBOARD (CONT'D)	Supply and fix							Take down and clear away	Take down and set aside for re-use	Fix only	Item	
		Plastic	Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium					Stainless steel
		A \$	B \$	C \$	D \$	E \$	F \$	G \$					H \$
	<i>Each</i>												
09213	Door pull handle 225 mm long.....	-	-	-	68.30	77.50	82.20	48.00	54.30	2.90	6.10	14.60	09213
09214	Ditto but 300 mm long.....	-	-	-	77.10	87.50	92.70	53.80	60.90	3.20	6.30	15.90	09214
09215	300 x 75 mm Finger plate.....	-	-	-	56.10	62.70	68.00	39.00	44.30	1.70	3.90	12.20	09215
09216	75 x 45 mm Flush pattern drop drawer handle.....	-	-	-	33.30	41.20	43.90	-	-	4.40	9.80	24.40	09216
09217	75 x 40 mm Flush pull handle.....	44.30	-	-	-	45.30	48.70	35.10	-	4.40	8.80	21.90	09217
09218	100 x 50 mm Ditto.....	45.40	-	-	-	46.70	50.10	36.40	-	4.40	8.80	21.90	09218
09219	75 x 40 mm Card holder frame.....	23.60	-	-	25.70	29.20	31.00	-	-	1.00	2.40	5.40	09219
09220	100 x 75 mm Ditto.....	27.60	-	-	29.80	33.80	35.80	-	-	1.20	2.70	6.30	09220
09221	150 x 100 mm Ditto.....	36.90	-	-	40.00	45.60	48.40	-	-	1.50	3.20	7.80	09221
09222	25 x 1.60 mm Hanging plate.....	-	-	-	20.30	-	-	-	-	1.00	2.20	5.40	09222
09223	40 x 1.60 mm Ditto.....	-	-	-	21.60	-	-	-	-	1.00	2.20	5.40	09223
09224	50 x 1.60 mm Ditto.....	-	-	-	22.90	-	-	-	-	1.00	2.20	5.40	09224
09225	50 mm Coat hook.....	-	-	-	25.70	31.00	34.60	17.90	-	1.00	2.20	5.40	09225
09226	100 mm Hat and coat hook.....	-	-	-	26.30	31.20	36.00	18.40	-	1.00	2.20	5.40	09226
09227	75 mm Combined hook and rubber door stop.....	-	-	-	22.60	26.30	30.00	15.70	-	1.00	2.20	5.40	09227
09228	25 mm Cup hook.....	-	-	-	8.60	-	12.10	-	-	0.50	0.70	1.50	09228
09229	50 mm Hook.....	-	-	11.40	23.80	-	28.60	-	-	0.40	1.00	2.20	09229
09230	100 x 75 mm Shelf bracket.....	-	20.50	-	-	-	-	-	-	2.90	6.10	14.60	09230
09231	150 x 125 mm Ditto.....	-	26.90	-	-	-	-	-	-	3.70	6.80	17.10	09231
09232	225 x 175 mm Ditto.....	-	34.00	-	-	-	-	-	-	3.90	7.60	19.50	09232
09233	300 x 250 mm Ditto.....	-	42.20	-	-	-	-	-	-	4.40	8.80	21.90	09233
09234	100 mm Cabin hook and eye.....	-	37.40	-	64.50	73.10	77.50	-	-	2.90	6.10	14.60	09234

Item	FITTINGS FOR DOOR AND CUPBOARD (CONT'D)	Supply and fix							Take down and clear away	Take down and set aside for re-use	Fix only	Item	
		Plastic	Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium					Stainless steel
		A	B	C	D	E	F	G					H
	<i>Each</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
09235	150 mm Cabin hook and eye.....	-	52.00	-	84.50	94.20	99.10	-	-	3.40	7.80	18.30	09235
09236	200 mm Ditto.....	-	58.90	-	101.20	114.70	121.50	-	-	4.10	9.80	22.40	09236
09237	250 mm Ditto.....	-	65.90	-	111.50	126.10	133.50	-	-	5.40	11.70	26.80	09237
09238	300 mm Ditto.....	-	72.80	-	121.80	137.50	145.30	-	-	5.80	13.60	31.70	09238
09239	150 mm Double hinged cabin hook and eye.....	-	-	-	93.50	105.80	112.10	-	-	4.10	9.00	21.90	09239
09240	Eye for cabin hook.....	-	12.80	-	18.90	29.40	34.20	-	-	1.10	2.40	5.60	09240
09241	75 mm Hasp and staple.....	-	15.10	-	-	-	-	-	-	2.70	4.90	11.00	09241
09242	100 mm Ditto.....	-	15.80	-	-	-	-	-	-	2.70	4.90	12.90	09242
09243	150 mm Ditto.....	-	19.30	-	-	-	-	-	-	3.20	5.40	13.40	09243
09244	75 mm Solid drawn flat bar type hasp and staple.....	-	18.20	-	26.70	-	-	-	-	2.70	4.90	11.00	09244
09245	100 mm Ditto.....	-	18.90	-	-	-	-	-	-	2.70	4.90	10.90	09245
09246	150 mm Ditto.....	-	22.40	-	-	-	-	-	-	3.20	5.40	13.40	09246
09247	450 mm Hinged swing locking bar with pivot and plate, two hook plates and staple plate.....	-	-	-	160.00	-	-	-	-	11.00	18.30	43.90	09247
09248	600 mm Ditto.....	-	-	-	245.50	-	-	-	214.00	12.20	24.40	56.10	09248
09249	900 mm Ditto.....	-	-	-	295.90	-	-	-	255.10	14.60	25.60	60.90	09249
09250	225 x 75 mm Letter plate with spring flap.....	-	-	-	-	148.00	160.10	-	99.70	4.10	6.80	16.10	09250
09251	Ditto with knock handle.....	-	-	-	-	155.20	172.30	-	105.30	4.10	6.80	16.10	09251
09252	Door chain complete with slider and 100 x 40 mm plate.....	-	23.80	-	31.30	33.70	38.60	-	26.60	4.10	9.30	20.70	09252
09253	Ditto but with 150 x 40 mm plate.....	-	25.30	-	33.70	36.20	40.90	-	28.40	4.10	9.30	20.70	09253
09254	Slide or upright single pulley (screw or frame and plate) with wheel n.e. 25 mm diameter.....	-	-	23.20	36.50	-	-	-	-	1.90	3.70	8.50	09254
09255	Ditto with wheel 25 - 50 mm diameter.....	-	-	28.50	44.10	-	-	-	-	2.10	3.80	8.70	09255

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Item **FITTINGS FOR DOOR AND CUPBOARD (CONT'D)**

Item

Supply and fix								Take down and clear away	Take down and set aside for re-use	Fix only	
Plastic	Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium	Stainless steel				
A	B	C	D	E	F	G	H	I	J	K	
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
09256	Slide or upright double pulley (screw or frame and plate) with wheel n.e. 25 mm diameter.....	-	-	26.50	51.00	-	-	-	1.90	3.40	8.30
09257	Ditto with wheel 25 - 50 mm diameter.....	-	-	30.00	61.20	-	-	-	2.20	3.70	8.50
09258	Ash tray in any size, surface mounted.....	-	-	-	-	-	-	263.90	1.80	3.40	6.80
09259	Litter bin, 250 x 250 x 350 mm high, surface mounted	-	-	-	-	-	-	845.70	6.10	9.80	24.40
09260	Ditto, 400 x 400 x 550 mm high, surface mounted.....	-	-	-	-	-	-	1,865.70	7.30	12.20	29.30

09256

09257

09258

09259

09260

Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only		
A	B	C	D		
\$	\$	\$	\$		
09261	Chromium plated brass or copper stud pin with socket for shelves	8.60	0.90	0.40	1.50
09262	Set of plastic or enamel coated metal drawer slider 300 mm long	66.20	2.20	4.90	11.70
09263	Add to Item 09262 for each additional 50 mm long or part thereof in length	4.20	0.30	0.60	1.50

Each

09261 Chromium plated brass or copper stud pin with socket for shelves

09261

Per pair

09262 Set of plastic or enamel coated metal drawer slider 300 mm long

09262

09263 Add to Item 09262 for each additional 50 mm long or part thereof in length

09263

Item **TOILET FITTINGS, ETC.**

Item

Per linear metre

Supply and fix				Take down and clear away	Take down and set aside for re-use	Fix only			
B.M.A.	Plated brass	Alu-minium	Stainless steel						
A	B	C	D	E	F	G			
\$	\$	\$	\$	\$	\$	\$			
09264	20 mm Diameter curtain or hanging rail.....	31.60	36.70	20.90	23.80	1.00	1.90	4.90	09264
09265	25 mm Diameter ditto.....	41.70	46.70	25.80	30.30	1.00	1.90	4.90	09265

Each

Supply and fix								Take down and clear away	Take down and set aside for re-use	Fix only			
Plastic	Steel	Gal-vanized	Brass	B.M.A.	Plated brass	Alu-minium	Stainless steel						
A	B	C	D	E	F	G	H	I	J	K			
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$			
09266	Flange plate for 20 mm diameter rail.....	-	-	-	20.00	-	24.90	-	-	1.70	3.70	8.50	09266
09267	Ditto but for 25 mm diameter rail	-	-	-	22.40	-	27.30	-	-	1.70	3.70	8.50	09267
09268	Shower curtain ring.....	9.00	-	-	10.50	-	11.20	-	-	1.70	3.70	8.50	09268
09269	Toilet roll holder (Heavy pattern)	-	-	-	120.30	-	132.60	-	-	4.90	9.80	24.40	09269
09270	Locking type ditto	-	-	-	149.20	-	173.80	-	-	4.90	9.80	24.40	09270
09271	450 mm Towel rail with pair of brackets.....	-	-	-	105.40	-	117.80	-	-	4.10	8.50	21.90	09271
09272	600 mm Ditto.....	-	-	-	142.40	-	154.80	-	-	4.10	8.50	21.90	09272
09273	900 mm Ditto.....	-	-	-	204.10	-	216.40	-	-	4.10	8.50	21.90	09273
09274	Tumbler holder	-	-	-	69.50	-	81.80	-	-	2.90	6.10	14.60	09274
09275	Tumbler and tooth brush holder.....	-	-	-	74.50	-	86.80	-	-	2.90	6.10	14.60	09275
09276	Pair of brackets for 125 mm glass shelves.....	-	-	-	99.50	-	104.40	-	-	5.60	12.20	29.30	09276

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Item **TOILET FITTINGS, ETC. (CONT'D)**

Item

Supply and fix								Take down and clear away	Take down and set aside for re-use	Fix only			
Plastic	Steel	Galvanized	Brass	B.M.A.	Plated brass	Aluminium	Stainless steel						
A	B	C	D	E	F	G	H	I	J	K			
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$			
09277	Guard rail for 525 x 125 mm glass shelves.....	-	-	-	40.80	-	48.30	-	-	0.90	1.70	4.40	09277
09278	Washing cream dispenser with white enamelled brackets, etc., and plastic soap container.....	-	-	-	312.10	-	327.10	-	-	2.90	6.10	14.60	09278
09279	Soap holder.....	-	-	-	-	-	-	-	152.40	2.20	4.90	12.20	09279
09280	Proprietary multi-roll toilet tissue dispenser box in plastic.....	253.50	-	-	-	-	-	-	-	5.40	12.20	29.30	09280
09281	Proprietary multi-roll toilet tissue dispenser box in stainless steel.....	-	-	-	-	-	-	-	605.30	5.40	12.20	29.30	09281

Each

Each

		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A	B	C	D	
		\$	\$	\$	\$	
09282	Proprietary surface mounted stainless steel liquid soap dispenser	374.60	2.20	5.00	12.50	09282
09283	Proprietary all purpose lavatory-basin soap dispenser, 100 mm spout length	222.60	2.20	5.00	12.50	09283
09284	Proprietary 75.7 litre stainless steel or chromium plated towel disposal, 400 x 555 x 300 mm surface mounted	796.20	4.30	10.00	25.00	09284
09285	Proprietary 7.6 litre stainless steel or chromium plated towel disposal, 275 x 230 x 110 mm surface mounted	304.00	4.30	10.00	25.00	09285
09286	Proprietary 59 litre stainless steel or chromium plated corner towel disposal, 380 x 585 x 370 mm surface mounted	1,106.20	4.30	10.00	25.00	09286
09287	Proprietary surface mounted stainless steel or chromium plated feminine napkin disposal, size 190 x 255 x 95 mm	286.30	2.90	7.20	16.60	09287
09288	Proprietary stainless steel single surface mounted toilet paper holder	103.50	2.90	5.70	16.60	09288
09289	Proprietary stainless steel type 304 grab bar in 11 gauge; satin non-slip finish; 600 mm x 32 mm outer diameter ; and concealed with mounting flange 76 mm diameter and 13 mm deep secured to concealed tenon plate with 3 stainless steel allen head screws, and the tenon plate in 13 gauge with slotted screw holes	346.50	4.30	10.00	25.00	09289
09290	Proprietary nylon coated aluminium grab rail 600 mm long, with colour options ; each wall plate to be fixed with three 45 mm screws ; and cover plates are bayonet fixed	538.20	4.30	10.00	25.00	09290

Item **TOILET FITTINGS, ETC. (CONT'D)**

Item

Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
A	B	C	D	
\$	\$	\$	\$	
913.10	4.30	10.00	25.00	09291
940.90	4.30	10.00	25.00	09292
471.00	2.20	5.00	12.50	09293
PROPRIETARY BABY CHANGING STATION				
Proprietary baby changing station including all necessary accessories in accordance with the manufacturer's recommendations :				
<i>Each</i>				
2,642.40	21.50	50.10	93.60	09294

Each

09291 Proprietary stainless steel hinged support rail for disable toilet, 600 mm long without toilet holder

09292 Proprietary grab bar for urinal; 32 mm diameter, 600 mm long; colour resin covered where required; easy grip; stain proof coating

09293 Battery operated automatic soap dispenser with infra-red sensor, plastic cover, inspection window and soap container

PROPRIETARY BABY CHANGING STATION

Proprietary baby changing station including all necessary accessories in accordance with the manufacturer's recommendations :

Each

09294 Proprietary baby changing station with FDA approved blow-moulded high-density, durable polyethylene with Microban Antimicrobial additive; equipped with a pneumatic cylinder for controlled opening and closing of bed ; secured to back plate with a concealed full-length steel-on-steel hinge, no hinge structure shall be exposed on interior and exterior surfaces ; applicable for barrier-free accessibility and comply with ADA regulations ; have smooth concave changing area with a nylon safety strap and two hooks for bags or purses ; have a universal instruction graphics ; safety messages in 6 languages and braille ; static load performance requirements rated to support 250-300 lbs to comply with ASTM ; and the product is to comply with ANSI S117.1, ASTM F2285-04 (formerly ASTM PS125), ANSI Z535.4, German TUV, ASTM G21 and ASTM G22.....

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Item **FIBRE TRACK, SLIDERS, ETC., FOR SMALL CUPBOARD AND GLASS SLIDING DOORS**

Item

Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only
A \$	B \$	C \$	D \$
33.30	2.90	6.50	17.10
36.70	2.90	6.50	17.10
29.90	2.20	5.00	12.20
31.10	2.20	5.00	12.20
75.60	4.30	8.60	24.40
74.50	4.30	8.60	24.40
81.50	4.30	8.60	24.40
80.30	4.30	8.60	24.40
107.10	4.30	8.60	24.40
105.90	4.30	8.60	24.40
6.60	0.90	1.70	4.40
7.20	0.90	1.70	4.40

Per linear metre

09295	13 x 4 mm "Grooving-in" type track including cutting groove	33.30	2.90	6.50	17.10	09295
09296	14 x 6 mm Ditto	36.70	2.90	6.50	17.10	09296
09297	11 x 6 mm "T" shaped track for surface fixing	29.90	2.20	5.00	12.20	09297
09298	13 x 8 mm Ditto	31.10	2.20	5.00	12.20	09298
09299	13 x 16 mm Single top channel including cutting groove if required	75.60	4.30	8.60	24.40	09299
09300	13 x 10 mm Single bottom channel ditto	74.50	4.30	8.60	24.40	09300
09301	22 x 16 mm Double top channel ditto	81.50	4.30	8.60	24.40	09301
09302	22 x 10 mm Double bottom channel ditto	80.30	4.30	8.60	24.40	09302
09303	38 x 16 mm Triple top channel ditto	107.10	4.30	8.60	24.40	09303
09304	38 x 10 mm Triple bottom channel ditto	105.90	4.30	8.60	24.40	09304

Each

09305	46 x 9 x 10 mm Slider	6.60	0.90	1.70	4.40	09305
09306	60 x 11 x 13 mm Ditto	7.20	0.90	1.70	4.40	09306

Item	SLIDING DOOR GEAR					Item
	(Note : - The following items are based on Messrs. P C Henderson Limited's equipment but the rates shall apply equally to similar items from any other approved manufacturer.)	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per linear metre</i>	A \$	B \$	C \$	D \$	
09307	Galvanized steel track (290-2 mm gauge) and fixed in bracket (measured separately).....	176.50	5.80	10.20	24.40	09307
09308	Galvanized steel track (301-2 mm gauge) and fixed in bracket (measured separately).....	246.20	5.80	10.20	24.40	09308
09309	Galvanized steel track (301H-3 mm gauge) and fixed in bracket (measured separately).....	422.00	5.80	10.20	24.40	09309
09310	Add to either of Items 09307 - 09309 inclusive for plugging and screwing direct to wall, beam, lintol and the like.....	43.10	12.20	21.40	48.70	09310
09311	Steel channel (89 C) guide and fix in and including groove in wood, wood block floor or edge of door, and any necessary plugging.....	227.90	9.30	15.80	36.60	09311
09312	Brass channel (94 B) guide and ditto.....	547.00	9.30	15.80	36.60	09312
09313	Aluminium alloy channel (94 XB) guide and ditto.....	170.40	9.30	15.80	36.60	09313
09314	Steel channel (89 C) guide and fix in and including cutting or forming groove and mortice in concrete or paved floor, grouting and making good.....	258.60	17.10	30.50	70.70	09314
09315	Deep steel channel (97 C) guide and ditto.....	307.70	17.10	30.50	70.70	09315
	<i>Each</i>					
09316	Aluminium alloy closed or open end track bracket for face fixing (1A/290), screwed to wood or plugged and screwed to wall, beam, lintol and the like.....	136.10	8.50	13.40	31.70	09316
09317	Ditto (1A/301), ditto.....	365.80	13.40	23.10	53.60	09317
09318	Aluminium alloy closed or open end track bracket for face or soffit fixing (9A/290, 3A/290 or 4A/290), screwed to wood or plugged and screwed to wall, beam, lintol and the like.....	151.80	9.30	15.80	36.60	09318
09319	Ditto (9A/301, 3A/301 or 4A/301), ditto.....	296.10	14.60	23.10	56.10	09319
09320	Add to either of Items 09316 - 09319 inclusive for fixing with 8 mm rawbolt including drilling hole in concrete, brick, stone or other surface and make good.....	31.60	4.10	7.30	15.90	09320
09321	Ditto but with 12 mm rawbolt.....	43.10	5.70	9.30	21.90	09321
09322	Four wheel hanger and adjustable split sprons (53 K).....	359.00	9.80	15.80	39.00	09322
09323	Ditto (53 A).....	796.00	9.80	15.80	39.00	09323
09324	Two wheel swivel hanger with nylon wheels concealed fixing (21 K).....	638.00	10.00	16.60	40.20	09324
09325	Ditto (21 A).....	845.00	9.80	15.80	39.00	09325
09326	Four wheel swivel hanger with nylon wheels concealed fixing (21 K/4).....	670.10	10.00	17.10	39.00	09326
09327	Ditto (21 A/4).....	955.90	10.00	17.10	39.00	09327
09328	Two wheel swivel end hanger face fixing (63 KX).....	510.10	9.80	15.80	39.00	09328
09329	Ditto (63 X).....	764.30	9.80	15.80	39.00	09329
09330	Two wheel swivel intermediate hanger face fixing (62 KX).....	556.50	13.40	23.10	53.60	09330
09331	Ditto (62 X).....	810.60	13.40	23.10	53.60	09331

Item	SLIDING DOOR GEAR (CONT'D)					Item
	(Note : - The following items are based on Messrs. P C Henderson Limited's equipment but the rates shall apply equally to similar items from any other approved manufacturer.) (cont'd)	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Each</i>	A \$	B \$	C \$	D \$	
09332	Brass roller guide light duty (106 R/94).....	94.90	4.40	8.00	17.10	09332
09333	Ditto face fixed heavy duty (102 ½R/97).....	264.50	5.10	8.50	20.70	09333
09334	Ditto face fixed (105 R/89).....	203.80	4.40	7.60	17.10	09334
09335	Flush fold guide (21 KR/94).....	143.10	6.80	12.20	26.80	09335
09336	Face fixed end fold guide (68/89).....	190.10	4.40	7.30	17.10	09336
09337	Face fixed intermediate fold guide (67 /89).....	279.00	6.80	12.20	29.30	09337
	METAL CURTAIN TRACKS					
	<i>Per linear metre</i>					
09338	Brass curtain track including brackets for top or face fixing at not more than 400 mm centres, all overlap brackets, end stops and thirteen runners per linear metre.....	61.10	2.20	5.10	12.20	09338
09339	Aluminium curtain track including ditto.....	48.10	2.20	5.10	12.70	09339
09340	Brass valance rail including brackets at not more than 400 mm centres and thirteen hooks per linear metre	26.80	1.70	4.10	9.80	09340
09341	Aluminium valance rail including ditto.....	22.30	1.70	4.10	9.80	09341
09342	Approved hospital curtain tracks.....	521.80	3.20	7.30	17.10	09342
	<i>Replacement parts only : -</i>					
	<i>Each</i>					
09343	Bracket only to brass or aluminium curtain track.....	20.10	0.90	1.90	4.90	09343
09344	Double bracket at overlap to ditto.....	25.00	1.00	2.20	5.60	09344
09345	End stop only to ditto.....	6.10	0.30	0.70	1.50	09345
09346	Runner only to ditto including removing and replacing end stop as necessary.....	10.30	1.20	2.40	6.10	09346
09347	Bracket only to brass or aluminium valance rail.....	20.10	1.00	1.90	4.90	09347
09348	Hook only to ditto.....	4.20	0.30	0.70	1.70	09348

Item	CORD OPERATED CURTAIN TRACKS					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A	B	C	D	
		\$	\$	\$	\$	
	<i>Per linear metre</i>					
09349	Proprietary metal curtain track with baked enamel finish regular duty rail for ceiling and wall mounting ; overall height in 20 mm ; for one-way or two way or multiple draw ; can be angular bent using 8 inches radius or circular curved ; can withstand max. fabric weight at 16 pounds for one-way draw and 30 pounds for two-way draw ; including brackets at 900 mm (maximum) centres for top or face fixing, centre overlap and master slides, end brackets and ten sliders per linear metre (pulley set measured separately).....	51.10	2.70	6.10	14.60	09349
09350	Proprietary metal curtain track with baked enamel finish double duty rail for ceiling, wall and recessed mounting ; in 22 gauge steel (0.03 inch) thickness ; overall height in 25 mm ; with extra strong and rugged deluxe traverse line and flange construction provides extra strength ; for one-way or two way or multiple draw ; can be angular bent using 8 inches radius or circular curved ; can withstand maximum fabric weight at 30 pounds for one-way draw and 45 pounds for two-way and multiple draw ; including brackets at 900 mm (maximum) centres for top or face fixing, featuring with push-in style brackets for fast mounting, centre self-lubricating overlap and master slides, concealed cord, end brackets and ten sliders per linear metre (pulley set measured separately).....	52.80	2.70	6.10	14.60	09350
	<i>Replacement parts only : -</i>					
	<i>Each</i>					
09351	Pulley set complete with cords to regular duty rail.....	24.50	1.10	2.40	6.10	09351
09352	Ditto but to double duty rail.....	24.50	1.10	2.40	6.10	09352
09353	Bracket only to regular duty rail.....	7.20	0.90	1.70	4.40	09353
09354	Ditto but to double duty rail.....	8.10	0.90	1.70	4.40	09354
09355	Slider for regular or double duty rail.....	4.30	0.40	1.00	2.20	09355
09356	Master slide to regular duty rail.....	5.60	0.50	1.10	2.70	09356
09357	Ditto but to double duty rail.....	5.60	0.50	1.10	2.70	09357
	<i>Per linear metre</i>					
09358	Aluminium curtain track, size 25 x 19 mm, including aluminium brackets at 900 mm (maximum) centres for top or face fixing, centre overlap and master slides, end brackets and ten sliders per linear metre including pulley set.....	82.40	2.70	6.10	14.60	09358
09359	Ditto but double duty rail or other approved.....	82.40	2.70	6.10	14.60	09359

Item	CORD OPERATED CURTAIN TRACKS (CONT'D)					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A	B	C	D	
		\$	\$	\$	\$	
	<i>Replacement parts only :-</i>					
	<i>Each</i>					
09360	Pulley set complete with cords to regular duty rail.....	41.30	1.10	2.40	6.10	09360
09361	Ditto but to double duty rail.....	41.30	1.10	2.40	6.10	09361
09362	Bracket only to regular duty rail.....	6.10	0.90	1.90	4.40	09362
09363	Ditto but to double duty rail.....	6.10	0.90	1.90	4.40	09363
09364	Slider for regular or double duty rail.....	5.10	0.40	1.00	2.20	09364
09365	Master slide to regular duty rail.....	12.50	0.60	1.20	2.70	09365
09366	Ditto but to double duty rail.....	12.50	0.60	1.20	2.70	09366
09367	Tension pulley.....	36.50	1.10	2.40	6.10	09367
	MOSQUITOES/FLY SCREENS					
	Mosquitoes or fly screens of approved gauge and mesh size in any colour coating or finish :-					
	<i>Per square metre</i>					
09368	Plastic coated glass fibre mosquitoes or fly screens fixed to wood or metal frames with or without beads (beads measured separately).....	50.70	5.70	11.50	29.30	09368
09369	Brass mosquitoes or fly screens ditto.....	141.30	5.70	11.50	29.30	09369
09370	Aluminium mosquitoes or fly screens ditto.....	120.90	5.70	11.50	29.30	09370
09371	Stainless steel mosquitoes or fly screens ditto.....	255.50	5.70	11.50	29.30	09371
	(Note :- The above Item A of Item 09371 will only be paid for, if ordered by the Maintenance Surveyor in writing.)					
	ROLLER TYPE MOSQUITOES/FLY SCREENS					
	Mosquitoes or fly screen of approved gauge and mesh size in any colour coating or finish :-					
	<i>Per square metre</i>					
09372	Aluminium vertical sliding roller retractable flyscreen comprising a roller cassette and side channels with aluminium pull down bar on heavy duty fiberglass flyscreen mesh including catch and all necessary ironmongery.....	817.50	5.70	11.50	29.30	09372
09373	Ditto but horizontal sliding roller type.....	810.70	5.70	11.50	29.30	09373

Item	SUNDRIES					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A	B	C	D	
		\$	\$	\$	\$	
	<i>Per linear metre</i>					
09374	12.70 mm Wide x 6.40 mm thick plastic foam self-adhesive draught excluder strip fixed to door edge, window edge or similar position.....	9.70	1.50	-	7.30	09374
09375	Plastic foam self adhesive strip size 15 x 3 mm fixed to window or door edge.....	26.40	1.50	-	7.30	09375
09376	Vinyl plastic handrail capping to 50 mm core rail.....	45.30	5.40	12.20	29.30	09376
09377	Rubber speed reduction ramp including end caps and anchor bolts.....	972.30	17.10	29.30	68.20	09377
	<i>Per set</i>					
09378	Proprietary ball bearing slides 483 mm long inset/horizontal type and soft closing mechanism flipper to cupboard door complete with slides, pivoted arms and all necessary fittings and furniture.....	1,106.00	24.40	39.00	97.50	09378
	REPAIRS TO LOCKS, LATCHES AND FURNITURE					
	<i>Each</i>				A	
					\$	
09379	Oil only lock or latch complete with furniture or hinge in position including ease and adjust keep or striking plate.....				3.30	09379
09380	Repair lock or latch including providing any new parts required (taking down and re-fixing lock measured separately if required).....				38.20	09380
09381	Pick lock.....				20.50	09381
09382	Provide two new keys to lock each complete with chromium plated stamped label and split ring (taking down and re-fixing lock measured separately if required).....				24.20	09382
09383	Provide new key to cylinder lock from pattern of old complete with ditto (ditto).....				13.10	09383
09384	Provide and fix grub screw to ball or lever handle.....				5.50	09384
09385	Ditto but including drilling out remains of old or drilling and tapping new hole for the same.....				16.50	09385
09386	Stamp letter or number 3 mm high on key or lock face plate (measured per letter or number).....				1.10	09386
09387	Obliterate old letter or number on key or lock face plate (measured per article).....				2.10	09387
09388	Provide and fix spindle of any length to mortice or rim lock, or latch, including taking off and existing furniture as necessary re-fixing.....				20.50	09388
09389	Provide and fix 25 mm diameter x 1.50 mm plastic disc to key with split ring and engraved with letters or numbers.....				8.30	09389
09390	Provide and fix wrot iron black japanned box staple for rim lock.....				31.00	09390
09391	Provide and fix brass keep for dead lock.....				13.20	09391
09392	Provide and fix brass striking plate for lock or latch.....				13.20	09392

Item	TRANSLUCENT FILM SIGNAGE											Item	
	Signage comprising graphics, logos, letters, numbers, Chinese characters, full stops, commas, and the like, cut from self adhesive translucent films and fixed on metal, plastic, or glass surfaces :- <i>Each</i>	Size (m ²)											
		n.e. 0.10	0.10 - 0.20	0.20 - 0.30	0.30 - 0.40	0.40 - 0.50	0.50 - 0.60	0.60 - 0.70	0.70 - 0.80	0.80 - 0.90	0.90 - 1.00		1.00 - 1.50
	A \$	B \$	C \$	D \$	E \$	F \$	G \$	H \$	I \$	J \$	K \$		
09393	Translucent film signage to existing plastic, glass and metal surfaces.....	126.90	171.80	218.30	264.90	311.40	358.00	404.60	451.20	497.70	544.30	698.50	09393
	SILKSCREEN SIGNS												
	Silkscreen printed signs comprising graphics, logos, letters, numbers, Chinese characters, full stops, commas, and the like :- <i>Each</i>												
09394	Silkscreen printing to existing plastic surfaces.....	29.60	54.60	79.80	104.80	130.80	155.00	180.10	205.10	230.30	255.30	387.50	09394
09395	Ditto to existing glass surfaces.....	29.60	54.60	79.80	104.80	130.80	155.00	180.10	205.10	230.30	255.30	387.50	09395
09396	Ditto to existing metal surfaces.....	29.60	54.60	79.80	104.80	130.80	155.00	180.10	205.10	230.30	255.30	387.50	09396
09397	Silkscreen printing with 3 mm thick white or coloured plastic sheet.....	35.90	74.00	112.10	149.70	187.40	225.90	264.20	302.30	341.00	379.50	548.90	09397
09398	Ditto but with 6 mm thick white or coloured plastic sheet.....	41.90	92.70	144.90	197.10	249.30	301.20	352.30	402.50	452.70	501.10	711.90	09398
09399	Ditto but with 10 mm thick white or coloured plastic sheet.....	50.20	118.30	186.40	252.80	322.50	390.70	458.70	528.50	596.50	666.40	924.10	09399
09400	Ditto but with 12.5 mm thick white or coloured plastic sheet.....	54.60	130.10	207.10	285.90	361.20	439.90	515.30	594.00	671.10	748.10	1,034.50	09400
09401	Silkscreen printing with 1.5 mm thick hairline stainless steel plate.....	46.50	107.00	165.90	224.70	285.40	346.00	404.80	463.70	524.20	583.20	820.10	09401
09402	Ditto but with 3 mm thick hairline stainless steel plate.....	64.10	158.80	252.80	346.60	440.50	534.50	631.90	722.40	816.40	910.30	1,262.60	09402
09403	Ditto but with 1.5 mm thick mirror finished stainless steel plate.....	46.70	107.90	169.30	228.80	288.30	349.70	410.90	468.70	530.00	589.50	828.60	09403
09404	Ditto but with 3 mm thick mirror finished stainless steel plate.....	64.10	159.70	256.00	350.70	445.20	538.20	632.70	727.40	818.50	913.20	1,264.00	09404
09405	Silkscreen printing with 1.5 mm thick aluminium plate.....	36.00	75.00	113.80	152.80	189.10	230.10	268.30	308.30	348.40	388.20	555.00	09405
09406	Ditto but with 3 mm thick aluminium plate.....	42.70	95.60	148.60	201.70	254.60	306.90	360.60	410.90	463.20	516.20	732.00	09406

Item	PLASTIC SIGNS	Thickness (mm)						Item
		3	4.5	6	8	10	12.5	
		A	B	C	D	E	F	
	<i>Per square metre</i>	\$	\$	\$	\$	\$	\$	
09407	Clear, white or coloured acrylic sheet.....	108.50	162.80	203.50	282.30	361.30	437.30	09407
09408	Ditto but with matt finish.....	119.40	179.00	223.80	310.50	397.40	480.90	09408
09409	Clear, white or coloured acrylic sheet fixed with adhesive as laminated cover or backing sheet.....	115.30	169.50	210.20	282.30	369.40	449.00	09409
09410	Ditto but with matt finish.....	126.10	185.90	230.50	310.50	405.50	598.90	09410
	<i>Per linear metre</i>							
09411	Cutting only acrylic sheet for features, graphics, etc. other than those measured elsewhere.....	5.80	6.10	6.30	6.60	7.30	11.00	09411

Item	PLASTIC SIGNS (CONT'D)	Size (m ²)										Item					
		n.e. 0.10	0.10 - 0.20	0.20 - 0.30	0.30 - 0.40	0.40 - 0.50	0.50 - 0.60	0.60 - 0.70	0.70 - 0.80	0.80 - 0.90	0.90 - 1.00		1.00 - 1.50				
		A \$	B \$	C \$	D \$	E \$	F \$	G \$	H \$	I \$	J \$		K \$				
	<i>Each</i>																
09412	Engraved plastic sign face complete with letters, numbers, characters, graphics, punctuations and the like, 3 mm thick.....	68.70	137.40	206.00	274.70	343.50	412.20	480.80	549.50	618.20	686.90	1,030.30	09412				
09413	Ditto but 6 mm thick.....	82.10	157.70	240.00	322.10	404.50	486.60	568.90	651.10	733.20	815.60	1,199.50	09413				
09414	Plastic sign complete with cut through letters, numbers, characters, graphics, punctuations and the like, 3 mm thick.....	83.10	164.50	246.00	329.10	412.20	495.30	576.70	659.80	741.10	824.20	1,031.10	09414				
09415	Ditto but through 4.50 mm thick sheet	91.60	176.40	266.30	357.90	449.40	539.30	629.30	720.90	810.70	902.30	1,116.00	09415				
09416	Ditto but through 6.00 mm thick sheet	98.40	189.90	288.40	386.70	485.10	583.40	683.50	781.80	880.30	978.60	1,199.10	09416				
09417	Ditto but through 10.00 mm thick sheet	108.60	208.60	318.90	427.40	536.00	644.50	754.80	863.30	971.80	1,082.00	1,324.60	09417				
09418	Ditto but through 12.50 mm thick sheet	120.50	230.60	351.10	471.40	591.90	712.40	832.70	953.20	1,073.50	1,195.70	1,465.30	09418				
	Plastic signs in letter, number or Chinese character : -	Height (mm)															
	<i>Each</i>	15	20	25	30	40	50	75	100	125	150	175	200	250	300	350	
		A \$	B \$	C \$	D \$	E \$	F \$	G \$	H \$	I \$	J \$	K \$	L \$	M \$	N \$	O \$	
09419	Letter or number cut from 3.00 mm thick sheet and fixed with adhesive	3.50	4.20	5.10	6.10	8.20	10.20	15.30	20.40	25.40	30.50	35.60	40.70	50.90	61.10	71.20	09419
09420	Ditto but from 4.50 mm thick sheet ditto	5.50	6.80	7.60	9.10	12.20	15.30	22.90	30.50	38.10	45.80	53.50	61.10	76.30	91.60	106.80	09420
09421	Ditto but from 6.00 mm thick sheet ditto.....	-	-	10.20	12.20	16.30	20.40	30.50	40.70	50.90	61.10	71.20	81.40	101.80	122.10	142.50	09421
09422	Ditto but from 10.00 mm thick sheet ditto	-	-	-	-	-	33.90	50.90	67.90	84.80	101.80	118.70	135.70	169.60	203.60	237.50	09422
09423	Ditto but from 12.50 mm thick sheet ditto	-	-	-	-	-	-	84.80	106.00	127.20	148.40	169.60	212.10	254.50	296.90		09423
09424	Chinese character cut from 3.00 mm thick sheet and fixed with adhesive	6.20	7.60	8.70	10.20	13.50	17.00	25.40	33.90	42.40	50.90	59.40	67.90	84.80	101.80	118.70	09424
09425	Ditto but from 4.50 mm thick sheet ditto	9.30	11.10	12.90	15.30	20.40	25.40	38.10	50.90	63.60	76.30	89.00	101.80	127.20	152.70	178.10	09425
09426	Ditto but from 6.00 mm thick sheet ditto.....	-	-	17.30	20.80	27.80	34.80	52.30	69.60	87.00	104.40	121.80	139.00	173.80	208.60	243.40	09426

Item	PLASTIC SIGNS (CONT'D)															Item							
	Plastic signs in letter, number or Chinese character : - (cont'd)																						
	Height (mm)																						
	15	20	25	30	40	50	75	100	125	150	175	200	250	300	350								
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O								
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$								
09427	Chinese character cut from 10.00 mm thick sheet and fixed with adhesive															09427							
	-	-	-	-	-	57.70	86.60	115.30	144.20	173.00	201.90	230.60	288.40	346.00	403.70								
09428	Ditto but from 12.50 mm thick sheet ditto															09428							
	-	-	-	-	-	-	-	144.20	180.30	216.20	252.40	288.40	360.40	432.50	504.60								
	Height (mm)																						
							500	600	700	800	900	1000											
							A	B	C	D	E	F											
							\$	\$	\$	\$	\$	\$											
09429	Letter or number cut from 8 mm thick plastic sheet with studs.....						549.50	659.40	769.30	879.20	989.20	1,099.00				09429							
09430	Ditto but from 10.00 mm thick sheet.....						580.10	696.10	812.00	928.10	1,044.00	1,160.10				09430							
09431	Ditto but from 12.50 mm thick sheet.....						610.60	732.70	854.90	976.90	1,099.00	1,221.20				09431							
09432	Chinese characters cut from 8 mm thick plastic sheet with studs.....						702.20	842.60	983.00	1,123.50	1,263.90	1,404.30				09432							
09433	Ditto but from 10.00 mm thick sheet.....						732.70	879.20	1,025.80	1,172.30	1,318.90	1,465.30				09433							
09434	Ditto but from 12.50 mm thick sheet.....						763.30	915.80	1,068.50	1,221.20	1,373.70	1,526.40				09434							
	Size (m ²)																						
	n.e.	0.10 -	0.20 -	0.30 -	0.40 -	0.50 -	0.60 -	0.70 -	0.80 -	0.90 -	1.00 -												
	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.50												
	A	B	C	D	E	F	G	H	I	J	K												
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$												
09435	Take down and clear away plastic sheet sign from any position.....											1.30	1.90	2.70	3.20	4.10	4.90	5.60	6.10	6.80	7.30	8.00	09435
09436	Take down and set aside for re-use ditto.....											2.90	4.40	6.10	7.30	9.30	10.20	12.20	13.40	15.10	17.10	18.30	09436
09437	Fix only ditto.....											7.30	11.00	14.60	18.30	21.90	24.40	29.30	31.70	34.60	39.00	43.90	09437
09438	Take down and clear away letters, numbers or Chinese characters of any size cut from plastic sheet from any position															A	\$	2.70	09438				
09439	Take down and set aside for re-use ditto																	6.10	09439				
09440	Fix only ditto																	14.60	09440				

Item	METAL SIGNS															Item	
	Metal signs in letter, number or Chinese character :-																
	Height (mm)																
	15	20	25	30	40	50	75	100	125	150	175	200	250	300	350		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
<i>Each</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
09441	Letter or number cut from 3.00 mm thick anodized aluminium sheet fixed with adhesive or screws	20.40	27.20	33.90	40.70	54.30	67.90	101.80	135.70	169.60	203.60	237.50	271.40	339.20	407.00	474.90	09441
09442	Ditto but from 6.00 mm thick sheet ditto	-	-	42.40	50.90	67.90	84.80	127.20	169.60	212.10	254.50	296.90	339.20	424.00	508.80	593.60	09442
09443	Chinese character cut from 3.00 mm thick anodized aluminium sheet fixed with adhesive or screws	25.40	33.90	42.40	50.90	67.90	84.80	127.20	169.60	212.10	254.50	296.90	339.20	424.00	508.80	593.60	09443
09444	Ditto but from 6.00 mm thick sheet ditto	30.50	40.70	50.90	61.10	81.40	101.80	152.70	203.60	254.50	305.40	356.10	407.00	508.80	610.60	712.40	09444
09445	Letter or number cut from 3.00 mm thick brass sheet fixed with adhesive or screws	30.50	40.70	50.90	61.10	81.40	101.80	152.70	203.60	254.50	305.40	356.10	407.00	508.80	610.60	712.40	09445
09446	Ditto but from 6.00 mm thick sheet ditto.....	-	-	63.60	76.30	101.80	127.20	190.80	254.50	318.00	381.60	445.20	508.80	636.00	763.30	890.40	09446
09447	Chinese character cut from 3.00 mm thick brass sheet fixed with adhesive or screws	39.00	50.90	63.60	76.30	101.80	127.20	190.80	254.50	318.00	381.60	445.20	508.80	636.00	763.30	890.40	09447
09448	Ditto but from 6.00 mm thick sheet ditto	45.80	61.10	76.30	91.60	122.10	152.70	229.00	305.40	381.60	457.90	534.30	610.60	763.30	915.80	1,068.50	09448
		Height (mm)															
		500	600	700	800	900	1000										
		A	B	C	D	E	F										
<i>Each</i>		\$	\$	\$	\$	\$	\$										
09449	Letter or number cut from 8 mm thick aluminium sheet with studs including baked paint finish and screws.....	881.90	1,058.30	1,234.70	1,411.10	1,587.50	1,763.90										09449
09450	Ditto but from 10 mm thick sheet.....	949.70	1,139.70	1,329.70	1,519.70	1,709.60	1,899.50										09450
09451	Ditto but from 12 mm thick sheet.....	1,017.60	1,221.20	1,424.60	1,628.20	1,831.60	2,035.20										09451
09452	Chinese characters cut from 8 mm thick aluminium sheet with studs including baked paint finish and screws.....	1,051.50	1,261.90	1,472.20	1,682.40	1,892.70	2,103.10										09452
09453	Ditto but from 10 mm thick sheet.....	1,119.40	1,343.20	1,567.10	1,791.00	2,014.80	2,238.80										09453
09454	Ditto but from 12 mm thick sheet.....	1,187.30	1,424.60	1,662.10	1,899.50	2,137.00	2,374.40										09454

Item	METAL SIGNS (CONT'D)	Size (m ²)										Item		
		n.e. 0.10	0.10 - 0.20	0.20 - 0.30	0.30 - 0.40	0.40 - 0.50	0.50 - 0.60	0.60 - 0.70	0.70 - 0.80	0.80 - 0.90	0.90 - 1.00		1.00 - 1.50	
		A \$	B \$	C \$	D \$	E \$	F \$	G \$	H \$	I \$	J \$		K \$	
	<i>Each</i>													
09455	Acid etched stainless steel sign face, 1.5 mm thick.....	74.50	158.30	242.00	325.80	409.40	493.10	577.00	660.70	744.40	828.10	1,177.30		09455
09456	Take down and clear away metal signs from any position.....	1.70	2.40	3.20	3.90	4.40	5.10	5.60	6.30	7.30	8.00	8.80		09456
09457	Take down and set aside for re-use ditto.....	2.90	3.90	5.40	6.30	7.30	8.50	9.80	11.00	12.20	13.40	14.60		09457
09458	Fix only ditto.....	7.60	10.00	12.40	15.80	18.20	20.70	25.50	28.00	31.60	34.00	36.40		09458
	<i>Each</i>												A \$	
09459	Take down and clear away letters, numbers or Chinese characters of any size cut from metal sheet from any position												6.80	09459
09460	Take down and set aside for re-use ditto												11.00	09460
09461	Fix only ditto												29.10	09461
	FLAG POLES													
	Proprietary aluminium flag poles systems complete with all necessary accessories in accordance with the manufacturer's recommendations :-								Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only		
	<i>Each</i>							A \$	B \$	C \$	D \$			
09462	Proprietary 14 metre high aluminium flag pole ground anchored (concrete footing measured separately)							43,824.90	43.00	128.90	754.90			09462
09463	Ditto but 12 metre high							33,545.00	34.40	114.60	725.80			09463
09464	Ditto but 9 metre high							24,347.20	28.60	100.30	711.30			09464
09465	7 metre High aluminium flag pole wall mounted including fixing brackets and stainless steel anchor bolts							21,039.10	28.60	71.60	529.80			09465
09466	Ditto but 6 metre high							19,748.30	22.90	57.30	515.30			09466
	Replacement parts only :-													
	<i>Each</i>													
09467	Internal halyard, pulleys. etc. for 12 metre high aluminium flag pole including taking down and clear away existing							2,696.00	7.20	21.50	139.50			09467
09468	Ditto but for 9 metre high flag pole							2,396.40	5.70	20.10	125.00			09468
09469	External halyard, pulleys. etc. for 6 or 7 metre high flag pole							2,225.30	5.70	18.60	95.90			09469

IRONMONGERY

09455 - 09469

Item	PROJECTOR SCREEN		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	Item
	Proprietary projection screen including all necessary accessories in accordance with the manufacturer's recommendations : -						
	Each		A \$	B \$	C \$	D \$	
09470	Proprietary projector screen, manually operated size : 1,780 x 1,780 mm		2,765.30	73.10	78.00	141.40	09470
09471	Proprietary projector screen, electrically operated size : 1,600 x 2,130 mm		11,757.40	134.00	136.50	316.80	09471
	TRAFFIC BARRIER SYSTEM						
	Note :- (i) Traffic barrier system shall be installed complete with all fittings, accessories, anchorages, supports, etc. and testing all in accordance with the manufacturer's recommendations. (ii) Provide all shop drawings and manufacturer's guarantee. (iii) Provide connection point for power supply (power supply to be executed by Electrical Contractor).						
	Proprietary traffic barrier system : -						
	Per set		A \$	B \$	C \$		
09472	Supply and fix traffic barrier system complete with gate arm and ON/OFF push button		28,845.20	29,421.30	29,874.60		09472
09473	Take down and clear away traffic barrier system			195.00	207.20	219.30	09473
09474	Take down and set aside for re-use ditto			292.50	316.80	341.20	09474
09475	Fix only ditto			584.90	609.30	633.60	09475

Item	HOLLOW METAL SIGNS										Item
Hollow metal signs:-											
Height (mm)											
500 600 700 800 900 1000 1100 1200 1300 1400 1500											
A B C D E F G H I J K											
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$											
09476	Letter or number cut and formed from stainless steel sheet not less than 1.2 mm thick with covered edge, fixed at any height including all necessary fixing accessories.....										09476
09477	Ditto but Chinese character										09477
09478	Letter or number cut and formed from anodized aluminium sheet not less than 2 mm thick with covered edge, fixed at any height including all necessary fixing accessories.....										09478
09479	Ditto but Chinese character										09479
Size (m²)											
n.e. 0.25 - 0.50 - 0.75 - 1.00 - 1.50 - 2.00 - 2.50 - 3.00 - 4.00 - 5.00 - 6.00											
0.25 0.50 0.75 1.00 1.50 2.00 2.50 3.00 4.00 5.00 6.00											
A B C D E F G H I J K											
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$											
09480	Logo or signage cut and formed from stainless steel sheet not less than 1.2 mm thick with covered edge, including moulding, graphic finish, fixed at any height and all necessary fixing accessories.....										09480
09481	Ditto but cut and formed from anodized aluminium sheet not less than 2 mm thick.....										09481
Add to Items 09476 to 09481 inclusive for the supply of powder coated and baked paint finish										20%	

Section 10

STEEL AND METAL WORK

STEEL AND METAL WORK

SPECIAL CONDITIONS

Measurement of hoardings, and walkways

- I. Throughout this Schedule, rates for all trades shall include for all temporary preventive and protective measures necessary for the execution of the work, such as to protect new work or existing surfaces, and to protect the public from harm, dust or nuisance. No payment will be made for hoardings and walkways under any circumstances, with the following exceptions : -
- (a) Hoardings and walkways are specifically ordered by the Maintenance Surveyor in writing and stating that the hoarding and walkways are for the exclusive use of the Employer and other contractor employed by the Employer within the Works Order period.

In the event that the hoardings and walkways mentioned in sub-clause (a) above are subsequently used as preventive and protective measures by the Contractor himself, no payment will be made.

The hoardings and walkways shall be measured the length on plan as fixed.

No measurement or adjustment shall be made for concrete footings or anchor bolts.

Measurement of temporary work - Fire protection enclosure materials

- II. Throughout this Schedule, rates for all trades shall include for all temporary preventive and protective measures necessary for the execution of the work such as to protect new work or existing surfaces, and to protect the public from harm, dust or nuisance. No payment will be made for such work except additional requirement of fire protection enclosure materials are specifically ordered by the Maintenance Surveyor in writing.

Measurement of steel shoring

- III. Steel strutting, shoring, supporting and protective measures for the face of excavation have been allowed in the rates of Section 01 - Excavation in this Schedule. No payment will be made for these measures under any circumstance, with the following exception : -
- (a) Steel strutting, shoring, bracings, supporting and the like in respect of the steel sheet piling. Steel sheet piling must be specifically ordered by the Maintenance Surveyor in writing.

Steel sections shall be measured the total weight as fixed. No deduction shall be made for bolt holes, splays, notches and the like. The weight of the bolts and nuts shall be added.

Measurement by weight

- IV. Structural steel work and metal work shall normally be measured by weight and shall be calculated in the following order of preference : -
- (1) Measurements of the structural steel sections and metal sections and reference to
- (a) Tables in Memoranda in this Schedule.
- (b) Tables in British Standards or similar documents.
- (c) Tables in manufacturer's catalogues or similar documents.
- (d) Unit weights calculated from the mass per cubic metre given in Memoranda in this Schedule.
- or
- (2) Weighed by the Contractor in the presence of the Maintenance Surveyor before fixing, and in default of this, shall be taken out, weighed and re-fixed by the Contractor at his own expense.

Measurement of structural steel work

- V. Structural steel work shall be paid only when it is specifically ordered by the Maintenance Surveyor in writing. Surface protection to structural steel shall be measured separately in Section 15 - Painting of this Schedule.

SPECIAL CONDITIONS (CONT'D)

VI.	<p>Metal sections shall be measured the length as fixed with square ends and the weight calculated.</p> <p>No deduction shall be made for rivet, screw and bolt holes, and notches or slots.</p>	Measurement of metal sections
VII.	<p>Mild steel (plain or galvanized) plate, when exceeding 300 mm wide and not exceeding 3 mm thick shall be measured as sheet metal. When exceeding 3 mm thick, the same shall be measured as "flat bar" or "plate".</p>	Measurement of sheet, flat bar or plate
VIII.	<p>Sheet metal work shall be measured the area as fixed and the weight calculated. No deduction shall be made for openings not exceeding 0.50 m². No addition shall be made for rivets, screws, nuts, bolts and the like.</p> <p>Perforated sheet metal work shall be measured the area as fixed and the weight calculated. No deduction shall be made for openings not exceeding 0.50 m² or perforations of the manufactured sheet.</p> <p>Sheet or perforated sheet metal work shall include all sheet metal formed in any shape, pattern, graphics, etc. and the like.</p>	Measurement of sheet metal
IX.	<p>Collapsible gate shall be measured the net weight calculated. No deduction shall be made for bolt holes, splays, notches and the like. The weight of bolts, nuts, rivets, spacers, fixing lugs and the like, except ironmongeries, shall be added.</p>	Measurement of collapsible gate
X.	<p>Items throughout the Steel and Metal Work Section include generally for all sundry labours, welding and hexagonal headed steel bolt. Items of sundry repairs will not be measured except in special circumstances where :-</p> <p>(a) The material on which the labour, welding or hexagonal headed steel bolting is required to be executed, is not itself being paid for; or the payment of fixing of that material.</p> <p>(b) Labour, welding or hexagonal headed steel bolting is required to be executed to existing material in position.</p>	Measurement of sundry repairs
XI.	<p>Corrugated and profiled sheet cladding (other than corrugated or profiled steel sheet roofing under Section 05 - Roofing of this Schedule) shall be measured flat (not girth on corrugations or profiles) over the net area covered with no allowance for laps. No deduction shall be made for openings not exceeding 0.50 m². Cladding to a radius not exceeding 15.00 m along the corrugation or profile shall be measured as "curved work".</p> <p>All purlins and sub-frame shall be measured separately.</p>	Measurement of corrugated and profiled sheet cladding
XII.	<p>Shutters shall be measured as the net area of the clear opening with reference to drawing or reference to manufacturer's catalogue excluding any enclosures to the shutter frames, linings, tracks, rails, hoods and the like.</p> <p>"Extra over" for wicket door shall be measured the overall size of door.</p>	Measurement of shutters
XIII.	<p>"Take down and set aside for re-use" of existing shutters for repairs shall generally be measured as net affected area.</p> <p>The affected area means the damaged area including the individual module of each affected slat or panel.</p>	Measurement of "Take down and set aside for re-use" of shutters for repairs
XIV.	<p>Cast iron, brass, copper, and gunmetal articles shall be measured the net weight as cast and finished ready for fixing.</p>	Measurement of cast iron, brass, copper and

SPECIAL CONDITIONS (CONT'D)

Measurement of metal windows and doors generally	XV.	<p>Metal windows and doors shall generally be measured net area of the structural opening of the windows and doors as fixed.</p> <p>“Extra over” for opening sashes or doors shall be measured the overall size of the opening sashes or doors.</p> <p>Glazing to metal windows and doors shall be measured separately in Section 14 - Glazing of this Schedule.</p>
Measurement of “Take down and clear away” or “Take down and set aside for re-use” metal window or door	XVI.	<p>“Take down and clear away” or “Take down and set aside for re-use” of existing window and door shall generally be measured net area of the structural opening of the window and door as fixed. No separate measurement will be made for openable sash, ironmongery, fixing lugs, dowels, etc. and the like.</p>
Measurement of galvanised steel works	XVII.	<p>Measurement of galvanised mild steel works shall include all processes of galvanising in accordance with G.S. Items 15.63 and 17.02 for all raw materials and factory manufactured products.</p>
Measurement of galvanizing, electro-plating and chromium plating	XVIII.	<p>Galvanizing, electro-plating and chromium shall be measured when the work has been fabricated on Site or off Site with further processing on Site required and is specifically ordered by the Maintenance Surveyor in writing. No payment will be made for proprietary or factory manufactured products.</p>
Measurement of “Zinc sprayed” or “Hot dipped” galvanising	XIX.	<p>“Zinc sprayed” or “hot dipped” galvanising shall only be measured when the mild steel work has been fabricated (not factory manufactured products) and it is specifically ordered in writing by the Maintenance Surveyor.</p>
Measurement of solid/composite aluminium wall cladding	XX.	<p>Solid/composite aluminium wall cladding shall be measured net on the area to be cladded. No deduction shall be made for opening not exceeding 0.50 m². No measurement for additional materials required for bending, rolling edges, returns, etc. and the like shall be made.</p>
Measurement of curtain walls	XXI.	<p>Curtain walls shall be measured plan area of the curtain wall as fixed. No deduction shall be made for opening not exceeding 0.50 m².</p>
Measurement of proprietary automatic swing and sliding doors	XXII.	<p>Proprietary automatic swing and sliding doors shall be measured as the plane area of the door panel.</p>
Measurement of slotted angle, tubing and wire rope	XXIII.	<p>Slotted angle, galvanized steel tubing and wire rope shall be measured the net length as fixed.</p>
Measurement of proprietary fire resisting door set	XXIV.	<p>Proprietary fire resisting door set shall be measured the plane area of the door panel.</p>
Measurement of proprietary fire resisting partitions	XXV.	<p>Proprietary fire resisting partitions shall generally be measured the plane area of panels. No deduction shall be made for voids or openings not exceeding 0.50 m². Finishes to the partition shall be measured separately.</p>

SPECIAL CONDITIONS (CONT'D)

- | | |
|---|---|
| <p>XXVI. Wire netting, wire mesh, welded wire mesh, expanded metal and chain link shall be measured the net area covered with no allowance for laps. No deduction shall be made for openings not exceeding 0.50 m².</p> <p>Irregular areas shall be measured the smallest square or rectangle size from which they can be cut.</p> <p>Various meshes sizes shall be measured in accordance with the British Standard unless otherwise specified.</p> | <p>Measurement of wire netting, wire mesh, welded wire mesh, expanded metal and chain link</p> |
| <p>XXVII. The rates shall generally include for any or all of the following as applicable : -</p> <ul style="list-style-type: none"> (a) All straight, raking or circular cutting and waste. (b) Lowering or hoisting to any depth or height and supporting, fitting and fixing various items to new or existing work in any position including the provision of all temporary supports and fastening, and grouting as required. (c) All fabrication, assembling and erection work including riveting, drilling, welding, brazing, either off Site or on Site as required. (d) Providing throughout all ancillary materials for jointing and fixing, such as welding rods, solders, screws and the like. (e) Executing all work to true detail, filing all edges, welds, etc., smoothing, filing off burrs around drilled holes, countersinking all screws, rivet heads and the like when required and finishing work to the satisfaction of the Maintenance Surveyor. (f) Drilling and tapping holes, mortices and the like. (g) Preparing new or existing surface for connection. (h) Allowance for rolling margin. (i) Building in, grouting and bedding, casting in and the application of bonding agents, fillers and sealing materials. (j) Sampling and testing of materials including submission of records. (k) In the case of structural steel, sampling and testing of materials shall further include all necessary security handling of samples, stock management on Site and removal of non-compliant steel sections. (l) Allowance for laps or seams. (m) Providing of prototypes as G.S. Item 17.14. (n) Protecting decorative finishes to metalwork. (o) Allowing all provisions of suitable connection point for equipotential bonding as required by the I.E.E. Wiring Regulations. | <p>Rates generally</p> |
| <p>XXVIII. The rates for hoardings and walkways shall include for : -</p> <ul style="list-style-type: none"> (a) Delivering to and erecting on Site, repairing and maintaining throughout the period of use in first or subsequent positions, and taking down and setting aside for re-erection or clearing away. (b) Providing all materials including poles, struts, wedges, plates, sheeting, bolts and the like. (c) Preparing and applying or touching up paint to all surfaces including writings and logos in single or multi-colour paints. | <p>Rates for hoardings and walkways</p> |

SPECIAL CONDITIONS (CONT'D)

**Rates for
hoardings and
walkways
(Cont'd)**

- XXVIII. (d) Providing and fixing anchor bolts, nuts and washers.
- (e) Provision of concrete footing including associated earthwork, formwork and reinforcement, if required.
- (f) Providing adequate lightings and warning lights, associated power supply and electrical work and payment of all charges incurred.
- (g) Making good any damage caused to pavings and other surfaces during use, erection and taking down.
- (h) Payment for resurfacing of the pavings, roads, drainage system or any other utilities in the event that making good is not allowed to be executed by the Contractor.

**Rates for
temporary work -
fire protection
enclosure
materials**

- XXIX. The rates for temporary work - fire protection enclosure materials shall include for : -
- (a) Working at any level, floor and locations.
- (b) All steel sections adequate for the fire rated period.
- (c) Finishing all fire protective boarding, metal plates, steel sections, etc. and the like with intumescent paint, painting and colour coating.
- (d) All concrete footing, base plate and anchor bolts including nuts and washers.
- (e) Delivering to and erecting on Site, adjusting and maintaining throughout the period of uses, and taking down and setting aside for re-use or removal from Site.
- (f) Providing and forming temporary access door, ironmongeries and door seals.
- (g) Providing, maintaining and clear away after use adequate lighting and warning lights, associated power supply and electrical work and payment of all charges incurred.
- (h) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
- (i) Sealing around edges with intumescent materials.
- (j) Grouting into new or existing mortice or holes.
- (k) Protecting and making good disturbed surfaces.
- (l) Providing test certificate.

**Rates for steel
shoring**

- XXX. The rates for steel shoring shall further include for : -
- (a) Working at any depth, height and locations.
- (b) All steel sections such as round bars, squares, flats, plates, angles, tees, channels, "I" joists, hollow sections and the like.
- (c) All anchor bolts and high friction grip bolts including nuts and washers.
- (d) Any wedges as required.
- (e) Delivering to and erecting on Site, adjusting and maintaining throughout the period of uses, and taking down and setting aside for re-use or removal from Site.
- (f) Design and submission of calculation and working drawings of lateral support including details of connections of walings, strutting, shoring, bracing, posts and splicing of members and sequence of construction and sequence of subsequent removal including endorsement by Registered Structural Engineer.
- (g) Preparing and submitting method statement.

SPECIAL CONDITIONS (CONT'D)

XXX.	<ul style="list-style-type: none"> (h) Cleaning the interface of members to be jointed. (i) Carrying out welding as G.S. Items 15.23 to 15.38. (j) Grouting to joints as required. (k) Protecting and making good existing surfaces disturbed. 	Rates for steel shoring (Cont'd)
XXXI.	<p>The rates for structural steel works shall further include for : -</p> <ul style="list-style-type: none"> (a) Qualification tests for welders as G.S. Item 15.44 and submission of welding record as G.S. Item 15.45. (b) Approval tests of welding as G.S. Item 15.47. (c) Test welded joints by non-destructive testing methods, and employing an approved specialist firm to carry out and interpret these tests all as G.S. Item 15.58. (d) Making good damaged galvanised surfaces as G.S. Items 15.53 and 15.64. (e) Providing manufacturers' certificates as G.S. Item 15.13. (f) Marking for identification on all materials as G.S. Item 15.14, protection from damage and delivery in matching sequence. 	Rates for structural steel works
XXXII.	<p>The rates for mild steel shall further include for : -</p> <ul style="list-style-type: none"> (a) Forging, notching, framing and bending. (b) Pointed, forged, fanged and threaded ends. (c) Mitres angles, ramps and wreaths. (d) Spot, fillet and seam welding. 	Rates for mild steel
XXXIII.	<p>The rates for sheet metal work shall further include for : -</p> <ul style="list-style-type: none"> (a) Notching, dressing, bending and rolled edges. (b) Punching holes. (c) Plugging or drilling existing surfaces. (d) Fixing with an approved adhesive. 	Rates for sheet metal work
XXXIV.	<p>The rates for lining, ducting, gutters, ventilator and the like shall further include for : -</p> <ul style="list-style-type: none"> (a) Notching, dressing, bending and rolled edges. (b) Punching holes. (c) Plugging or drilling existing surfaces. (d) Fixing with an approved adhesive. (e) All bends, ends, inlets, outlets, junctions, connections, flanged joints and the like. (f) Forming perforations (gross weight measured). (g) Fixing to wood or metal framing with or without brackets (framing and brackets measured separately). 	Rates for lining, ducting, gutters, ventilator and the like

SPECIAL CONDITIONS (CONT'D)

**Rates for
collapsible gates**

- XXXV. The rates for collapsible gates shall further include for : -
- (a) Framing to head, jambs, top and bottom guides.
 - (b) Fixing blocks, pickets, diagonal folding iron bars and fixing lugs.
 - (c) Riveted pivot points with brass washers and spacers.
 - (d) Supply and fixing of ball bearing rollers, retaining catches, catch hook, brass pull handles, lock and all necessary ironmongeries.
 - (e) Forming pockets in existing structure, grouting in with cement mortar and making good.

**Rates for bolts
and anchor bolts**

- XXXVI. The rates for bolts and anchor bolts shall further include for : -
- (a) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
 - (b) Grouting into new or existing mortice or holes.
 - (c) Providing and fixing with nuts and washers.
 - (d) Making good disturbed surfaces.
 - (e) Components and devices for grouping and tying anchor bolts to form assemblies of bolts.

**Rates for
corrugated and
profiled sheet
cladding**

- XXXVII. The rates for corrugated and profiled sheet cladding shall further include for : -
- (a) Works at any height and locations.
 - (b) Works to new or existing surfaces in repairs.
 - (c) Forming and including joints and allowing for laps including side and end laps when required.
 - (d) Allowing for cutting, waste and breakage.
 - (e) Sealing at edges, joints and around intersections and projections.
 - (f) All narrow widths and small areas.
 - (g) Providing shop drawings as necessary for the works.
 - (h) Making good affected areas to match existing.
 - (i) Allowing all notching and fitting edges of sheets and mitring corners as required, and all mitred angles, junctions and ends.
 - (j) Drilling holes for and providing all drive screws, self-tapping screws, rivets, bolts, hook bolts, nuts, metal and rubber washers, and plastic caps for fixing to purlins or framing spaced at any interval.
 - (k) Drilling holes to existing or new purlins of framing spaced at any interval for the fixing of corrugated and profiled sheet cladding.
 - (l) Forming holes for pipes or articles.
 - (m) Recommended fixing method in accordance with the manufacturer's instructions.
 - (n) Forming and including movement joints as required.
 - (o) Forming sheets to required curvature.

SPECIAL CONDITIONS (CONT'D)

XXXVIII. The rates for tubular metal work shall further include for : -	Rates for tubular metal work
<ul style="list-style-type: none"> (a) Framing and bending. (b) Cut and welded junctions, angles, tees and cross joints. (c) Flanged or screw fitting connectors. (d) Screw fitting bends, tees, crosses and flanges. (e) Ramps, wreaths and fanged, fair and capped ends. 	
XXXIX. The rates for stainless steel shall further include for : -	Rates for stainless steel
<ul style="list-style-type: none"> (a) Items described as trim or cover strip shall include for cutting to length and mitred angles. (b) Finishing all welds, etc. to match the finish specified. (c) Treatment on surfaces in contact with concrete or dissimilar metals with one coat of bituminous paint on stainless steel surfaces or using an approved tape. 	
XL. The rates for aluminium shall further include for : -	Rates for aluminium
<ul style="list-style-type: none"> (a) Items described as trim or cover strip shall include for cutting to length and mitred angles. (b) Ramps, wreaths and flanged, fair and capped ends. (c) Treatment on surfaces in contact with concrete or dissimilar metals with one coat of bituminous paint on aluminium surfaces or using an approved tape. 	
XLI. The rates for wire netting, wire mesh, welded wire mesh, expanded metal and chain link shall further include for : -	Rates for wire netting, wire mesh, welded wire mesh, expanded metal and chain link
<ul style="list-style-type: none"> (a) All bending and notching required. (b) Allowance for side and end laps. (c) Allowance for spot weld, staples, tying wire, strained wire and the like as required. 	
XLII. The rates for steel windows and doors shall further include for : -	Rates for steel windows and doors
<ul style="list-style-type: none"> (a) Providing steel clamps to all opening lights of casements as G.S. Item 17.32 (o). (b) Providing and fixing galvanised mild steel glazing beads and drips, if required. (c) Providing and fixing galvanised mild steel fixing lugs or anchor bolts as required. (d) Providing and fixing all necessary ironmongeries except torque arm control system. (e) Providing drawings as G.S. Item 17.34. (f) Providing sample as G.S. Item 17.35. (g) Raking joints, pointing, masking, cleaning as G.S. Item 17.36 (i). (h) Making good disturbed surfaces. (i) Protecting and cleaning. 	

SPECIAL CONDITIONS (CONT'D)

**Rates for repairs
to metal windows
and doors**

- XLIII. The rates for repairs to metal windows and doors shall further include for : -
- (a) Cutting at all means.
 - (b) Drilling and tapping to existing framing including riveting and welding.
 - (c) Providing and fixing screws, rivets, etc. and the like.
 - (d) Cutting mortices and grouting in cement mortar and making good disturbed surfaces.
 - (e) Making good disturbed surfaces.
 - (f) Protecting and cleaning.

**Rates for
aluminium
windows and doors**

- XLIV. The rates for aluminium windows and doors shall further include for : -
- (a) Providing all necessary galvanised steel fixing lugs and the like as G.S. Item 17.33 (e).
 - (b) Providing galvanised steel water bars as G.S. Item 17.33 (f).
 - (c) Providing and fixing all necessary ironmongeries, fittings and furniture as G.S. Items 17.33 (l) to 17.33 (n) except remote control system.
 - (d) Providing and fixing all necessary weather-strip as G.S. Item 17.33 (i).
 - (e) Providing drawings as G.S. Item 17.34.
 - (f) Providing sample as G.S. Item 17.35.
 - (g) Bedding frames as G.S. Item 17.36 (h).
 - (h) Raking joints, pointing, masking, cleaning as G.S. Item 17.36 (j).
 - (i) Treatment on surfaces in contact with concrete or dissimilar metals with one coat of bituminous paint on aluminium surfaces or using an approved tape.

**Rates for
curtain walls**

- XLV. The rates for curtain walls shall further include for : -
- (a) The design of the curtain walls to comply with the maximum Overall Thermal Transfer Values (OTTV) for building (including walls and roof) of 23 w/m² or less.
 - (b) All submissions of information as required in G.S. Item 16.07.
 - (c) Requirements pursuant to codes and standards as G.S. Item 16.05 and an itemised list of deviations from the Specification and Drawings for the works.
 - (d) Submission of drawings and calculations as G.S. Item 16.09.
 - (e) Submission of samples, mock-up erection and tests.
 - (f) Method statement related to jointing of components, fire barriers between perimeters of floors and curtain wall, programme for the works, erection and any remedial works.
 - (g) In the case of aluminium curtain walls, all types of anodised finishes, powder coated, organic coating fluorocarbon coated or PVF2 finishes.
 - (h) In the case of stainless steel curtain walls, all types of polished finishes.
 - (i) Reinforcing members, sub-frames and the like of any material.
 - (j) Fixing, connections and provision of anchorages.

SPECIAL CONDITIONS (CONT'D)

XLV.	<ul style="list-style-type: none"> (k) Openable windows and doors, integral louvres and associated ironmongeries and fittings. (l) Spandrels, stone panels and their supporting systems. (m) Cills, copings, water bars, flashings, seals and other attachments including dressing to roofs/abutments. (n) Isolation of dissimilar metals and moving parts. (o) Support fire-saving insulation on galvanized steel support clips spaced at a maximum of 450 mm centres. (p) Preparation work to adjoining structure for attachment of curtain wall. (q) All glass and glazing work. (r) All tests, at field or in laboratories, and report work. (s) Sealing joints within curtain wall and joints to existing. (t) Provision of reports, manufacturer's guarantee, maintenance manuals and deed of warranty, if required. (u) Provision of anchors for gondola. (v) Provision of lightning protection. (w) Provision of Field or Site mock-up. (x) Provision of closure panel for venetian blind/shutter. (y) Provision of waterproofing/water-tightness. (z) Protection and cleaning. 	Rates for curtain walls (Cont'd)
XLVI.	<p>The Special Conditions for Section 09 - Ironmongery in this Schedule shall apply equally to all items of ironmongery in this Section.</p>	Rates for ironmongery
XLVII.	<p>The rates for solid/composite aluminium cladding shall further include for :-</p> <ul style="list-style-type: none"> (a) The design of solid/composite aluminium cladding. (b) Submission of design, calculation and drawings by a Registered Structural Engineer. (c) Submission of details related to quality, coating finish, thickness and standard of aluminium and galvanised mild steel reinforcement together with the manufacturer's certification. (d) Submission of samples, mock-up erection and testing. (e) Method statement related to jointing of components, programme for the work, erection and any remedial works. (f) All types of anodised finishes, powder coated, organic coating fluorocarbon coated or PVF2 finishes. (g) Reinforcing members, backing materials, sub-frames and the like of any materials. (h) Fixing, connections and provision of all types of anchorages. 	Rates for solid/composite aluminium cladding

SPECIAL CONDITIONS (CONT'D)

Rates for solid/composite aluminium cladding (Cont'd)

- XLVII. (i) Openable access doors, louvres and openings for other building services installation.
- (j) Ironmongeries and fittings.
- (k) Isolation of dissimilar metals, moving parts and provision of lubrication.
- (l) Support fire-safing insulation on galvanized steel support clips spaced at a maximum of 450 mm centres.
- (m) Preparation work to adjoining structure for attachment of cladding.
- (n) Sealing joints within cladding and joints to existing.
- (o) Concealed and exposed flashings, edge trims and the like.
- (p) Provision of all necessary testings, reports, maintenance manuals and manufacturer's guarantee.
- (q) Provision of anchors for gondola.
- (r) Provision of lightning protection.
- (s) Provision of Field or Site mock-up.
- (t) Provision of waterproofing/water-tightness.
- (u) Protection and cleaning.

Rates for shutters

- XLVIII. The rates for shutters shall further include for : -
- (a) Cutting mortice, sinking or drilling in concrete, brick, stone or other surfaces as required.
- (b) Grouting into new or existing mortice or holes.
- (c) Providing and fixing with nuts and washers.
- (d) Providing and fixing hinges, locking device, lock and all necessary ironmongeries.
- (e) Making good disturbed surfaces.

Rates for fire resisting roller shutters

- XLIX. The rates for fire resisting roller shutters shall further include for : -
- (a) Supply and installation in accordance with the manufacturer's instructions, Particular Specification and in compliance with statutory requirements.
- (b) Providing and fixing self closing mechanism activated by smoke detector(s) and manual control device(s) on both side of the wall openings for automatic and manual operation compliance with the Fire Service Installation if Government Buildings, Architectural Services Department, and all accessories, ironmongeries and the like recommended by the manufacturer.
- (c) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
- (d) Grouting into new or existing mortice or holes.
- (e) Providing back up power supply.
- (f) Connecting to fire alarm system when required.
- (g) Finishing all surfaces as required.
- (h) Providing test certificate, operation manuals and manufacturer's guarantee.

SPECIAL CONDITIONS (CONT'D)

- | | | |
|------|--|--|
| L. | The rates for proprietary transparent shutters shall further include for : - | Rates for proprietary transparent shutters |
| | (a) Supply and installation in accordance with the manufacturer's instructions. | |
| | (b) Cutting mortice, sinking or drilling in concrete, brick, stone or other surfaces as required. | |
| | (c) Grouting into new or existing mortice or holes. | |
| | (d) Providing and fixing with nuts and washers. | |
| | (e) Providing and fixing typhoon shutter guide with locking device. | |
| | (f) Providing and fixing hinges, locking device, lock and all necessary ironmongeries. | |
| | (g) Making good disturbed surfaces. | |
| | (h) Providing test certificate, operation manuals and manufacturer's guarantee. | |
| LI. | The rates for proprietary fire resisting doors shall further include for : - | Rates for proprietary fire resisting doors |
| | (a) Supply and installation in accordance with the manufacturer's instructions and in compliance with statutory requirements. | |
| | (b) Providing and fixing door frames, all accessories, ironmongeries and the like recommended by the manufacturer (panic bolt, emergency panic device and digital locking device measured separately). | |
| | (c) Providing back up power supply when required. | |
| | (d) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required. | |
| | (e) Grouting into new or existing mortice or holes. | |
| | (f) Finishing all surfaces as required. | |
| | (g) Making good disturbed surfaces. | |
| | (h) Providing test certificate, operation manuals and manufacturer's guarantee. | |
| LII. | The rates for proprietary automatic swing and sliding doors shall further include for : - | Rates for proprietary automatic swing and sliding doors |
| | (a) Supply and installation in accordance with the manufacturer's instructions. | |
| | (b) Providing and fixing door frames, door operator, automatic mechanism, interlocking devices and all necessary accessories, ironmongeries and the like recommended by the manufacturer. | |
| | (c) Providing clear tempered glass door panel or observation panel. | |
| | (d) Providing back up power supply. | |
| | (e) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required. | |
| | (f) Grouting into new or existing mortice or holes. | |
| | (g) Finishing all surfaces as required. | |
| | (h) Making good disturbed surfaces. | |
| | (i) Providing test certificate, operation manuals and manufacturer's guarantee. | |

SPECIAL CONDITIONS (CONT'D)

Rates for proprietary fire resisting partitions	LIII.	The rates for proprietary fire resisting partitions shall further include for : -
	(a)	Supply and installation in accordance with the manufacturer's instructions and in compliance with statutory requirements.
	(b)	Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
	(c)	Grouting into new or existing mortice or holes.
	(d)	Finishing both sides of partition with fire resisting boarding/material.
	(e)	Finishing all surfaces as required.
	(f)	Making good disturbed surfaces.
	(g)	Providing test certificate, operation manuals and manufacturer's guarantee.
Rates for proprietary fibreglass house and planter	LIV.	The rates for proprietary fibreglass house and planter shall further include for : -
	(a)	All necessary accessories recommended by the manufacturer.
	(b)	Fixing to concrete base or steel support (measured separately) including anchor bolts.
Measurement for enhanced treatment to hoardings	LV.	Enhanced treatment to hoardings including graphic design proprietary graphical use film, plastic sheeting, painting and "green" features shall be measured the net area as covered. No deduction shall be made for openings not exceeding 0.50 m ² .
G.S. clauses	LVI.	G.S. clauses for the following items can be found in the respective sections of the General Specification for Building as listed below : -
	(a)	Steel sheet cladding - Section 12 - Roofing.
	(b)	Fencing and gates - Section 24 - External Works.
	(c)	Structural steel work - Section 15 - Structural Steel Work.
	(d)	Curtain walls - Section 16 - Curtain Walls.
	(e)	Corrugated and profiled sheeting cladding - Section 12 - Roofing.
	(f)	Strong room doors - Section 22 - Interior Fittings and Fixtures.

Item	STEEL SHORING	Erect, maintain, take down and clear away		Erect, maintain, and left-in position		Item																																																																																
		A	B	A	B																																																																																	
The following Items 10001 to 10002 inclusive will only be paid in accordance with Special Conditions Clause III.																																																																																						
<i>Per kg</i>																																																																																						
10001	Steel shoring to support surface of excavation.....	9.70		9.00		10001																																																																																
10002	Steel shoring to support existing building or structure.....	12.40		12.00		10002																																																																																
HOARDINGS AND WALKWAYS																																																																																						
The following Items 10003 to 10019 inclusive will only be paid in accordance with Special Conditions Clause I :																																																																																						
<i>Per linear metre</i>																																																																																						
10003	Type A hoarding – corrugated steel fence as detailed on drawings 9711/A/A01 to 9711/A/A05 and 9711/A/S01 to 9711/A/S04.....	1,570.80		1,492.30		10003																																																																																
10004	Type E hoarding – corrugated steel fence (surface-mounted footing) as detailed on drawings 9711/E/A01 to 9711/E/A05 and 9711/E/S01 to 9711/E/S04.....	1,865.30		1,772.10		10004																																																																																
<i>Each</i>																																																																																						
10005	Gateway for Type A hoarding – corrugated steel fence as detailed on drawings 9711/A/A01 to 9711/A/A05 and 9711/A/S01 to 9711/A/S04.....	18,711.00		17,775.50		10005																																																																																
10006	Gateway for Type E hoarding – corrugated steel fence (surface-mounted footing) as detailed on drawings 9711/E/A01 to 9711/E/A05 and 9711/E/S01 to 9711/E/S04.....	21,021.00		19,970.00		10006																																																																																
<table border="1"> <thead> <tr> <th rowspan="3"></th> <th colspan="3">Erect, maintain, take down and clear away</th> <th colspan="3">Erect, maintain and left-in position</th> </tr> <tr> <th colspan="3">with walkway of minimum clear width</th> <th colspan="3">with walkway of minimum clear width</th> </tr> <tr> <th>1.1 m</th> <th>1.4 m</th> <th>2.0 m</th> <th>1.1 m</th> <th>1.4 m</th> <th>2.0 m</th> </tr> </thead> <tbody> <tr> <td colspan="7"><i>Per linear metre</i></td> </tr> <tr> <td>10007</td> <td>Type B hoarding – covered walkway as detailed on drawings 9711/B/A01 to 9711/B/A07 and 9711/B/S01 to 9711/B/S05.....</td> <td>4,158.00</td> <td>4,365.90</td> <td>4,989.60</td> <td>3,950.10</td> <td>4,147.60</td> <td>4,740.10</td> <td>10007</td> </tr> <tr> <td>10008</td> <td>Type C hoarding – covered walkway with single deck catch platform as detailed on drawings 9711/C/A01 to 9711/C/A07 and 9711/C/S01 to 9711/C/S05.....</td> <td>6,381.40</td> <td>6,700.40</td> <td>7,657.70</td> <td>6,062.30</td> <td>6,365.40</td> <td>7,274.80</td> <td>10008</td> </tr> <tr> <td>10009</td> <td>Type D hoarding – covered walkway with double deck catch platform as detailed on drawings 9711/D/A01 to 9711/D/A07 and 9711/D/S01 to 9711/D/S05.....</td> <td>8,489.30</td> <td>8,913.70</td> <td>10,187.10</td> <td>8,064.80</td> <td>8,468.00</td> <td>9,677.80</td> <td>10009</td> </tr> <tr> <td>10010</td> <td>Type F hoarding – covered walkway (surface-mounted footing) as detailed on drawings 9711/F/A01 to 9711/F/A07 and 9711/F/S01 to 9711/F/S05.....</td> <td>4,446.80</td> <td>4,669.10</td> <td>5,336.10</td> <td>4,224.40</td> <td>4,435.60</td> <td>5,069.30</td> <td>10010</td> </tr> <tr> <td>10011</td> <td>Type G hoarding – covered walkway with single deck catch platform (surface-mounted footing) as detailed on drawings 9711/G/A01 to 9711/G/A07 and 9711/G/S01 to 9711/G/S05.....</td> <td>6,468.00</td> <td>6,791.40</td> <td>7,761.60</td> <td>6,144.60</td> <td>6,451.80</td> <td>7,373.50</td> <td>10011</td> </tr> <tr> <td>10012</td> <td>Type H hoarding – covered walkway with double deck catch platform (surface-mounted footing) as detailed on drawings 9711/H/A01 to 9711/H/A07 and 9711/H/S01 to 9711/H/S05.....</td> <td>8,662.50</td> <td>9,095.60</td> <td>10,395.00</td> <td>8,229.40</td> <td>8,640.80</td> <td>9,875.30</td> <td>10012</td> </tr> </tbody> </table>								Erect, maintain, take down and clear away			Erect, maintain and left-in position			with walkway of minimum clear width			with walkway of minimum clear width			1.1 m	1.4 m	2.0 m	1.1 m	1.4 m	2.0 m	<i>Per linear metre</i>							10007	Type B hoarding – covered walkway as detailed on drawings 9711/B/A01 to 9711/B/A07 and 9711/B/S01 to 9711/B/S05.....	4,158.00	4,365.90	4,989.60	3,950.10	4,147.60	4,740.10	10007	10008	Type C hoarding – covered walkway with single deck catch platform as detailed on drawings 9711/C/A01 to 9711/C/A07 and 9711/C/S01 to 9711/C/S05.....	6,381.40	6,700.40	7,657.70	6,062.30	6,365.40	7,274.80	10008	10009	Type D hoarding – covered walkway with double deck catch platform as detailed on drawings 9711/D/A01 to 9711/D/A07 and 9711/D/S01 to 9711/D/S05.....	8,489.30	8,913.70	10,187.10	8,064.80	8,468.00	9,677.80	10009	10010	Type F hoarding – covered walkway (surface-mounted footing) as detailed on drawings 9711/F/A01 to 9711/F/A07 and 9711/F/S01 to 9711/F/S05.....	4,446.80	4,669.10	5,336.10	4,224.40	4,435.60	5,069.30	10010	10011	Type G hoarding – covered walkway with single deck catch platform (surface-mounted footing) as detailed on drawings 9711/G/A01 to 9711/G/A07 and 9711/G/S01 to 9711/G/S05.....	6,468.00	6,791.40	7,761.60	6,144.60	6,451.80	7,373.50	10011	10012	Type H hoarding – covered walkway with double deck catch platform (surface-mounted footing) as detailed on drawings 9711/H/A01 to 9711/H/A07 and 9711/H/S01 to 9711/H/S05.....	8,662.50	9,095.60	10,395.00	8,229.40	8,640.80	9,875.30	10012
	Erect, maintain, take down and clear away			Erect, maintain and left-in position																																																																																		
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10007	Type B hoarding – covered walkway as detailed on drawings 9711/B/A01 to 9711/B/A07 and 9711/B/S01 to 9711/B/S05.....	4,158.00	4,365.90	4,989.60	3,950.10	4,147.60	4,740.10	10007																																																																														
10008	Type C hoarding – covered walkway with single deck catch platform as detailed on drawings 9711/C/A01 to 9711/C/A07 and 9711/C/S01 to 9711/C/S05.....	6,381.40	6,700.40	7,657.70	6,062.30	6,365.40	7,274.80	10008																																																																														
10009	Type D hoarding – covered walkway with double deck catch platform as detailed on drawings 9711/D/A01 to 9711/D/A07 and 9711/D/S01 to 9711/D/S05.....	8,489.30	8,913.70	10,187.10	8,064.80	8,468.00	9,677.80	10009																																																																														
10010	Type F hoarding – covered walkway (surface-mounted footing) as detailed on drawings 9711/F/A01 to 9711/F/A07 and 9711/F/S01 to 9711/F/S05.....	4,446.80	4,669.10	5,336.10	4,224.40	4,435.60	5,069.30	10010																																																																														
10011	Type G hoarding – covered walkway with single deck catch platform (surface-mounted footing) as detailed on drawings 9711/G/A01 to 9711/G/A07 and 9711/G/S01 to 9711/G/S05.....	6,468.00	6,791.40	7,761.60	6,144.60	6,451.80	7,373.50	10011																																																																														
10012	Type H hoarding – covered walkway with double deck catch platform (surface-mounted footing) as detailed on drawings 9711/H/A01 to 9711/H/A07 and 9711/H/S01 to 9711/H/S05.....	8,662.50	9,095.60	10,395.00	8,229.40	8,640.80	9,875.30	10012																																																																														

Item	HOARDINGS AND WALKWAYS (CONT'D)	Erect, maintain, take down and clear away						Erect, maintain and left-in position						Item		
		with walkway of minimum clear width						with walkway of minimum clear width								
		1.1 m		1.4 m		2.0 m		1.1 m		1.4 m		2.0 m				
		A	B	C	D	E	F	A	B	C	D	E	F			
<i>Each</i>																
													Erect, maintain, take down and clear away		Erect, maintain, and left-in position	
													A		B	
													\$		\$	
10013	Gateway for Type B hoarding – covered walkway as detailed on drawings 9711/B/A01 to 9711/B/A07 and 9711/B/S01 to 9711/B/S05.....	36,093.80	37,898.40	43,312.50	34,289.10	36,003.50	41,146.90							10013		
10014	Gateway for Type C hoarding – covered walkway with single deck catch platform as detailed on drawings 9711/C/A01 to 9711/C/A07 and 9711/C/S01 to 9711/C/S05.....	45,738.00	48,024.90	54,885.60	43,451.10	45,632.70	52,141.30							10014		
10015	Gateway for Type D hoarding – covered walkway with double deck catch platform as detailed on drawings 9711/D/A01 to 9711/D/A07 and 9711/D/S01 to 9711/D/S05.....	45,738.00	48,024.90	54,885.60	43,451.10	45,632.70	52,141.30							10015		
10016	Gateway for Type F hoarding – covered walkway (surface-mounted footing) as detailed on drawings 9711/F/A01 to 9711/F/A07 and 9711/F/S01 to 9711/F/S05.....	34,650.00	36,382.50	41,580.00	32,917.50	34,563.40	39,501.00							10016		
10017	Gateway for Type G hoarding – covered walkway with single deck catch platform (surface-mounted footing) as detailed on drawings 9711/G/A01 to 9711/G/A07 and 9711/G/S01 to 9711/G/S05.....	45,738.00	48,024.90	54,885.60	43,451.10	45,632.70	52,141.30							10017		
10018	Gateway for Type H hoarding – covered walkway with double deck catch platform (surface-mounted footing) as detailed on drawings 9711/H/A01 to 9711/H/A07 and 9711/H/S01 to 9711/H/S05.....	45,738.00	48,024.90	54,885.60	43,451.10	45,632.70	52,141.30							10018		
<i>Per linear metre</i>																
10019	Extra over Items 10003 to 10004 and 10007 to 10012 inclusive for toe sheet as detailed on drawings 9711/A/A03, 9711/B/A03, 9711/C/A03, 9711/D/A03, 9711/E/A03, 9711/F/A03, 9711/G/A03 and 9711/H/A03.....					21.20	18.40							10019		
TEMPORARY WORK - FIRE PROTECTION ENCLOSURE																
The following Items 10020 to 10021 inclusive will only be paid in accordance with Special Conditions Clause II.																
<i>Per square metre</i>																
10020	Temporary enclosure with fire protection material of 1 hour fire rated period.....					429.00	526.40							10020		
10021	Ditto but 2 hour fire rated period.....					1,019.90	1,170.40							10021		

Item	STRUCTURAL STEEL WORK					Item
HOT ROLLED STEEL; GRADE S275		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
<i>Per kg</i>		A \$	B \$	C \$	D \$	
10022	Round rods.....	24.00	4.30	5.10	11.80	10022
10023	Square rods or flat bars n.e. 300 mm wide.....	25.20	4.50	5.10	11.80	10023
10024	Plate or flat bars exceeding 300 mm wide.....	24.40	4.30	5.00	10.60	10024
10025	Angle sections.....	24.40	4.30	5.10	11.80	10025
10026	Tee sections.....	24.40	4.30	5.10	11.80	10026
10027	Universal beams, columns, channels or "I" joists.....	24.00	3.40	4.10	8.30	10027
10028	Rectangular, square or circular hollow sections.....	28.30	3.70	4.40	9.50	10028
10029	Fabricated small items n.e. 2 kg each.....	26.80	4.30	6.00	13.00	10029
HOT ROLLED STEEL; GRADE S355						
<i>Per kg</i>						
10030	Round rods.....	24.50	4.30	5.10	11.80	10030
10031	Square rods or flat bars n.e. 300 mm wide.....	24.50	4.80	5.10	11.80	10031
10032	Plate or flat bars exceeding 300 mm wide.....	24.00	4.30	5.00	10.60	10032
10033	Angle sections.....	25.00	4.30	5.10	11.80	10033
10034	Tee sections.....	25.00	4.30	5.10	11.80	10034
10035	Universal beams, columns, channels or "I" joists.....	24.50	3.40	4.10	8.30	10035
10036	Rectangular, square or circular hollow sections.....	26.90	3.40	4.30	9.50	10036
10037	Fabricated small items n.e. 2 kg each.....	26.20	4.30	6.00	13.00	10037
COLD ROLLED STEEL TO BS EN 10162:2003						
<i>Per kg</i>						
10038	Angle or tee sections.....	27.50	4.30	5.10	11.80	10038
10039	Channels, lipped channels or lipped "Z" sections.....	28.90	4.30	5.10	13.00	10039
10040	Non-standard purlin sections or similar.....	30.30	4.30	5.10	14.20	10040
10041	Rectangular, square or circular hollow sections.....	31.70	3.40	4.00	9.50	10041
10042	Fabricated small items n.e. 2 kg each.....	28.90	4.30	6.00	13.00	10042
<p>(Note : - The above Items 10038 to 10042 inclusive for cold rolled steel to BS EN 10162:2003 will only be paid for, if ordered by the Maintenance Surveyor in writing)</p>						

Item	MILD STEEL					Item
ROLLED SECTIONS AND PLATE		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
<i>Per kg</i>		A \$	B \$	C \$	D \$	
10043	Round rods	20.90	4.30	5.10	9.50	10043
10044	Square rods or flat bars n.e. 300 mm wide.....	21.10	4.30	5.10	9.50	10044
10045	Plate or flat bars exceeding 300 mm wide.....	23.30	4.30	5.20	10.60	10045
10046	Chequer plates	24.80	4.30	5.10	11.80	10046
10047	Angle sections	23.80	4.30	5.10	11.80	10047
10048	Tee sections.....	23.80	4.30	5.10	11.80	10048
10049	Universal beams, columns, channels or "T" joists.....	18.40	2.80	3.40	8.30	10049
10050	Rectangular, square or circular hollow sections.....	21.30	3.10	3.60	8.30	10050
SHEET METAL WORK						
<i>Per kg</i>						
10051	Flat or formed sheet covering	17.30	4.30	5.10	10.60	10051
10052	Sheet lining to brick or concrete duct	22.40	4.80	7.50	14.20	10052
10053	Sheet as ducting.....	21.80	5.10	6.90	13.80	10053
10054	Sheet as pipes, gutters, funnels, hoods, chimney cowls, roof plates and the like.....	23.20	5.10	7.70	15.40	10054
10055	Ventilator formed to detail (gross weight measured)	24.40	5.30	8.20	16.60	10055

Item	MILD STEEL (CONT'D)					Item	
COLLAPSIBLE GATES							
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only		
	<i>Per kg</i>	A \$	B \$	C \$	D \$		
10056	Mild steel collapsible gates, diamond pattern, welded and riveted connections.....	24.00	4.30	6.00	13.00	10056	
10057	Ditto but galvanised.....	29.20	4.30	6.70	14.20	10057	
SUNDRY REPAIRS							
		Thickness of metal (mm)					
		N.e. 3	3 - 6	6 - 12	12 - 20		
	<i>Per linear metre</i>	A \$	B \$	C \$	D \$		
10058	Straight, raking or circular cutting on any type of metal including filing edges clean.....	2.90	3.80	6.70	10.60	10058	
		Diameter of thread of hole (mm)					
		N.e. 15	15 - 20	20 - 25	25 - 30	30 - 40	40 - 50
	<i>Each</i>	A \$	B \$	C \$	D \$	E \$	F \$
10059	Cut screw thread on end of steel or iron round rod or tube for length to twice the diameter of the rod or tube.....	14.20	15.40	15.40	16.60	18.90	20.10
10060	Add to Item 10059 for each additional 25 mm or part thereof in length	1.80	1.90	2.00	2.10	2.40	2.50
10061	Cut screw thread on end of steel or iron square rod for length equal to twice the thickness of the rod.....	14.20	15.40	15.40	16.60	18.90	20.10
10062	Add to Item 10061 for each additional 25 mm or part thereof in length.....	1.80	1.90	2.00	2.10	2.40	2.50
10063	Cut off end of bolt or rod for threading or re-threading.....	4.70	4.70	4.70	5.90	5.90	7.10
10064	Drill hole in metal n.e. 6 mm deep including countersinking if required.....	4.70	4.70	4.70	5.90	5.90	7.10
10065	Add to Item 10064 for each additional 6 mm or part thereof in depth.....	1.20	1.20	1.20	1.20	1.20	1.20
10066	Drill and tap hole in metal n.e. 6 mm deep.....	8.30	8.30	9.50	9.50	10.60	11.80
10067	Add to Item 10066 for each additional 6 mm or part thereof in depth.....	2.40	2.40	2.40	2.40	3.50	3.50

Item	MILD STEEL (CONT'D) SUNDRY REPAIRS (CONT'D)	A \$	Item
	<i>Each</i>		
10068	Punch small hole for nail, screw and the like through any type of sheet metal not thicker than 3 mm.....	1.20	10068
	Execute the following welding including providing all plant, welding rods, etc., filing weld on completion and preparing and chamfering ends, edges and surfaces to be welded as required : -		
	<i>Per linear metre</i>		
10069	Fillet weld in lengths n.e. 300 mm at connections (net length of fillet measured - allowance made for angles, etc.).....	109.70	10069
10070	Fillet seam weld in lengths n.e. 300 mm at lapped joints (ditto).....	101.00	10070
10071	Single butt weld in lengths exceeding 300 mm at butt joints and connections (net length of joint measured on one face only).....	102.80	10071
10072	Double butt weld in lengths exceeding 300 mm when ordered at butt joints and connections where metal exceeds 6 mm thick (net length of joint measured on both faces).....	107.10	10072
	<i>Each</i>		
10073	Spot weld end of wire or rod n.e. 12 mm diameter, or bar n.e. 50 mm girth, and the like.....	4.60	10073

Item	GALVANIZED MILD STEEL					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	<i>Per kg</i>					
10074	Round rods.....	23.10	4.30	6.00	10.60	10074
10075	Square rods or flat bars n.e. 300 mm wide.....	24.10	4.30	6.00	10.60	10075
10076	Plate or flat bars exceeding 300 mm wide.....	25.80	3.80	5.60	11.80	10076
10077	Chequer plates.....	24.30	4.60	6.30	13.00	10077
10078	Angle sections.....	25.70	4.30	5.10	13.30	10078
10079	Tee sections.....	25.70	4.30	5.10	13.30	10079
10080	Universal beams, columns, channels or "I" joists.....	20.60	2.80	3.90	8.30	10080
10081	Rectangular, square or circular hollow sections excluding galvanised mild steel tubing.....	23.00	3.00	4.30	9.50	10081
10082	Water bar.....	26.70	4.30	6.00	12.70	10082
10083	Wall tie, frame holdfast, single piece ceiling hanger or bracket, and the like.....	31.60	6.90	9.40	16.60	10083
10084	Composite ceiling hanger, bracket and the like of two or more pieces including assembling, supplying and fixing nuts, bolts and washers, or welding.....	30.30	5.10	6.90	15.40	10084
10085	Chains, including hooks, rings, shackles, etc., complete.....	38.40	1.90	2.20	5.20	10085
10086	Flat / formed sheet covering.....	25.10	4.30	6.00	12.70	10086
10087	Perforated flat or formed sheet covering.....	23.80	4.30	6.00	12.70	10087
10088	Sheet lining to brick or concrete duct.....	28.70	4.70	8.30	15.40	10088
10089	Sheet covering to roofs, domes, etc., including all rolls, welts, flashings and the like.....	29.40	4.70	6.90	16.50	10089
10090	Sheet as ducting.....	28.10	4.70	7.70	15.40	10090
10091	Sheet as pipes, gutters, funnels, hoods, chimney cowls, roof plates and the like.....	29.60	5.10	7.70	16.60	10091
10092	Sheet in square or rectangular tanks, storage cisterns and the like, and including angle stiffeners, corner plates and cover.....	29.00	4.00	6.90	15.40	10092
10093	Ventilator formed to detail (gross weight measured).....	31.50	5.10	8.60	17.70	10093
10094	Stopcock or meter box and the like with hinged or loosed lid to detail (ironmongery measured separately).....	27.00	4.70	8.40	17.20	10094

Item	GALVANIZED MILD STEEL (CONT'D)				Item																									
	<i>Each</i>			A \$																										
10095	16 mm Diameter dowel 75 mm long including letting 40 mm in a frame, cutting mortice in concrete floor or paving if required, and grouting in and making good.....			11.60	10095																									
		<table border="1"> <thead> <tr> <th></th> <th colspan="4">Diameter (mm)</th> </tr> <tr> <th></th> <th>40</th> <th>50</th> <th>65</th> <th>75</th> </tr> </thead> <tbody> <tr> <th>Thickness (mm)</th> <td>1.00</td> <td>1.00</td> <td>1.26</td> <td>1.26</td> </tr> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <th></th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </tbody> </table>					Diameter (mm)					40	50	65	75	Thickness (mm)	1.00	1.00	1.26	1.26		A	B	C	D		\$	\$	\$	\$
	Diameter (mm)																													
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Thickness (mm)	1.00	1.00	1.26	1.26																										
	A	B	C	D																										
	\$	\$	\$	\$																										
	<i>Each</i>																													
10096	Single sided round toothed timber connector plate holed for bolt (measured separately) and fixing.....	8.70	9.10	9.60	10.00	10096																								
10097	Double sided ditto.....	12.40	12.70	13.30	13.80	10097																								
	GALVANIZED STEEL WINDOWS AND GLAZED DOORS																													
	Supply and fix the following galvanized steel window and glazed door frames :-																													
	<i>Per square metre</i>																													
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only																									
		A \$	B \$	C \$	D \$																									
10098	Galvanised steel window medium sections.....	544.40	31.70	33.40	67.40	10098																								
10099	Extra over for openable portions.....	285.00	-	-	-	10099																								
10100	Galvanised steel window large (38 mm) sections.....	647.40	37.70	40.30	80.40	10100																								
10101	Extra over Item 10100 for openable portions.....	338.60	-	-	-	10101																								
10102	Galvanised steel door medium sections.....	466.80	29.10	30.00	60.30	10102																								
10103	Extra over Item 10102 for openable portions.....	241.90	-	-	-	10103																								
10104	Galvanised steel door large (38 mm) sections.....	555.40	34.30	36.00	72.10	10104																								
10105	Extra over Item 10104 for openable portions.....	287.50	-	-	-	10105																								

Item	REPAIRS TO GALVANIZED STEEL WINDOWS AND DOORS				Item	
	<i>Per linear metre</i>			A \$		
10106	Coupling mullion for window complete with mastic for assembly.....	63.60			10106	
10107	Coupling mullion for door or side light ditto.....	63.60			10107	
10108	Coupling transom for window ditto.....	67.50			10108	
10109	Coupling transom for door or side light with ventilator over ditto.....	71.50			10109	
	<i>Per square metre</i>					
10110	Take down and clear away openable sash, ventilator, window or door of any size or section including cutting hinges away from frame.....	14.20			10110	
10111	Take down and set aside for re-use ditto.....	11.10			10111	
10112	Fix only openable sash, ventilator, window or door of any size or section to existing frame including welding or riveting hinges.....	23.10			10112	
	<i>Each</i>					
10113	Oil only hinges and fittings to openable sash, ventilator, window or door.....	3.70			10113	
10114	Weld joint, corner, etc., of sash, ventilator, window, door or frame.....	17.50			10114	
	<i>Per kg</i>					
10115	Galvanised steel glazing bar.....	26.90	4.30	6.00	14.20	10115
10116	Galvanised steel channel bead fixed to existing window and door.....	31.00	4.40	7.20	17.70	10116

Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only
A \$	B \$	C \$	D \$
26.90	4.30	6.00	14.20
31.00	4.40	7.20	17.70

Item	REPAIRS TO GALVANIZED STEEL WINDOWS AND DOORS (CONT'D)	Supply and fix			Take down and clear away	Take down and set aside for re-use	Fix only	Item
		Galvan-ized	Brass	B.M.A.				
		A \$	B \$	C \$				
	<i>Each</i>							
10117	Pair 50 mm butt hinges.....	38.00	-	-	9.70	-	24.00	10117
10118	Pair 75 mm ditto.....	44.60	-	-	10.40	-	25.70	10118
10119	Pair projecting hinges (for metal casement).....	62.50	-	-	11.20	-	27.30	10119
10120	Barrel bolt n.e. 150 mm long with socket.....	52.80	-	103.50	9.70	-	26.00	10120
10121	Ditto but 150 - 225 mm long ditto.....	58.20	-	118.30	10.10	-	27.30	10121
10122	Ditto but 225 - 300 mm long ditto.....	73.70	-	166.10	10.60	-	28.70	10122
10123	Mortice lock with staple including labelling keys.....	-	-	249.30	24.00	32.10	79.90	10123
10124	Set of lever handle furniture.....	-	-	81.20	8.00	9.70	24.00	10124
10125	75 mm Cleat hook.....	17.00	-	23.80	2.60	-	6.40	10125
10126	Spring catch with ring and staple.....	33.50	-	53.80	4.50	5.60	11.20	10126
10127	Staple only.....	9.10	-	19.20	2.00	-	4.80	10127
10128	Screw eye.....	6.80	-	9.90	1.60	-	3.20	10128
10129	Casement fastener with 115 mm handle and two point nose.....	46.50	52.40	53.70	4.10	4.80	24.00	10129
10130	Two throw casement fastener with 115 mm handle and steel connecting rod.....	109.20	172.10	188.40	8.00	9.70	48.20	10130
10131	250 mm Casement stay of sliding bar type.....	48.30	103.40	111.60	5.80	7.20	14.40	10131
10132	300 mm Ditto.....	54.20	112.50	123.30	6.20	7.40	15.30	10132
10133	200 mm Casement stay with two stud pins.....	34.30	52.20	58.20	5.50	6.60	13.60	10133
10134	250 mm Ditto.....	36.60	56.60	63.20	5.80	6.90	14.30	10134
10135	300 mm Ditto.....	38.80	60.90	68.20	5.90	7.20	14.90	10135
10136	Single stud pin only.....	8.60	20.00	22.60	1.60	-	3.20	10136

Item	REPAIRS TO GALVANIZED STEEL WINDOWS AND DOORS (CONT'D)					Item			
		Supply and fix			Take down and clear away	Take down and set aside for re-use	Fix only		
		Galvan- ized	Brass	B.M.A.					
		A \$	B \$	C \$	D \$	E \$	F \$		
10137	Set of sliding shoes, pivots and friction side arms for projecting casement.....	-	156.20	180.80	5.80	6.90	14.40	10137	
10138	Pair fanlight roller stays.....	25.10	-	60.00	3.20	3.80	6.40	10138	
10139	Through-the-frame type fanlight stay.....	-	-	54.50	2.40	2.90	4.80	10139	
10140	Roto-operator opening and closing mechanism with handle.....	-	-	137.50	2.90	3.40	5.60	10140	
10141	Fanlight opener with 300 mm rack and pinion, worm wheel, pulley and endless cord.....	87.50	-	117.00	16.60	19.90	32.10	10141	
10142	Ditto but with 375 mm long rack and pinion.....	101.70	-	138.40	17.40	20.90	33.70	10142	
	GALVANIZED STEEL SHEET CLADDING (FACE WORK OTHER THAN ROOFING)				Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
					A \$	B \$	C \$	D \$	
	<i>Per square metre</i>								
10143	0.60 mm Corrugated steel sheet cladding in any corrugation fixed to timber framing (measured separately).....			104.00	6.20	14.60	28.90	10143	
10144	Ditto but 0.70 mm thick.....			109.10	6.30	15.00	30.00	10144	
10145	Ditto but 0.80 mm thick.....			118.10	6.60	15.40	30.70	10145	
10146	Ditto but 0.90 mm thick.....			125.50	6.70	15.90	31.70	10146	
10147	Ditto but 1.00 mm thick.....			132.60	7.00	16.40	32.40	10147	
10148	0.60 mm Corrugated steel sheet cladding in any corrugation fixed to curved timber framing (measured separately).....			107.70	6.80	16.20	32.10	10148	
10149	Ditto but 0.70 mm thick.....			112.50	7.00	16.60	33.20	10149	
10150	Ditto but 0.80 mm thick.....			121.50	7.20	16.90	34.00	10150	
10151	Ditto but 0.90 mm thick.....			128.90	7.40	17.50	34.90	10151	
10152	Ditto but 1.00 mm thick.....			136.10	7.60	18.00	35.90	10152	

Item	GALVANIZED STEEL SHEET CLADDING (FACE WORK OTHER THAN ROOFING) (CONT'D)	Item					
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only		
		A \$	B \$	C \$	D \$		
<i>Per square metre</i>							
10153	0.60 mm Corrugated steel sheet cladding in any corrugation fixed to steel framing (measured separately).....	105.30	5.10	12.00	24.80	10153	
10154	Ditto but 0.70 mm thick.....	109.90	5.30	12.40	25.70	10154	
10155	Ditto but 0.80 mm thick.....	118.90	5.50	12.90	26.00	10155	
10156	Ditto but 0.90 mm thick.....	126.30	5.70	13.20	27.10	10156	
10157	Ditto but 1.00 mm thick.....	133.40	6.00	13.70	27.20	10157	
10158	0.60 mm Corrugated steel sheet cladding in any corrugation fixed to curved steel framing (measured separately).....	108.60	5.70	13.20	27.40	10158	
10159	Ditto but 0.70 mm thick.....	113.30	5.80	13.70	28.40	10159	
10160	Ditto but 0.80 mm thick.....	122.30	6.00	14.00	29.10	10160	
10161	Ditto but 0.90 mm thick.....	129.60	6.20	14.60	29.60	10161	
10162	Ditto but 1.00 mm thick.....	137.00	6.30	14.80	30.60	10162	
<i>Per linear metre</i>							
10163	0.60 mm Drip or flashing up to 150 mm girth fixed over door or window head, lapped 150 mm at end laps (measured net).....	21.70	1.70	4.30	8.30	10163	
10164	Ditto but 0.70 mm thick.....	23.60	1.90	4.40	8.90	10164	
10165	Ditto but 0.80 mm thick.....	25.10	2.00	4.40	9.00	10165	
10166	Ditto but 0.90 mm thick.....	27.50	2.10	4.70	9.40	10166	
10167	Ditto but 1.00 mm thick.....	29.20	2.60	4.80	9.50	10167	

Item	<p>PROPRIETARY PROFILED STEEL SHEET CLADDING (FACE WORK OTHER THAN ROOFING)</p> <p>Proprietary profiled steel sheet cladding, trapezoidal ribbed, roll-formed roofing and walling profile; has bold, widely spaced ribs and is formed from steel; minimum base metal thickness is 0.42 mm (BMT), grade of steel G550 (550 N/mm yield strength); coating class AZ150, total coated thickness in 0.47 mm (TCT); and available in a range of steel paint systems and colours :</p> <p><i>Per square metre</i></p>	Item																																																								
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Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only																																																							
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379.30	6.20	13.70	27.60																																																							
	<p>Proprietary profiled steel sheet cladding, roll-formed from steel, lock-action rib for positive concealed clip fixing; profile with an effective cover width of 406 mm and a rib height of 41 mm; minimum base metal thickness is 0.48 mm (BMT), grade of steel G550 (550 N/mm yield strength); coating class AZ150, total coated thickness in 0.53 mm (TCT); and available in a range of steel paint systems and colours :</p> <p><i>Per square metre</i></p>																																																									
10168	0.47 mm Thick proprietary profiled steel sheeting fixed to timber framing.....	10168																																																								
10169	Ditto but fixed to curved timber framing.....	10169																																																								
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10179	Ditto but 0.65 mm thick.....	10179																																																								
	<p><i>Each</i></p>																																																									
10180	Cut hole through existing sheet cladding for pipes or articles in any size and thickness.....	<table border="1"> <tr> <td>A \$</td> <td>23.80</td> </tr> </table>	A \$	23.80	10180																																																					
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Item	GALVANIZED MILD STEEL TUBING					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	<i>Per linear metre</i>					
10181	15 mm Bore medium series galvanized tubing.....	28.90	2.60	3.00	9.50	10181
10182	20 mm Ditto.....	39.80	3.40	4.10	11.80	10182
10183	25 mm Ditto.....	57.70	4.20	5.10	15.40	10183
10184	32 mm Ditto.....	70.50	5.10	6.00	18.90	10184
10185	40 mm Ditto.....	85.40	6.90	7.70	24.80	10185
10186	50 mm Ditto.....	115.30	9.40	12.00	31.90	10186
10187	80 mm Ditto.....	179.80	12.90	15.40	41.40	10187
10188	100 mm Ditto.....	243.90	14.60	18.00	47.30	10188
10189	150 mm Ditto.....	369.50	17.10	20.60	55.60	10189
	Add to either of Items 10181 to 10189 inclusive for bending to radius n.e. 15.00 m.....	5%	-	-	-	
	GALVANIZED STEEL WIRE ROPE, ETC.					
	<i>Per linear metre</i>					
10190	3 mm Diameter flexible galvanized steel wire rope in flagstaff guys and the like including all binding and splicing, and splicing to existing rope.....	13.50	1.70	2.10	4.70	10190
10191	4 mm Ditto.....	14.00	1.70	2.20	4.80	10191
10192	6 mm Ditto.....	15.20	1.80	2.30	5.10	10192
10193	8 mm Ditto.....	16.30	2.10	2.40	5.50	10193
10194	10 mm Ditto.....	17.30	2.20	2.60	5.70	10194

Item	GALVANIZED STEEL WIRE ROPE, ETC. (CONT'D)				Item	
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
10195	Galvanized steel sail thimble for rope n.e. 6 mm diameter.....	9.00	-	-	-	10195
10196	Ditto but exceeding 6 mm and n.e. 10 mm diameter.....	10.00	-	-	-	10196
10197	Galvanized wrought iron "D" shaped shackle with 6 mm diameter metal rod or bolt at centre of bow.....	19.80	1.80	2.20	5.40	10197
10198	Ditto but with 8 mm diameter metal rod or bolt at centre of bow.....	23.40	1.90	2.30	5.50	10198
10199	Ditto but with 10 mm diameter metal rod or bolt at centre of bow.....	23.50	2.10	2.50	5.70	10199
10200	Heavy duty galvanized steel rope strainer with central body, screw hook on one end and screw eye on the other end, 375 mm long overall to take load of 1 tonne.....	57.10	5.00	6.00	11.80	10200
10201	Ditto but 475 mm long overall to take load of 2 tonnes.....	98.90	8.60	10.30	15.40	10201
CAST IRON						
Supply only the following cast iron items including making patterns for articles as required (fixing measured in Brickwork and Blockwork Section of this Schedule) :-						
					A \$	
10202	Combined gate, tree grilles, covers, fireplace surround, mantel, range, damper and frame, soot door, fire door, fireplace fret, fire bar and the like except manhole covers and frames n.e. 6.0 kg in weight each.....				12.70	10202
10203	Ditto but exceeding 6.0 kg in weight each.....				12.10	10203
REPAIRS TO GRATES, RANGES, ETC.						
			Take down and clear away	Fix only		
		A \$	B \$			
10204	Knob to damper flue or oven door, etc.....		9.40	31.90		10204
10205	Ventilator to oven.....		18.90	63.80		10205
10206	Catch for oven door or keep for oven door latch.....		12.90	44.90		10206
10207	Latch for oven door.....		18.90	63.80		10207
10208	Boiler front		38.60	130.00		10208
10209	Top of range		57.40	189.10		10209

Item	STAINLESS STEEL (CONT'D)										Item	
	METAL SECTIONS (CONT'D)	Supply and fix						Fix only				
		Thickness (mm)	AISI 304			AISI 316			Under 1	1 - 2		Over 2
			Under 1	1 - 2	Over 2	Under 1	1 - 2	Over 2				
		A	B	C	D	E	F	G	H	I		
	<i>Per kg</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$		
10220	Square or rectangular hollow tube outside girth n.e. 75 mm.....	92.40	-	-	138.60	-	-	23.10	-	-	10220	
10221	Ditto 75 - 150 mm.....	91.90	91.30	-	138.20	137.60	-	22.10	21.60	-	10221	
10222	Ditto exceeding 150 mm.....	90.80	90.30	89.70	137.10	136.60	136.00	21.20	20.60	20.10	10222	
10223	Hollow circular tube outside diameter n.e. 25 mm.....	93.90	93.40	-	140.30	139.80	-	24.30	23.70	-	10223	
10224	Ditto exceeding 25 mm.....	92.80	92.30	91.90	139.20	138.70	138.20	23.20	22.70	22.10	10224	
10225	Equal or unequal angle, tee or channel total overall width of flanges or legs n.e. 75 mm.....	90.40	89.90	89.40	135.30	134.70	134.20	23.20	22.70	22.10	10225	
10226	Ditto 75 - 150 mm.....	89.40	88.90	88.30	134.20	133.70	133.10	22.10	21.60	21.20	10226	
10227	Ditto exceeding 150 mm.....	88.30	87.80	87.30	133.10	132.60	132.00	21.20	20.60	20.10	10227	
	<i>Per square metre</i>											
10228	Add to either of Items 10212 to 10227 inclusive for Finish No. 4 - polished with fine grit or hair line finish.....	6.90	6.90	6.90	11.60	11.60	11.50	-	-	-	10228	
10229	Add to either of Items 10212 to 10227 inclusive for Finish No. 8 - mirror finish.....	17.30	17.40	17.30	28.90	29.00	28.90	-	-	-	10229	

(Note : - The above Items 10212 to 10227 inclusive for stainless steel in grade AISI 316 will only be paid for, if ordered by the Maintenance Surveyor in writing.)

Item	BOLTS AND ANCHOR BOLTS (CONT'D)	Nominal diameter of shank (mm)						Item	
		6	8	10	12	16	20		
		A \$	B \$	C \$	D \$	E \$	F \$		
	<i>Each</i>								
10239	Steel ragbolt 75 mm long overall.....	23.10	24.20	25.40	34.10	39.70	45.20	10239	
10240	Ditto but 100 mm long overall.....	24.10	25.20	26.30	31.20	36.80	42.40	10240	
10241	Ditto but 150 mm long overall.....	25.00	26.20	27.20	32.20	37.70	43.30	10241	
10242	Ditto but 240 mm long overall.....	26.60	27.60	28.80	33.60	39.30	44.90	10242	
10243	Steel ragbolt (loose bolt or bolt projecting type) 50 mm long overall.....	19.70	20.50	21.40	36.30	64.90	84.00	10243	
10244	Ditto but 75 mm long overall.....	20.20	21.10	21.90	37.70	68.30	88.80	10244	
10245	Ditto but 100 mm long overall.....	26.80	28.00	23.30	41.00	74.00	95.80	10245	
10246	Ditto but 150 mm long overall.....	28.40	29.40	30.60	44.30	61.60	102.90	10246	
10247	Ditto but 240 mm long overall.....	29.60	30.70	31.90	59.90	65.30	108.10	10247	
10248	Proprietary non-drilling or self drilling anchor of any length.....	10.30	10.60	11.30	14.90	22.80	36.20	10248	
10249	Proprietary stud anchor of any length.....	10.60	10.90	11.60	15.50	24.20	38.80	10249	
	ALUMINIUM SHEET CLADDING (FACE WORK OTHER THAN ROOFING)								
	<i>Per square metre</i>								
					Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
					A \$	B \$	C \$	D \$	
10250	0.60 mm Corrugated aluminium sheet cladding in any corrugation and colour fixed to timber framing (measured separately).....				438.90	5.90	11.80	21.30	10250
10251	Ditto but 0.70 mm thick.....				522.20	6.00	11.60	24.80	10251
10252	Ditto but 0.80 mm thick.....				595.50	6.20	11.90	26.00	10252
10253	Ditto but 0.90 mm thick.....				660.70	6.30	12.20	27.20	10253
10254	Ditto but 1.00 mm thick.....				733.70	6.50	12.40	28.40	10254
10255	0.60 mm Corrugated aluminium sheet cladding in any corrugation and colour fixed to curved timber framing (measured separately).....				443.10	6.30	12.20	27.20	10255
10256	Ditto but 0.70 mm thick.....				524.60	6.50	12.50	28.40	10256
10257	Ditto but 0.80 mm thick.....				597.90	6.70	12.90	29.60	10257
10258	Ditto but 0.90 mm thick.....				662.80	6.90	13.50	30.70	10258
10259	Ditto but 1.00 mm thick.....				736.10	7.00	13.90	31.90	10259

Item	ALUMINIUM SHEET CLADDING (FACE WORK OTHER THAN ROOFING) (CONT'D)					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	<i>Per square metre</i>					
10260	0.60 mm Corrugated aluminium sheet cladding in any corrugation and colour fixed to steel framing (measured separately).....	441.50	6.00	11.70	24.80	10260
10261	Ditto but 0.70 mm thick.....	522.80	6.30	12.10	26.00	10261
10262	Ditto but 0.80 mm thick.....	595.90	6.30	12.20	27.20	10262
10263	Ditto but 0.90 mm thick.....	661.10	6.50	12.80	28.40	10263
10264	Ditto but 1.00 mm thick.....	734.10	6.70	13.20	29.60	10264
10265	0.60 mm Corrugated aluminium sheet cladding in any corrugation and colour fixed to curved steel framing (measured separately).....	443.80	6.50	12.80	28.40	10265
10266	Ditto but 0.70 mm thick.....	525.10	6.80	13.30	29.60	10266
10267	Ditto but 0.80 mm thick.....	598.30	7.00	13.70	30.70	10267
10268	Ditto but 0.90 mm thick.....	663.50	7.10	14.00	31.90	10268
10269	Ditto but 1.00 mm thick.....	736.80	7.30	14.40	33.10	10269
	<i>Per linear metre</i>					
10270	0.60 mm Drip or flashing up to 150 mm girth fixed over door or window head, lapped 150 mm at end laps (measured net).....	46.60	1.80	3.80	8.30	10270
10271	Ditto but 0.70 mm thick.....	53.50	2.10	3.90	8.80	10271
10272	Ditto but 0.80 mm thick.....	60.20	2.20	4.20	8.90	10272
10273	Ditto but 0.90 mm thick.....	66.90	2.30	4.30	9.20	10273
10274	Ditto but 1.00 mm thick.....	73.70	2.50	4.60	9.30	10274
	ALUMINIUM					
	SHEET METAL WORK - MILL FINISH					
	<i>Per kg</i>					
10275	Chequer plate.....	71.60	7.70	9.40	23.60	10275
10276	Flat or formed sheet covering.....	75.10	7.70	10.30	21.30	10276
10277	Perforated flat or formed sheet covering.....	80.90	7.70	10.30	21.30	10277
10278	Sheet as pipes, gutters, funnels, hoods, chimney cowls, roof plates and the like.....	86.60	12.00	15.40	39.00	10278
10279	Ventilator formed to detail (gross weight measured).....	92.40	10.30	12.90	31.90	10279

Item	ALUMINIUM (CONT'D)						Item	
	EXTRUDED METAL SECTIONS - CLEAR ANODIZED FINISH							
		Supply and fix			Fix only			
	Thickness (mm)	Under 2	2 - 6	Over 6	Under 2	2 - 6	Over 6	
		A	B	C	D	E	F	
	<i>Per kg</i>	\$	\$	\$	\$	\$	\$	
10280	Square or flat bar n.e. 25 mm wide.....	106.00	103.70	101.10	56.70	54.40	52.00	
10281	Ditto but exceeding 25 mm wide.....	109.10	106.50	103.70	59.10	56.70	54.40	
		Supply and fix			Fix only			
	Diameter (mm)	Under 2	2 - 6	Over 6	Under 2	2 - 6	Over 6	
		A	B	C	D	E	F	
	<i>Per kg</i>	\$	\$	\$	\$	\$	\$	
10282	Round bar.....	105.30	104.40	103.10	54.40	53.20	52.00	
		Supply and fix			Fix only			
	Thickness (mm)	Under 2	2 - 6	Over 6	Under 2	2 - 6	Over 6	
		A	B	C	D	E	F	
	<i>Per kg</i>	\$	\$	\$	\$	\$	\$	
10283	Square or rectangular hollow tube outside girth n.e. 75 mm.....	106.00	105.00	-	56.70	55.60	-	
10284	Ditto but outside girth 75 - 150 mm.....	103.70	102.40	-	54.40	53.20	-	
10285	Ditto but outside girth exceeding 150 mm.....	101.10	99.80	-	52.00	49.60	-	
10286	Hollow circular tube outside diameter n.e. 25 mm.....	109.10	108.60	-	59.10	57.90	-	
10287	Ditto but outside diameter 25 - 50 mm.....	106.50	105.00	103.70	56.70	55.60	54.40	
10288	Ditto but outside diameter exceeding 50 mm.....	104.60	103.30	102.00	54.40	53.20	52.00	
10289	Equal or unequal angle, tee, channel or similar section total overall width, flanges or legs n.e. 75 mm.....	106.00	105.00	103.70	56.70	55.60	54.40	
10290	Ditto but total overall width, flanges or legs 75 - 150 mm.....	103.70	102.40	101.10	54.40	53.20	52.00	
10291	Ditto but total overall width, flanges or legs exceeding 150 mm.....	-	-	98.40	-	-	48.50	
10292	Segmental or moulded edge trim.....	76.10	-	-	27.20	-	-	
	Add to either of Items 10275 to 10279 inclusive for supply of clear anodized aluminium in lieu of mill finish aluminium.....							10%
	Add to either of Items 10275 to 10279 inclusive for supply of bronze anodized aluminium in lieu of mill finish aluminium.....							15%
	Add to either of Items 10275 to 10279 inclusive for the supply of black anodized aluminium in lieu of mill finish aluminium.....							18%
	Add to either of Items 10275 to 10279 inclusive for the supply of powder coated aluminium in lieu of mill finish aluminium.....							22%
	Add to either of Items 10275 to 10279 inclusive for supply of fluorocarbon coated aluminium in lieu of mill finish aluminium.....							25%
	Add to either of Items 10280 to 10292 inclusive for supply of bronze anodized aluminium in lieu of clear anodized aluminium.....							5%
	Add to either of Items 10280 to 10292 inclusive for the supply of black anodized aluminium sections in lieu of clear anodized aluminium.....							8%
	Add to either of Items 10280 to 10292 inclusive for the supply of powder coated aluminium sections in lieu of clear anodized aluminium.....							12%
	Add to either of Items 10280 to 10292 inclusive for the supply of fluorocarbon coated aluminium sections in lieu of clear anodized aluminium.....							15%

Item	ALUMINIUM (CONT'D)					Item
	EXTRUDED METAL SECTIONS - CLEAR ANODIZED FINISH (CONT'D)					
	<i>Per kg</i>					
10293	Take down and clear away any of the above sections (Items 10280 to 10292 inclusive).....					10293
10294	Take down and set aside for re-use ditto (ditto).....					10294
		A \$				
		19.70				
		23.10				
	ALUMINIUM WINDOWS AND DOORS					
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
10295	Clear anodized finish extruded section in aluminium windows.....	887.50	25.70	26.60	70.90	10295
10296	Extra over ditto for openable portions.....	299.60	-	-	-	10296
10297	Clear anodized finish extruded section in aluminium doors.....	812.60	23.10	24.00	62.70	10297
10298	Extra over ditto for openable portions.....	242.60	-	-	-	10298
	Add to either of Items 10295 to 10298 inclusive for the supply of bronze anodized aluminium sections in lieu of clear anodized aluminium sections.....					5%
	Add to either of Items 10295 to 10298 inclusive for the supply of black anodized aluminium sections in lieu of clear anodized aluminium sections.....					8%
	Add to either of Items 10295 to 10298 inclusive for the supply of powder coated aluminium sections in lieu of clear anodized aluminium sections.....					12%
	Add to either of Items 10295 to 10298 inclusive for the supply of fluorocarbon coated aluminium sections in lieu of clear anodized aluminium sections.....					15%
	REPAIRS TO ALUMINIUM WINDOWS AND DOORS					
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per kg</i>	A \$	B \$	C \$	D \$	
10299	Clear anodized finish extruded section in window and door frames, mullions, transoms, glazing beads and the like.....	88.20	27.40	33.40	44.90	10299
	<i>Per linear metre</i>					
10300	Positive pressure neoprene gasket seal.....	14.20	1.10	1.40	3.50	10300
10301	Neoprene wiping primary seal.....	18.60	1.10	1.40	3.50	10301
10302	Glazing gasket hand to glazier for fixing.....	11.60	-	-	-	10302
	<i>Each</i>					
10303	Ease, oil and adjust existing opening casements of any size.....	9.20	-	-	-	10303

Item	REPAIRS TO ALUMINIUM WINDOWS AND DOORS (CONT'D)					Item	
	Add to Item 10299 for the supply of bronze anodized aluminium sections in lieu of clear anodized aluminium sections.....				5%		
	Add to Item 10299 for the supply of black anodized aluminium sections in lieu of clear anodized aluminium sections.....				8%		
	Add to Item 10299 for the supply of powder coated aluminium sections in lieu of clear anodized aluminium sections.....				12%		
	Add to Item 10299 for the supply of fluorocarbon coated aluminium sections in lieu of clear anodized aluminium sections.....				15%		
		Supply and fix		Take down and clear away	Take down and set aside for re-use	Fix only	
		Alumin-ium or zinc alloy	Stain-less steel				
	<i>Each</i>	A	B	C	D	E	
		\$	\$	\$	\$	\$	
10304	Pair 50 mm butt hinges.....	41.90	37.30	9.40	12.00	14.20	10304
10305	Pair 75 mm ditto.....	45.40	36.70	9.40	12.00	14.20	10305
10306	Pair 200 to 400mm locally manufactured sliding shoes, pivots and friction side arm for projecting window.....	-	78.10	29.10	36.00	43.70	10306
10307	Pair 400 to 600 mm ditto.....	-	130.20	48.50	60.00	72.90	10307
10308	Pair 200 to 400 mm patent sliding shoes, pivots and friction side arms for projecting windows.....	-	128.70	23.10	28.30	43.70	10308
10309	Pair 400 to 600mm ditto.....	-	214.50	38.60	47.10	72.90	10309
10310	Barrel bolt n.e. 150 mm long.....	47.70	61.10	7.70	10.30	15.40	10310
10311	Ditto but 150 - 225 mm long.....	57.00	61.70	7.70	10.30	16.60	10311
10312	Flush bolt n.e. 150 mm long	51.20	57.00	7.70	9.40	16.60	10312
10313	Ditto but 150 - 225 mm long.....	52.30	60.40	7.70	10.30	15.40	10313

Item	REPAIRS TO ALUMINIUM WINDOWS AND DOORS (CONT'D)	Supply and fix		Take down and clear away	Take down and set aside for re-use	Fix only	Item
		Alumin- ium or zinc alloy	Stain- less steel				
		A \$	B \$				
	<i>Each</i>						
10314	Cam catch.....	34.20	51.10	3.40	4.30	10.60	10314
10315	Mortice lock with brass dead bolt and spring bolt, striking plate and four lever mechanism including labelling keys.....	195.20	-	24.90	32.60	80.40	10315
10316	Set of lever handle furniture.....	76.80	117.20	6.90	9.40	24.80	10316
10317	Mortice lock with brass expanding claw bolt for sliding door and flush furniture.....	177.40	258.30	24.00	31.70	80.40	10317
10318	Casement fastener with 115 mm handle and standard wedge plate.....	48.40	56.70	9.40	12.00	24.80	10318
10319	Two throw ditto with steel connecting rod.....	101.10	136.10	18.90	24.00	48.50	10319
10320	Through-the-frame type casement fastener.....	73.50	86.80	12.90	16.30	31.90	10320
10321	Two throw ditto with steel connecting rod.....	138.10	210.60	18.90	24.90	48.50	10321
10322	250 mm Casement stay of sliding bar type.....	69.60	78.90	6.00	6.90	14.20	10322
10323	300 mm Ditto.....	72.30	83.70	6.20	7.60	16.10	10323
10324	200 mm Casement stay with two stud pins	36.70	38.40	6.00	6.90	14.20	10324
10325	250 mm Ditto.....	35.60	43.70	6.20	7.10	15.40	10325
10326	300 mm Ditto.....	42.90	45.30	6.40	7.80	16.10	10326
10327	Set of adjustable rollers to suit sliding windows including all necessary guide, etc.....	144.30	-	16.30	22.30	55.60	10327
10328	Ditto but for sliding door.....	174.00	-	16.30	23.10	57.90	10328
10329	100 mm Pull handle.....	33.70	44.10	4.30	5.10	9.50	10329
10330	100 mm Flush pull handle.....	47.60	66.10	4.40	5.40	10.60	10330

Item	BRASS					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	<i>Per kg</i>					
10331	Casting, trimmed from mould, rough filed, drilled and countersunk as required.....	121.30	6.00	6.90	15.40	10331
10332	Ditto but fine filed, buffed and polished, drilled and countersunk, turned, threaded and brazed as required	127.40	6.00	6.90	15.40	10332
10333	Strip set in screed or paving as dividing strip.....	131.10	6.00	6.90	13.00	10333
10334	Ditto but bent in addition at expansion joints.....	155.80	6.00	6.90	14.20	10334
10335	Flat or formed sheet covering.....	136.70	6.00	6.90	13.00	10335
10336	Sheet covering to roofs, domes, etc., including all rolls, welts, flashings and the like.....	158.20	12.90	16.30	33.10	10336
10337	Sheet as pipes, gutters, hoods, chimney cowls, roof plates and the like.....	158.90	12.90	16.30	34.30	10337
10338	Sheet as square or rectangular tanks, storage cisterns, etc., including all stiffeners, corner plates and covers.....	158.20	12.90	16.30	33.10	10338
10339	Ventilator formed to detail (gross weight measured).....	154.70	12.00	15.40	29.60	10339
	COPPER					
	<i>Per kg</i>					
10340	Casting, trimmed from mould, rough filed, drilled and countersunk as required, including making pattern and preparing mould	161.70	6.00	6.90	15.40	10340
10341	Ditto but fine filed, buffed and polished, drilled and countersunk, turned, threaded and brazed as required	167.50	6.00	6.90	15.40	10341
10342	Flat or formed sheet covering.....	184.80	6.00	6.90	13.00	10342
10343	Sheet covering to roofs, domes, etc., including all rolls, welts, flashings and the like.....	207.90	12.90	16.30	33.10	10343
10344	Sheet as pipes, gutters, hoods, chimney cowls, roof plates and the like.....	207.90	12.90	16.30	34.30	10344
10345	Sheet as square or rectangular tanks, storage cisterns, etc., including all stiffeners, corner plates and covers.....	207.90	12.90	16.30	34.30	10345
10346	Ventilator formed to detail (gross weight measured).....	202.10	12.00	15.40	30.70	10346
	GUNMETAL					
	<i>Per kg</i>					
10347	Casting, trimmed from mould, rough filed, drilled and countersunk as required, including making pattern and preparing mould.....	222.30	6.00	9.40	26.00	10347
10348	Ditto but fine filed, buffed and polished, drilled and countersunk, turned, threaded and brazed as required.....	249.70	10.30	18.00	52.00	10348

Item	ROLLER SHUTTERS					Item
	Supply and fix manually operated roller shutters to suit any structural opening by an approved roller shutter manufacturer :-	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
10349	Galvanised mild steel rolling shutter Type K2 or B2.....	1,443.80	213.40	274.20	561.50	10349
10350	Extra over for wicket door.....	1,876.90	-	-	-	10350
10351	Stainless steel rolling shutter, Finish No. 4 - polished with fine grit or hair line finish.....	3,811.50	213.40	274.20	561.50	10351
10352	Extra over for wicket door.....	2,829.80	-	-	-	10352
10353	Stainless steel rolling shutter, Finish No. 8 - mirror finish.....	4,365.90	213.40	274.20	561.50	10353
10354	Extra over for wicket door.....	3,234.30	-	-	-	10354
10355	Stainless steel link grilles shutters Type 12F.....	3,222.50	213.40	274.20	561.50	10355
10356	Stainless steel semi-grilles shutters, Finish No. 4 - polished with fine grit or hair line finish.....	3,534.30	213.40	274.20	561.50	10356
10357	Ditto but Finish No. 8 - mirror finish.....	4,059.80	213.40	274.20	561.50	10357
10358	Aluminium rolling shutters Type OEC2 or EK2, clear anodized.....	2,032.80	213.40	274.20	561.50	10358
10359	Extra over for wicket door.....	3,811.50	-	-	-	10359
10360	Aluminium rolling shutters Type OEC2 or EK2, bronze anodized.....	2,217.60	213.40	274.20	561.50	10360
10361	Extra over for wicket door.....	4,067.20	-	-	-	10361
10362	Aluminium link grilles shutters Type 12F.....	2,194.50	213.40	274.20	561.50	10362
10363	Aluminium semi-grilles shutters, clear anodized.....	2,457.30	213.40	274.20	561.50	10363
10364	Ditto but bronze anodized.....	2,598.80	213.40	274.20	561.50	10364
	Supply and fix electrically operated roller shutters to suit any opening by an approved roller shutter manufacturer (power supply measured separately) :-					
	<i>Per square metre</i>					
10365	Galvanised mild steel rolling shutter Type K2 or B2.....	2,357.60	265.60	342.80	709.20	10365
10366	Extra over for wicket door.....	1,876.90	-	-	-	10366

Item	ROLLER SHUTTERS (CONT'D)					Item
	Supply and fix electrically operated roller shutters to suit any structural opening by an approved roller shutter manufacturer (power supply measured separately) : - (cont'd)	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
10367	Stainless steel rolling shutter, Finish No. 4 - polished with fine grit or hair line finish.....	5,313.00	265.60	342.80	709.20	10367
10368	Extra over for wicket door.....	2,829.80	-	-	-	10368
10369	Stainless steel rolling shutter, Finish No. 8 - mirror finish.....	5,578.70	265.60	342.80	709.20	10369
10370	Extra over for wicket door.....	3,187.80	-	-	-	10370
10371	Stainless steel link grilles shutters Type 12F.....	4,475.60	265.60	342.80	709.20	10371
10372	Stainless steel semi-grilles shutters, Finish No. 4 - polished with fine grit or hair line finish.....	4,758.60	265.60	342.80	709.20	10372
10373	Ditto but Finish No. 8 - mirror finish.....	5,174.40	265.60	342.80	709.20	10373
10374	Aluminium rolling shutters Type OEC2 or EK2, clear anodized.....	2,988.60	265.60	342.80	709.20	10374
10375	Extra over for wicket door.....	3,719.10	-	-	-	10375
10376	Aluminium rolling shutters Type OEC2 or EK2, bronze anodized.....	3,176.30	265.60	342.80	709.20	10376
10377	Extra over for wicket door.....	4,058.60	-	-	-	10377
10378	Aluminium link grilles shutters Type 12F.....	3,153.20	265.60	342.80	709.20	10378
10379	Aluminium semi-grilles shutters, clear anodized.....	3,395.70	265.60	342.80	709.20	10379
10380	Ditto but bronze anodized.....	3,678.70	265.60	342.80	709.20	10380
	PROPRIETARY TRANSPARENT SHUTTERS					
	Proprietary crystal-clear transparent security roller shutter manually operated constructed with polycarbonate panels (maximum width 3000 mm ; maximum height 300 mm ; thickness 3 mm), C-shape horizontal aluminium extrusions (height 31 mm ; width 11.2 mm), O-shape horizontal aluminium extrusions (height 30 mm ; width 11.2 mm ; outer diameter 12.5 mm), vertical supports (width 8 mm ; rated thickness 11.2 mm), stainless steel end guards (width 19 mm ; thickness 3mm) and bottom bar (width 80 mm ; height 101.5 mm ; thickness 4.5 mm) ; with UV-resistant and top-graded polycarbonate sheet which should have been tested and proven to meet the requirements of Airbus Directive (ABD) 0031 Issue E with respect to Smoke and Toxic Gas Emissions ; the C-shape & O-shape horizontal aluminium extrusions, vertical supports and bottom bars are extruded aluminium 6063 with a light grey or white colour powder coated finish ; continual PC panels could be fitted inside the grooves of the C-shape and O-shape horizontal aluminium extrusions to form full width of the transparent shutter ; and the clear height of the PC panels would be gradually increasing from a minimum of 182 mm at the top to a maximum of 300 mm at the bottom :					
	<i>Per square metre</i>					
10381	Proprietary transparent shutter.....	3,060.80	282.80	394.20	637.80	10381
10382	Extra over for wicket door.....	4,042.50	-	-	-	10382

Item	SUNDRIES FOR SHUTTERS				Item	
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	<i>Per linear metre</i>					
10383	Shutter hood, galvanized mild steel including access door and all necessary ironmongery.....	1,039.50	282.80	394.20	661.90	10383
10384	Ditto but stainless steel, hair line finish.....	2,887.50	282.80	394.20	661.90	10384
10385	Ditto but stainless steel, mirror face finish.....	3,303.30	282.80	394.20	661.90	10385
10386	Ditto but aluminium, clear anodized.....	2,297.30	282.80	394.20	661.90	10386
10387	Ditto but aluminium, bronze anodized.....	2,480.00	282.80	394.20	661.90	10387
10388	Typhoon shutter guide with locking device.....	554.40	57.40	79.70	133.60	10388
	Replacement parts :-					
	<i>Per set</i>					
10389	Lock and malleable iron shoot bolts.....	388.10	16.30	19.70	49.60	10389
10390	Coil spring with barrel, shutter n.e. 2.4 m width.....	2,032.80	48.80	62.90	81.60	10390
10391	Add to Item 10390 for each additional 600 mm width of shutter.....	544.20	12.00	15.40	20.10	10391
10392	A pair of aluminium guide rail, shutter n.e. 2.4 m height.....	2,032.80	57.40	79.70	133.60	10392
10393	Add to item 10392 for each additional 600 mm height of shutter.....	542.90	14.60	19.70	33.10	10393
10394	A pair of stainless steel guide rail, shutter n.e. 2.4 m height.....	4,521.80	57.40	79.70	133.60	10394
10395	Add to Item 10394 for each additional 600 mm height of shutter.....	1,130.50	14.60	19.70	33.10	10395
10396	A pair of galvanized mild steel guide rail, shutter n.e. 2.4 m height.....	1,256.60	57.40	79.70	133.60	10396
10397	Add to Item 10396 for each additional 600 mm height of shutter.....	304.90	14.60	19.70	33.10	10397
	<i>Per square metre</i>					
10398	Slat for galvanised mild steel rolling shutter Type K2 or B2.....	664.10	137.10	180.00	372.30	10398
10399	Slat for stainless steel rolling shutter, Finish No. 4 - polished with fine grit or hair line finish.....	924.00	137.10	180.00	372.30	10399
10400	Slat for stainless steel rolling shutter, Finish No. 8 - mirror finish.....	1,112.30	137.10	180.00	372.30	10400
10401	Slat for stainless steel link grilles shutters Type 12F.....	1,097.30	137.10	180.00	372.30	10401
10402	Slat for stainless steel semi-grilles shutters, Finish No. 4 - polished with fine grit or hair line finish.....	1,155.00	137.10	180.00	372.30	10402
10403	Ditto but Finish No. 8 - mirror finish.....	1,351.40	137.10	180.00	372.30	10403

Item	SUNDRIES FOR SHUTTERS (CONT'D)				Item	
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	Replacement parts : - (Cont'd)					
	<i>Per square metre</i>					
10404	Slat for aluminium rolling shutters Type OEC2 or EK2, clear anodized.....	895.10	137.10	180.00	372.30	10404
10405	Slat for aluminium rolling shutters Type OEC2 or EK2, bronze anodized.....	946.50	137.10	180.00	372.30	10405
10406	Slat for aluminium link grilles shutters Type 12F.....	998.20	137.10	180.00	372.30	10406
10407	Slat for aluminium semi-grilles shutters, clear anodized.....	1,039.50	137.10	180.00	372.30	10407
10408	Ditto but bronze anodized.....	1,098.70	137.10	180.00	372.30	10408
	METAL LOUVRE FRAMES					
	Metal adjustable louvre frames complete with clips, operating handle, etc., and all necessary mullion coupling clips and spacers for 100, 150 or 225 mm glass blades (measured separately), including any assembling, screwing to wood, plugging and screwing to concrete, brick, stone or other jamb or coupled to form mullion, and bedding with and including providing mastic in accordance with the manufacturer's instructions :-				Galvanized steel with aluminium lacquer or stove baked enamel finish	Plain or anodized aluminium
	Set of two metal adjustable louvre frames complete with clips for glass, operating handle, etc., and any necessary mullion coupling clips and spacers :-				A \$	B \$
	<i>Per set</i>					
10409	Set of two frames with clips for three 100 mm wide glass blades (285 mm overall height).....			242.60	331.90	10409
10410	Add to Item 10409 for each additional clip (each additional 90 mm in overall height).....			46.20	74.40	10410
10411	Set of two frames with clips for two 150 mm wide glass blades (300 mm overall height).....			265.70	363.20	10411
10412	Add to Item 10411 for each additional clip (each additional 140 mm in overall height).....			80.90	127.50	10412
10413	Set of two frames with clips for two 225 mm wide glass blades (440 mm overall height).....			336.10	506.20	10413
10414	Add to Item 10413 for each additional clip (each additional 200 mm in overall height).....			111.40	190.90	10414
	<i>Per linear metre</i>					
10415	Top weather strip to louvres.....			65.70	86.40	10415
10416	Bottom ditto.....			66.80	86.40	10416
	<i>Per linear metre</i>					
		Take down and clear away	Take down and set aside for re-use	Fix only		
		A \$	B \$	C \$		
10417	Set of two frames with clips as above described (net height of each set of two frames measured).....		17.10	35.10	88.70	10417
10418	Top or bottom weather strip.....		4.30	7.70	20.10	10418

Item	SLOTTED ANGLES								Item			
	Approved slotted steel angle, rust protected and stove enamelled, fixed complete and including all cutting, fitting, supplying and fixing screws, bolts, nuts, washers, corner stiffeners and rubber pads, plugging to concrete, brick, stone or other surfaces and making good :-											
	<i>Per linear metre</i>											
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only							
		A \$	B \$	C \$	D \$							
10419	36 x 36 x 1.80 mm Slotted angle section in brackets, shelving racks, stands and the like.....	57.80	5.10	10.30	28.90				10419			
10420	40 x 40 x 2.00 mm Ditto.....	63.50	5.10	10.30	28.90				10420			
10421	62 x 41 x 2.00 mm Ditto.....	66.70	5.10	10.30	28.90				10421			
10422	66 x 45 x 2.50 mm Ditto.....	79.50	5.10	10.30	28.90				10422			
	STEEL NETTING, MESH AND EXPANDED METAL											
		Supply and fix					Take down and clear away	Take down and set aside for re-use	Fix only			
	Wire (mm)	0.80	1.00	1.00	1.00	1.12						
	Mesh (mm)	15	25	30	40	50						
		A \$	B \$	C \$	D \$	E \$	F \$	G \$	H \$			
10423	Galvanized iron wire netting lapped 75 mm at joints and bedded in floor screeds, paving, etc.....	11.60	14.80	14.10	12.70	11.40	-	-	5.90	10423		
10424	Ditto but fixed to walls, wall lining or other vertical surfaces as key for plaster or screed.....	14.10	17.50	16.60	15.10	13.80	-	-	8.30	10424		
10425	Ditto but fixed to soffits, or sides and soffits of beams as key for plaster or screeds.....	15.50	18.70	18.00	16.50	15.10	-	-	9.50	10425		
10426	Ditto but fixed to timber, concrete or steel posts or framing (measured separately) in fencing, gates, shelving, grilles, panels and the like	18.90	22.20	21.40	19.90	18.50	3.40	6.00	13.00	10426		
		Supply and fix						Take down and clear away	Take down and set aside for re-use	Fix only		
		Straight lattice mesh				Diamond mesh						
	Wire (mm)	1.40	1.80	2.24	2.50	1.60	2.00	2.50				
	Mesh (mm)	5	10	13	16	25	30	40				
		A \$	B \$	C \$	D \$	E \$	F \$	G \$	H \$			
10427	Galvanized steel wire woven mesh fixed to timber, concrete or steel posts or framing (measured separately) in fencing, gates, shelving, grilles, panels and the like.....	80.90	77.30	74.00	69.30	40.40	46.20	46.20	4.30	8.60	18.90	10427

Item	STEEL NETTING, MESH AND EXPANDED METAL (CONT'D)							Item		
10428	Approved galvanized welded steel wire mesh fixed to timber or steel posts or framing (measured separately) in fencing, gates, shelving, racks, screens, window guards, etc., including all galvanized staples, screws, typing wire and the like (measured net).....	Supply and fix				Take down and clear away	Take down and set aside for re-use	Fix only		
		Wire (mm)	1.20	1.20	1.20				1.50	
		Mesh (mm)	12 x 12	12 x 25	25 x 25	50 x 50				
		<i>Per square metre</i>	A	B	C	D	E	F	G	
		\$	\$	\$	\$	\$	\$	\$		
		52.00	40.40	34.70	28.90	3.40	6.00	13.00		
10429	Approved steel wire mesh fixed to timber, concrete or steel post framing (measured separately) in fencing, gates, shelving, grilles, panels and the like (measured net).....	Supply and fix				Take down and clear away	Take down and set aside for re-use	Fix only		
		Wire (mm)	2.50 x 2.50	3.15 x 3.15	3.15 x 3.15				4.00 x 4.00	
		Mesh (mm)	25 x 75	25 x 75	25 x 75	75 x 75				
		<i>Per square metre</i>	A	B	C	D	E	F	G	
		\$	\$	\$	\$	\$	\$	\$		
		46.20	52.00	46.20	52.00	3.40	6.00	13.00		
10430	Ditto but galvanized (ditto).....									
		48.40	54.00	48.00	54.00	4.30	6.90	14.20		
10431	Plastic dipped metal netting fixed to timber, concrete or steel posts or framing (measured separately) in fencing, gates, shelving, grilles, panels and the like (measured net).....	Supply and fix					Take down and clear away	Take down and set aside for re-use	Fix only	
		A	B	C	D					
				\$	\$	\$	\$			
		202.10	3.40	6.00	13.00					
10432	Approved expanded metal fixed to timber, concrete, or steel post framing (measured separately) in fencing gates, shelving, grilles, panels and the like (measured net).....	Supply and fix					Take down and clear away	Take down and set aside for re-use	Fix only	
		Mesh (mm)	10	22	25	34				50
		Weight (kg/m²)	1.60	1.95	2.22	2.00	3.11	3.80		
		<i>Per square metre</i>	A	B	C	D	E	F	G	H
		\$	\$	\$	\$	\$	\$	\$	\$	\$
		80.90	98.20	127.20	104.00	138.60	138.60	4.30	6.90	17.70
10433	Ditto but galvanized (ditto).....									
		109.70	127.10	173.30	144.40	196.40	196.40	4.30	6.90	17.70

Item	STEEL NETTING, MESH AND EXPANDED METAL (CONT'D)										Item	
				Supply and fix			Take down and clear away	Take down and set aside for re-use	Fix only			
		Mesh (mm)	77 x 34	30.48 x 13	38.10 x 16.93							
		Weight (kg/m ²)	5.91	7.38	12							
			A	B	C	D	E	F				
			\$	\$	\$	\$	\$	\$				
10434	Proprietary expanded metal for security fencing with hot dip galvanized finish complied to BS EN ISO 1461:1999.....		329.20	335.00	427.40	4.30	7.70	17.70			10434	
				Supply and fix					Take down and clear away	Take down and set aside for re-use	Fix only	
		Wire (mm)	2.50	3.00	3.00	3.00	4.00					
		Mesh (mm)	40	75	50	40	50					
			A	B	C	D	E	F	G	H		
			\$	\$	\$	\$	\$	\$	\$	\$		
10435	Stainless steel chain link fixed to concrete, timber or steel posts or framing (measured separately) in fencing, gates, etc.		184.80	188.80	190.60	196.30	202.10	3.40	6.00	13.00	10435	
10436	Ditto but galvanized steel chain link.....		46.20	48.30	57.80	63.50	75.10	3.40	6.00	13.00	10436	

Item	P.V.C. COATED CHAIN LINK FENCING							Item		
	Supply and fix				Take down and clear away	Take down and set aside for re-use	Fix only			
	Wire (mm)	3.00	3.00	2.50	2.50					
	Mesh (mm)	75	50	40	25					
		A	B	C	D	E	F	G		
		\$	\$	\$	\$	\$	\$	\$		
10437	<i>Per square metre</i> P.V.C. coated galvanised steel chain link fixed to timber, concrete or steel posts or framing (measured separately) in fencing, gates and the like							10437		
		86.60	115.50	98.20	138.60	3.40	6.00	13.00		
	BARBED WIRE OR TAPE					Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per linear metre</i>					A	B	C	D	
						\$	\$	\$	\$	
10438	Proprietary stainless steel razor barbed wire fence top and steel posts with any diameter coils including all necessary stainless steel wire (measured straight).....					28.90	3.40	6.00	14.20	10438
10439	Proprietary stainless steel barbed wire fence top and steel posts with any diameter coils including all necessary stainless steel wire (measured straight).....					28.90	3.40	6.00	14.20	10439
10440	Galvanised barbed wire formed from 2 strands of 2.5 mm mild steel line wires and 2 mm mild steel pointed wires with set of two barbs at 125 mm centres, strained tight and fixed to fence top and steel posts including all necessary tying wire, staples and the like (measured straight).....					5.80	0.90	1.70	4.70	10440
10441	Ditto but with sets of four barbs at 75 mm centre (measured straight).....					7.30	0.90	1.70	4.70	10441
10442	Extra over either of Items 10440 to 10441 inclusive for forming into coils of any diameter.....					7.20	-	-	5.90	10442
10443	Extra over either of Items 10440 to 10441 inclusive for hand weaving into woven mat.....					7.20	-	-	5.90	10443
	FIXING BOLTS FOR SECURITY FENCING									
	<i>Each</i>									
10444	Fixing bolt with shear nuts and washers 6 mm diameter.....					11.60	2.60	3.40	5.90	10444
10445	Ditto but 8 mm diameter.....					13.60	2.60	3.40	5.90	10445
10446	Ditto but 10 mm diameter.....					16.60	3.40	4.00	7.10	10446
10447	Ditto but 12 mm diameter.....					19.20	3.40	4.00	7.10	10447
10448	Ditto but 16 mm diameter.....					26.50	3.40	4.30	8.30	10448
10449	U-bolt, hot dip galvanized with clamp plate and security shear nut.....					56.40	3.40	4.30	8.30	10449

Item	GALVANIZING, ELECTRO-PLATING AND CHROMIUM PLATING				Item	
	Zinc sprayed	Electro plated	Hot dipped	Chromium plated		
	A	B	C	D		
	\$	\$	\$	\$		
<i>Each</i>						
10450	Steel or cast iron articles complete with nuts, bolts or other fixing accessories, n.e. 1 kg (weight of composite items measured) each in total weight.....	10.20	11.40	12.90	29.20	10450
10451	Ditto but brass or copper articles.....	-	-	-	24.10	10451
<i>Per kg</i>						
10452	Steel or cast iron articles complete with nuts, bolts or other fixing accessories, 1 - 13 kg (weight of composite items measured) each in total weight.....	7.30	8.30	9.40	25.90	10452
10453	Ditto but exceeding 13 kg ditto.....	3.80	4.20	4.70	13.30	10453
PROPRIETARY FIRE PROTECTION ENCLOSURE AND CEILING						
Supply and install proprietary fire protection enclosure and ceiling system complying with BS 476 : Parts 20-24 and statutory requirements, complete with fire resisting boarding/material to all exposed surfaces, steel framings, insulation, and all necessary accessories in accordance with the manufacturer's recommendations including providing test certificates.					Supply and fix	
<i>Per square metre</i>					A \$	
10454	Proprietary fire protection enclosure of non-combustible composite panel of fibre reinforced cement, mechanically bonded to punched steel sheet on both surfaces, 1 hour fire rated period (finishes measured separately).....				1,894.20	10454
10455	Ditto but 2 hours fire rated period (ditto).....				1,952.00	10455
10456	Ditto but 4 hours fire rated period (ditto).....				2,032.80	10456
10457	Proprietary fire protection enclosure of non-combustible calcium silicate board reinforced with selected fibres and fillers. The board has smooth surface on one face and a lightly textured sanded surface on the other, 1 hour fire rated period (finishes measured separately).....				1,051.10	10457
10458	Ditto but 2 hours fire rated period (ditto).....				1,478.40	10458
10459	Proprietary fire protection enclosure of non-combustible calcium silicate board reinforced with selected fibres and fillers. The board has smooth finish on both faces, 4 hour fire rated period (finishes measured separately).....				1,755.60	10459
10460	Proprietary fire protection enclosure of non-combustible matrix engineered mineral boards, 1 hour fire rated period (finishes measured separately).....				693.00	10460
10461	Ditto but 2 hours fire rated period (ditto).....				866.30	10461
10462	Ditto but 4 hours fire rated period (ditto).....				1,131.90	10462
10463	Proprietary fire protection enclosure of non-combustible board manufactured with a fibre reinforced cement core with outer facing of perforated galvanized steel or other suitable materials mechanically bonded to each surface of the core, 1 hour fire rated period (finishes measured separately).....				1,732.50	10463
10464	Ditto but 2 hours fire rated period (ditto).....				1,732.50	10464
10465	Ditto but 4 hours fire rated period (ditto).....				2,079.00	10465
10466	Take down and clear away any type of fire protection enclosure or ceiling system.....				124.30	10466

Item	FIRE RESISTING DOOR SETS		Item																													
	Approved galvanised mild steel fire resisting door and frame of fire rated period tested in accordance with BS 476 : Parts 20-23 and Health and Safety at Work etc. Act 1974 including door frames and any finish : -	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">Supply and fix</th> <th rowspan="3">Take down and clear away</th> <th rowspan="3">Take down and set aside for re-use</th> <th rowspan="3">Fix only</th> </tr> <tr> <th colspan="4">Fire rated period</th> </tr> <tr> <th>1/2 hour</th> <th>1 hour</th> <th>2 hours</th> <th>4 hours</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> <td>F</td> <td>G</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </tbody> </table>	Supply and fix				Take down and clear away	Take down and set aside for re-use	Fix only	Fire rated period				1/2 hour	1 hour	2 hours	4 hours	A	B	C	D	E	F	G	\$	\$	\$	\$	\$	\$	\$	
Supply and fix				Take down and clear away	Take down and set aside for re-use	Fix only																										
Fire rated period																																
1/2 hour	1 hour	2 hours	4 hours																													
A	B	C	D	E	F	G																										
\$	\$	\$	\$	\$	\$	\$																										
10467	Fire resisting door, single leaf.....	2,560.20	2,589.10	2,589.10	3,779.20	38.60	48.00	96.90	10467																							
10468	Fire resisting door, double leaf.....	2,413.50	2,443.50	2,443.50	3,313.70	30.90	38.60	78.00	10468																							
	<i>Per square metre</i> (Door panel size measured)																															
10469	Proprietary fire and smoke seals, tested in accordance with BS 476 : Parts 20/22 and BS 476-31.1:1983 including any finish.....	226.80	226.80	226.80	226.80	2.60	4.30	9.50	10469																							
	<i>Per linear metre</i>																															
	<i>Each</i>																															
10470	Extra over either of Items 10467 to 10468 inclusive for forming observation panel n.e. 0.10 m ²				250.00	250.00	289.50	434.30	10470																							
10471	Ditto but 0.10 - 0.20 m ²				625.10	625.10	723.70	1,085.60	10471																							
10472	Ditto but 0.20 - 0.40 m ²				1,000.00	1,000.00	1,157.90	1,736.90	10472																							
	Approved stainless steel fire resisting door and frame of fire rated period tested in accordance with BS 476 : Parts 20-23 and Health and Safety at Works etc. Act 1974 including door frames and any finish : -	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">Supply and fix</th> <th rowspan="3">Take down and clear away</th> <th rowspan="3">Take down and set aside for re-use</th> <th rowspan="3">Fix only</th> </tr> <tr> <th colspan="4">Fire rated period</th> </tr> <tr> <th>½ hour</th> <th>1 hour</th> <th>2 hours</th> <th>4 hours</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> <td>F</td> <td>G</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </tbody> </table>	Supply and fix				Take down and clear away	Take down and set aside for re-use	Fix only	Fire rated period				½ hour	1 hour	2 hours	4 hours	A	B	C	D	E	F	G	\$	\$	\$	\$	\$	\$	\$	
Supply and fix				Take down and clear away	Take down and set aside for re-use	Fix only																										
Fire rated period																																
½ hour	1 hour	2 hours	4 hours																													
A	B	C	D	E	F	G																										
\$	\$	\$	\$	\$	\$	\$																										
10473	Fire resisting door, single leaf.....	5,568.50	5,655.10	5,655.10	7,344.10	38.60	48.00	96.90	10473																							
10474	Fire resisting door, double leaf.....	5,386.70	5,462.90	5,462.90	7,043.80	30.90	38.60	78.00	10474																							
	<i>Per square metre</i> (Door panel size measured)																															
10475	Proprietary fire and smoke seals, tested in accordance with BS 476 : Parts 20/22 and BS 476-31.1:1983 including any finish.....	226.80	226.80	226.80	226.80	2.60	4.30	9.50	10475																							
	<i>Per linear metre</i>																															
	<i>Each</i>																															
10476	Extra over either of Items 10473 to 10474 inclusive for forming observation panel n.e. 0.10 m ²				250.00	250.00	289.50	434.30	10476																							
10477	Ditto but 0.10 - 0.20 m ²				625.10	625.10	723.70	1,085.60	10477																							
10478	Ditto but 0.20 - 0.40 m ²				1,000.00	1,000.00	1,157.90	1,736.90	10478																							

Item	FIRE RESISTING DOOR SETS (CONT'D)				Item	
	Approved fire resisting glazed doors to BS 476 : Parts 20-23 comprising fire resisting clear tempered glass panels and mirror finished stainless steel door frames :-	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
10479	Single leaf door, 1 hour fire rated period with fire resisting clear tempered glass panels.....	8,766.80	24.90	24.90	49.60	10479
10480	Ditto but double leaf door.....	8,254.00	22.30	22.30	44.90	10480
10481	Single leaf door, 2 hours fire rated period with fire resisting clear tempered glass panels.....	12,292.30	26.60	26.60	54.40	10481
10482	Ditto but double leaf door.....	11,595.10	24.90	24.90	49.60	10482
	FIRE RESISTING PARTITIONS					
	Supply and install fire resisting glazed partition comprising fire resisting glass panels, galvanized mild steel frames, stainless steel beads and clad with stainless steel facing in any finish complying with BS 476 : Parts 20-24 :-					
	<i>Per square metre</i>					
10483	Approved glazed partition with 6 mm thick fire resisting clear tempered glass with 1 hour fire rated period.....	2,141.70	60.80	93.40	189.10	10483
10484	Ditto but with 12 mm thick fire resisting clear tempered glass with 1 hour fire rated period.....	2,498.70	71.10	108.80	218.70	10484
	Supply and install proprietary fire resisting partition wall system comprising metal framing with gypsum board and versatile lining board, composed of calcium silicate and cellulose reinforced fibre, on both sides. The works shall include sealing up head and bottom and joint with tape and compound in accordance with manufacturer's instructions and complying with BS 476 : Parts 20-24 :-					
	<i>Per square metre</i>					
10485	Proprietary fire resisting partition wall, 1 hour fire rated period.....	388.10	45.40	60.00	118.20	10485
10486	Ditto, but 2 hours fire rated period.....	486.70	45.40	60.00	118.20	10486
	Supply and install proprietary fire resisting partition system comprising steel framings, insulation, and all necessary accessories in accordance with the manufacturer's recommendations and complying with BS 476 : Parts 20-24 :-					
	<i>Per square metre</i>					
10487	Proprietary fire resisting partition comprising non-combustible composite panel of fibre reinforced cement, mechanically bonded to punched steel sheet, 1 hour fire rated period (finishes measured separately).....	2,010.20	84.80	130.30	260.10	10487
10488	Ditto but 2 hours fire rated period (ditto).....	2,076.90	84.80	130.30	260.10	10488
10489	Ditto but 4 hours fire rated period (ditto).....	2,394.60	84.80	130.30	260.10	10489
10490	Proprietary fire resisting partition comprising non-combustible calcium silicate board reinforced with selected fibres and fillers. The board has smooth surface on one face and a lightly textured sanded surface on the other, 1 hour fire rated period (finishes measured separately).....	1,108.80	108.00	135.40	338.10	10490
10491	Ditto but 2 hours fire rated period (ditto).....	1,282.10	108.00	135.40	338.10	10491
10492	Ditto but 4 hours fire rated period (ditto).....	1,605.50	108.00	135.40	338.10	10492

Item	FIRE RESISTING PARTITIONS (CONT'D)				Item		
	Supply and install proprietary fire resisting partition system comprising steel framings, insulation and all necessary accessories in accordance with the manufacturer's recommendations and complying with BS 476 Parts 20-24 : - (Cont'd)	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only		
	<i>Per square metre</i>	A \$	B \$	C \$	D \$		
10493	Proprietary fire resisting partition comprising non-combustible matrix engineered mineral boards, 1 hour fire rated period, with or without lining (finishes measured separately).....	1,039.50	108.00	135.40	323.40	10493	
10494	Ditto but 2 hours fire rated period (ditto).....	1,155.00	108.00	135.40	323.40	10494	
10495	Ditto but 4 hours fire rated period (ditto).....	1,386.00	108.00	135.40	323.40	10495	
10496	Proprietary fire resisting partition comprising non-combustible board manufactured with fibre reinforced cement core with outer facing of perforated galvanized steel or other suitable materials mechanically bonded to each surface of the core, 1 hour fire rated period, with or without lining (finishes measured separately).....	2,141.80	108.00	135.40	323.40	10496	
10497	Ditto but 2 hours fire rated period (ditto).....	2,159.90	108.00	135.40	323.40	10497	
10498	Ditto but 4 hours fire rated period (ditto).....	2,477.20	108.00	135.40	323.40	10498	
	FIRE RESISTING DROP SHUTTERS						
	Approved fire resisting drop shutter, 4 hours fire rated period tested in accordance with BS 476 : Parts 20-24 (power supply measured separately) : -						
	<i>Per square metre</i>						
10499	Drop shutter.....	7,469.10	145.70	176.50	484.60	10499	
	PROPRIETARY FIRE RESISTING LOUVRES						
	Proprietary fire resisting louvre, 2 hours fire rated period in compliance with the BS 476 (power supply measured separately) : -						
	<i>Per square metre</i>						
10500	Proprietary fire resisting louvre, 2 hours fire rated period.....	10,667.40	145.70	176.50	484.60	10500	
	FIRE RESISTING ROLLER SHUTTERS						
	Approved fire resisting roller shutter tested in accordance with BS 476 : Parts 20-24 (power supply measured separately) : -						
	<i>Per square metre</i>						
		Supply and fix		Take down and clear away	Take down and set aside for re-use	Fix only	
		Fire rated period					
		1 hour	2 hours				
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	E \$	
10501	Fire resisting roller shutter, galvanized mild steel, manually operated.....	1,934.60	1,992.40	213.40	280.20	567.40	10501
10502	Fire resisting roller shutter, galvanized mild steel, electrically operated.....	2,281.10	2,338.90	266.50	350.50	709.20	10502
10503	Fire resisting roller shutter, stainless steel, manually operated.....	2,367.80	2,425.50	213.40	280.20	567.40	10503
10504	Fire resisting roller shutter, stainless steel, electrically operated.....	3,003.00	3,089.60	266.50	350.50	709.20	10504

Item	CURTAIN WALLS				Item	
	Design, supply, fabricate and install glazed/unglazed aluminium curtain wall including framing components and sub-frames :-					
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A	B	C	D	
		\$	\$	\$	\$	
	<i>Per square metre</i>					
10505	Aluminium curtain wall.....	2,338.90	249.40	490.20	1,229.30	10505
10506	Ditto but circular on plan.....	2,693.50	267.30	526.10	1,312.10	10506
10507	Extra over either of Items 10505 to 10506 inclusive for openable portion.....	184.80	18.90	44.60	89.80	10507
10508	Extra over either of Items 10505 to 10506 inclusive for louvres.....	404.30	38.60	90.00	180.90	10508
	Design, supply, fabricate and install glazed/unglazed stainless steel curtain wall including framing components and sub-frames :-					
10509	Stainless steel curtain wall.....	3,511.20	239.10	440.50	1,099.30	10509
10510	Ditto but circular on plan.....	4,158.00	257.10	473.00	1,182.00	10510
10511	Extra over either of Items 10509 to 10510 inclusive for openable portion.....	279.50	30.90	66.80	135.90	10511
10512	Extra over either of Items 10509 to 10510 inclusive for louvres.....	577.50	49.70	112.30	224.60	10512
	SOLID ALUMINIUM WALL CLADDING					
	Design, supply, fabricate and install 3 mm thick (minimum) aluminium composite wall cladding including galvanized sub-frames in accordance with the manufacturer's instructions :-					
	<i>Per square metre</i>					
10513	Cladding to internal wall.....	1,790.30	250.20	443.00	579.20	10513
10514	Ditto but circular on plan.....	1,867.60	263.10	484.10	626.50	10514
10515	Cladding to external wall.....	1,900.00	266.50	473.90	614.70	10515
10516	Ditto but circular on plan.....	2,018.90	281.10	516.70	661.90	10516

Item	COMPOSITE ALUMINIUM WALL CLADDING					Item
	Design, supply, fabricate and install 4 mm thick aluminium composite wall cladding including galvanized sub-frames in accordance with the manufacturer's instructions : -	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
10517	Cladding to internal wall.....	2,255.10	250.20	443.00	620.60	10517
10518	Ditto but circular on plan.....	2,337.20	263.10	484.10	673.80	10518
10519	Cladding to external wall.....	2,401.30	266.50	473.90	661.90	10519
10520	Ditto but circular on plan.....	2,526.00	281.10	516.70	721.00	10520
	PROPRIETARY AUTOMATIC SWING AND SLIDING DOORS					
	Supply and fix proprietary automatic swing or sliding door system in accordance with the manufacturer's instructions comprising minimum of 6 mm clear tempered glass panels and mirror finished or other finished stainless steel door frames. The works shall include door operator to comply with BS 7036, safety unit, locks and all necessary accessories (power supply measured separately) :					
	<i>Per square metre</i>					
10521	Proprietary automatic swing door; single leaf door.....	11,864.20	234.80	541.60	1,087.50	10521
10522	Ditto but double leaf door.....	9,507.50	187.70	432.70	862.90	10522
10523	Proprietary automatic sliding door; single leaf door.....	11,776.40	185.10	425.90	851.10	10523
10524	Ditto but double leaf door.....	9,591.10	148.30	341.00	685.60	10524
	STRONG ROOM DOORS AND FRAMES					
	Supply and fix strong room door and frame, complete with all boltwork, locking, anti-explosive protection and fire protection, in accordance with G.S. clause 22.50 : -					
	<i>Per square metre</i>					
10525	Single leaf Treasury Grade "C" door.....	25,952.40	180.80	332.50	1,111.10	10525
10526	Ditto but Treasury Grade "D".....	23,078.00	152.50	281.10	945.60	10526
10527	Ditto but Treasury Grade "E".....	19,034.70	125.10	229.70	721.80	10527
	(Note : - The above Items 10525 to 10527 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)					

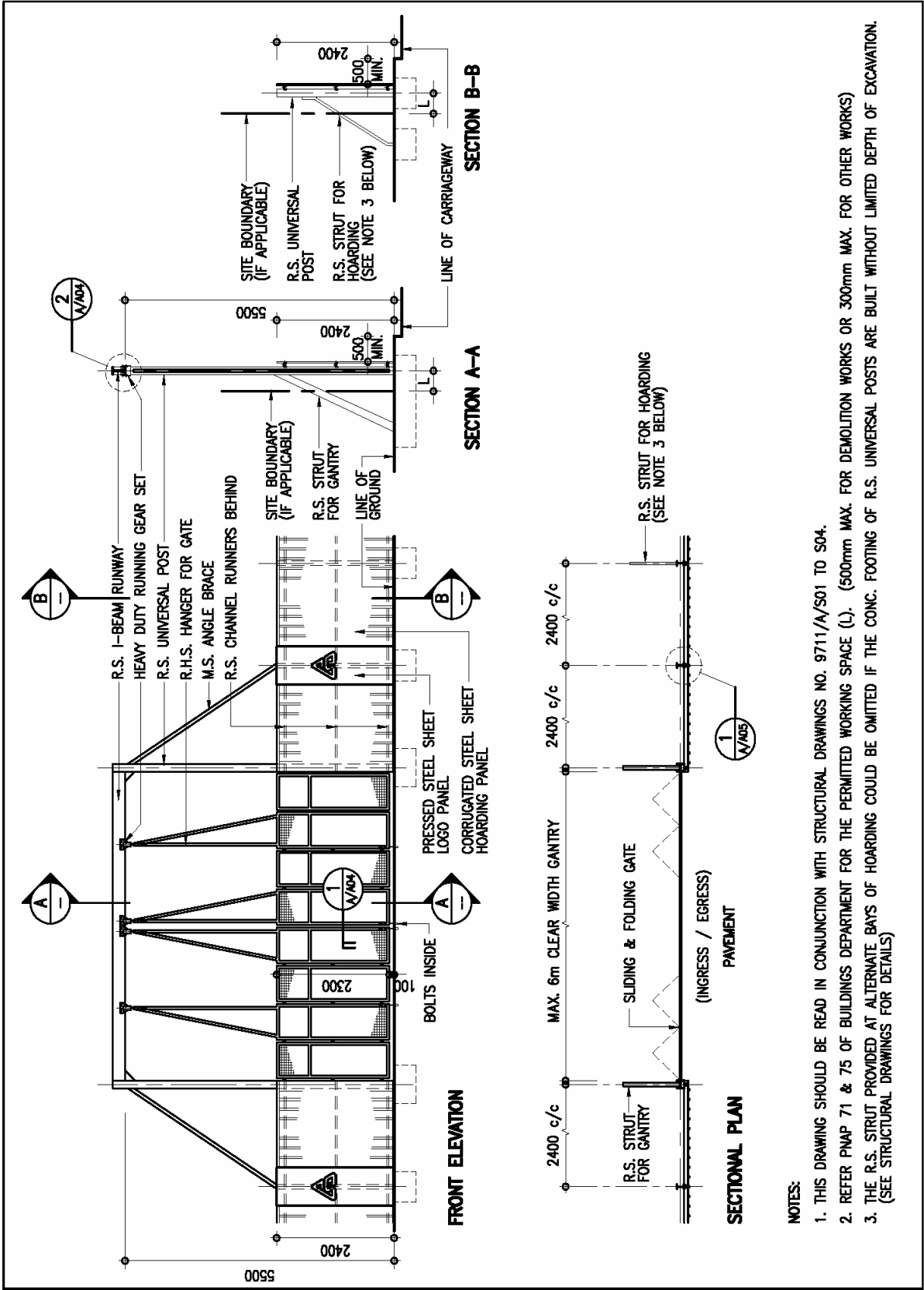
Item	PROPRIETARY FIBREGLASS HOUSE AND PLANTER				Item	
	Proprietary fibreglass house equipped with windows, door, louvres and all necessary accessories in accordance with the manufacturer's instructions : -	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per set</i>	A \$	B \$	C \$	D \$	
10528	Proprietary combinable house size 1520 x 1220 x 2250 mm high and sun cover size 2400 x 1500 x 150 mm high.....	13,871.50	476.40	428.50	858.20	10528
10529	Proprietary guard house size 1250 x 1250 x 2100 mm high and sun cover size 1800 x 1500 x 150 mm high.....	12,427.10	378.80	342.80	682.00	10529
10530	Proprietary guard house size 3460 x 1520 x 2350 mm high and sun cover size 3800 x 1800 x 150 mm high.....	40,110.00	1,289.60	1,199.70	2,316.80	10530
	Proprietary fibreglass planters with galvanized mild steel framing in any colour finish and all necessary accessories in accordance with the manufacturer's instructions : -					
10531	Proprietary planter size 1200 x 1200 x 1200 mm high.....	7,762.40	200.50	180.00	360.50	10531
	PROPRIETARY FURNITURE					
	Supply and fix proprietary fire resistant double wall type fume cupboard of zinc coated steel panel with epoxy coat finish or other suitable finish. Work shall complete with epoxy resin worktop, oval drip cup, water tap, gas tap, electricity outlet and under bench cabinet, exhaust system, safety devices, control and monitoring panel, connectors to nearby utilities and exhaust outlets, all connection and testing and commissioning works, all in accordance with the manufacturer's instructions. The standard shall conform to EN 14175 and BS 7258 (gas and power supply measured separately) :					
	<i>Per set</i>					
10532	Proprietary fume cupboard; overall size : 1200 x 2300 x 810 mm.....	52,552.50	472.20	425.90	851.10	10532
10533	Ditto; overall size : 1500 x 2300 x 810 mm.....	56,017.50	472.20	425.90	851.10	10533
	Supply and fix proprietary school type fume cupboard complete with two compartment base storage cupboard for acid and inflammable liquids cast epoxy resin worktop and sinks, 4 sides glass panel, 250 mm diameter polypropylene ductwork, exhaust extraction system including steel support frame for fan and motor, safety devices, control and monitoring panel, connectors to nearby utilities and exhaust outlets, all connection and testing and commissioning works, all in accordance with the manufacturer's instructions. The standard shall conform to EN 14175 and BS 7258 (gas and power supply measured separately) :					
	<i>Per set</i>					
10534	Proprietary fume cupboard ; overall size : 1500 x 2100 x 700 mm.....	54,851.00	472.20	425.90	851.10	10534

Item	PROPRIETARY FURNITURE (CONT'D)				Item	
	<p>Supply and fix proprietary locker system comprising :- Panel conforming to EN 13 mm thick ± 1 mm solid phenolic panel doors and intermediate self divider, 3 mm thick ± 1 mm partition and side walls, thick ± 1 mm back wall. Solid colour on both sides of the panel. Hardware : Aluminium framing, concealed hinges and multi-directional adjustable legs. Alloy locks with masterkeying system, two masterkeys and each lock with two keys and one plastic number plate with stainless steel split key ring. Plastic number plate with logo for each compartment. Rubber strip as door stop.</p> <p><i>Per set</i></p>	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
10535	Proprietary locker size 300 x 1800 mm high, 400 - 500 mm deep, 1 tier, fully openable.....	2,815.90	47.10	21.40	36.70	10535
10536	Ditto but 2 tiers.....	3,357.60	47.10	21.40	36.70	10536
10537	Ditto but 3 tiers.....	3,752.60	47.10	21.40	36.70	10537
10538	Ditto but 4 tiers.....	4,279.30	47.10	21.40	36.70	10538
10539	Ditto but 5 tiers.....	4,781.70	47.10	21.40	36.70	10539
10540	Ditto but 6 tiers.....	5,396.20	47.10	21.40	36.70	10540
10541	Extra over either of Items 10535 to 10540 inclusive for each locker door for coin-return locking device.....	580.40	-	-	-	10541
10542	Extra over either of Items 10535 to 10540 inclusive for each locker door for additional pad lock device.....	147.80	-	-	-	10542
	<p>Supply and fix proprietary locker system comprising 8 mm thick compact laminated panel machined in double side fine velour finish and any colour, for the self, door, side panel, top and bottom panel, 3 mm thick for back panel and dividing panel; including all necessary aluminium hardware, ironmongeries and fixtures like continuous natural anodized aluminium extruded profile, shelf support, hinges and cam locks each with two keys and one plastic key plates, etc. :-</p> <p><i>Per set</i></p>					
10543	Proprietary locker size 300 x 1800 mm high, 400 - 500 mm deep, 1 tier, fully openable.....	3,751.40	36.00	21.40	36.70	10543
10544	Ditto but 2 tiers.....	4,227.30	36.00	21.40	36.70	10544
10545	Ditto but 3 tiers.....	4,802.50	36.00	21.40	36.70	10545
10546	Ditto but 4 tiers.....	5,336.10	36.00	21.40	36.70	10546
10547	Ditto but 5 tiers.....	5,869.70	36.00	21.40	36.70	10547
10548	Ditto but 6 tiers.....	6,361.70	36.00	21.40	36.70	10548
10549	Proprietary lockers size 300 x 1800 mm high, 400 - 500 mm deep, 2 tiers, partial openable.....	3,804.60	36.00	21.40	36.70	10549
10550	Ditto but 3 tiers.....	4,565.70	36.00	21.40	36.70	10550
10551	Ditto but 4 tiers.....	4,878.70	36.00	21.40	36.70	10551
10552	Ditto but 5 tiers.....	5,419.30	36.00	21.40	36.70	10552
10553	Ditto but 6 tiers.....	5,982.90	36.00	21.40	36.70	10553
	<p>Replacement parts :-</p> <p><i>Each</i></p>					
10554	Supply only additional key and plastic key plate.....	11.60	-	-	-	10554
10555	Door hinge.....	60.10	2.60	5.10	11.80	10555
10556	Cam lock	150.20	4.30	9.40	24.80	10556

Item	PROPRIETARY CHANGING SEATING BENCHES					Item
	Proprietary changing seating benches comprising 13 ± 1 mm thick compact laminated seat, back rest, coat hook rail and coat hooks, stainless steel or powder coated aluminium framings and all necessary accessories in accordance with the manufacturer's recommendations : -					
	<i>Per linear metre</i>					
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
10557	Proprietary changing seating bench, size : 900 mm wide x 450 mm high.....	3,603.60	18.90	17.10	47.30	10557
10558	Proprietary changing seating bench, single side size : 450 mm wide x 450 mm high with 1650 mm high coat hook rail...	3,465.00	16.30	13.70	42.60	10558
10559	Proprietary changing seating bench, double side size : 900 mm wide x 450 mm high with 1650 mm high coat hook rail..	5,717.30	19.70	15.40	52.00	10559
	SUPPLY ONLY OF MATERIALS					
	MILD STEEL					
	<i>Per kg</i>				A \$	
10560	Square rods or flat bars.....				11.40	10560
10561	Angle sections.....				11.80	10561
10562	Tee sections.....				11.80	10562
	GALVANIZED MILD STEEL					
	<i>Per kg</i>					
10563	Plate or flat bars exceeding 300 mm wide.....				18.20	10563
10564	Round rods.....				16.10	10564
10565	Square rods or flat bars n.e. 300 mm wide.....				17.30	10565
10566	Angle sections.....				16.60	10566
10567	Tee sections.....				16.60	10567
10568	Chequer plates.....				15.30	10568
	STAINLESS STEEL					
	<i>Per kg</i>					
				AISI 304	AISI 316	
				A \$	B \$	
10569	Square or flat bars.....			58.90	98.80	10569
10570	Round bars.....			59.80	93.90	10570
10571	Square or rectangular hollow tubes.....			68.30	113.70	10571
10572	Hollow circular tubes.....			68.30	113.70	10572
10573	Equal or unequal angle, tee or channel sections.....			63.30	109.90	10573


Item	SUPPLY ONLY OF MATERIALS (CONT'D)				Item		
NON FERROUS METAL							
<i>Per kg</i>							
10574	Extruded aluminium sections with clear anodized finish in square or flat bars.....	61.70	A		10574		
10575	Ditto but in round bars.....	61.70	\$		10575		
10576	Ditto but in square or rectangular hollow tubes.....	61.70			10576		
10577	Ditto but in hollow circular tubes.....	61.70			10577		
10578	Ditto but in equal or unequal angle, tee or channel sections.....	61.70			10578		
Approved stove enamelled slotted steel angel section complete with fixing screws, bolts, nuts washers and corner stiffeners :-							
<i>Per linear metre</i>							
10579	36 x 36 x 1.8 mm Slotted angle section.....	28.30			10579		
10580	40 x 40 x 2.00 mm Ditto.....	33.90			10580		
10581	62 x 41 x 2.00 mm Ditto.....	37.00			10581		
10582	66 x 45 x 2.50 mm Ditto.....	49.60			10582		
EXPANDED METAL							
<i>Per square metre</i>							
			Mesh (mm)	77 x 34	30.48 x 13	38.10 x 16.93	
			Weight (kg/m ²)	5.91	7.38	12	
				A	B	C	
				\$	\$	\$	
10583	Proprietary expanded metal for security fencing with hot dip galvanized finish.....	305.30	311.00	401.60		10583	
FENCING							
<i>Per square metre</i>							
		Wire (mm)	2.50	3.00	3.00	3.00	4.00
		Mesh (mm)	40	75	50	40	50
			A	B	C	D	E
			\$	\$	\$	\$	\$
10584	Galvanized iron wire chain link.....	32.60	34.60	43.90	49.50	60.90	10584
<i>Per square metre</i>							
		Wire (mm)	3.00	3.00	2.50	2.50	
		Mesh (mm)	75	50	40	25	
			A	B	C	D	
			\$	\$	\$	\$	
10585	P.V.C. coated galvanized steel chain link.....	72.20	100.50	83.50	123.10	10585	

Item	ENHANCED TREATMENT TO HOARDINGS (Note : - The following Items 10586 to 10589 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)	Item
	<i>Per square metre</i>	
		A \$
10586	Apply graphic design proprietary graphical use film, plastic sheeting or painting to hoarding surface	10586
10587	Apply "green" feature including suitable climbing plants and mesh to hoarding surface.....	10587
	<i>Per linear metre</i>	
10588	Transparent polycarbonate sheet hoarding 2 m high	10588
10589	Hang flower pot at approximately 2 m intervals including support hanging brackets to hoarding	10589




NOTES:

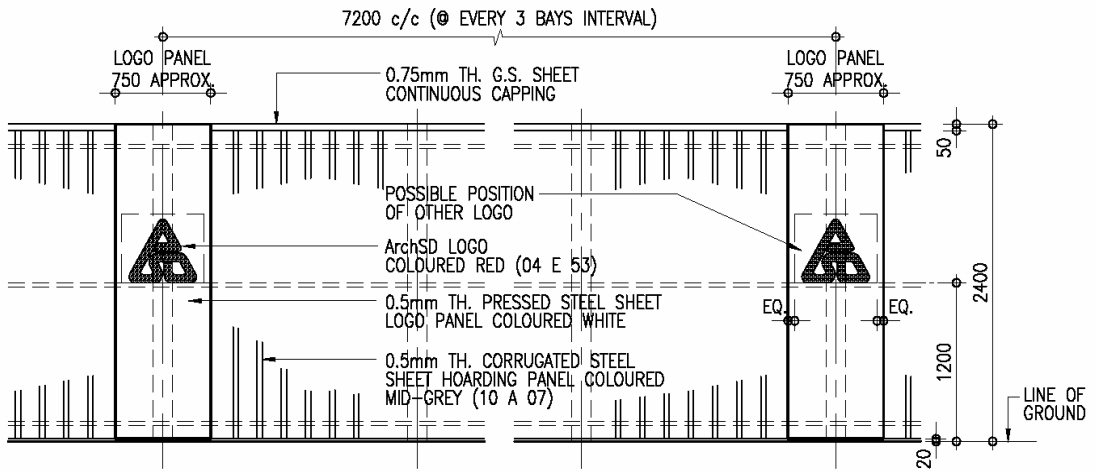
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH STRUCTURAL DRAWINGS NO. 9711/A/S01 TO S04.
2. REFER PNAP 71 & 75 OF BUILDINGS DEPARTMENT FOR THE PERMITTED WORKING SPACE (L). (500mm MAX. FOR DEMOLITION WORKS OR 300mm MAX. FOR OTHER WORKS)
3. THE R.S. STRUT PROVIDED AT ALTERNATE BAYS OF HOARDING COULD BE OMITTED IF THE CONC. FOOTING OF R.S. UNIVERSAL POSTS ARE BUILT WITHOUT LIMITED DEPTH OF EXCAVATION. (SEE STRUCTURAL DRAWINGS FOR DETAILS)

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE A HOARDING - CORRUGATED STEEL FENCE GENERAL PLANS		Scale 1 : 100	Drawing No. 9711/A/A01
	Checked by CPM303 C.F. HO <i>RU</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007

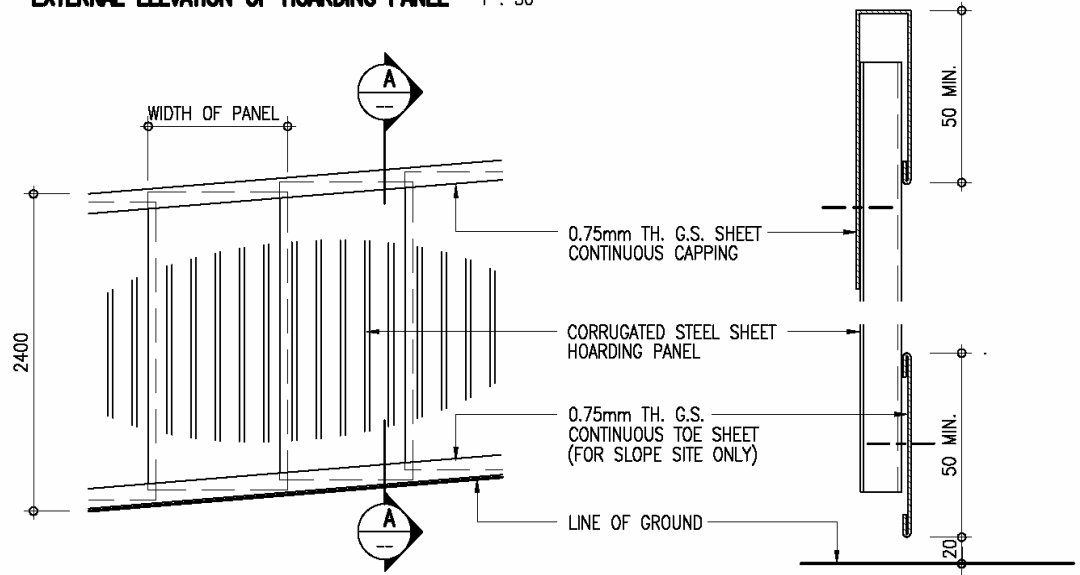
**GENERAL NOTES FOR CONSTRUCTION OF
HOARDINGS, COVERED WALKWAYS, AND ASSOCIATED GANTRIES AND CATCH PLATFORMS:**

1. THE ARCHITECTURAL HOARDING DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE APPROPRIATE STRUCTURAL HOARDING DRAWINGS AS REFERRED ON THE DRAWINGS.
2. IN DETERMINING THE TYPE OF HOARDING/COVERED WALKWAY CONSTRUCTION AND THE ASSOCIATED PROVISIONS TO SUIT THE PURPOSE, REFERENCE AND PROVISIONS SHOULD ALWAYS BE MADE TO MEET THE REQUIREMENTS OF THE CURRENTLY ENFORCED "CODE OF PRACTICE FOR DEMOLITION OF BUILDINGS" AND RELEVANT PNAPS ISSUED BY BUILDINGS DEPARTMENT.
3. A MINIMUM CLEAR WIDTH OF 1.1m AND RAISED FLOOR SHOULD BE PROVIDED FOR HOARDING/COVERED WALKWAY LOCATED ON CARRIAGEWAY. FOR HOARDING/COVERED WALKWAY LOCATED ON FOOTPATH, THE CLEAR WIDTH SHOULD BE RELATED TO THE EXISTING PAVEMENT WIDTH AND BE PROVIDED ACCORDING TO THOSE AS PROMULGATED IN PNAP 75 ISSUED BY THE BUILDINGS DEPARTMENT.
4. A TEMPORARY LIGHTING SYSTEM AS PROMULGATED IN PNAP 75 SHOULD BE PROVIDED FOR ALL COVERED WALKWAYS OF BUILDING SITES.
5. ALL METALWORK REFERRED IN THE DRAWINGS SHOULD COMPLY WITH SECTION 17 OF THE GENERAL SPECIFICATION FOR BUILDING 2007 EDITION OR THEREAFTER.
6. ALL CORRUGATED STEEL SHEET PANELS, CAPPINGS AND TOE SHEETS SHOULD BE OF GALVANIZED STEEL WITH MINIMUM ZINC COATING CONTENT $350\text{g}/\text{m}^2$ WITH TRIPLE-SPOT TEST, AND BE FINISHED ON BOTH SURFACES WITH ONE UNDERCOAT OF "LUXAPRIME 1600 PRIMER" OR EQUIVALENT AND TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
7. ALL EXPOSED SURFACES OF METALWORK SHOULD BE PAINTED IN MID-GREY COLOUR (10 A 07) UNLESS STATED OTHERWISE.
8. ArchSD LOGO SHOULD BE PAINTED AT A 3-BAY INTERVAL. IF THERE ARE OTHER LOGOS TO BE DISPLAYED, THE SPECIFIED LOGO AND THE ArchSD LOGO SHOULD BE PAINTED ALTERNATIVELY AT A 3-BAY INTERVAL.

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE A HOARDING - CORRUGATED STEEL FENCE GENERAL NOTES		Scale NIL	Drawing No. 9711/A/A02
	Checked by CPM303 C.F. HO <i>AO</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007

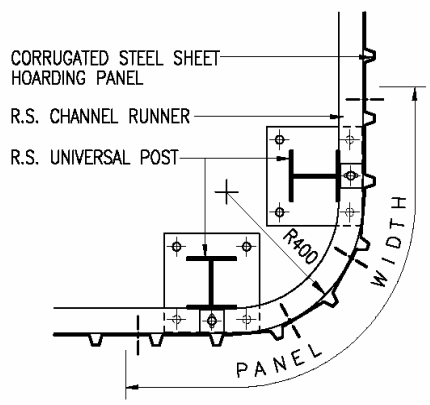


EXTERNAL ELEVATION OF HOARDING PANEL 1 : 50

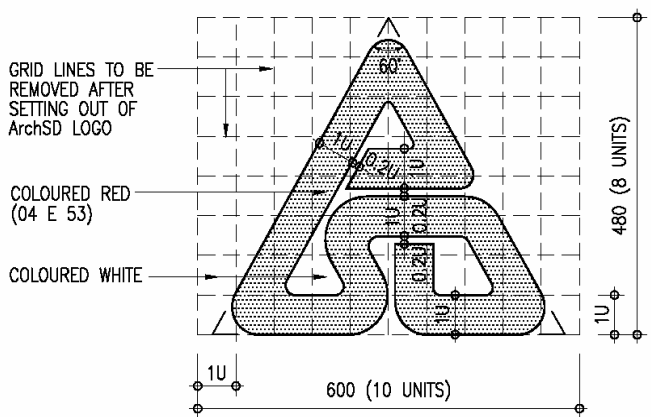


EXTERNAL ELEVATION OF HOARDING PANEL ON SLOPE 1 : 50

SECTION A-A 1 : 5



PLAN OF HOARDING PANEL AT CORNER 1 : 20



SETTING OUT OF ArchSD LOGO 1 : 10



ARCHITECTURAL
SERVICES
DEPARTMENT

Title
**TYPE A HOARDING - CORRUGATED STEEL FENCE
CONSTRUCTION DETAILS 1**

Scale
as shown

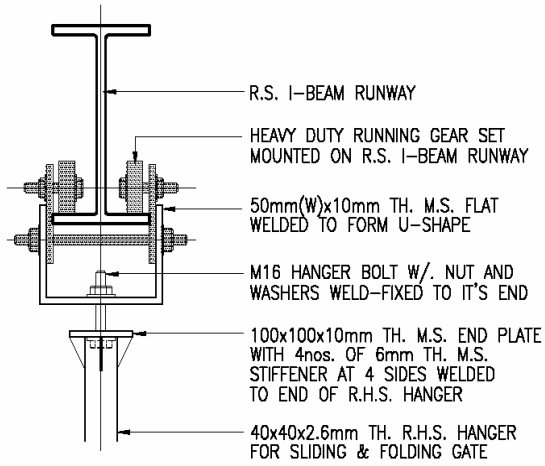
Drawing No.
9711/A/A03

Checked by
CPM303 C.F. HO *RF*

Date
18 Sept. 2007

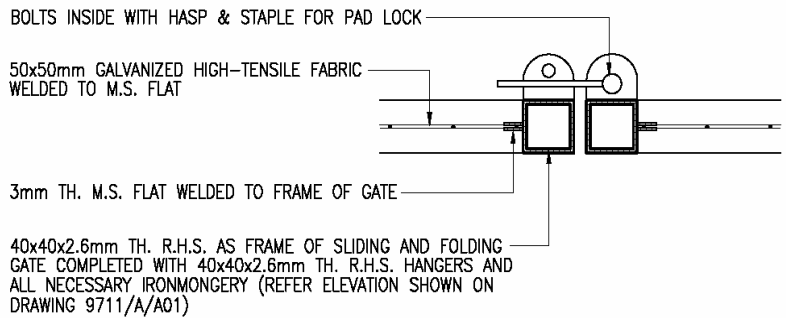
Approved by
AD(PS) K.K. LEUNG *ML*

Date
19 Sept. 2007



2 **DETAILS OF RUNNING GEAR ***
A/A04 1 : 10

* THIS FIXING DETAIL IS FOR REFERENCE ONLY, SAMPLE OF RUNNING GEAR SET AND FIXING METHOD SHOULD BE SUBMITTED FOR APPROVAL BEFORE ORDERING.

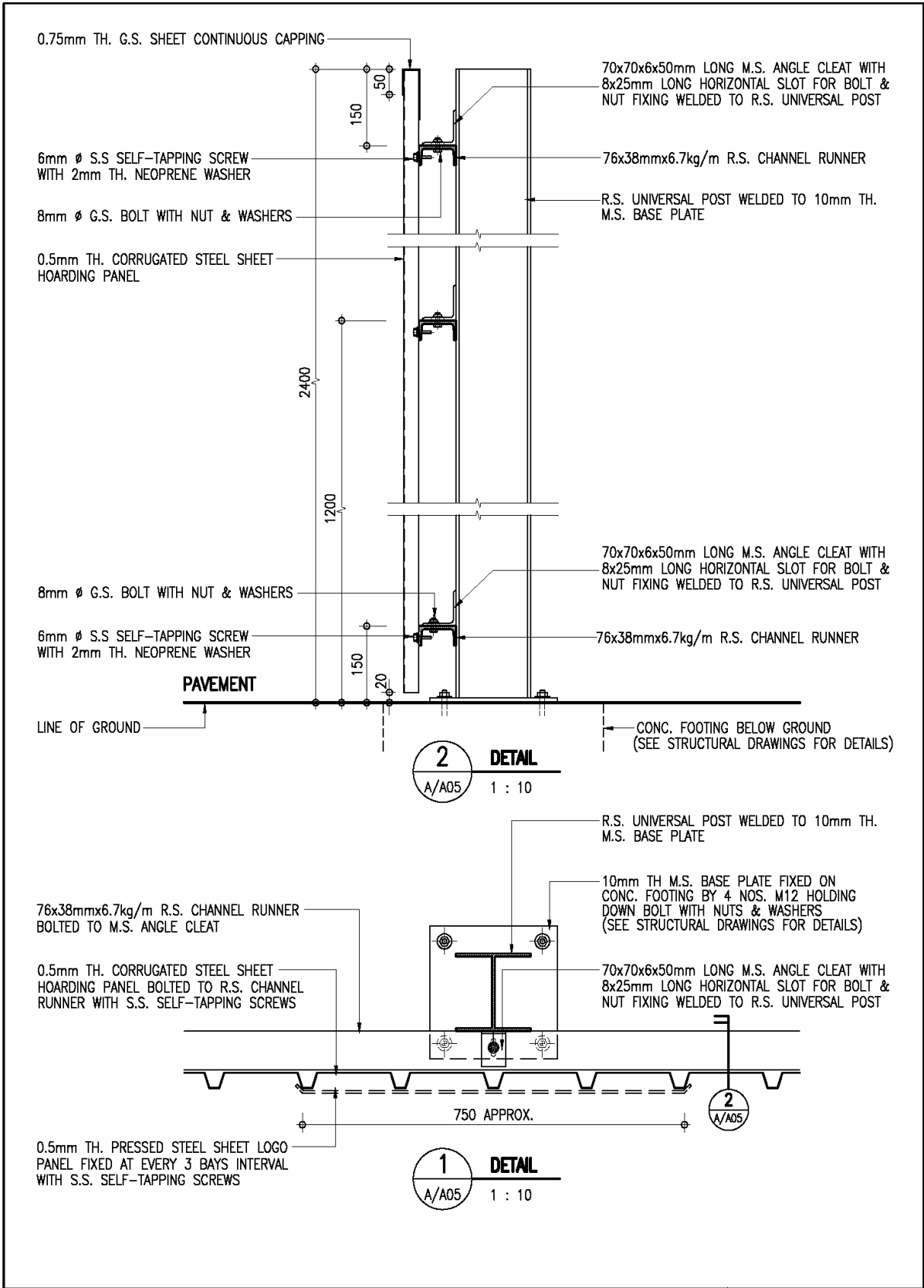



1 **DETAILS OF SLIDING AND FOLDING GATE**
A/A04 1 : 5

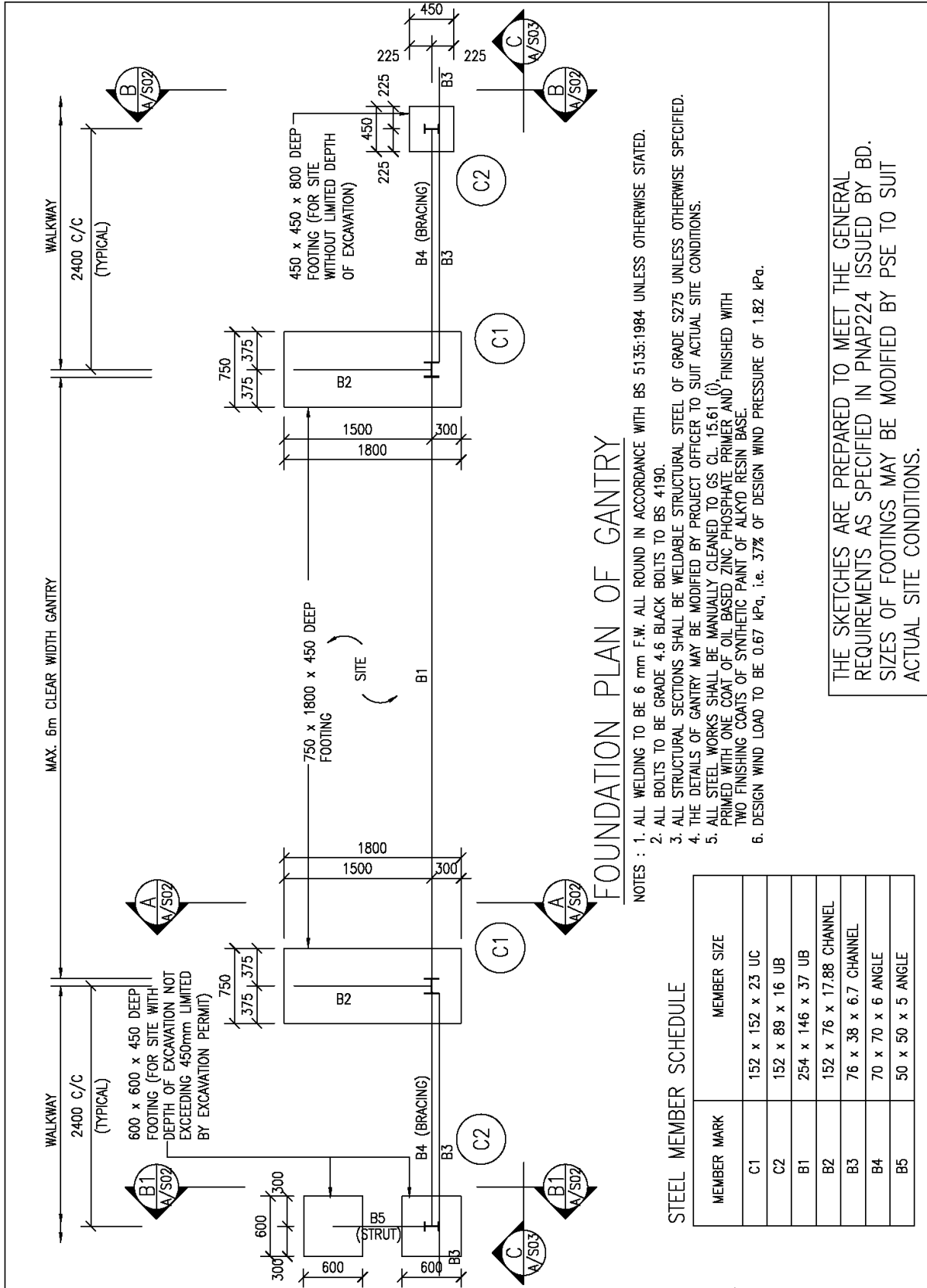


ARCHITECTURAL SERVICES DEPARTMENT

Title TYPE A HOARDING - CORRUGATED STEEL FENCE CONSTRUCTION DETAILS 2		Scale 1 : 5	Drawing No. 9711/A/A04
Checked by CPM303 C.F. HO <i>HO</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007



 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE A HOARDING - CORRUGATED STEEL FENCE CONSTRUCTION DETAILS 3		Scale 1 : 10	Drawing No. 9711/A/A05
	Checked by CPM303 C.F. HO <i>RU</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>MA</i>	Date 19 Sept. 2007



FOUNDATION PLAN OF GANTRY

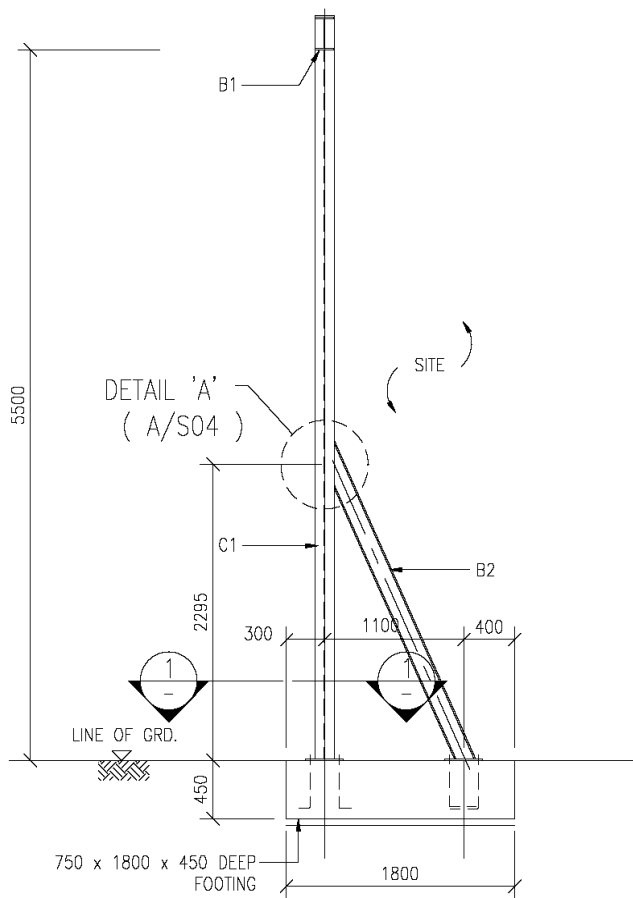
- NOTES :
1. ALL WELDING TO BE 6 mm F.W. ALL ROUND IN ACCORDANCE WITH BS 5135:1984 UNLESS OTHERWISE STATED.
 2. ALL BOLTS TO BE GRADE 4.6 BLACK BOLTS TO BS 4190.
 3. ALL STRUCTURAL SECTIONS SHALL BE WELDABLE STRUCTURAL STEEL OF GRADE S275 UNLESS OTHERWISE SPECIFIED.
 4. THE DETAILS OF GANTRY MAY BE MODIFIED BY PROJECT OFFICER TO SUIT ACTUAL SITE CONDITIONS.
 5. ALL STEEL WORKS SHALL BE MANUALLY CLEANED TO GS CL. 15.61 (i), PRIMED WITH ONE COAT OF OIL BASED ZINC PHOSPHATE PRIMER AND FINISHED WITH TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
 6. DESIGN WIND LOAD TO BE 0.67 kPa, i.e. 37% OF DESIGN WIND PRESSURE OF 1.82 kPa.

STEEL MEMBER SCHEDULE

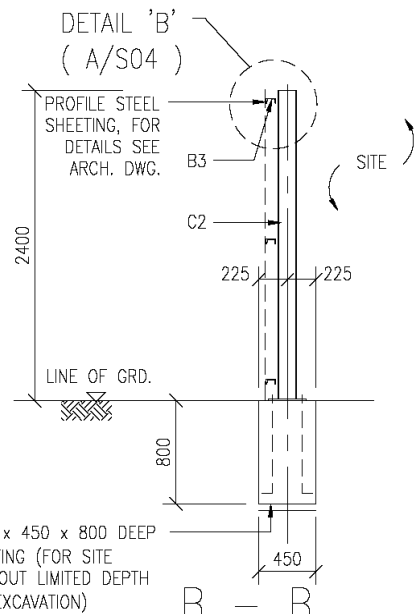
MEMBER MARK	MEMBER SIZE
C1	152 x 152 x 23 UC
C2	152 x 89 x 16 UB
B1	254 x 146 x 37 UB
B2	152 x 76 x 17.88 CHANNEL
B3	76 x 38 x 6.7 CHANNEL
B4	70 x 70 x 6 ANGLE
B5	50 x 50 x 5 ANGLE

THE SKETCHES ARE PREPARED TO MEET THE GENERAL REQUIREMENTS AS SPECIFIED IN PNAP224 ISSUED BY BD. SIZES OF FOOTINGS MAY BE MODIFIED BY PSE TO SUIT ACTUAL SITE CONDITIONS.

ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE A HOARDING - CORRUGATED STEEL FENCE STRUCTURAL DETAILS 1	Scale 1 : 50	Drawing No. 9711/A/S01
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>

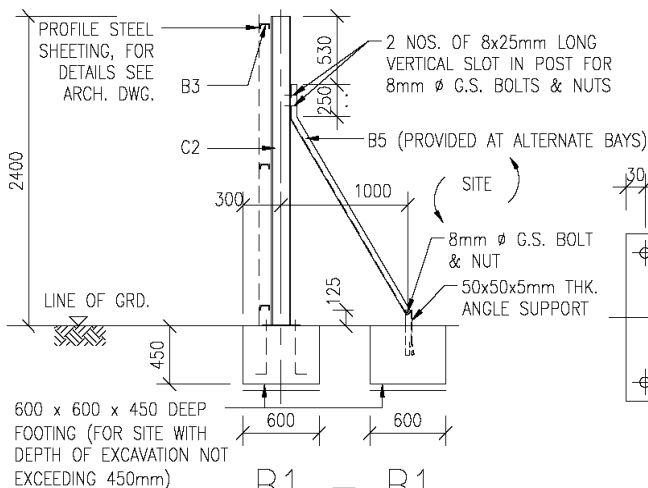


A - A
(GANTRY FRAME)

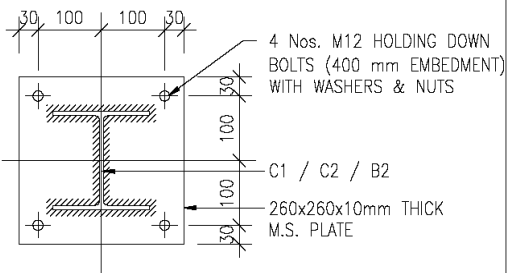


B - B
(TYP. FOR C2 WITHOUT INCLUDED STRUT)

NOTES :-
1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.



B1 - B1
(TYP. FOR C2 WITH INCLUDED STRUT)



1 - 1
1 : 10



ARCHITECTURAL
SERVICES
DEPARTMENT

Title
**TYPE A HOARDING - CORRUGATED STEEL FENCE
STRUCTURAL DETAILS 2**

Scale
1 : 50
1 : 10

Drawing No.
9711/A/S02

Checked by
CSE/1 C.T. WONG

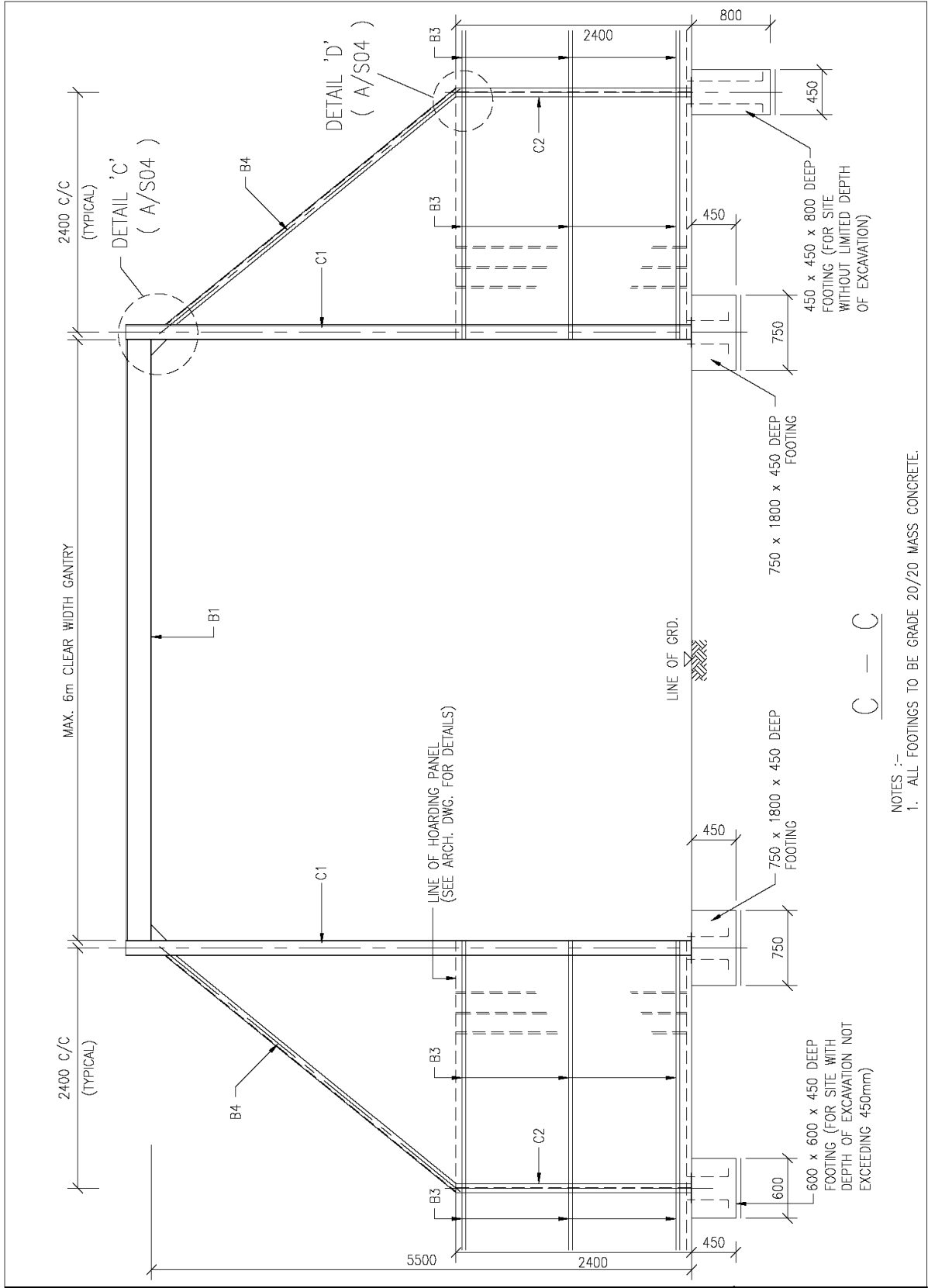
C.T. Wong

Date
11 Oct. 2007

Approved by
AD(SE) W.W. LI


W.W. Li

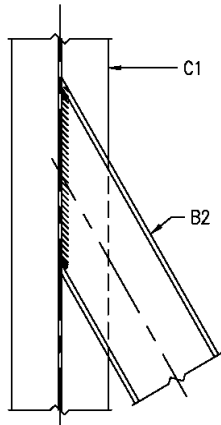
Date
11 Oct. 2007



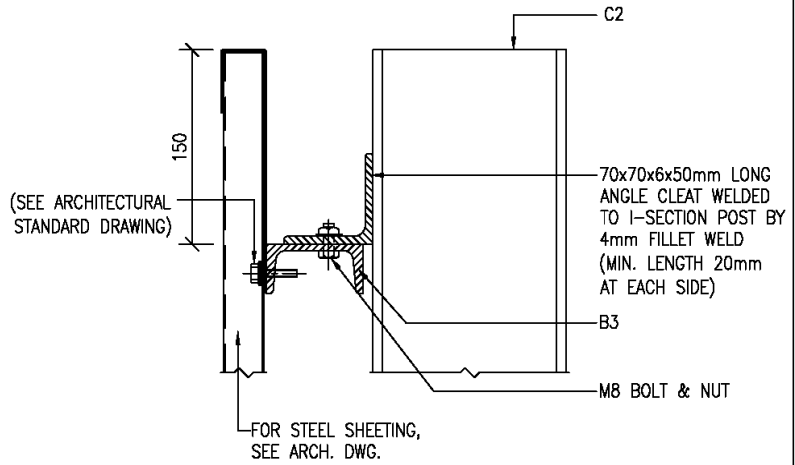
NOTES :-
 1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.

C - C

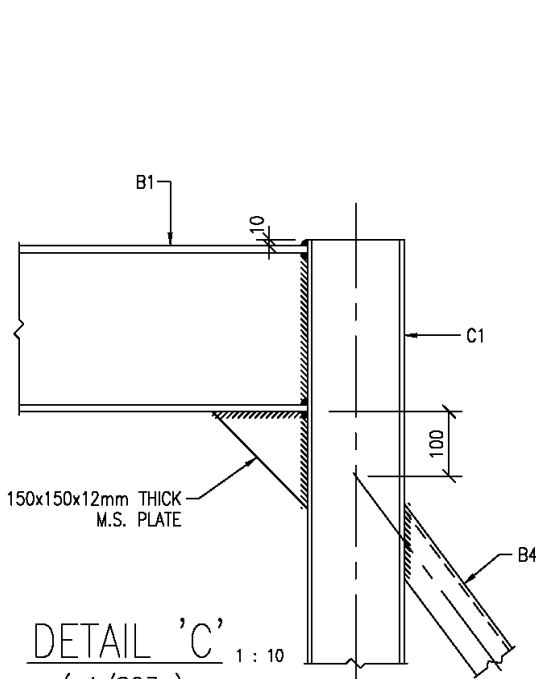
 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE A HOARDING - CORRUGATED STEEL FENCE STRUCTURAL DETAILS 3		Scale 1 : 50	Drawing No. 9711/A/S03
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007



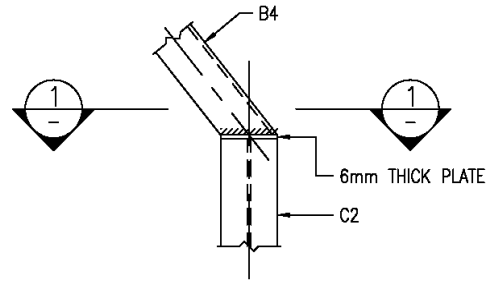
DETAIL 'A' 1 : 10
 (FLANGE OF C1 NOT SHOWN FOR CLARITY)
 (A/S02)



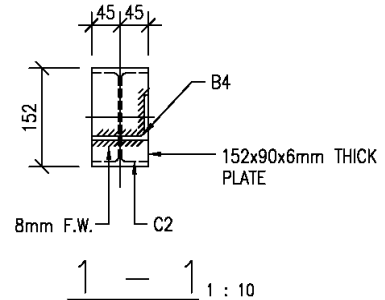
DETAIL 'B' 1 : 5
 (A/S02)



DETAIL 'C' 1 : 10
 (A/S03)



DETAIL 'D' 1 : 10
 (B3 NOT SHOWN FOR CLARITY)
 (A/S03)



1 - 1 1 : 10



ARCHITECTURAL
 SERVICES
 DEPARTMENT

Title
**TYPE A HOARDING - CORRUGATED STEEL FENCE
 STRUCTURAL DETAILS 4**

Scale
 1 : 10
 1 : 5

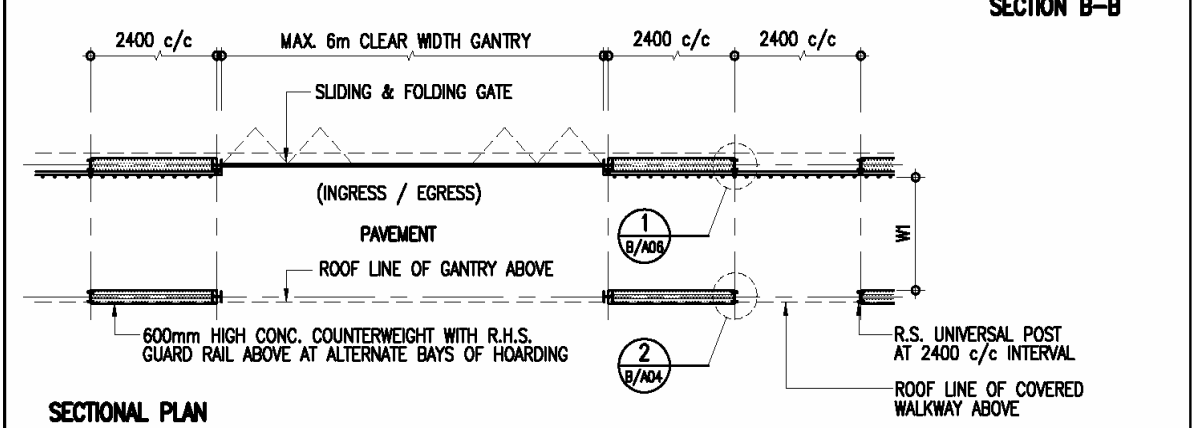
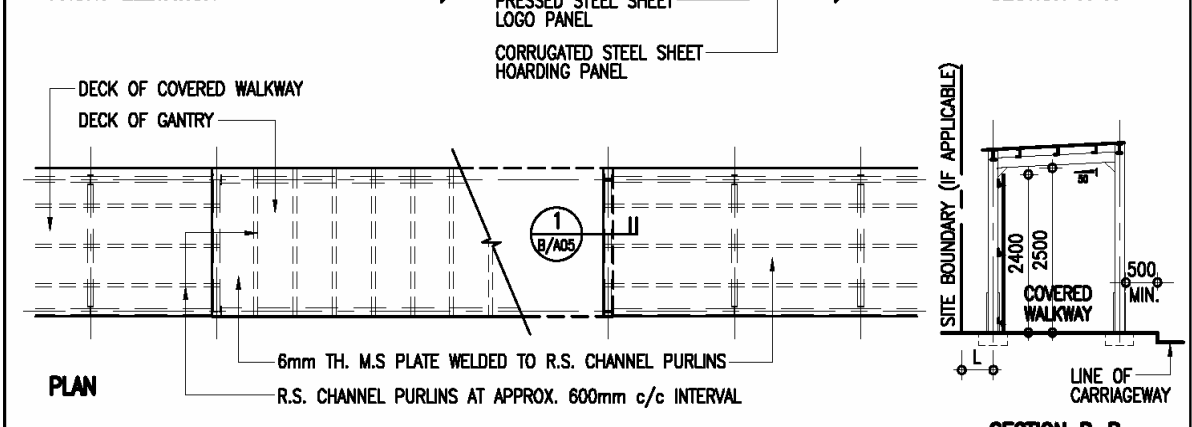
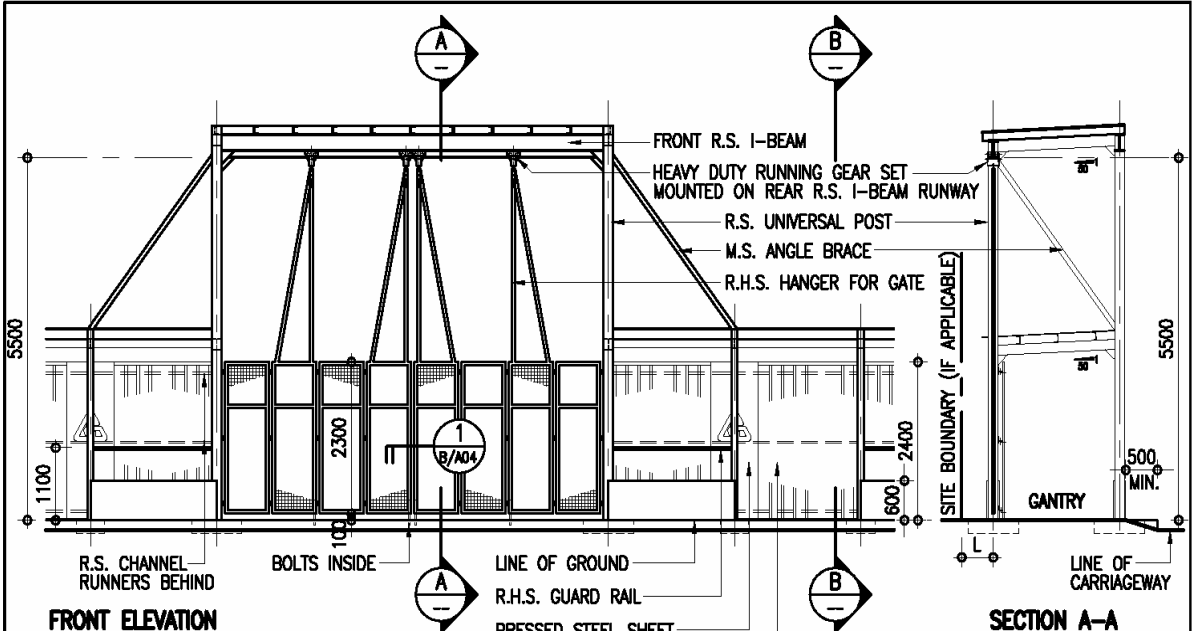
Drawing No.
9711/A/S04

Checked by
 CSE/1 C.T. WONG *C.T. Wong*

Date
 11 Oct. 2007

Approved by
 AD(SE) W.W. LI *W.W. Li*

Date
 11 Oct. 2007




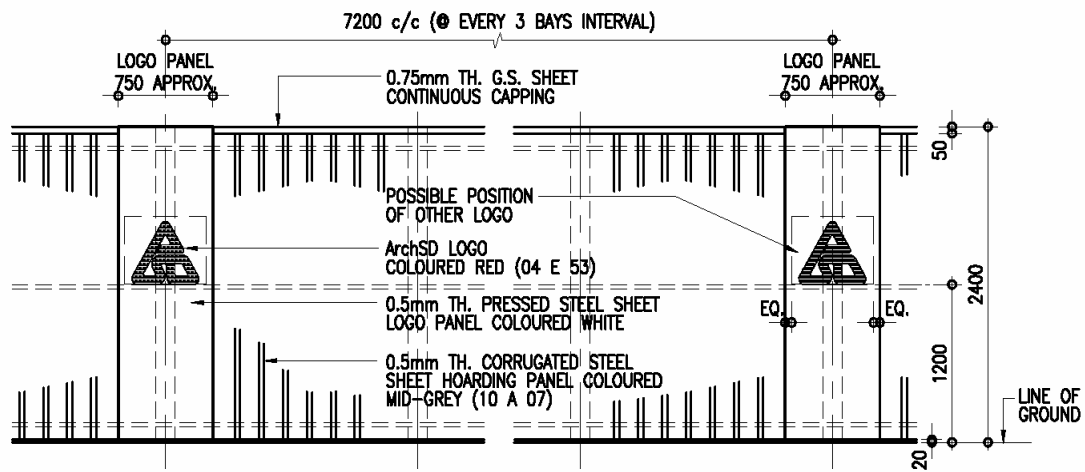
- NOTES:**
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH STRUCTURAL DRAWINGS NO. 9711/B/S01 TO S05.
 2. REFER PT. 3 OF GENERAL NOTES IN DRAWING NO. 9711/B/A02 FOR THE REQUIRED CLEAR WIDTH (W1) OF COVERED WALKWAY.
 3. REFER PNAP 71 & 75 OF BUILDINGS DEPARTMENT FOR THE PERMITTED WORKING SPACE (L). (500mm MAX. FOR DEMOLITION WORKS OR 300mm MAX. FOR OTHER WORKS)

	Title TYPE B HOARDING - COVERED WALKWAY GENERAL PLANS	Scale 1 : 100	Drawing No. 9711/B/A01
	Checked by CPM303 C.F. HO <i>AC</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>

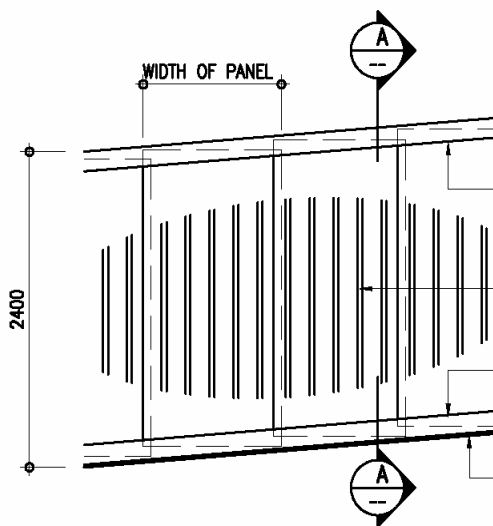
**GENERAL NOTES FOR CONSTRUCTION OF
HOARDINGS, COVERED WALKWAYS, AND ASSOCIATED GANTRIES AND CATCH PLATFORMS:**

1. THE ARCHITECTURAL HOARDING DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE APPROPRIATE STRUCTURAL HOARDING DRAWINGS AS REFERRED ON THE DRAWINGS.
2. IN DETERMINING THE TYPE OF HOARDING/COVERED WALKWAY CONSTRUCTION AND THE ASSOCIATED PROVISIONS TO SUIT THE PURPOSE, REFERENCE AND PROVISIONS SHOULD ALWAYS BE MADE TO MEET THE REQUIREMENTS OF THE CURRENTLY ENFORCED "CODE OF PRACTICE FOR DEMOLITION OF BUILDINGS" AND RELEVANT PNAPS ISSUED BY BUILDINGS DEPARTMENT.
3. A MINIMUM CLEAR WIDTH OF 1.1m AND RAISED FLOOR SHOULD BE PROVIDED FOR HOARDING/COVERED WALKWAY LOCATED ON CARRIAGEWAY. FOR HOARDING/COVERED WALKWAY LOCATED ON FOOTPATH, THE CLEAR WIDTH SHOULD BE RELATED TO THE EXISTING PAVEMENT WIDTH AND BE PROVIDED ACCORDING TO THOSE AS PROMULGATED IN PNAF 75 ISSUED BY THE BUILDINGS DEPARTMENT.
4. A TEMPORARY LIGHTING SYSTEM AS PROMULGATED IN PNAF 75 SHOULD BE PROVIDED FOR ALL COVERED WALKWAYS OF BUILDING SITES.
5. ALL METALWORK REFERRED IN THE DRAWINGS SHOULD COMPLY WITH SECTION 17 OF THE GENERAL SPECIFICATION FOR BUILDING 2007 EDITION OR THEREAFTER.
6. ALL CORRUGATED STEEL SHEET PANELS, CAPPINGS AND TOE SHEETS SHOULD BE OF GALVANIZED STEEL WITH MINIMUM ZINC COATING CONTENT 350g/m² WITH TRIPLE-SPOT TEST, AND BE FINISHED ON BOTH SURFACES WITH ONE UNDERCOAT OF "LUXAPRIME 1600 PRIMER" OR EQUIVALENT AND TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
7. ALL EXPOSED SURFACES OF METALWORK SHOULD BE PAINTED IN MID-GREY COLOUR (10 A 07) UNLESS STATED OTHERWISE.
8. ArchSD LOGO SHOULD BE PAINTED AT A 3-BAY INTERVAL. IF THERE ARE OTHER LOGOS TO BE DISPLAYED, THE SPECIFIED LOGO AND THE ArchSD LOGO SHOULD BE PAINTED ALTERNATIVELY AT A 3-BAY INTERVAL.

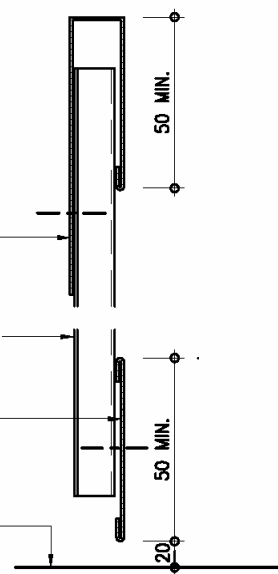
 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE B HOARDING - COVERED WALKWAY GENERAL NOTES		Scale NIL	Drawing No. 9711/B/A02
	Checked by CPM303 C.F. HO <i>AJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007



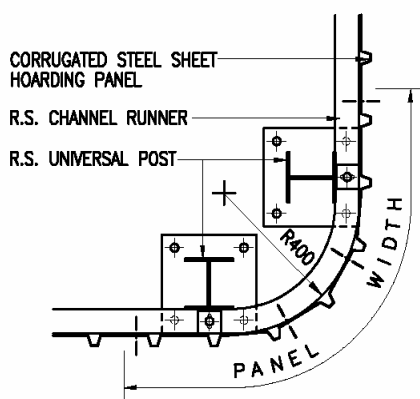
EXTERNAL ELEVATION OF HOARDING PANEL 1 : 50



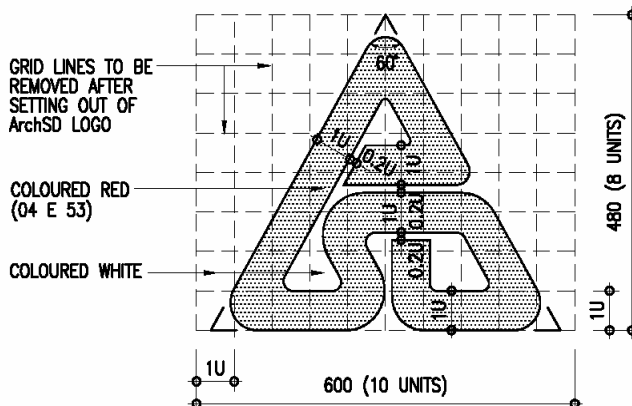
EXTERNAL ELEVATION OF HOARDING PANEL ON SLOPE 1 : 50



SECTION A-A 1 : 5



PLAN OF HOARDING PANEL AT CORNER 1 : 20

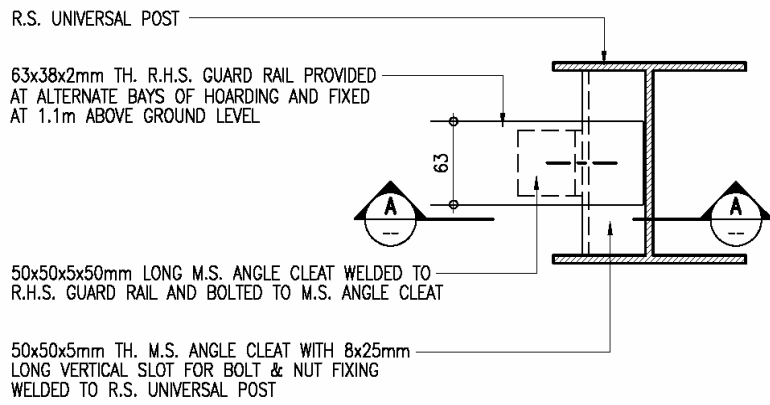
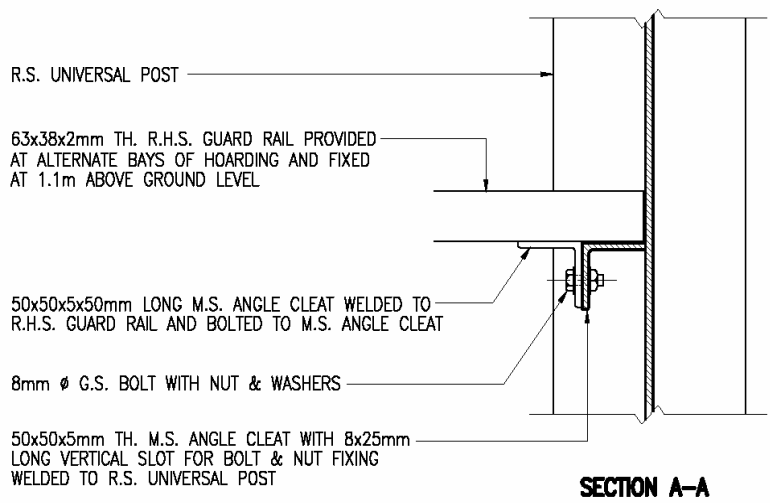


SETTING OUT OF ArchSD LOGO 1 : 10

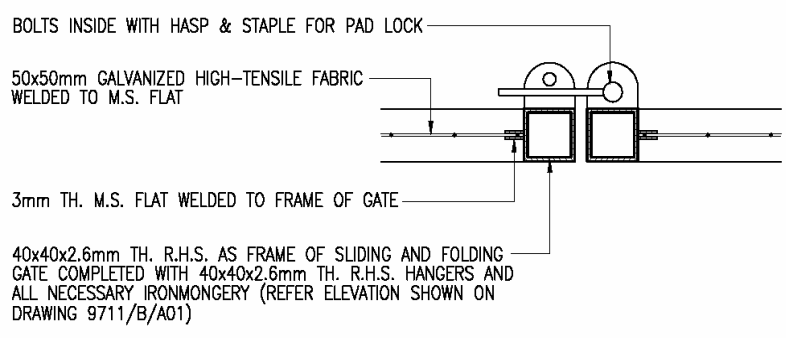


ARCHITECTURAL SERVICES DEPARTMENT


Title TYPE B HOARDING - COVERED WALKWAY CONSTRUCTION DETAILS 1		Scale as shown	Drawing No. 9711/B/A03
Checked by CPM303 C.F. HO <i>RJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007

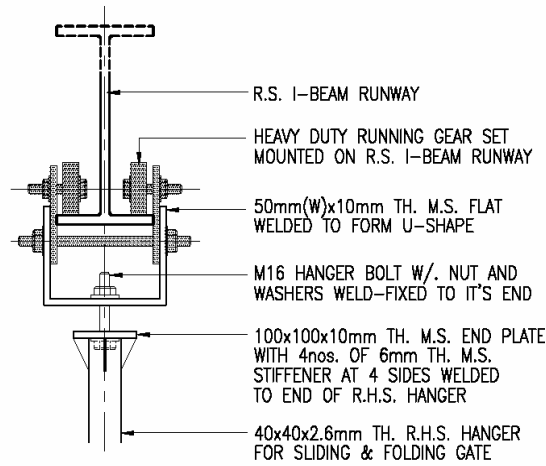


2 **FIXING DETAILS OF R.H.S. GUARD RAIL**
B/A04 1 : 5



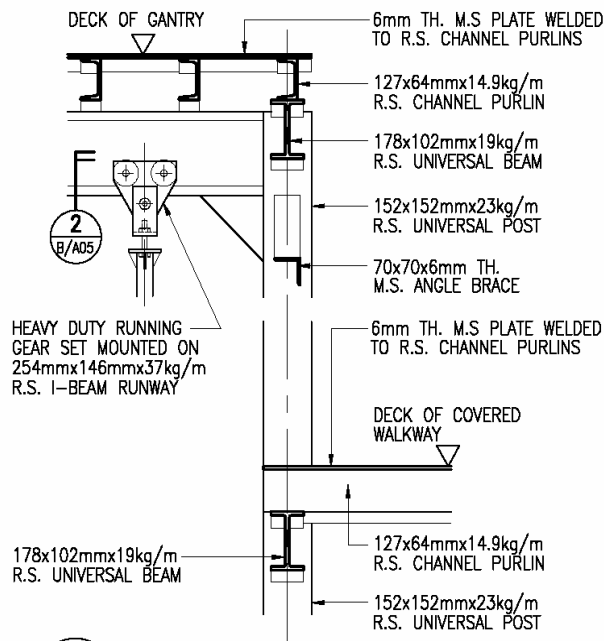
1 **DETAILS OF SLIDING AND FOLDING GATE**
B/A04 1 : 5

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE B HOARDING - COVERED WALKWAY CONSTRUCTION DETAILS 2		Scale 1 : 5	Drawing No. 9711/B/A04
	Checked by CPM303 C.F. HO <i>AO</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>MA</i>	Date 19 Sept. 2007



2 DETAIL*
B/A05 1 : 10

* THIS FIXING DETAIL IS FOR REFERENCE ONLY. SAMPLE OF RUNNING GEAR SET AND FIXING METHOD SHOULD BE SUBMITTED FOR APPROVAL BEFORE ORDERING.



1 DETAIL
B/A05 1 : 20



ARCHITECTURAL
SERVICES
DEPARTMENT

Title
**TYPE B HOARDING - COVERED WALKWAY
CONSTRUCTION DETAILS 3**

Scale
as shown

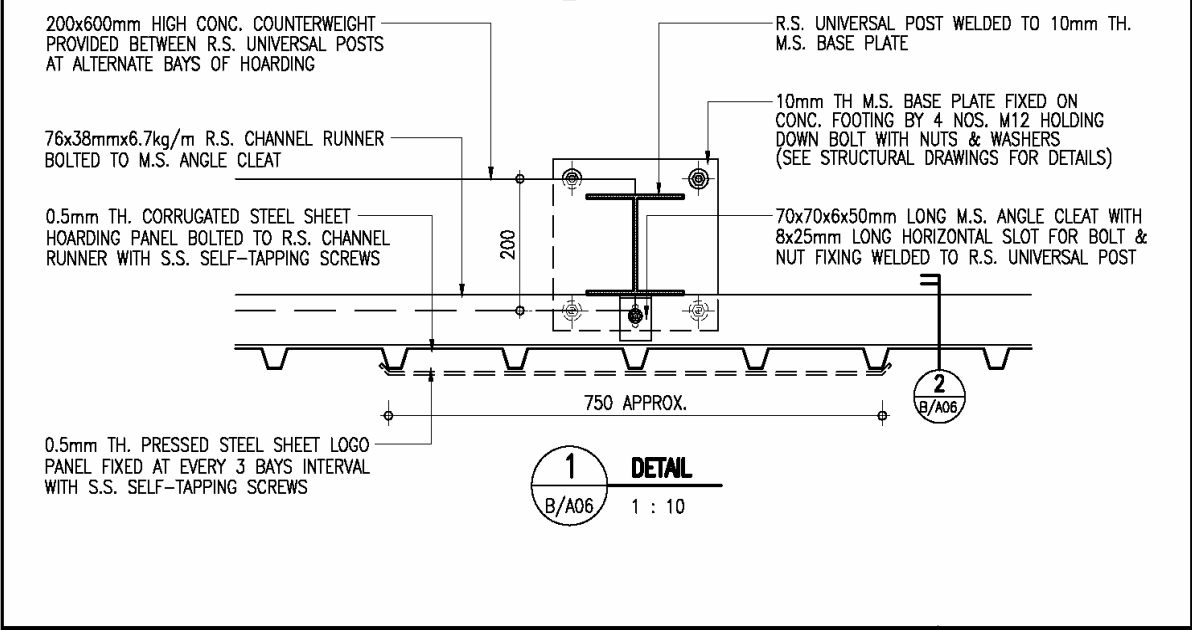
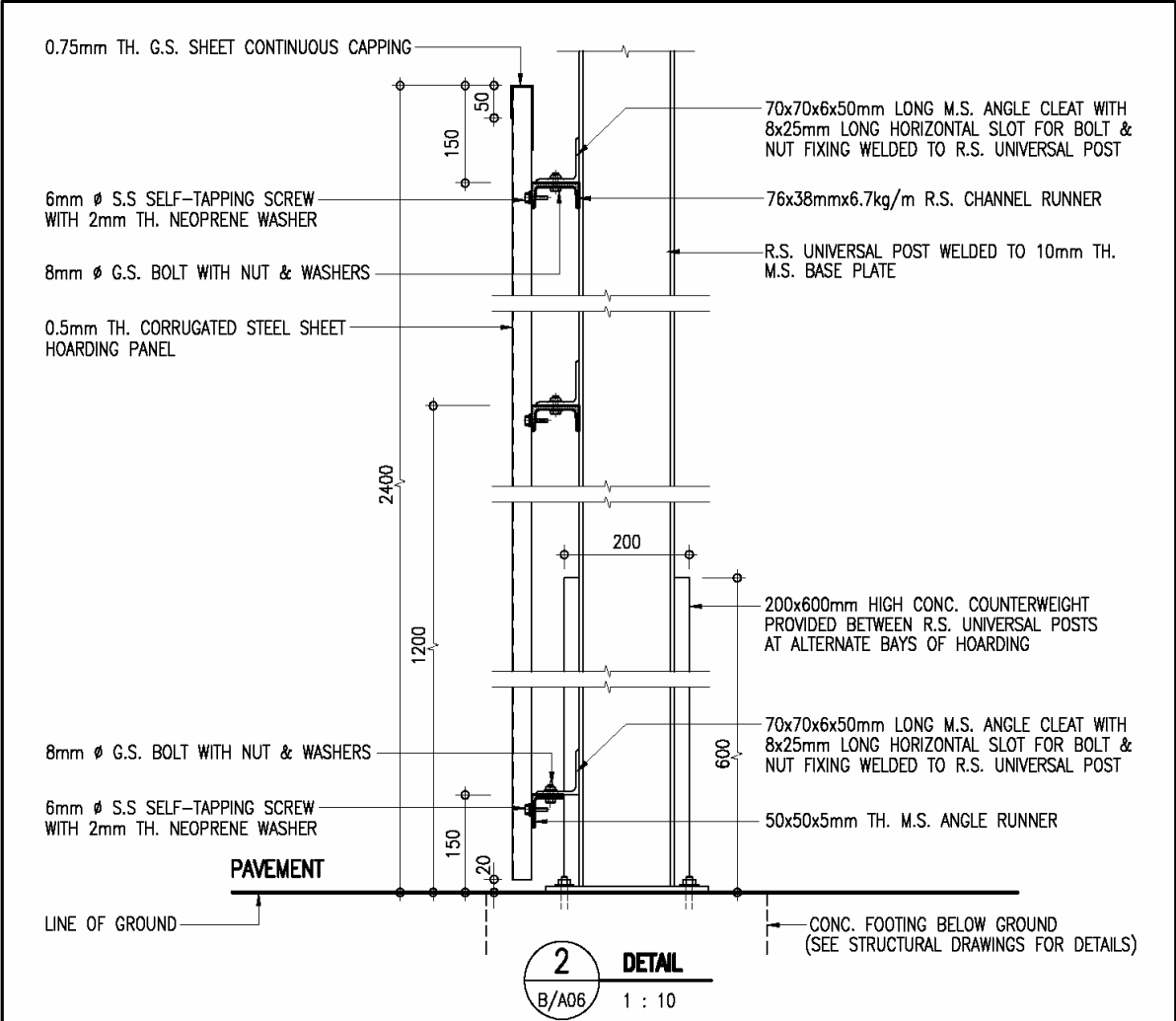
Drawing No.
9711/B/A05


Checked by
CPM303 C.F. HO *RU*

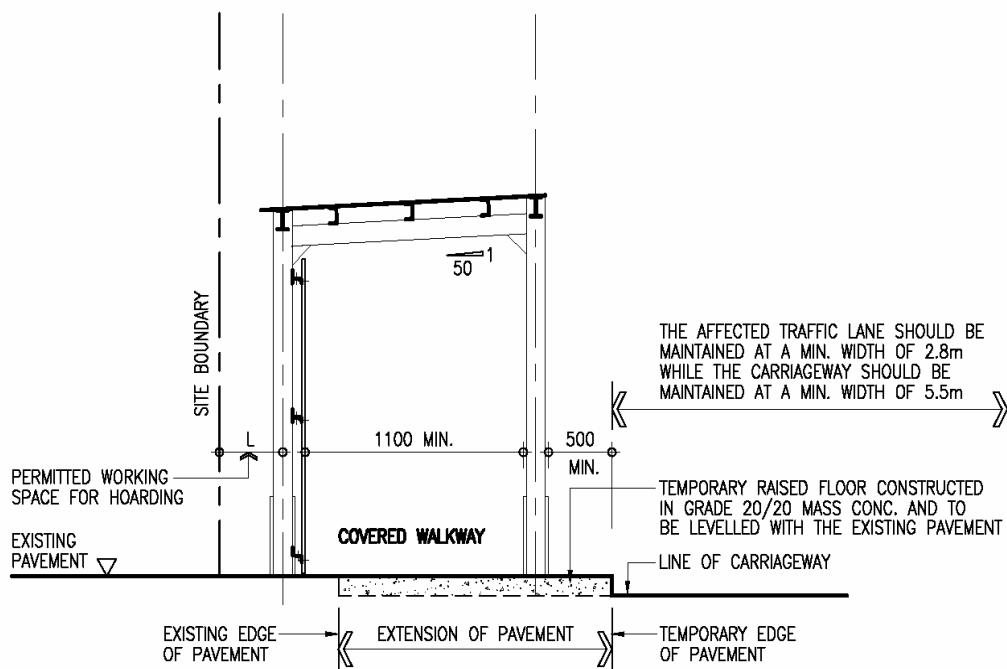
Date
18 Sept. 2007

Approved by
AD(PS) K.K. LEUNG *MA*


Date
19 Sept. 2007



 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE B HOARDING - COVERED WALKWAY CONSTRUCTION DETAILS 4		Scale 1 : 10	Drawing No. 9711/B/A06
	Checked by CPM303 C.F. HO <i>AJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>MA</i>	Date 19 Sept. 2007



**TYPICAL DETAILS OF COVERED WALKWAY HOARDING
SITED ON CARRIAGEWAY/NARROW PAVEMENT** 1 : 50

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE B HOARDING - COVERED WALKWAY CONSTRUCTION DETAILS 5		Scale 1 : 50	Drawing No. 9711/B/A07
	Checked by CPM303 C.F. HO <i>AJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007



ARCHITECTURAL SERVICES DEPARTMENT

Title
TYPE B HOARDING - COVERED WALKWAY STRUCTURAL DETAILS 1

Scale
1 : 50

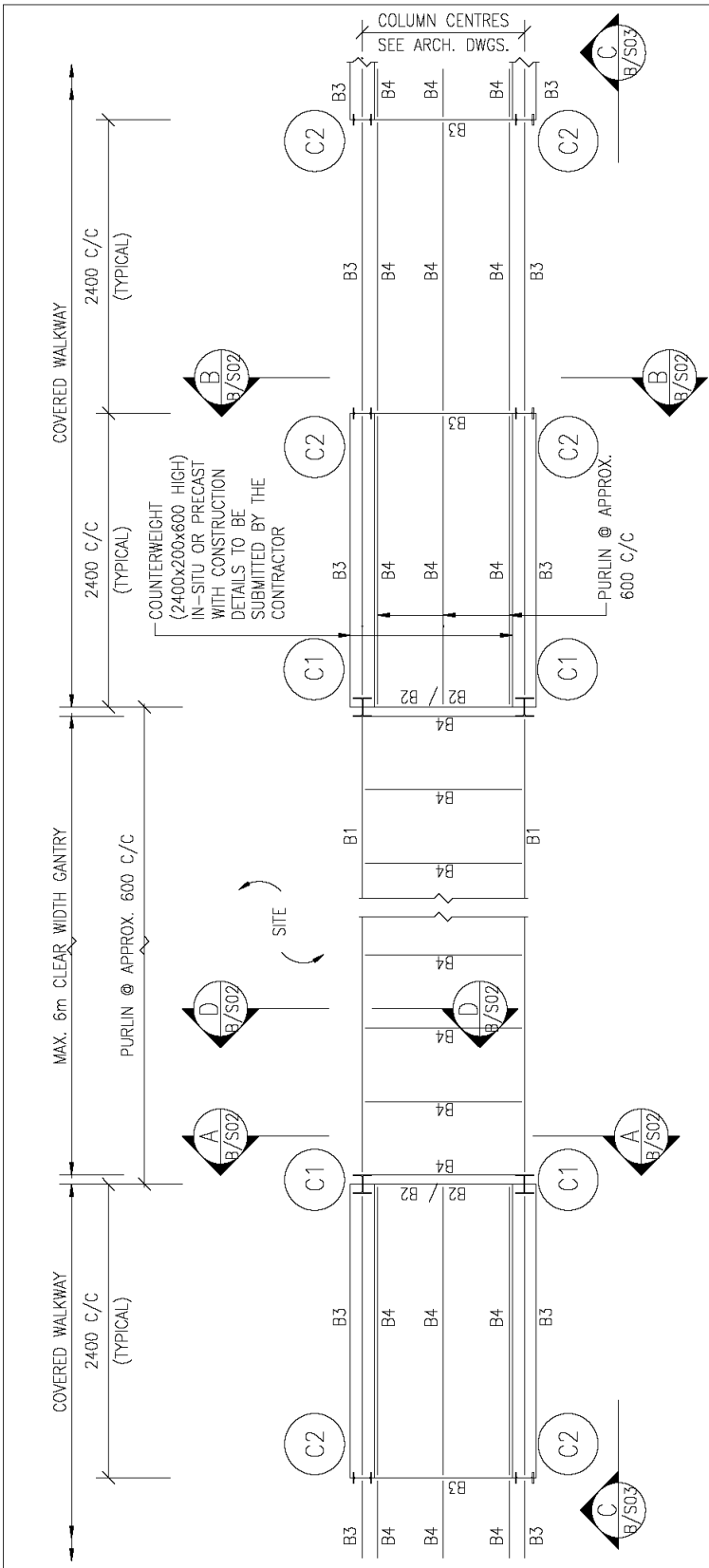
Drawing No.
9711/B/S01

Checked by
CSE/1 C.T. WONG *Chow*

Date
11 Oct. 2007

Approved by
AD(SE) W.W. LI *Li*

Date
11 Oct. 2007



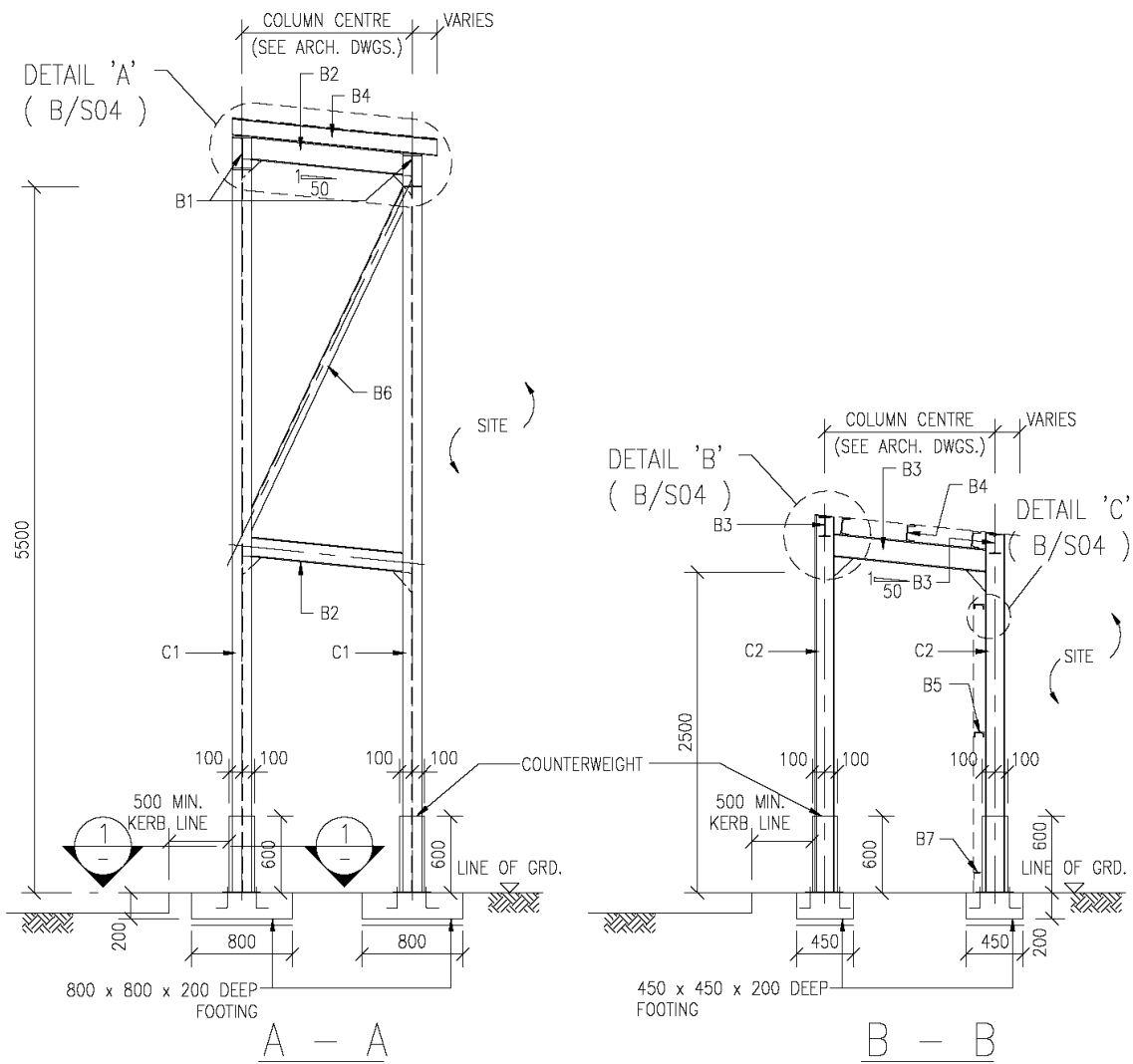
TOP PLAN OF GANTRY AND COVERED WALKWAY

- NOTES :
1. ALL WELDING TO BE 6 mm F.W. ALL ROUND IN ACCORDANCE WITH BS 5135:1984 UNLESS OTHERWISE STATED.
 2. ALL BOLTS TO BE GRADE 4.6 BLACK BOLTS TO BS 4190.
 3. ALL STRUCTURAL SECTIONS SHALL BE WELDABLE STRUCTURAL STEEL OF GRADE S275 UNLESS OTHERWISE SPECIFIED.
 4. THE DETAILS OF GANTRY MAY BE MODIFIED BY PROJECT OFFICER TO SUIT ACTUAL SITE CONDITIONS.
 5. ALL STEEL WORKS SHALL BE MANUALLY CLEANED TO GS CL. 15.61 (1) PRIMED WITH ONE COAT OF OIL BASED ZINC PHOSPHATE PRIMER AND FINISHED WITH TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
 6. DESIGN WIND LOAD TO BE 0.67 kPa, i.e. 37% OF DESIGN WIND PRESSURE OF 1.82 kPa.

STEEL MEMBER SCHEDULE

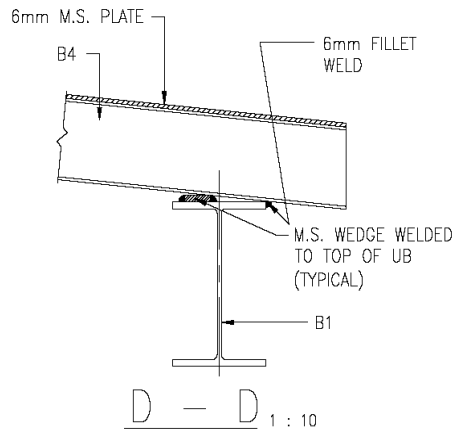
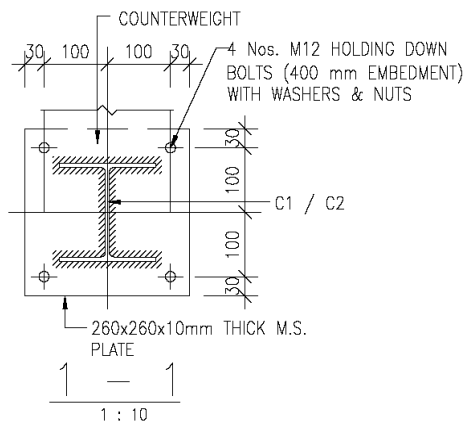
MEMBER MARK	MEMBER SIZE
C1	152 x 152 x 23 UC
C2, B3	152 x 89 x 16 UB
B1	254 x 146 x 37 UB
B2	178 x 102 x 19 UB
B4	127 x 64 x 14.9 CHANNEL
B5	76 x 38 x 6.7 CHANNEL
B6	70 x 70 x 6 ANGLE
B7	50 x 50 x 5 ANGLE

THE SKETCHES ARE PREPARED TO MEET THE GENERAL REQUIREMENTS AS SPECIFIED IN PNAP224 ISSUED BY BD. SIZES OF FOOTINGS MAY BE MODIFIED BY PSE TO SUIT ACTUAL SITE CONDITIONS.

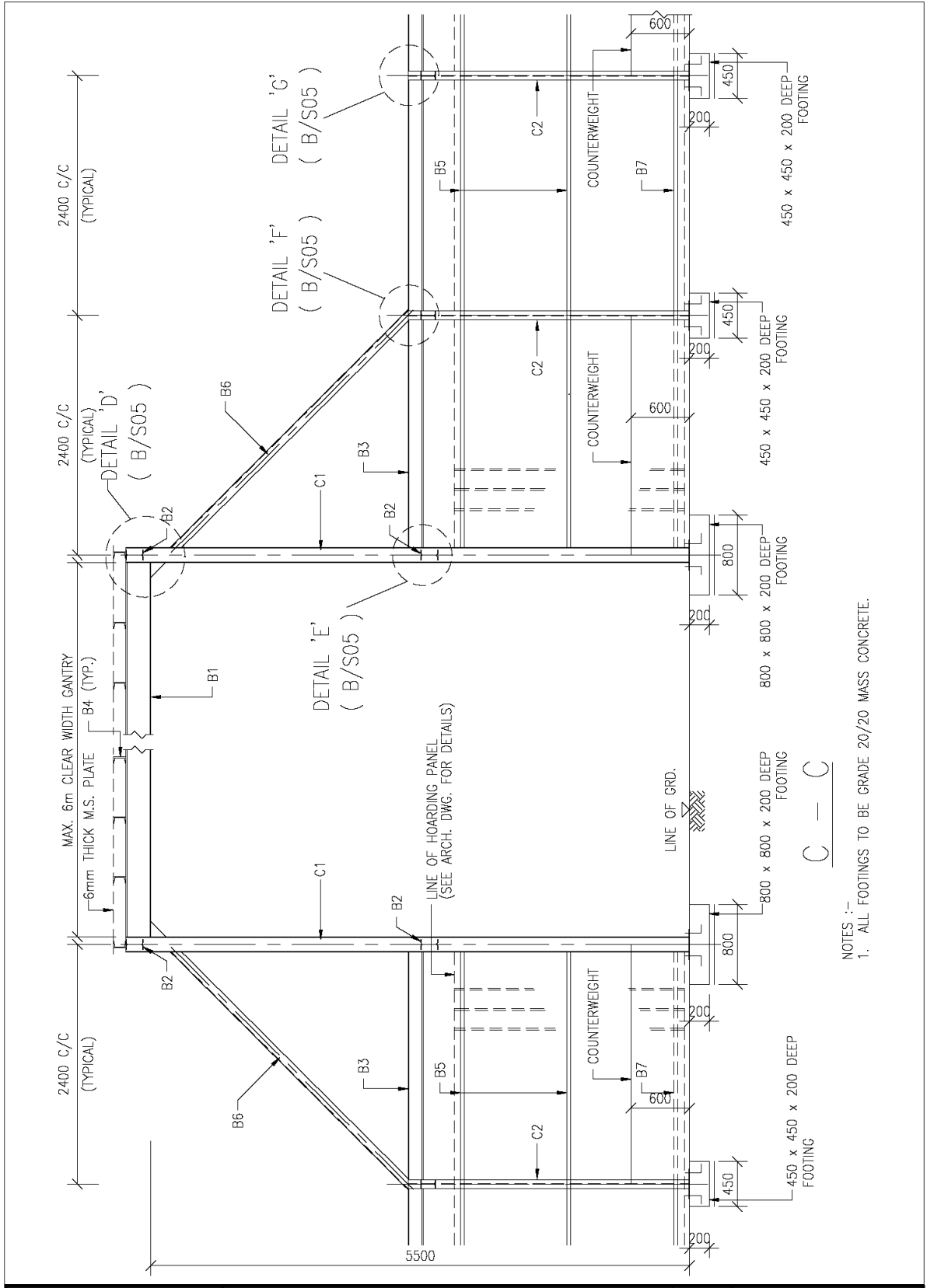


(TYPICAL SECTION OF COVERED WALKWAY)

NOTES :-
1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.




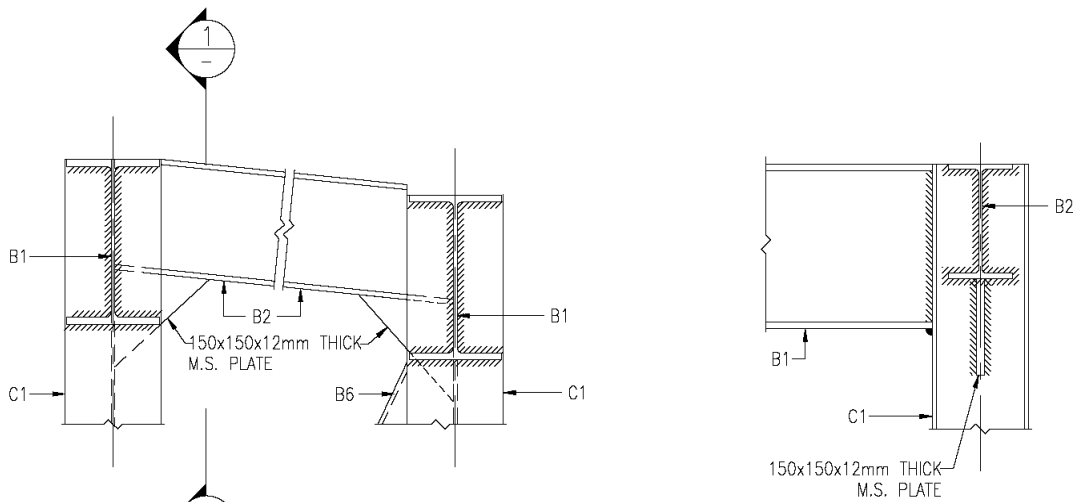
Title TYPE B HOARDING - COVERED WALKWAY STRUCTURAL DETAILS 2		Scale 1 : 50 1 : 10	Drawing No. 9711/B/S02
Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007



C - C

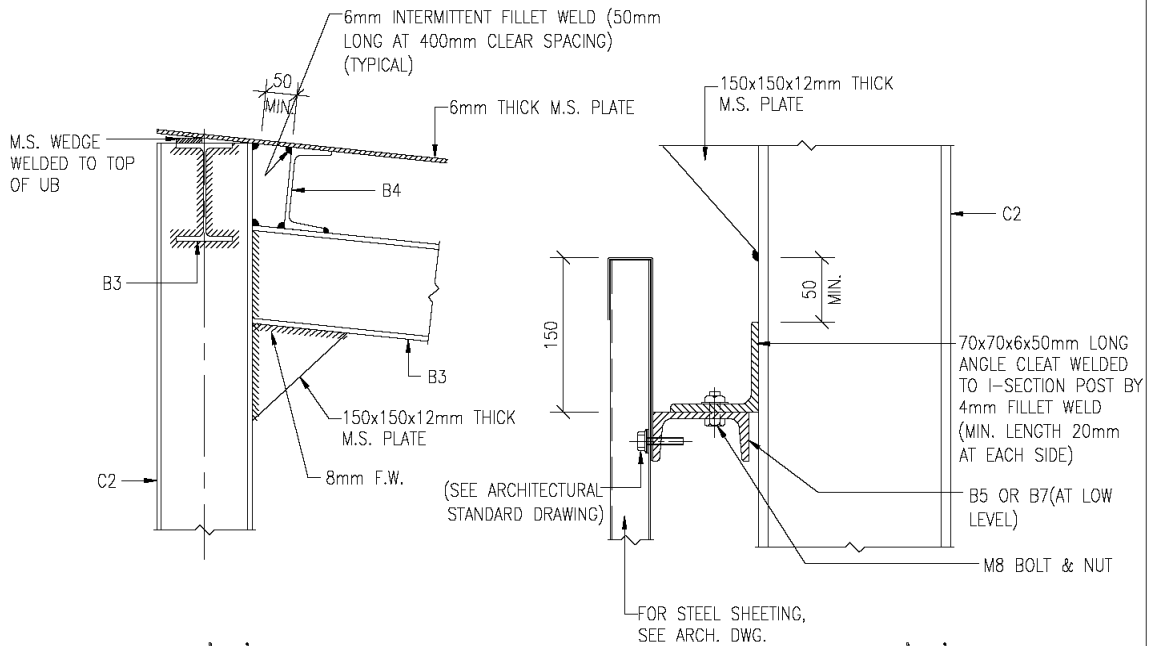
NOTES :-
 1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE B HOARDING - COVERED WALKWAY STRUCTURAL DETAILS 3		Scale 1 : 50	Drawing No. 9711/B/S03
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007



DETAIL 'A' 1 : 10
 (B4 NOT SHOWN FOR CLARITY)
 (B/S02)

1 - 1 1 : 10



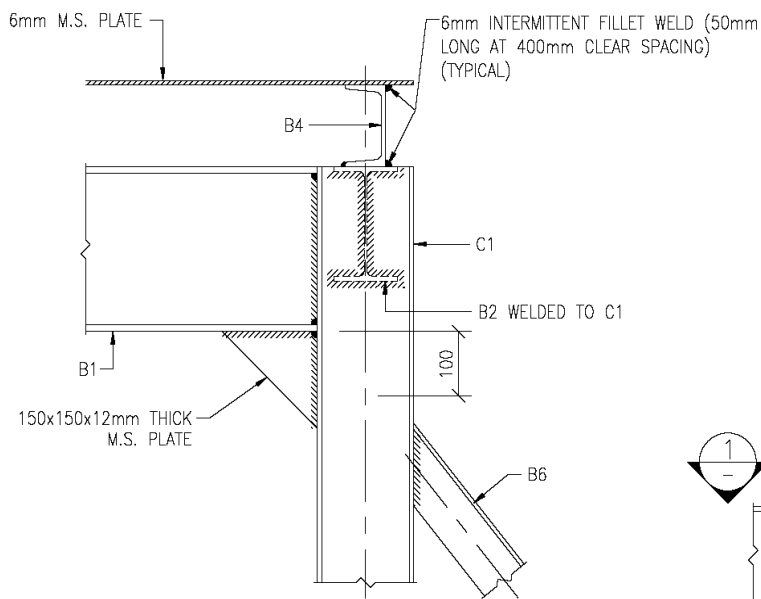
DETAIL 'B' 1 : 10
 (B/S02)

DETAIL 'C' 1 : 5
 (B/S02)

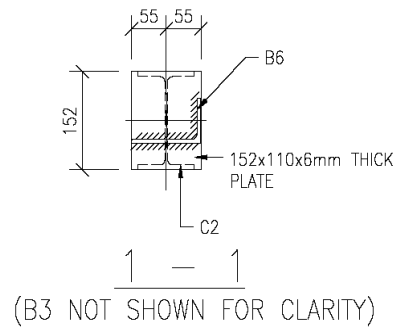


ARCHITECTURAL
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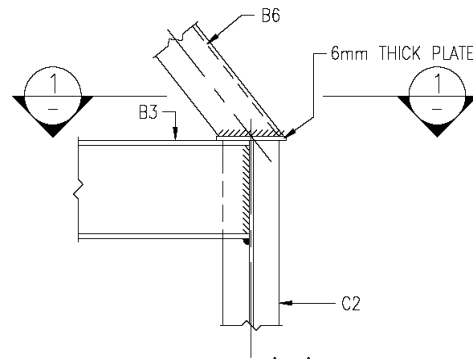
Title TYPE B HOARDING - COVERED WALKWAY STRUCTURAL DETAILS 4		Scale 1 : 10 1 : 5	Drawing No. 9711/B/S04
Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007



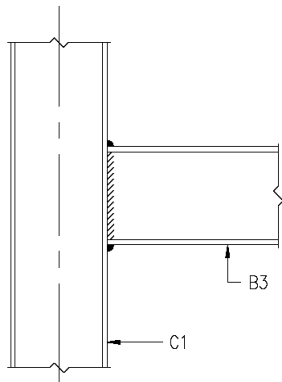
DETAIL 'D'
(B/S03)



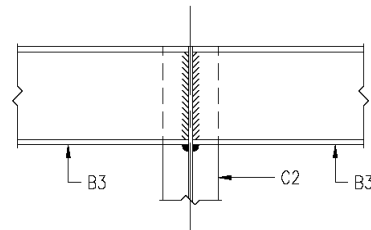
(B3 NOT SHOWN FOR CLARITY)



DETAIL 'F'
(FLANGE OF C2 NOT SHOWN FOR CLARITY)
(B/S03)



DETAIL 'E'
(B/S03)



DETAIL 'G'
(FLANGE OF C2 NOT SHOWN FOR CLARITY)
(B/S03)



ARCHITECTURAL
SERVICES
DEPARTMENT

Title
**TYPE B HOARDING - COVERED WALKWAY
STRUCTURAL DETAILS 5**

Scale
1 : 10

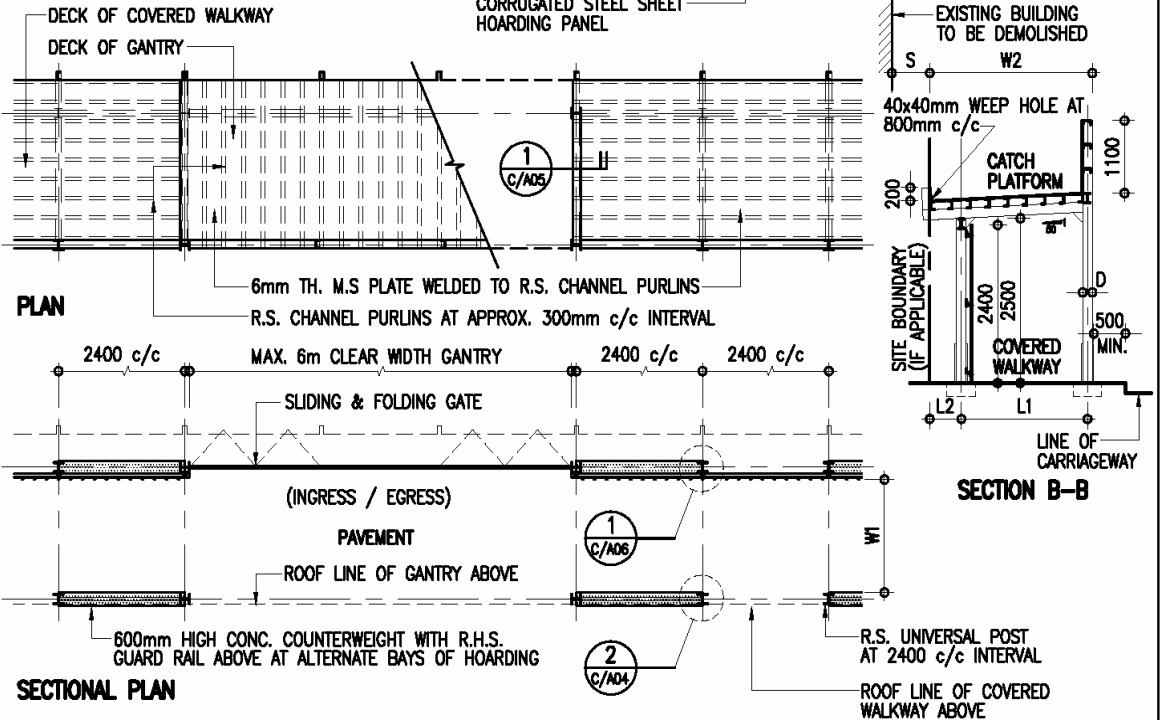
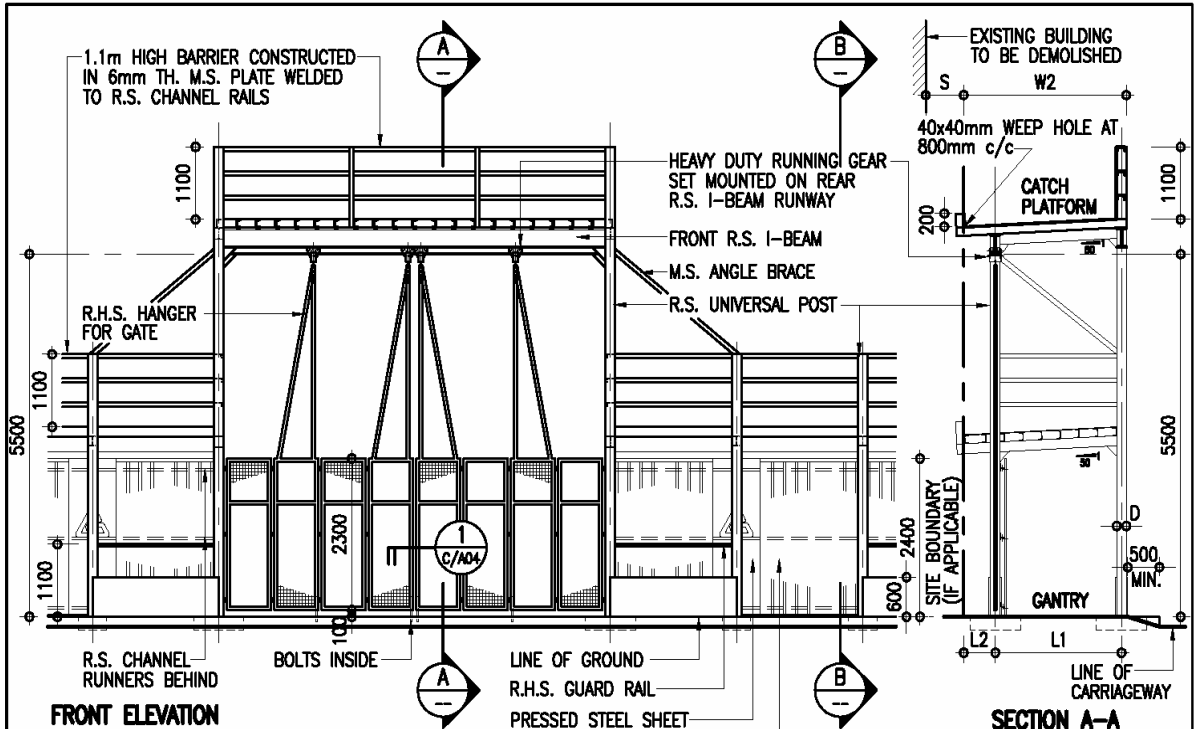
Drawing No.
9711/B/S05

Checked by
CSE/1 C.T. WONG *C.T. Wong*


Date
11 Oct. 2007

Approved by
AD(SE) W.W. LI *W.W. Li*

Date
11 Oct. 2007




- NOTES:**
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH STRUCTURAL DRAWINGS NO. 9711/C/S01 TO S05.
 2. REFER PT. 3 OF GENERAL NOTES IN DRAWING NO. 9711/C/A02 FOR THE REQUIRED CLEAR WIDTH (W1) OF COVERED WALKWAY.
 3. REFER PNAP 71 & 75 OF BUILDINGS DEPARTMENT FOR THE PERMITTED WORKING SPACE (L2). (500mm MAX. FOR DEMOLITION WORKS OR 300mm MAX. FOR OTHER WORKS)
 4. MIN. WIDTH OF CATCH PLATFORM (W2) FOR DEMOLITION WORKS = $2000\text{mm} - (S)$ SET BACK OR $(L1) + (L2) + (D/2)$, WHICHEVER THE GREATER.

 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH TYPE C HOARDING - SINGLE DECK CATCH PLATFORM GENERAL PLANS		Scale 1 : 100	Drawing No. 9711/C/A01
	Checked by CPM303 C.F. HO <i>RF</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007

**GENERAL NOTES FOR CONSTRUCTION OF
HOARDINGS, COVERED WALKWAYS, AND ASSOCIATED GANTRIES AND CATCH PLATFORMS:**

1. THE ARCHITECTURAL HOARDING DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE APPROPRIATE STRUCTURAL HOARDING DRAWINGS AS REFERRED ON THE DRAWINGS.
2. IN DETERMINING THE TYPE OF HOARDING/COVERED WALKWAY CONSTRUCTION AND THE ASSOCIATED PROVISIONS TO SUIT THE PURPOSE, REFERENCE AND PROVISIONS SHOULD ALWAYS BE MADE TO MEET THE REQUIREMENTS OF THE CURRENTLY ENFORCED "CODE OF PRACTICE FOR DEMOLITION OF BUILDINGS" AND RELEVANT PNAPS ISSUED BY BUILDINGS DEPARTMENT.
3. A MINIMUM CLEAR WIDTH OF 1.1m AND RAISED FLOOR SHOULD BE PROVIDED FOR HOARDING/COVERED WALKWAY LOCATED ON CARRIAGEWAY. FOR HOARDING/COVERED WALKWAY LOCATED ON FOOTPATH, THE CLEAR WIDTH SHOULD BE RELATED TO THE EXISTING PAVEMENT WIDTH AND BE PROVIDED ACCORDING TO THOSE AS PROMULGATED IN PNAP 75 ISSUED BY THE BUILDINGS DEPARTMENT.
4. A TEMPORARY LIGHTING SYSTEM AS PROMULGATED IN PNAP 75 SHOULD BE PROVIDED FOR ALL COVERED WALKWAYS OF BUILDING SITES.
5. ALL METALWORK REFERRED IN THE DRAWINGS SHOULD COMPLY WITH SECTION 17 OF THE GENERAL SPECIFICATION FOR BUILDING 2007 EDITION OR THEREAFTER.
6. ALL CORRUGATED STEEL SHEET PANELS, CAPPINGS AND TOE SHEETS SHOULD BE OF GALVANIZED STEEL WITH MINIMUM ZINC COATING CONTENT $350\text{g}/\text{m}^2$ WITH TRIPLE-SPOT TEST, AND BE FINISHED ON BOTH SURFACES WITH ONE UNDERCOAT OF "LUXAPRIME 1600 PRIMER" OR EQUIVALENT AND TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
7. ALL EXPOSED SURFACES OF METALWORK SHOULD BE PAINTED IN MID-GREY COLOUR (10 A 07) UNLESS STATED OTHERWISE.
8. ArchSD LOGO SHOULD BE PAINTED AT A 3-BAY INTERVAL. IF THERE ARE OTHER LOGOS TO BE DISPLAYED, THE SPECIFIED LOGO AND THE ArchSD LOGO SHOULD BE PAINTED ALTERNATIVELY AT A 3-BAY INTERVAL.

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE C HOARDING - COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM GENERAL NOTES		Scale NIL	Drawing No. 9711/C/A02
	Checked by CPM303 C.F. HO <i>AJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KK</i>	Date 19 Sept. 2007

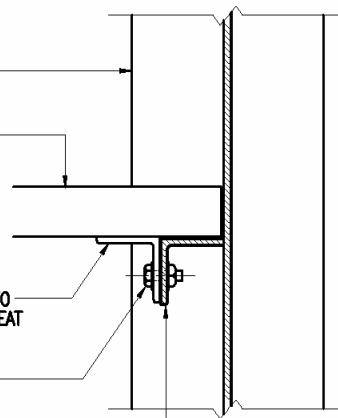
R.S. UNIVERSAL POST

63x38x2mm TH. R.H.S. GUARD RAIL PROVIDED AT ALTERNATE BAYS OF HOARDING AND FIXED AT 1.1m ABOVE GROUND LEVEL

50x50x5x50mm LONG M.S. ANGLE CLEAT WELDED TO R.H.S. GUARD RAIL AND BOLTED TO M.S. ANGLE CLEAT

8mm ϕ G.S. BOLT WITH NUT & WASHERS

50x50x5mm TH. M.S. ANGLE CLEAT WITH 8x25mm LONG VERTICAL SLOT FOR BOLT & NUT FIXING WELDED TO R.S. UNIVERSAL POST



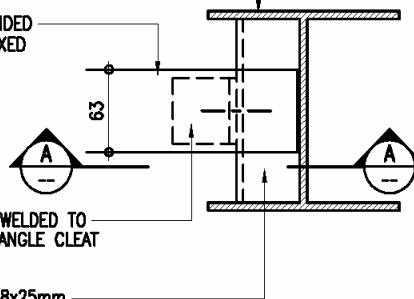
SECTION A-A

R.S. UNIVERSAL POST

63x38x2mm TH. R.H.S. GUARD RAIL PROVIDED AT ALTERNATE BAYS OF HOARDING AND FIXED AT 1.1m ABOVE GROUND LEVEL

50x50x5x50mm LONG M.S. ANGLE CLEAT WELDED TO R.H.S. GUARD RAIL AND BOLTED TO M.S. ANGLE CLEAT

50x50x5mm TH. M.S. ANGLE CLEAT WITH 8x25mm LONG VERTICAL SLOT FOR BOLT & NUT FIXING WELDED TO R.S. UNIVERSAL POST



2
C/A04

FIXING DETAILS OF R.H.S. GUARD RAIL

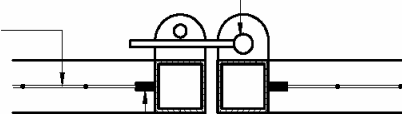
1 : 5

BOLTS INSIDE WITH HASP & STAPLE FOR PAD LOCK

50x50mm GALVANIZED HIGH-TENSILE FABRIC WELDED TO M.S. FLAT

3mm TH. M.S. FLAT WELDED TO FRAME OF GATE

40x40x2.6mm TH. R.H.S. AS FRAME OF SLIDING AND FOLDING GATE COMPLETED WITH 40x40x2.6mm TH. R.H.S. HANGERS AND ALL NECESSARY IRONMONGERY (REFER ELEVATION SHOWN ON DRAWING 9711/C/A01)



1
C/A04

DETAILS OF SLIDING AND FOLDING GATE

1 : 5



ARCHITECTURAL SERVICES DEPARTMENT

Title
TYPE C HOARDING - COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM CONSTRUCTION DETAILS 2

Scale
1 : 5

Drawing No.
9711/C/A04

Checked by
CPM303 C.F. HO

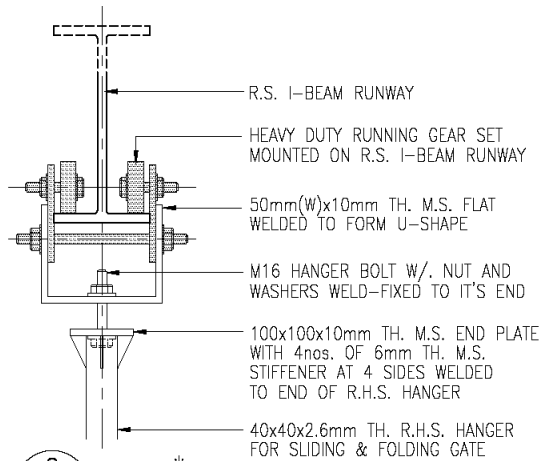
CF

Date
18 Sept. 2007

Approved by
AD(PS) K.K. LEUNG

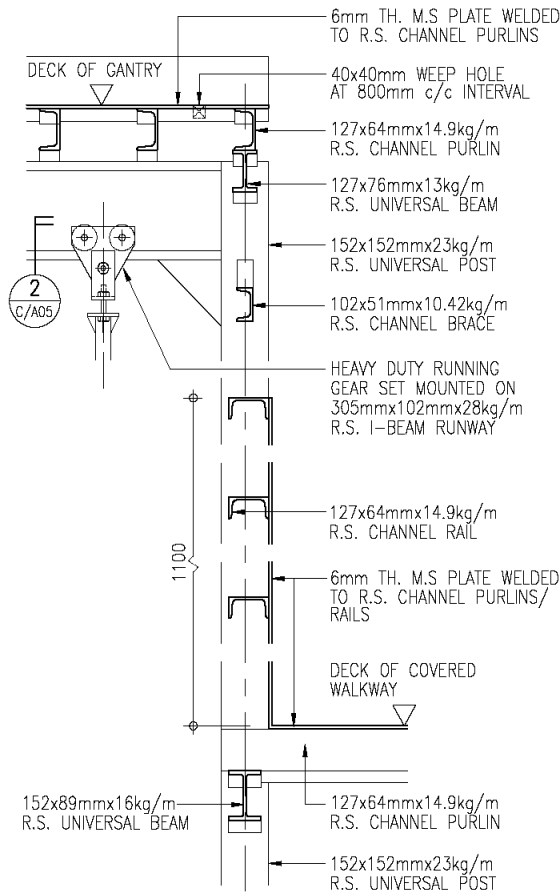
KL

Date
19 Sept. 2007



2 DETAIL[‡]
C/A05 1 : 10

‡ THIS FIXING DETAIL IS FOR REFERENCE ONLY, SAMPLE OF RUNNING GEAR SET AND FIXING METHOD SHOULD BE SUBMITTED FOR APPROVAL BEFORE ORDERING.



1 DETAIL
C/A05 1 : 20



ARCHITECTURAL
SERVICES
DEPARTMENT

Title
**COVERED WALKWAY WITH
TYPE C HOARDING - SINGLE DECK CATCH PLATFORM
CONSTRUCTION DETAILS 3**

Scale
as shown

Drawing No.
9711/C/A05

Checked by
CPM303 C.F. HO

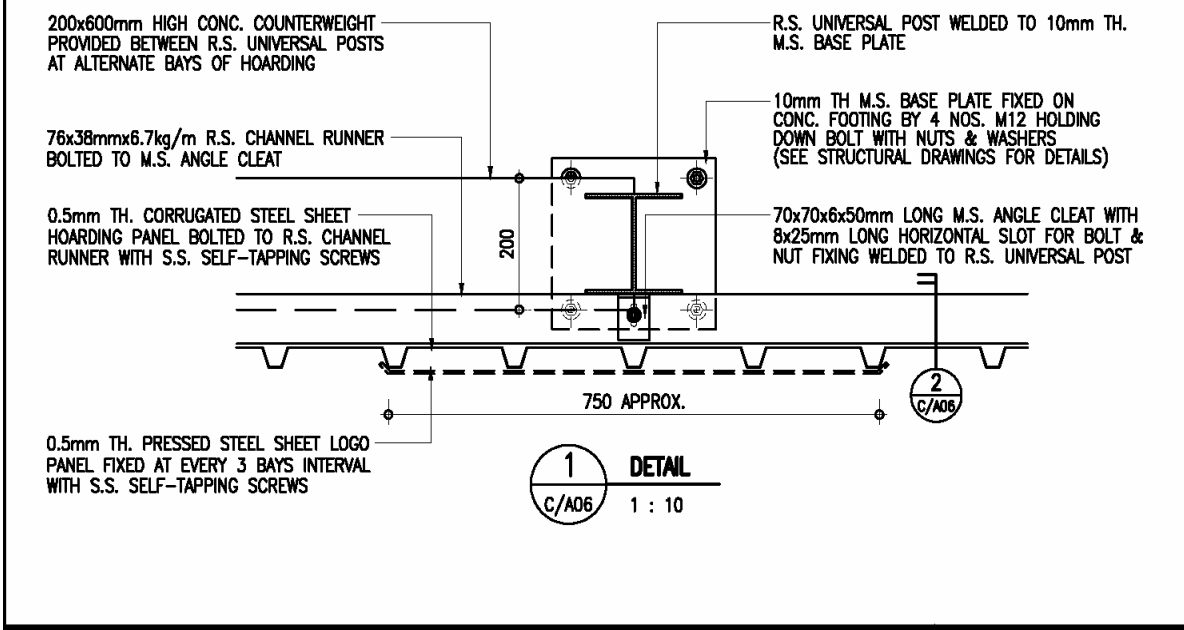
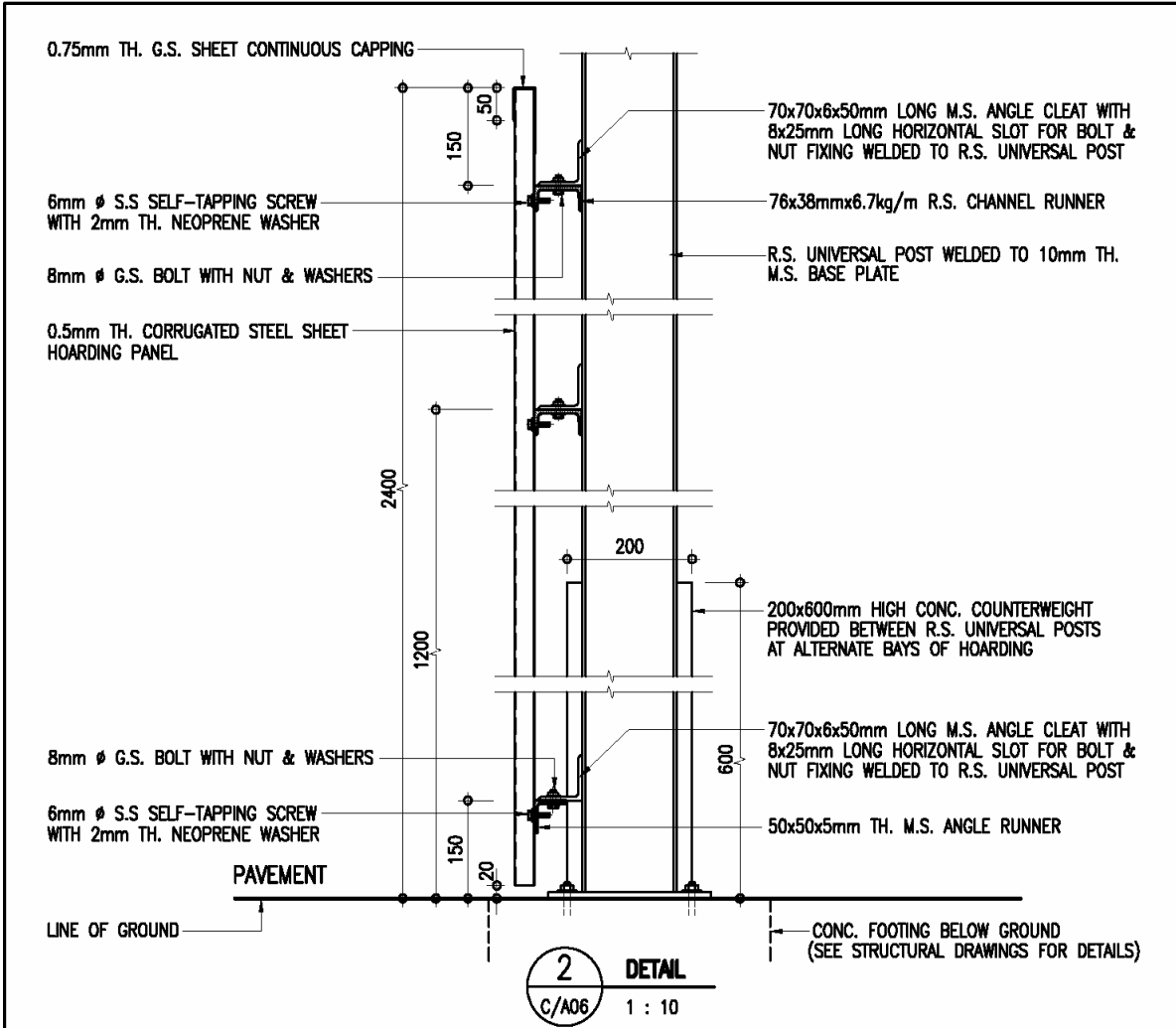
CF


Date
18 Sept. 2007

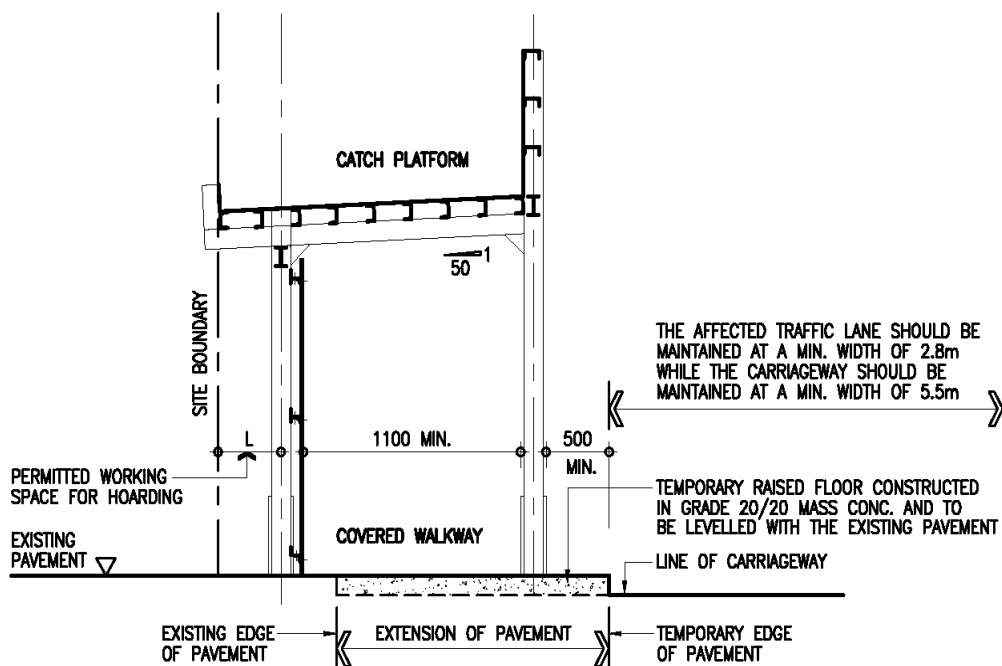
Approved by
AD(PS) K.K. LEUNG

KL

Date
19 Sept. 2007




 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH TYPE C HOARDING - SINGLE DECK CATCH PLATFORM CONSTRUCTION DETAILS 4		Scale 1 : 10	Drawing No. 9711/C/A06
	Checked by CPM303 C.F. HO <i>RU</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007



TYPICAL DETAILS OF COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM HOARDING SITED ON CARRIAGEWAY/NARROW PAVEMENT

1 : 50

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE C HOARDING - COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM CONSTRUCTION DETAILS 5		Scale 1 : 50	Drawing No. 9711/C/A07
	Checked by CPM303 C.F. HO <i>HO</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007



Title
COVERED WALKWAY WITH TYPE C HOARDING - SINGLE DECK CATCH PLATFORM STRUCTURAL DETAILS 1

Scale
 1 : 50

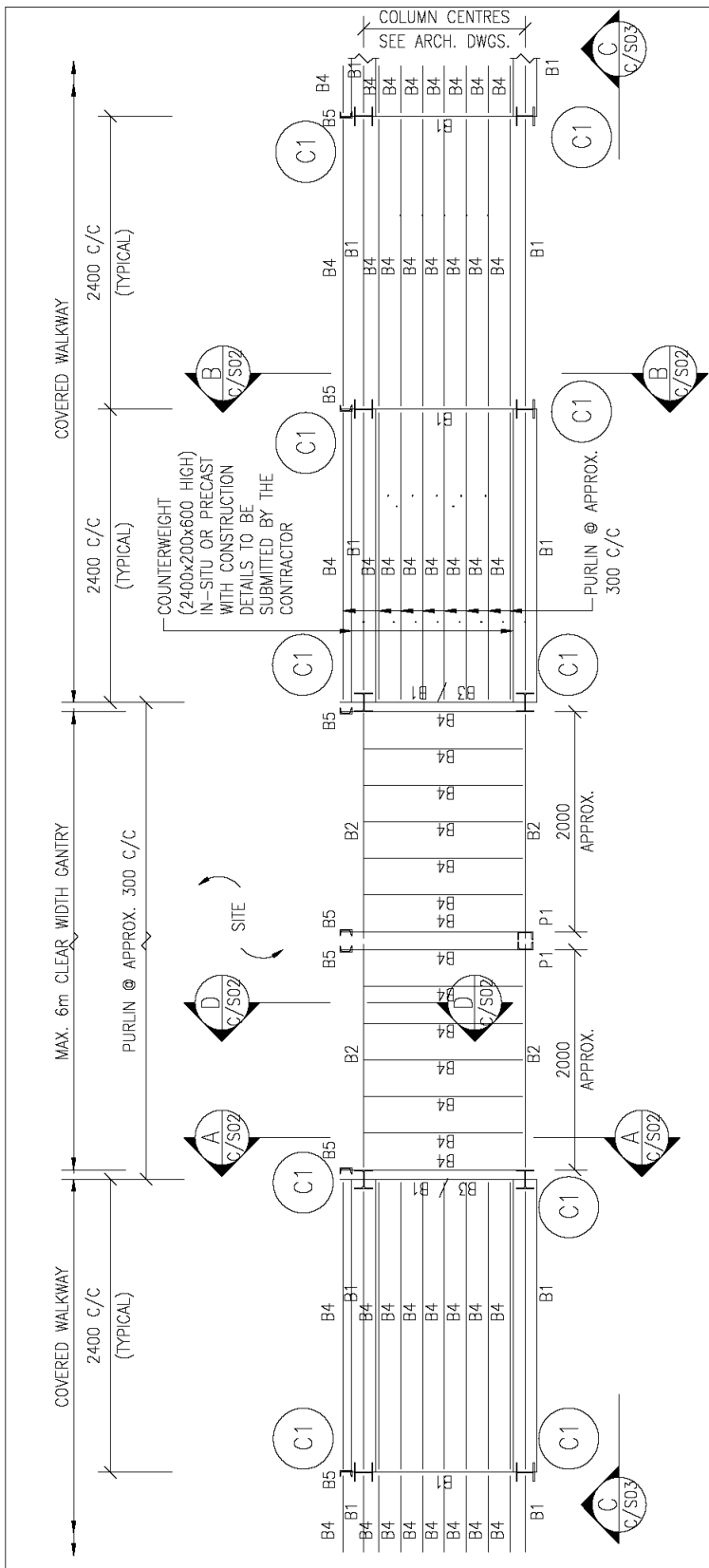
Drawing No.
9711/C/S01

Checked by
 CSE/1 C.T. WONG *C.T. Wong*

Date
 11 Oct. 2007

Approved by
 AD(SE) W.W. LI *W.W. Li*

Date
 11 Oct. 2007



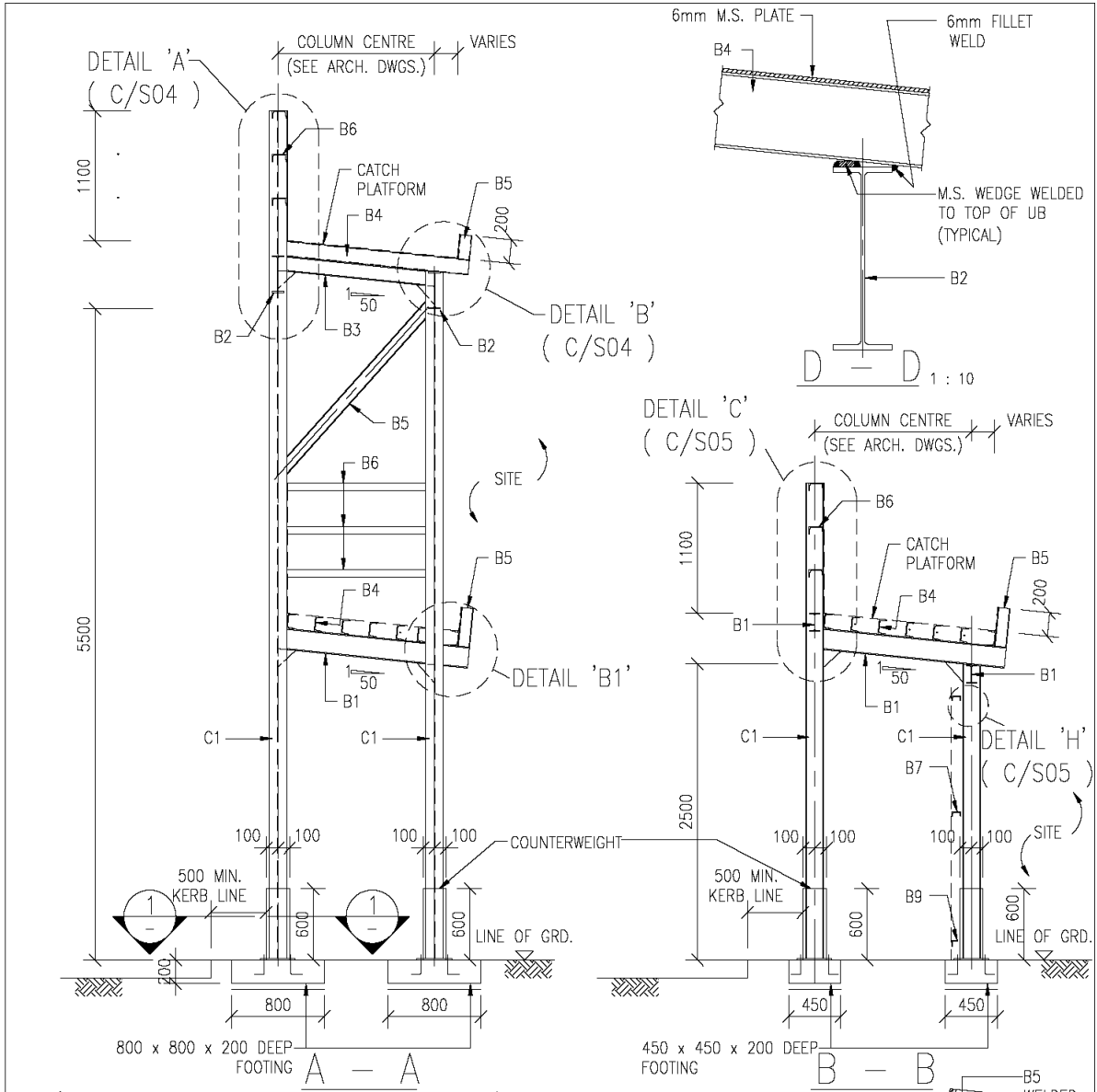
TOP PLAN OF GANTRY AND COVERED WALKWAY

- NOTES :
1. ALL WELDING TO BE 6 mm F.W. ALL ROUND IN ACCORDANCE WITH BS 5135:1984 UNLESS OTHERWISE STATED.
 2. ALL BOLTS TO BE GRADE 4.6 BLACK BOLTS TO BS 4190.
 3. ALL STRUCTURAL SECTIONS SHALL BE WELDABLE STRUCTURAL STEEL OF GRADE S275 UNLESS OTHERWISE SPECIFIED.
 4. THE DETAILS OF GANTRY MAY BE MODIFIED BY PROJECT OFFICER TO SUIT ACTUAL SITE CONDITIONS.
 5. ALL STEEL WORKS SHALL BE MANUALLY CLEANED TO GS CL. 15.61 (1) PRIMED WITH ONE COAT OF OIL BASED ZINC PHOSPHATE PRIMER AND FINISHED WITH TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
 6. DESIGN WIND LOAD TO BE 0.67 kPa, i.e. 37% OF DESIGN WIND PRESSURE OF 1.82 kPa.

STEEL MEMBER SCHEDULE

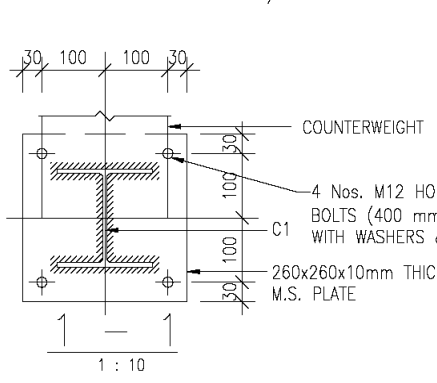
MEMBER MARK	MEMBER SIZE
C1	152 x 152 x 23 UC
B1	152 x 89 x 16 UB
B2	305 x 102 x 28 UB
B3	127 x 76 x 13 UB
B4, B6, P1	127 x 64 x 14.9 CHANNEL
B5	102 x 51 x 10.42 CHANNEL
B7	76 x 38 x 6.7 CHANNEL
B8	70 x 70 x 6 ANGLE
B9	50 x 50 x 5 ANGLE

THE SKETCHES ARE PREPARED TO MEET THE GENERAL REQUIREMENTS AS SPECIFIED IN PNAP224 ISSUED BY BD. SIZES OF FOOTINGS MAY BE MODIFIED BY PSE TO SUIT ACTUAL SITE CONDITIONS.

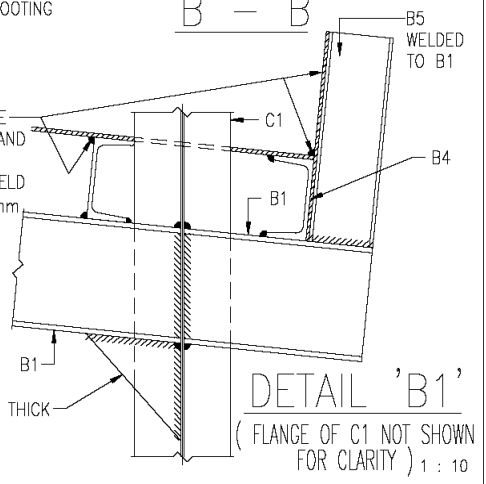



(TYPICAL SECTION OF COVERED WALKWAY)

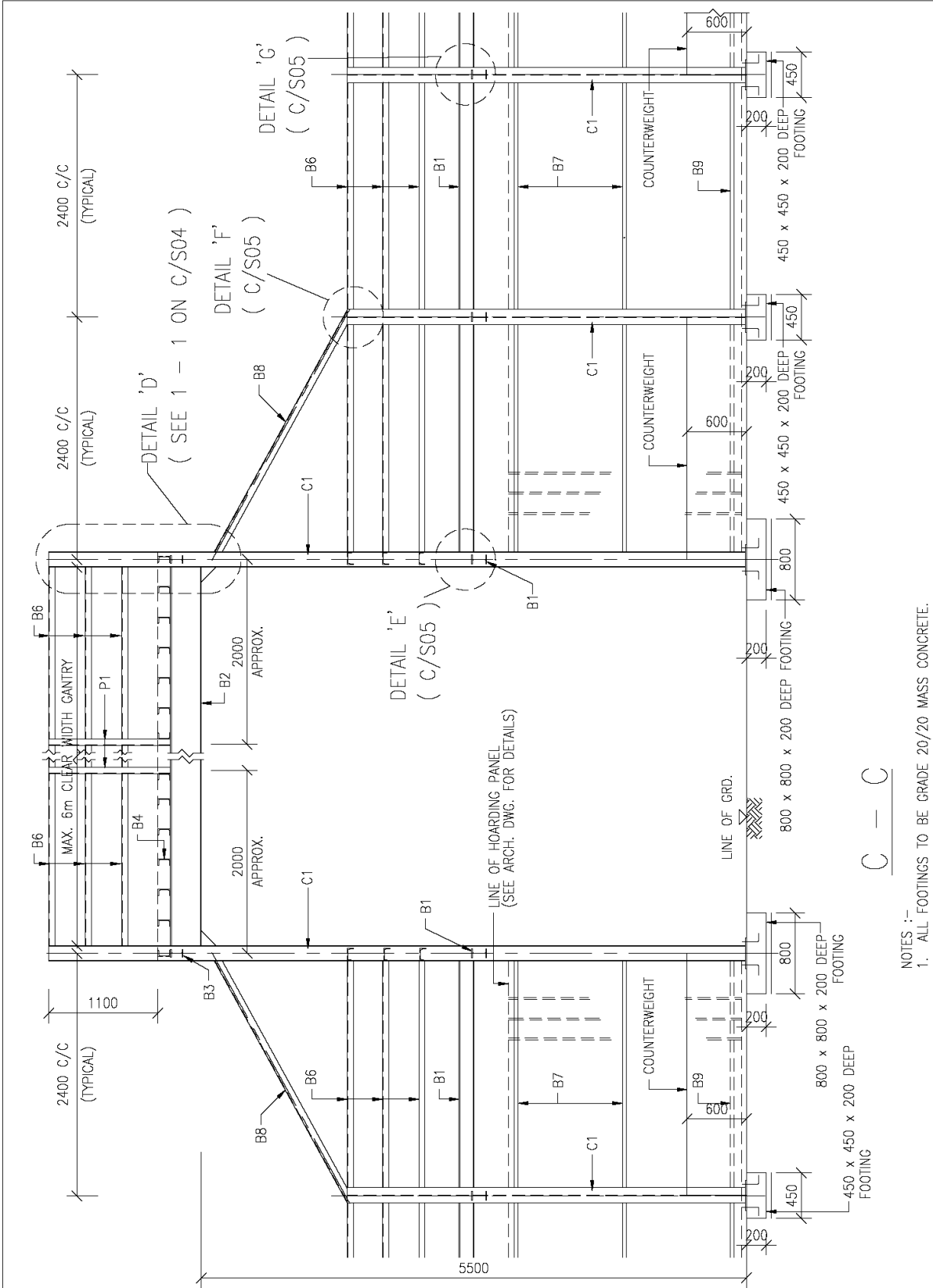
- NOTES :-
 1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.



6mm THICK M.S. PLATE WELDED TO CHANNEL AND ROOF PLATE BY 6mm. INTERMITTENT FILLET WELD (50mm LONG AT 400mm CLEAR SPACING) (TYPICAL)




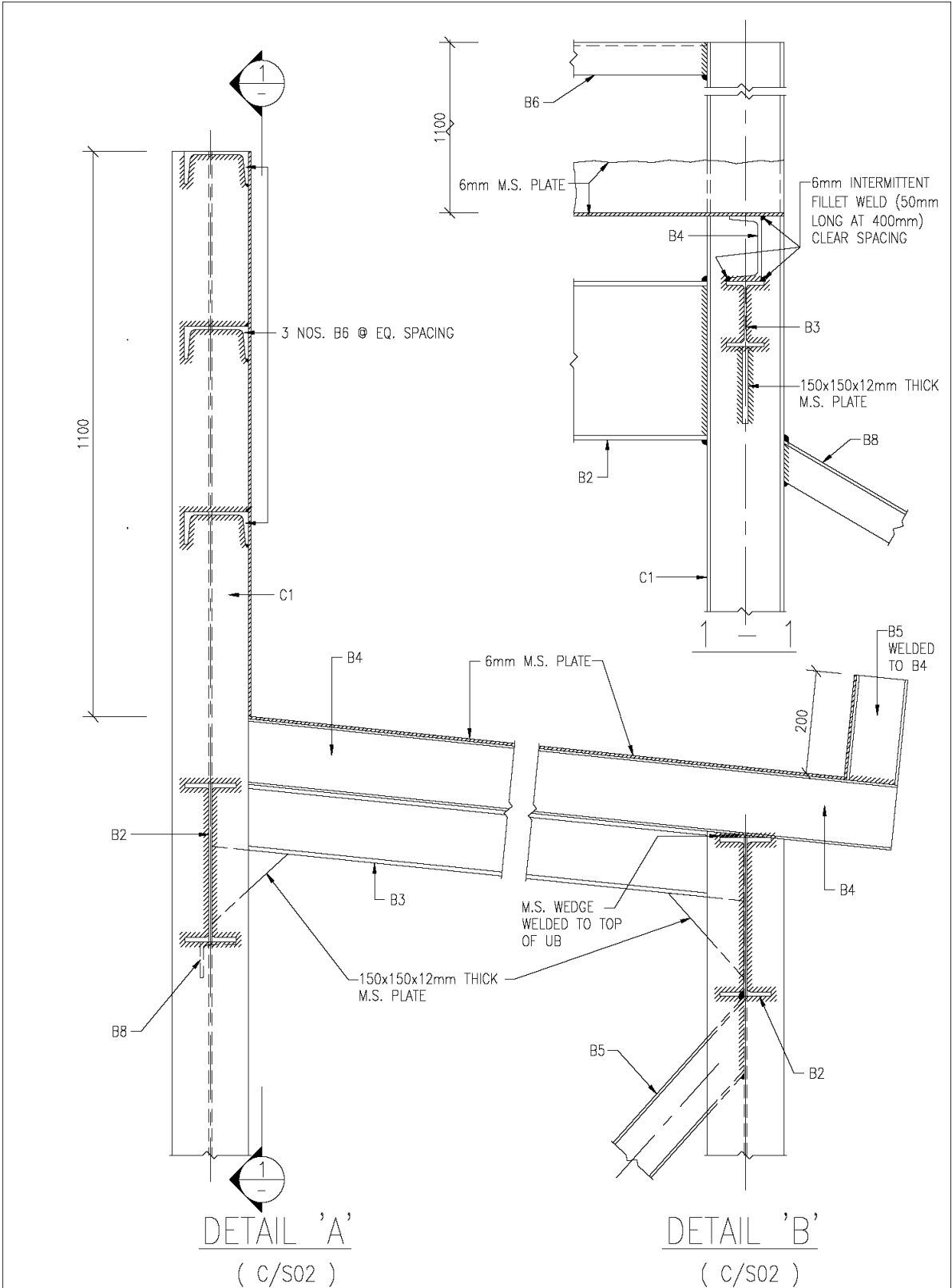
 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH TYPE C HOARDING - SINGLE DECK CATCH PLATFORM STRUCTURAL DETAILS 2		Scale 1 : 50 1 : 10	Drawing No. 9711/C/S02
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007




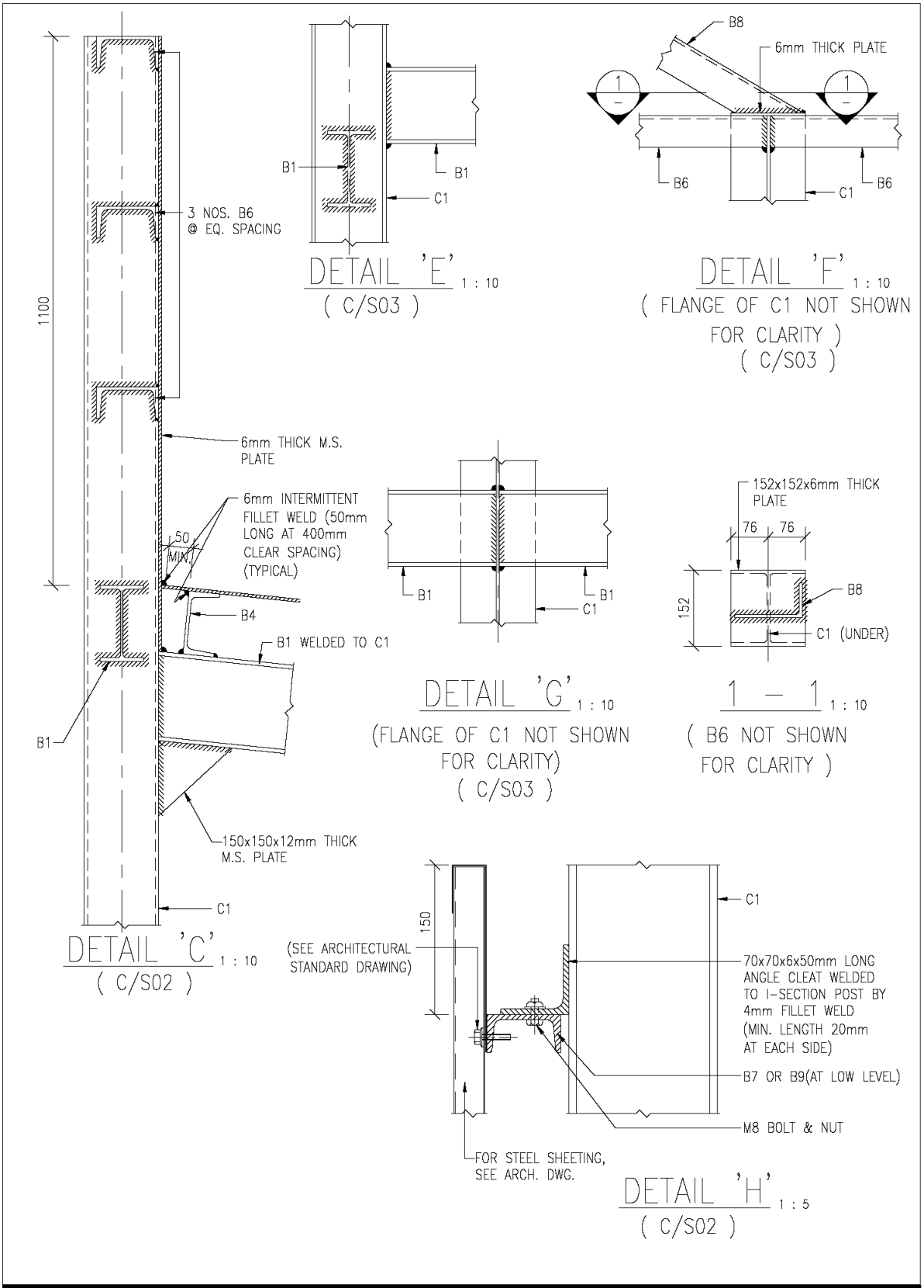
C - C


NOTES :-
 1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.

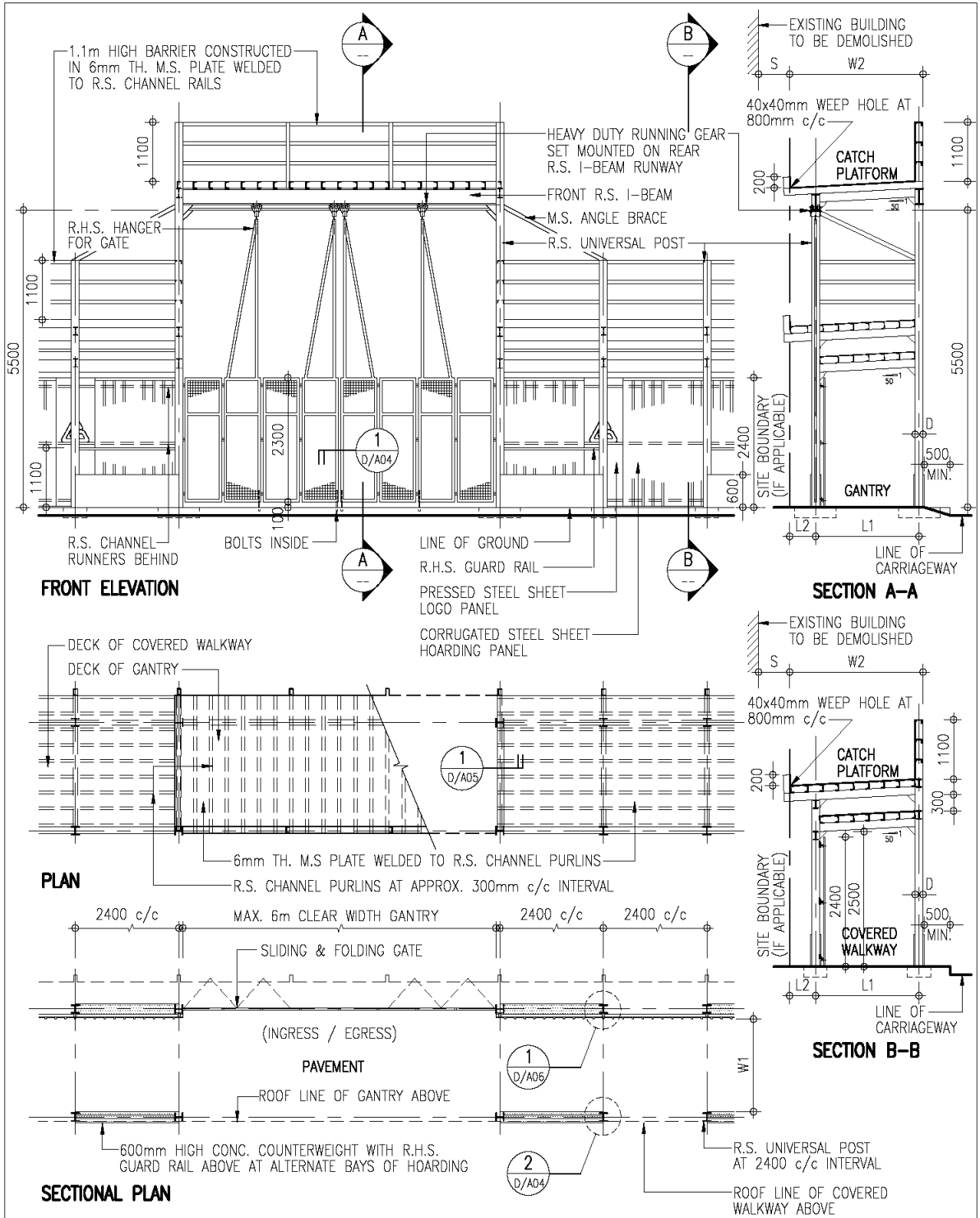
 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH TYPE C HOARDING - SINGLE DECK CATCH PLATFORM STRUCTURAL DETAILS 3		Scale 1 : 50	Drawing No. 9711/C/S03
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007



 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH TYPE C HOARDING - SINGLE DECK CATCH PLATFORM STRUCTURAL DETAILS 4		Scale 1 : 10	Drawing No. 9711/C/S04
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007




 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH TYPE C HOARDING - SINGLE DECK CATCH PLATFORM STRUCTURAL DETAILS 5		Scale 1 : 10 1 : 5	Drawing No. 9711/C/S05
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007




NOTES:

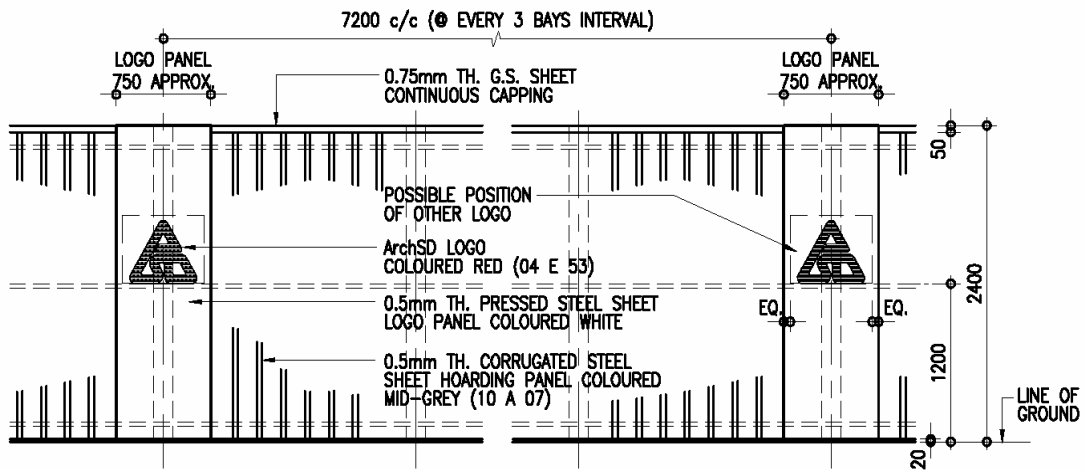
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH STRUCTURAL DRAWINGS NO. 9711/D/S01 TO S05.
2. REFER PT. 3 OF GENERAL NOTES IN DRAWING NO. 9711/D/A02 FOR THE REQUIRED CLEAR WIDTH (W1) OF COVERED WALKWAY.
3. REFER PNAP 71 & 75 OF BUILDINGS DEPARTMENT FOR THE PERMITTED WORKING SPACE (L2). (500mm MAX. FOR DEMOLITION WORKS OR 300mm MAX. FOR OTHER WORKS)
4. MIN. WIDTH OF CATCH PLATFORM (W2) FOR DEMOLITION WORKS = 2000mm-(S) SET BACK OR (L1)+(L2)+(D/2), WHICHEVER THE GREATER.

 <p>ARCHITECTURAL SERVICES DEPARTMENT</p>	<p>Title</p> <p style="text-align: center;">COVERED WALKWAY WITH TYPE D HOARDING - DOUBLE DECK CATCH PLATFORM GENERAL PLANS</p>		<p>Scale</p> <p style="text-align: center;">1 : 100</p>	<p>Drawing No.</p> <p style="text-align: center;">9711/D/A01</p>
	<p>Checked by</p> <p>CPM303 C.F. HO <i>RF</i></p>	<p>Date</p> <p>18 Sept. 2007</p>	<p>Approved by</p> <p>AD(PS) K.K. LEUNG <i>MA</i></p>	<p>Date</p> <p>19 Sept. 2007</p>

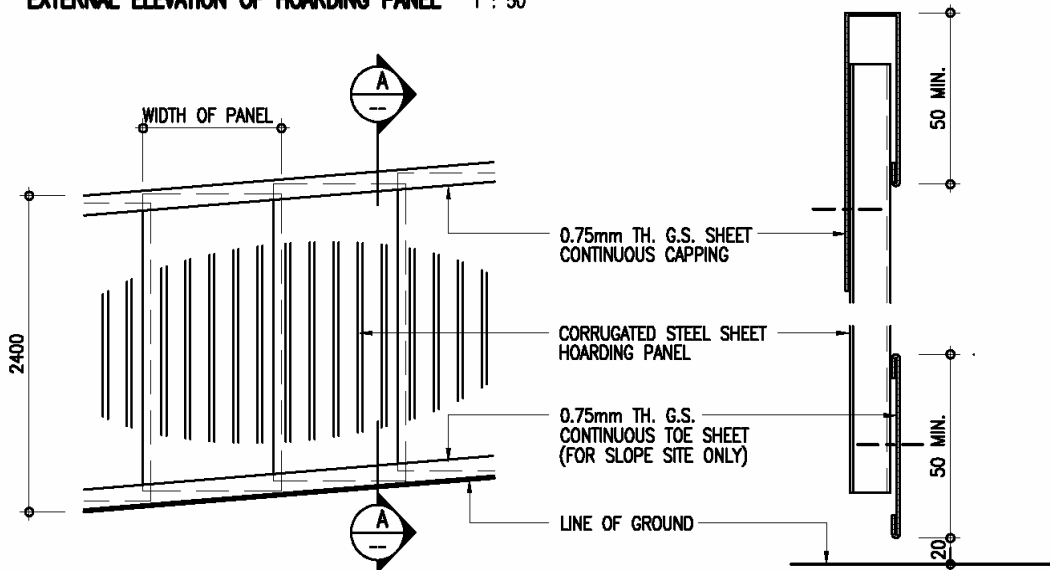
**GENERAL NOTES FOR CONSTRUCTION OF
HOARDINGS, COVERED WALKWAYS, AND ASSOCIATED GANTRIES AND CATCH PLATFORMS:**

1. THE ARCHITECTURAL HOARDING DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE APPROPRIATE STRUCTURAL HOARDING DRAWINGS AS REFERRED ON THE DRAWINGS.
2. IN DETERMINING THE TYPE OF HOARDING/COVERED WALKWAY CONSTRUCTION AND THE ASSOCIATED PROVISIONS TO SUIT THE PURPOSE, REFERENCE AND PROVISIONS SHOULD ALWAYS BE MADE TO MEET THE REQUIREMENTS OF THE CURRENTLY ENFORCED "CODE OF PRACTICE FOR DEMOLITION OF BUILDINGS" AND RELEVANT PNAPS ISSUED BY BUILDINGS DEPARTMENT.
3. A MINIMUM CLEAR WIDTH OF 1.1m AND RAISED FLOOR SHOULD BE PROVIDED FOR HOARDING/COVERED WALKWAY LOCATED ON CARRIAGEWAY. FOR HOARDING/COVERED WALKWAY LOCATED ON FOOTPATH, THE CLEAR WIDTH SHOULD BE RELATED TO THE EXISTING PAVEMENT WIDTH AND BE PROVIDED ACCORDING TO THOSE AS PROMULGATED IN PNAP 75 ISSUED BY THE BUILDINGS DEPARTMENT.
4. A TEMPORARY LIGHTING SYSTEM AS PROMULGATED IN PNAP 75 SHOULD BE PROVIDED FOR ALL COVERED WALKWAYS OF BUILDING SITES.
5. ALL METALWORK REFERRED IN THE DRAWINGS SHOULD COMPLY WITH SECTION 17 OF THE GENERAL SPECIFICATION FOR BUILDING 2007 EDITION OR THEREAFTER.
6. ALL CORRUGATED STEEL SHEET PANELS, CAPPINGS AND TOE SHEETS SHOULD BE OF GALVANIZED STEEL WITH MINIMUM ZINC COATING CONTENT 350g/m² WITH TRIPLE-SPOT TEST, AND BE FINISHED ON BOTH SURFACES WITH ONE UNDERCOAT OF "LUXAPRIME 1600 PRIMER" OR EQUIVALENT AND TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
7. ALL EXPOSED SURFACES OF METALWORK SHOULD BE PAINTED IN MID-GREY COLOUR (10 A 07) UNLESS STATED OTHERWISE.
8. ArchSD LOGO SHOULD BE PAINTED AT A 3-BAY INTERVAL. IF THERE ARE OTHER LOGOS TO BE DISPLAYED, THE SPECIFIED LOGO AND THE ArchSD LOGO SHOULD BE PAINTED ALTERNATIVELY AT A 3-BAY INTERVAL.

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE D HOARDING - COVERED WALKWAY WITH DOUBLE DECK CATCH PLATFORM GENERAL NOTES		Scale NIL	Drawing No. 9711/D/A02
	Checked by CPM303 C.F. HO <i>AJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>MA</i>	Date 19 Sept. 2007

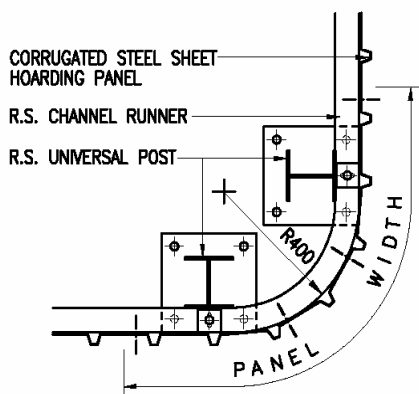


EXTERNAL ELEVATION OF HOARDING PANEL 1 : 50

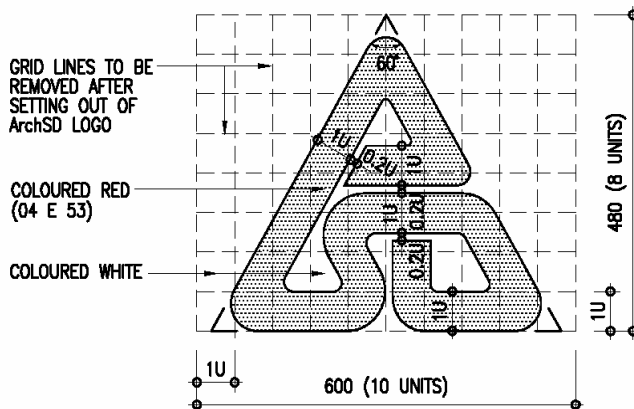


EXTERNAL ELEVATION OF HOARDING PANEL ON SLOPE 1 : 50

SECTION A-A 1 : 5



PLAN OF HOARDING PANEL AT CORNER 1 : 20



SETTING OUT OF ArchSD LOGO 1 : 10



Title
TYPE D HOARDING - DOUBLE DECK CATCH PLATFORM CONSTRUCTION DETAILS 1

Scale
 as shown

Drawing No.
 9711/D/A03

Checked by
 CPM303 C.F. HO *RJ*

Date
 18 Sept. 2007

Approved by
 AD(PS) K.K. LEUNG *KL*

Date
 19 Sept. 2007

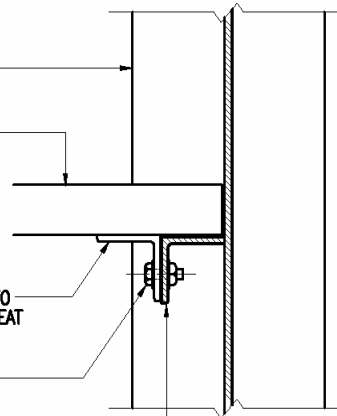
R.S. UNIVERSAL POST

63x38x2mm TH. R.H.S. GUARD RAIL PROVIDED AT ALTERNATE BAYS OF HOARDING AND FIXED AT 1.1m ABOVE GROUND LEVEL

50x50x5x50mm LONG M.S. ANGLE CLEAT WELDED TO R.H.S. GUARD RAIL AND BOLTED TO M.S. ANGLE CLEAT

8mm ϕ G.S. BOLT WITH NUT & WASHERS

50x50x5mm TH. M.S. ANGLE CLEAT WITH 8x25mm LONG VERTICAL SLOT FOR BOLT & NUT FIXING WELDED TO R.S. UNIVERSAL POST



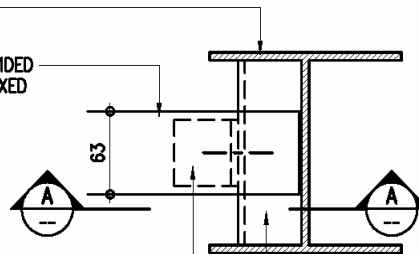
SECTION A-A

R.S. UNIVERSAL POST

63x38x2mm TH. R.H.S. GUARD RAIL PROVIDED AT ALTERNATE BAYS OF HOARDING AND FIXED AT 1.1m ABOVE GROUND LEVEL

50x50x5x50mm LONG M.S. ANGLE CLEAT WELDED TO R.H.S. GUARD RAIL AND BOLTED TO M.S. ANGLE CLEAT

50x50x5mm TH. M.S. ANGLE CLEAT WITH 8x25mm LONG VERTICAL SLOT FOR BOLT & NUT FIXING WELDED TO R.S. UNIVERSAL POST



2
D/A04

FIXING DETAILS OF R.H.S. GUARD RAIL

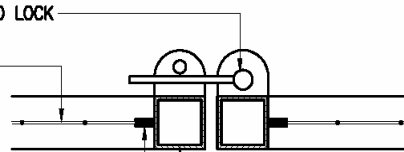
1 : 5

BOLTS INSIDE WITH HASP & STAPLE FOR PAD LOCK

50x50mm GALVANIZED HIGH-TENSILE FABRIC WELDED TO M.S. FLAT

3mm TH. M.S. FLAT WELDED TO FRAME OF GATE

40x40x2.6mm TH. R.H.S. AS FRAME OF SLIDING AND FOLDING GATE COMPLETED WITH 40x40x2.6mm TH. R.H.S. HANGERS AND ALL NECESSARY IRONMONGERY (REFER ELEVATION SHOWN ON DRAWING 9711/D/A01)



1
D/A04

DETAILS OF SLIDING AND FOLDING GATE

1 : 5



ARCHITECTURAL SERVICES DEPARTMENT

Title
COVERED WALKWAY WITH TYPE D HOARDING - DOUBLE DECK CATCH PLATFORM CONSTRUCTION DETAILS 2

Scale
1 : 5

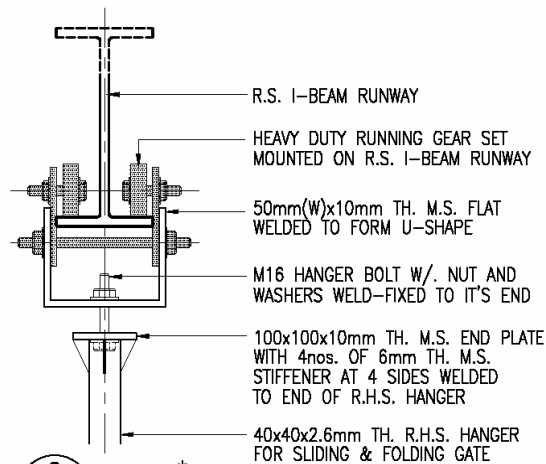
Drawing No.
9711/D/A04

Checked by
CPM303 C.F. HO *CF*

Date
18 Sept. 2007

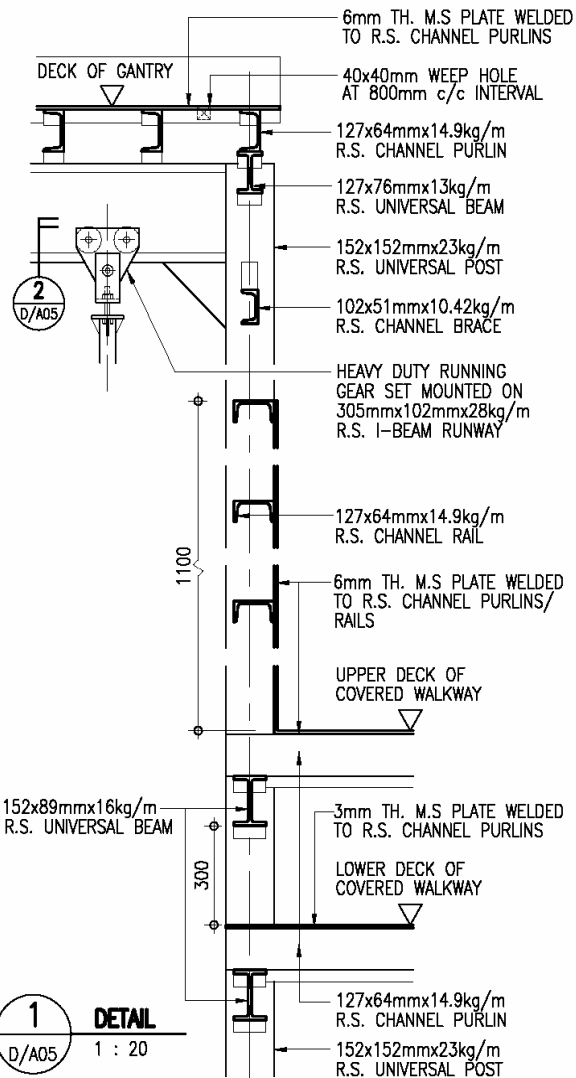
Approved by
AD(PS) K.K. LEUNG *KL*

Date
19 Sept. 2007



* THIS FIXING DETAIL IS FOR REFERENCE ONLY. SAMPLE OF RUNNING GEAR SET AND FIXING METHOD SHOULD BE SUBMITTED FOR APPROVAL BEFORE ORDERING.

2 DETAIL*
D/A05 1 : 10



1 DETAIL
D/A05 1 : 20



ARCHITECTURAL
SERVICES
DEPARTMENT

Title
**TYPE D HOARDING - COVERED WALKWAY WITH
DOUBLE DECK CATCH PLATFORM
CONSTRUCTION DETAILS 3**

Scale
as shown

Drawing No.
9711/D/A05

Checked by
CPM303 C.F. HO

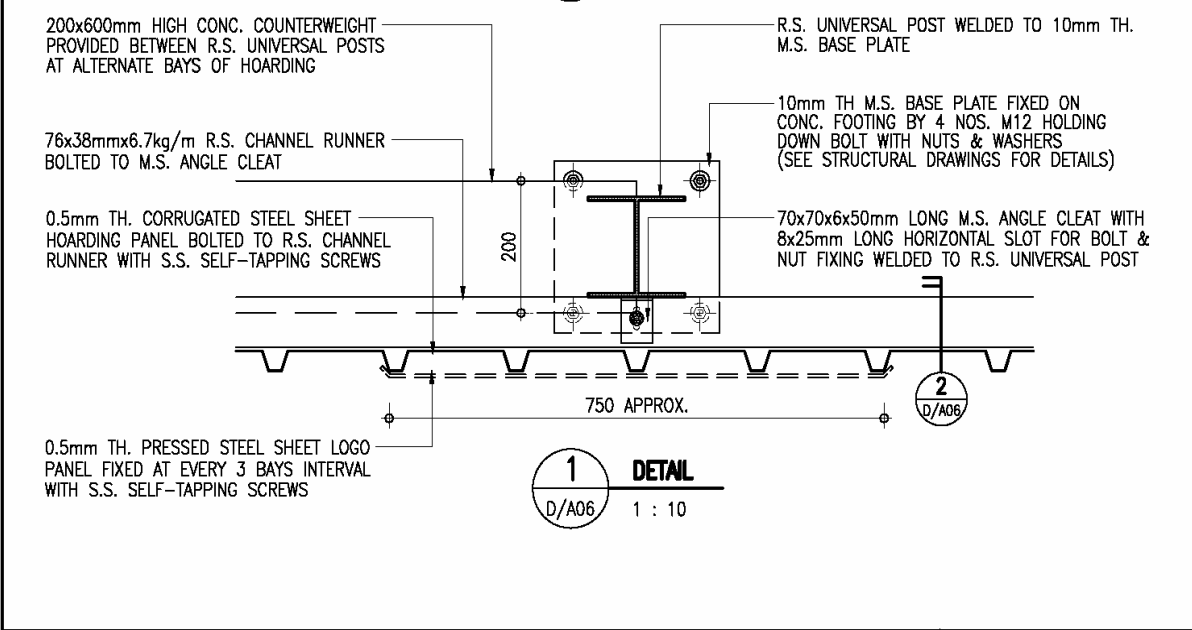
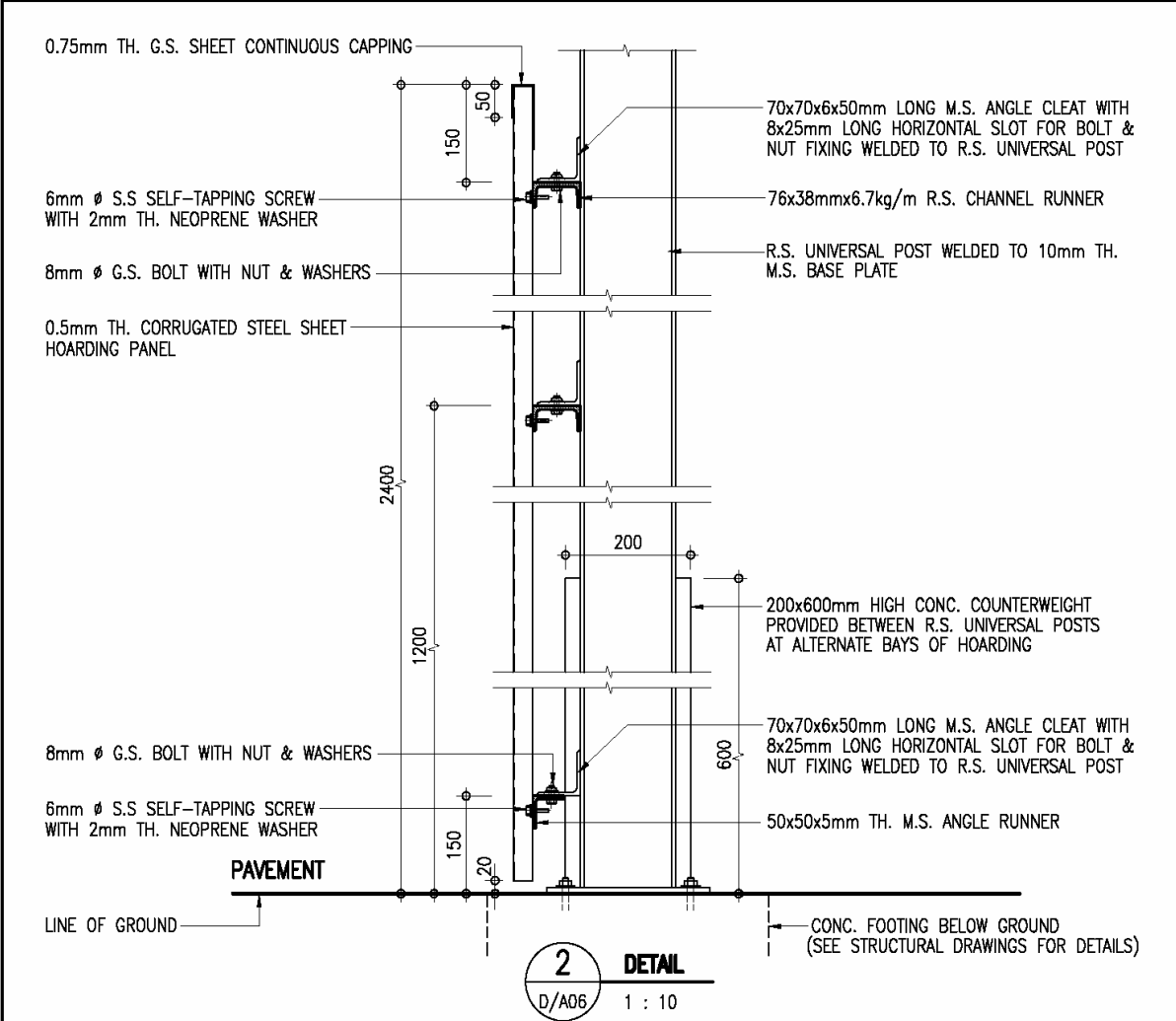
Handwritten signature


Date
18 Sept. 2007

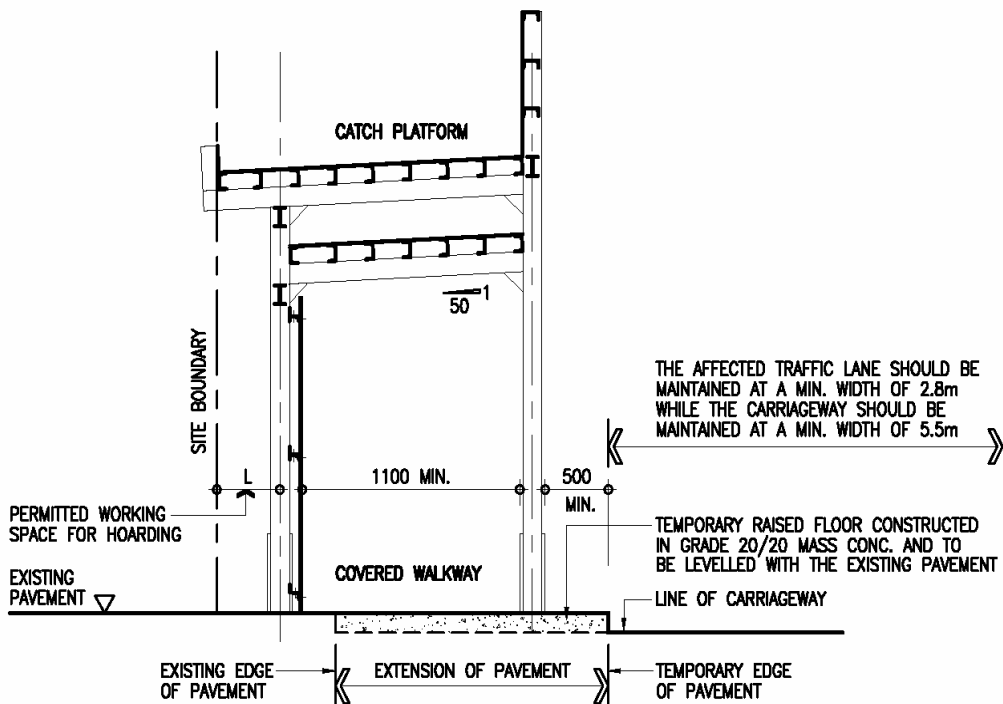
Approved by
AD(PS) K.K. LEUNG

Handwritten initials

Date
19 Sept. 2007




 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH TYPE D HOARDING - DOUBLE DECK CATCH PLATFORM CONSTRUCTION DETAILS 4	Scale 1 : 10	Drawing No. 9711/D/A06
	Checked by CPM303 C.F. HO <i>RU</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>MA</i>



TYPICAL DETAILS OF COVERED WALKWAY WITH
DOUBLE DECK CATCH PLATFORM HOARDING
SITED ON CARRIAGEWAY/NARROW PAVEMENT

1 : 50

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE D HOARDING - COVERED WALKWAY WITH DOUBLE DECK CATCH PLATFORM CONSTRUCTION DETAILS 5		Scale 1 : 50	Drawing No. 9711/D/A07
	Checked by CPM303 C.F. HO <i>RJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>MA</i>	Date 19 Sept. 2007



ARCHITECTURAL SERVICES DEPARTMENT

Title
COVERED WALKWAY WITH TYPE D HOARDING - DOUBLE DECK CATCH PLATFORM STRUCTURAL DETAILS 1

Scale
1 : 50

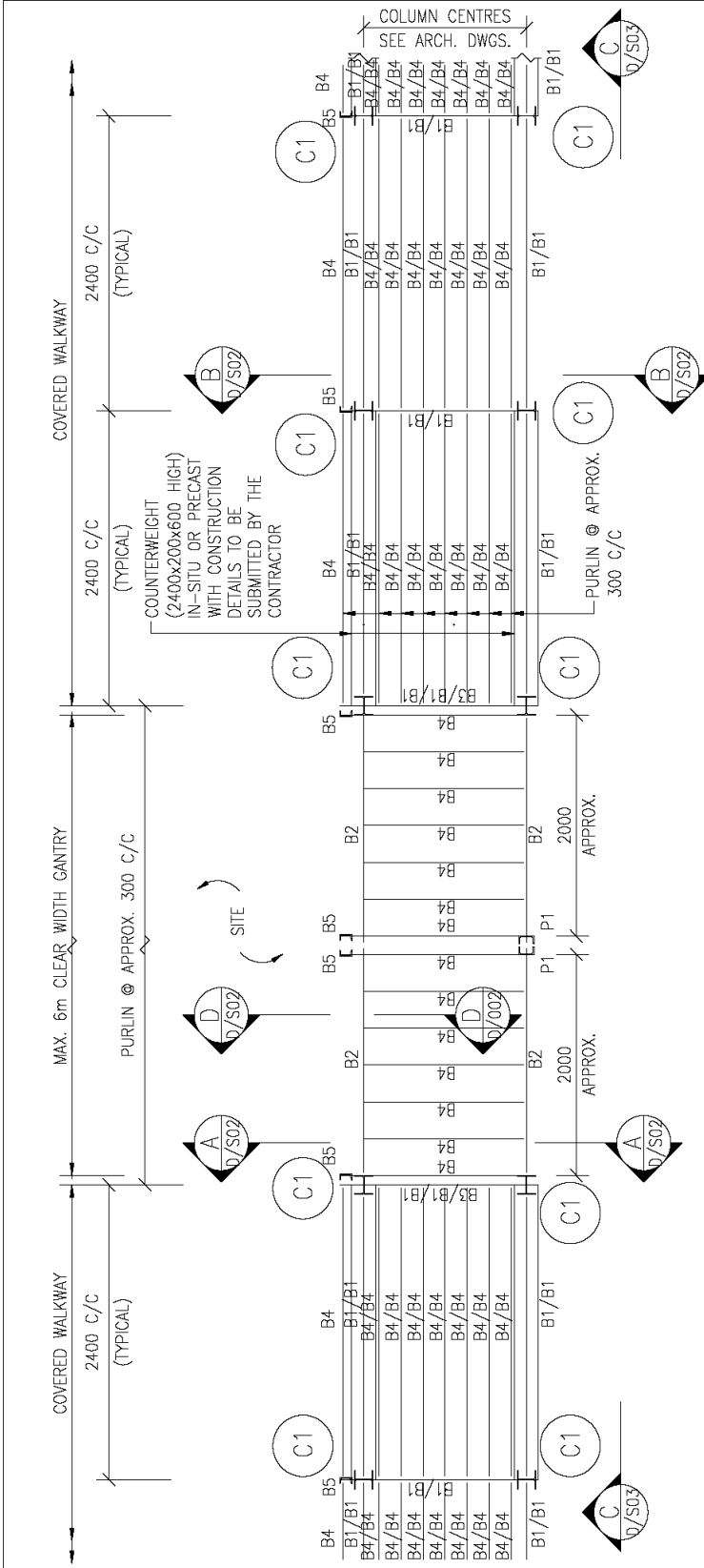
Drawing No.
9711/D/S01

Checked by
CSE/1 C.T. WONG *C.T. Wong*

Date
11 Oct. 2007

Approved by
AD(SE) W.W. LI *W.W. Li*

Date
11 Oct. 2007



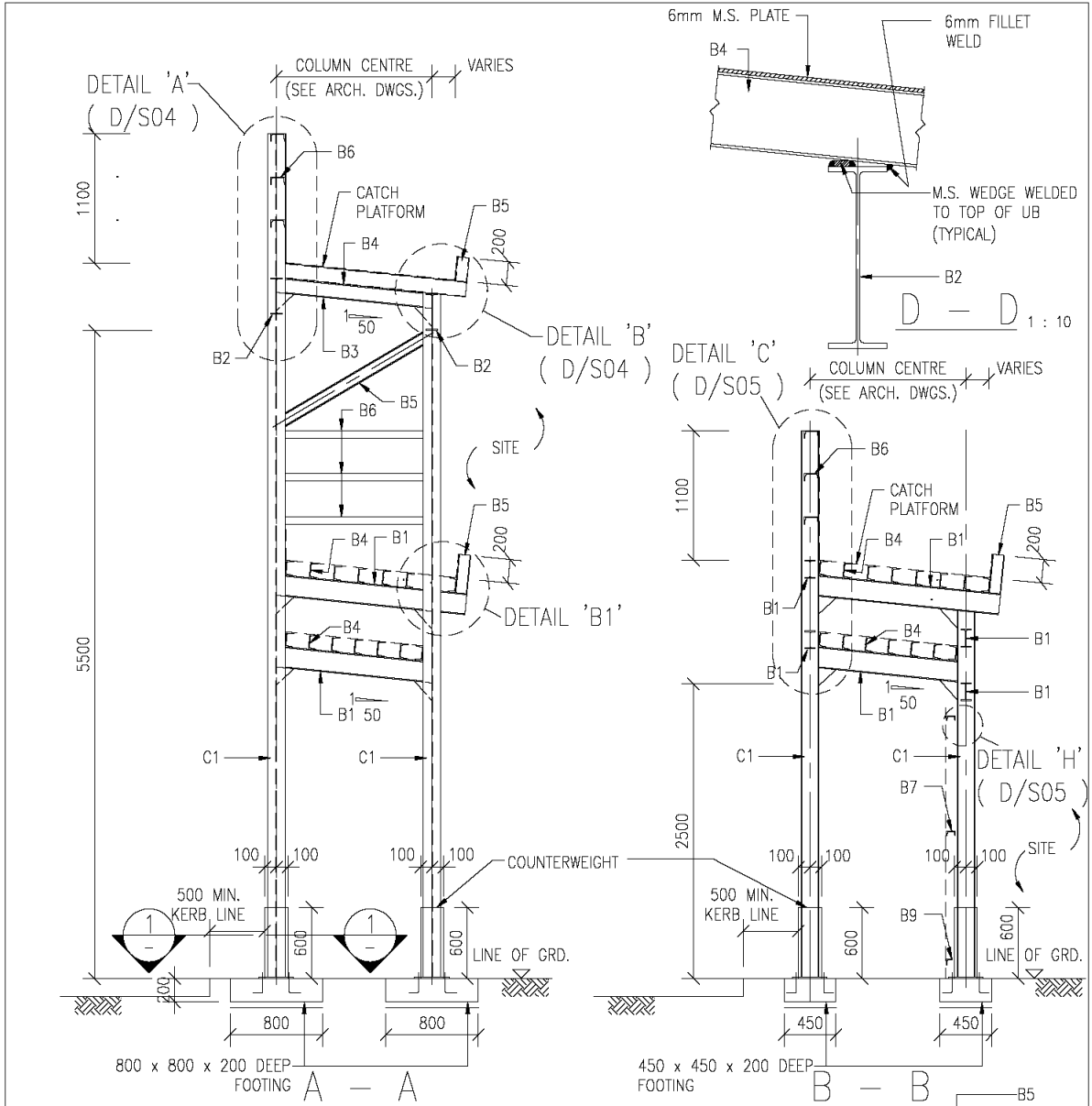
TOP PLAN OF GANTRY AND COVERED WALKWAY

- NOTES :
1. ALL WELDING TO BE 6 mm F.W. ALL ROUND IN ACCORDANCE WITH BS 5135:1984 UNLESS OTHERWISE STATED.
 2. ALL BOLTS TO BE GRADE 4.6 BLACK BOLTS TO BS 4190.
 3. ALL STRUCTURAL SECTIONS SHALL BE WELDABLE STRUCTURAL STEEL OF GRADE S275 UNLESS OTHERWISE SPECIFIED.
 4. THE DETAILS OF GANTRY MAY BE MODIFIED BY PROJECT OFFICER TO SUIT ACTUAL SITE CONDITIONS.
 5. ALL STEEL WORKS SHALL BE MANUALLY CLEANED TO CS CL. 15.61 (i) PRIMED WITH ONE COAT OF OIL BASED ZINC PHOSPHATE PRIMER AND FINISHED WITH TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
 6. DESIGN WIND LOAD TO BE 0.67 kPa, i.e. 37% OF DESIGN WIND PRESSURE OF 1.82 kPa.

STEEL MEMBER SCHEDULE

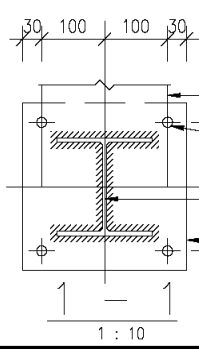
MEMBER MARK	MEMBER SIZE
C1	152 x 152 x 23 UC
B1	152 x 89 x 16 UB
B2	305 x 102 x 28 UB
B3	127 x 76 x 13 UB
B4, B6, P1	127 x 64 x 14.9 CHANNEL
B5	102 x 51 x 10.42 CHANNEL
B7	76 x 38 x 6.7 CHANNEL
B8	70 x 70 x 6 ANGLE
B9	50 x 50 x 5 ANGLE

THE SKETCHES ARE PREPARED TO MEET THE GENERAL REQUIREMENTS AS SPECIFIED IN PNAP224 ISSUED BY BD. SIZES OF FOOTINGS MAY BE MODIFIED BY PSE TO SUIT ACTUAL SITE CONDITIONS.

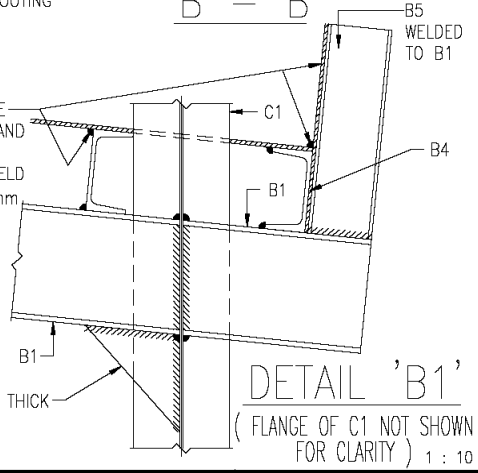


(TYPICAL SECTION OF COVERED WALKWAY)


NOTES :-
 1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.

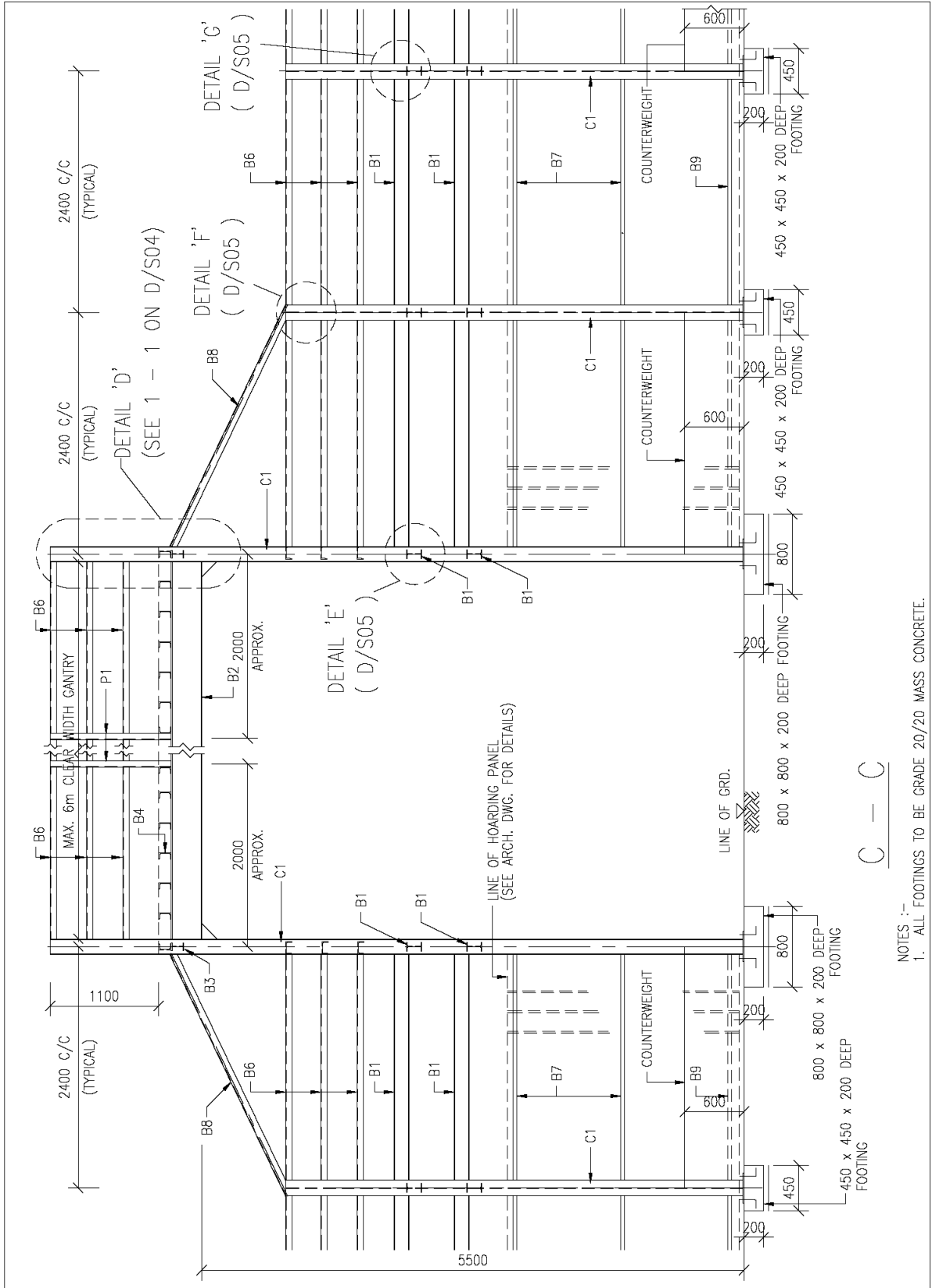


6mm THICK M.S. PLATE WELDED TO CHANNEL AND ROOF PLATE BY 6mm. INTERMITTENT FILLET WELD (50mm LONG AT 400mm CLEAR SPACING)




DETAIL 'B1'
 (FLANGE OF C1 NOT SHOWN FOR CLARITY) 1 : 10

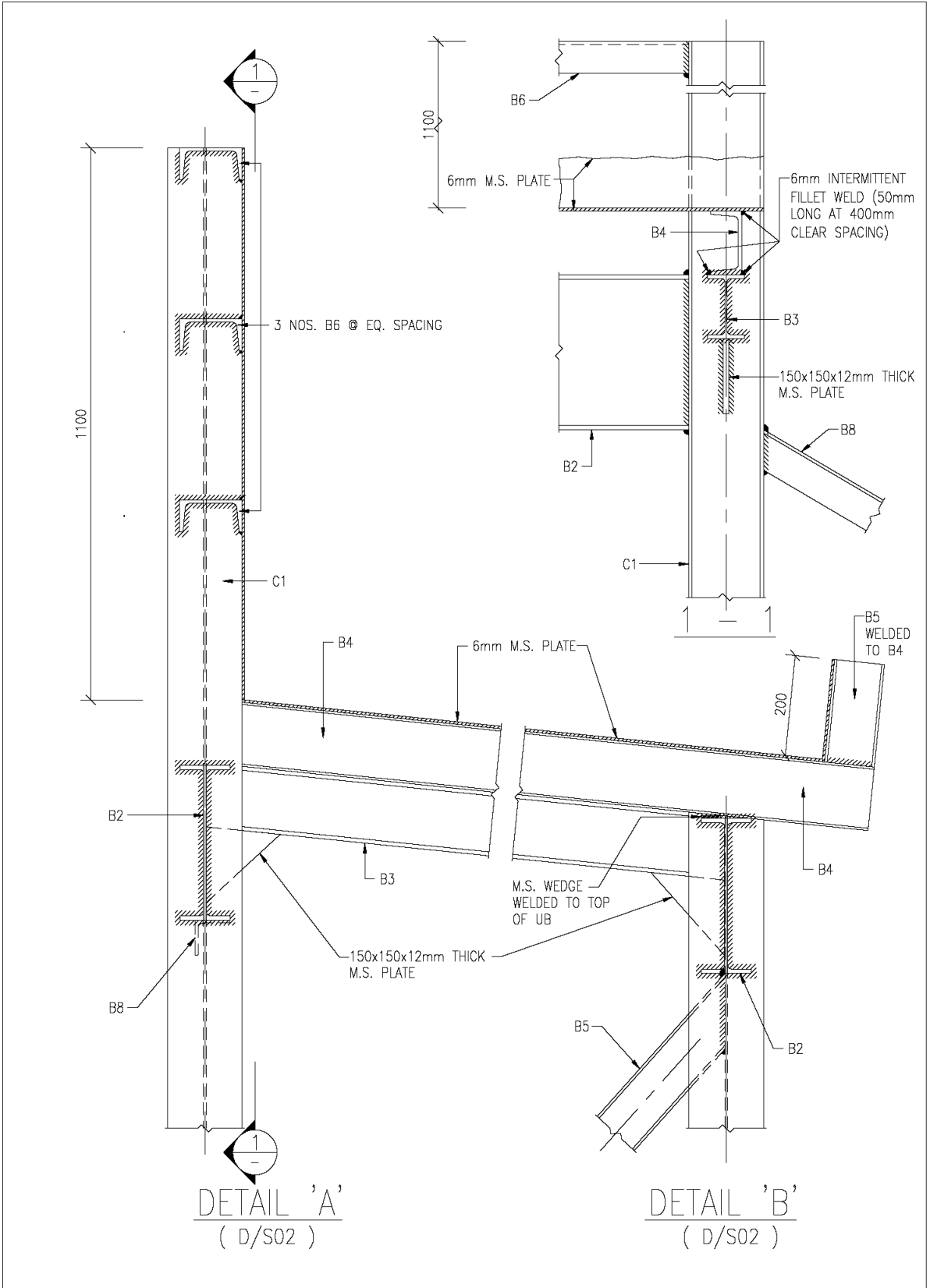
 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH TYPE D HOARDING - DOUBLE DECK CATCH PLATFORM STRUCTURAL DETAILS 2		Scale 1 : 50 1 : 10	Drawing No. 9711/D/S02
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007




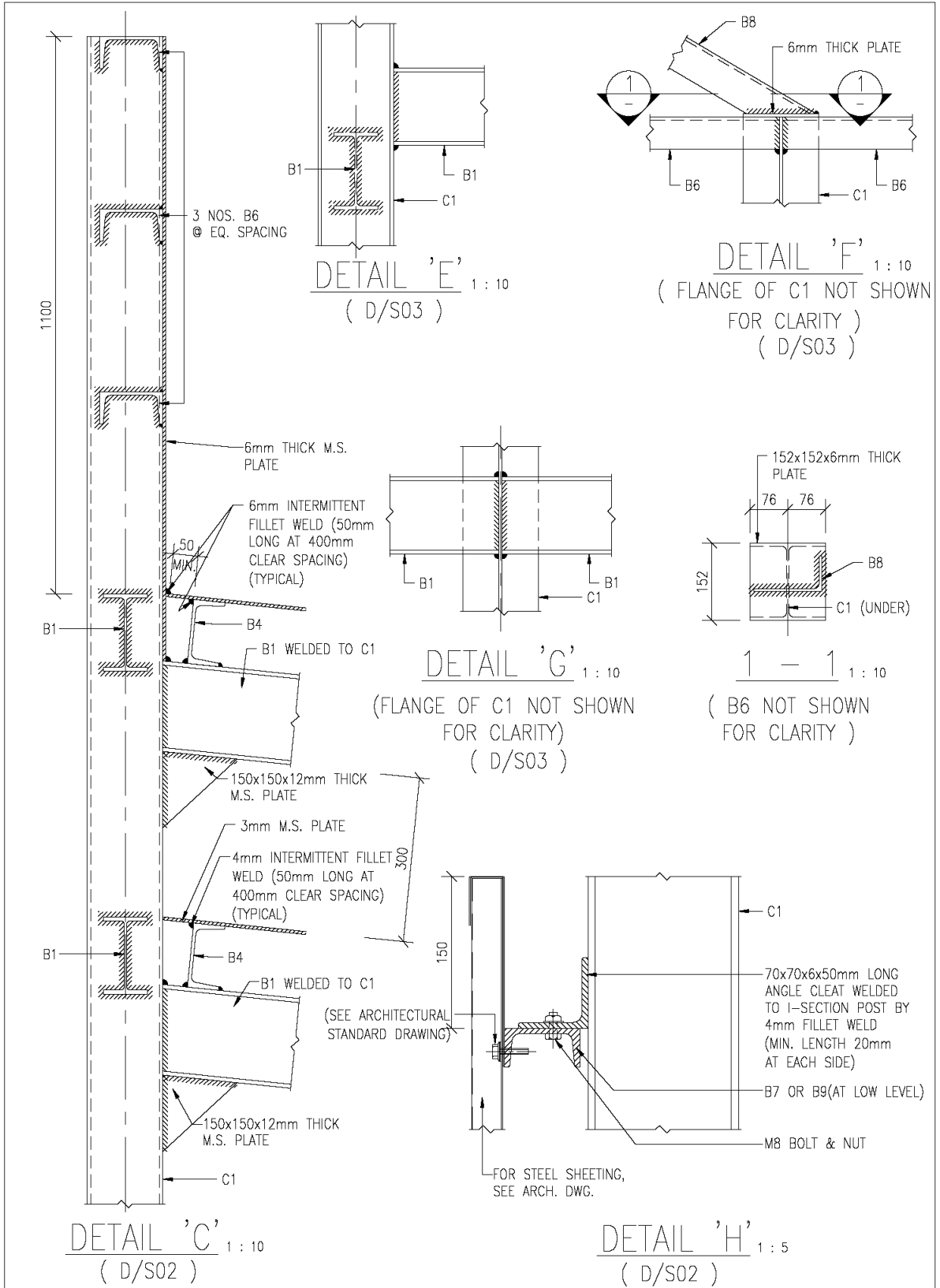
C - C


NOTES :-
 1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.

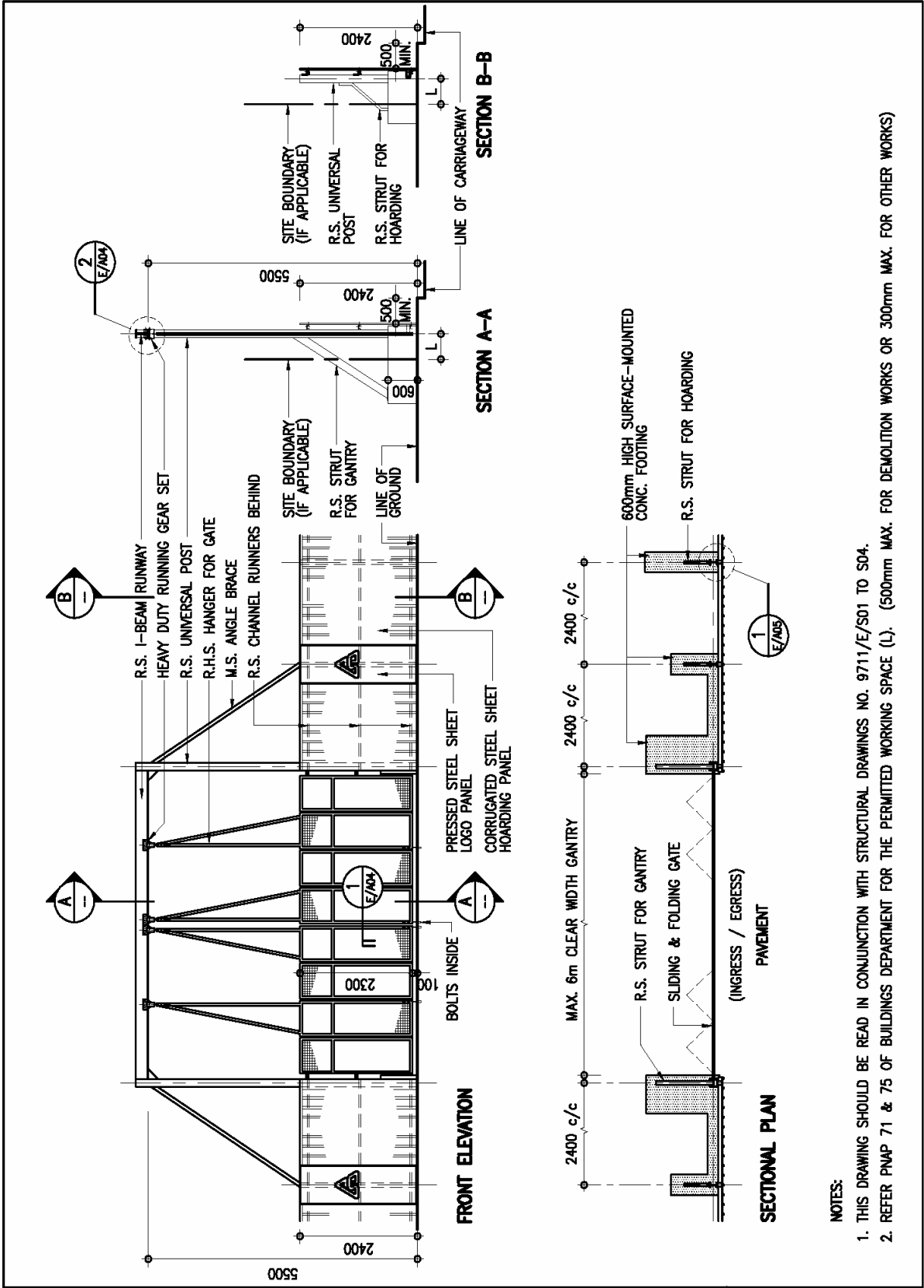
 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH TYPE D HOARDING - DOUBLE DECK CATCH PLATFORM STRUCTURAL DETAILS 3		Scale 1 : 50	Drawing No. 9711/D/S03
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007



 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH TYPE D HOARDING - DOUBLE DECK CATCH PLATFORM STRUCTURAL DETAILS 4		Scale 1 : 10	Drawing No. 9711/D/S04
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007




 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH TYPE D HOARDING - DOUBLE DECK CATCH PLATFORM STRUCTURAL DETAILS 5		Scale 1 : 10 1 : 5	Drawing No. 9711/D/S05
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007




NOTES:

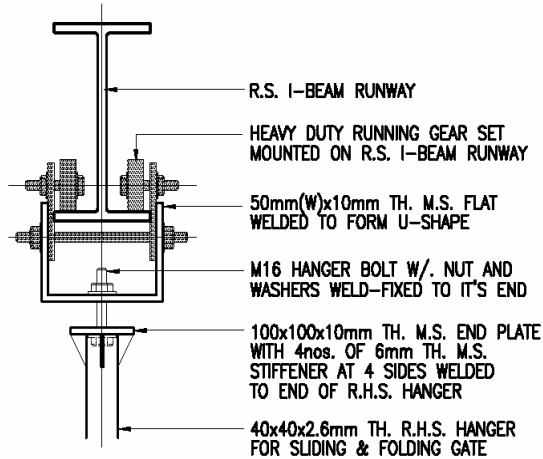
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH STRUCTURAL DRAWINGS NO. 9711/E/S01 TO S04.
2. REFER PNAP 71 & 75 OF BUILDINGS DEPARTMENT FOR THE PERMITTED WORKING SPACE (L). (500mm MAX. FOR DEMOLITION WORKS OR 300mm MAX. FOR OTHER WORKS)

 ARCHITECTURAL SERVICES DEPARTMENT	Title CORRUGATED STEEL FENCE TYPE E HOARDING - (SURFACE-MOUNTED FOOTING) GENERAL PLANS		Scale 1 : 100	Drawing No. 9711/E/A01
	Checked by CPM303 C.F. HO <i>RU</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007

**GENERAL NOTES FOR CONSTRUCTION OF
HOARDINGS, COVERED WALKWAYS, AND ASSOCIATED GANTRIES AND CATCH PLATFORMS:**

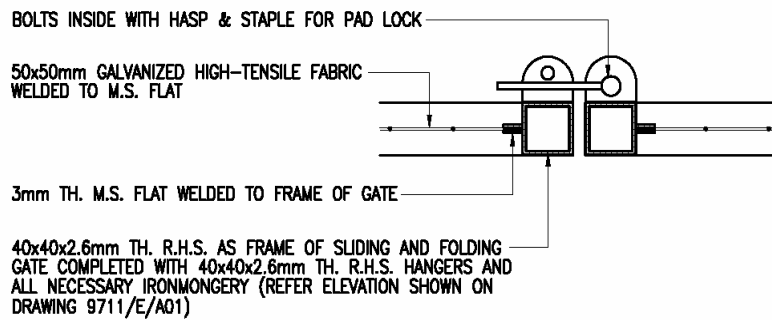
1. THE ARCHITECTURAL HOARDING DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE APPROPRIATE STRUCTURAL HOARDING DRAWINGS AS REFERRED ON THE DRAWINGS.
2. IN DETERMINING THE TYPE OF HOARDING/COVERED WALKWAY CONSTRUCTION AND THE ASSOCIATED PROVISIONS TO SUIT THE PURPOSE, REFERENCE AND PROVISIONS SHOULD ALWAYS BE MADE TO MEET THE REQUIREMENTS OF THE CURRENTLY ENFORCED "CODE OF PRACTICE FOR DEMOLITION OF BUILDINGS" AND RELEVANT PNAPS ISSUED BY BUILDINGS DEPARTMENT.
3. A MINIMUM CLEAR WIDTH OF 1.1m AND RAISED FLOOR SHOULD BE PROVIDED FOR HOARDING/COVERED WALKWAY LOCATED ON CARRIAGEWAY. FOR HOARDING/COVERED WALKWAY LOCATED ON FOOTPATH, THE CLEAR WIDTH SHOULD BE RELATED TO THE EXISTING PAVEMENT WIDTH AND BE PROVIDED ACCORDING TO THOSE AS PROMULGATED IN PNAP 75 ISSUED BY THE BUILDINGS DEPARTMENT.
4. A TEMPORARY LIGHTING SYSTEM AS PROMULGATED IN PNAP 75 SHOULD BE PROVIDED FOR ALL COVERED WALKWAYS OF BUILDING SITES.
5. ALL METALWORK REFERRED IN THE DRAWINGS SHOULD COMPLY WITH SECTION 17 OF THE GENERAL SPECIFICATION FOR BUILDING 2007 EDITION OR THEREAFTER.
6. ALL CORRUGATED STEEL SHEET PANELS, CAPPINGS AND TOE SHEETS SHOULD BE OF GALVANIZED STEEL WITH MINIMUM ZINC COATING CONTENT 350g/m² WITH TRIPLE-SPOT TEST, AND BE FINISHED ON BOTH SURFACES WITH ONE UNDERCOAT OF "LUXAPRIME 1600 PRIMER" OR EQUIVALENT AND TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
7. ALL EXPOSED SURFACES OF METALWORK SHOULD BE PAINTED IN MID-GREY COLOUR (10 A 07) UNLESS STATED OTHERWISE.
8. ArchSD LOGO SHOULD BE PAINTED AT A 3-BAY INTERVAL. IF THERE ARE OTHER LOGOS TO BE DISPLAYED, THE SPECIFIED LOGO AND THE ArchSD LOGO SHOULD BE PAINTED ALTERNATIVELY AT A 3-BAY INTERVAL.

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE E HOARDING - CORRUGATED STEEL FENCE (SURFACE-MOUNTED FOOTING) GENERAL NOTES		Scale NIL	Drawing No. 9711/E/A02
	Checked by CPM303 C.F. HO <i>AJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KK</i>	Date 19 Sept. 2007




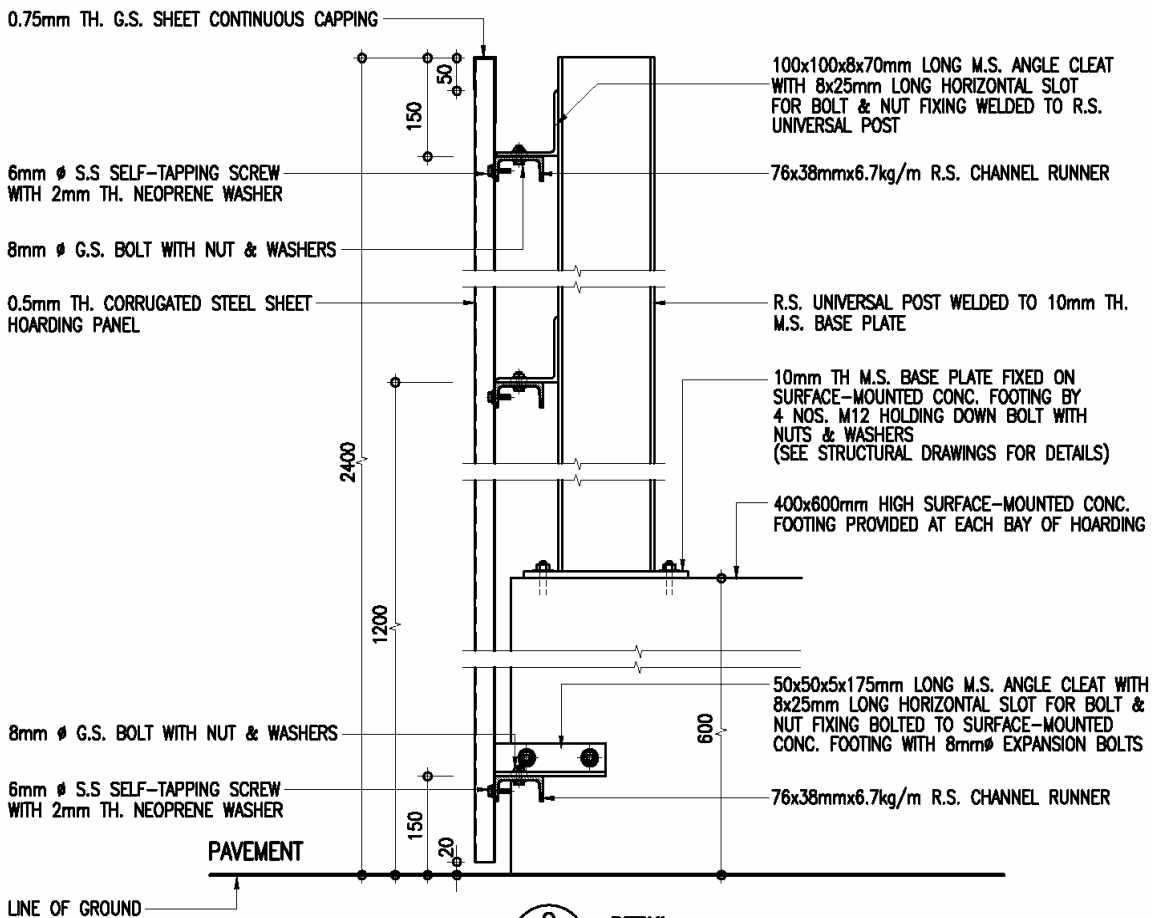
2 **DETAILS OF RUNNING GEAR ***
E/A04 1 : 10

* THIS FIXING DETAIL IS FOR REFERENCE ONLY, SAMPLE OF RUNNING GEAR SET AND FIXING METHOD SHOULD BE SUBMITTED FOR APPROVAL BEFORE ORDERING.

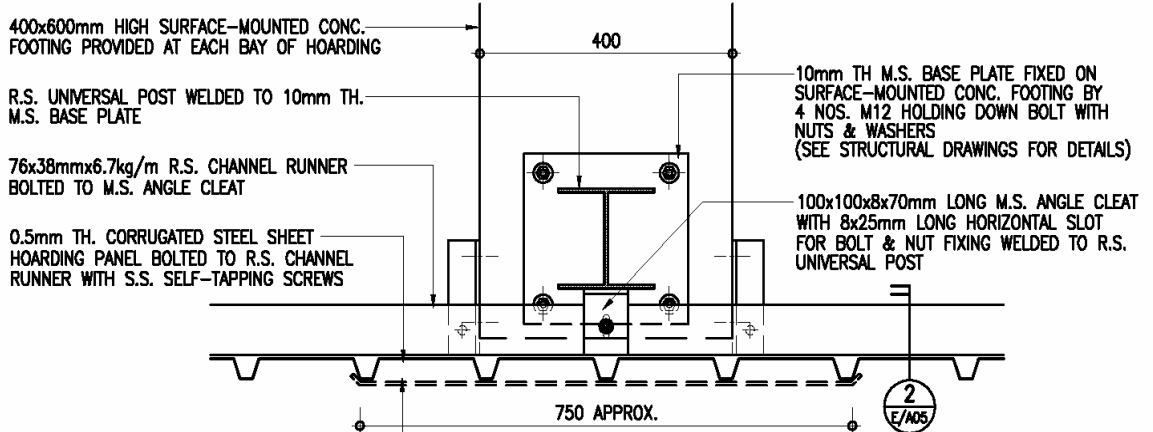


1 **DETAILS OF SLIDING AND FOLDING GATE**
E/A04 1 : 5

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE E HOARDING - CORRUGATED STEEL FENCE (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 2		Scale 1 : 5	Drawing No. 9711/E/A04
	Checked by CPM303 C.F. HO <i>RJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007



2 DETAIL
E/A05 1 : 10



1 DETAIL
E/A05 1 : 10



ARCHITECTURAL SERVICES DEPARTMENT

Title
TYPE E HOARDING - CORRUGATED STEEL FENCE (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 3

Scale
1 : 10

Drawing No.
9711/E/A05

Checked by
CPM303 C.F. HO *RJ*

Date
18 Sept. 2007

Approved by
AD(PS) K.K. LEUNG *KK*

Date
19 Sept. 2007



Title
**TYPE E HOARDING - CORRUGATED STEEL FENCE
 (SURFACE-MOUNTED FOOTING)
 STRUCTURAL DETAILS 1**

Scale
 1 : 50

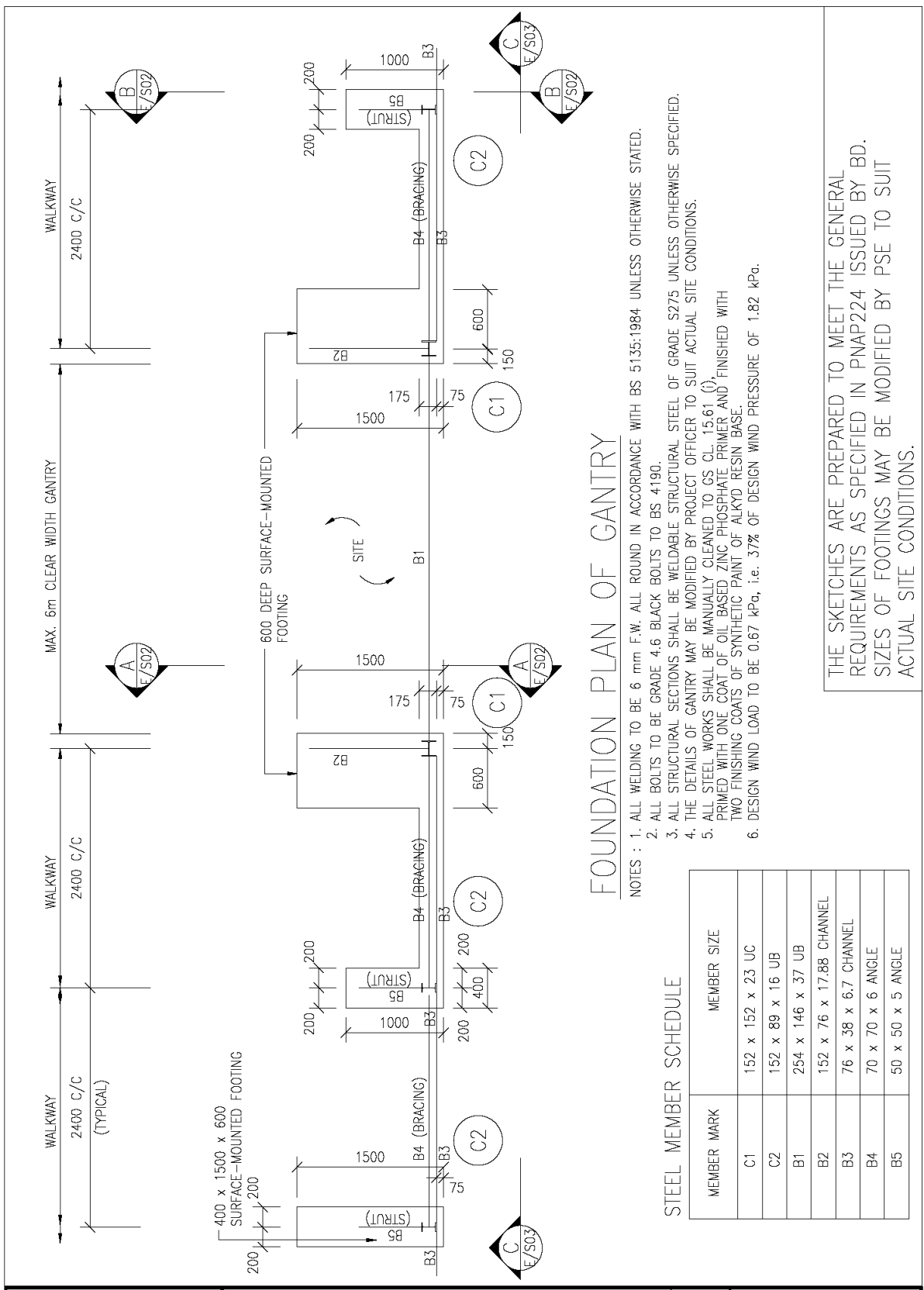
Drawing No.
9711/E/S01

Checked by
 CSE/1 C.T. WONG *C.T. Wong*

Date
 11 Oct. 2007

Approved by
 AD(SE) W.W. LI *W.W. Li*

Date
 11 Oct. 2007



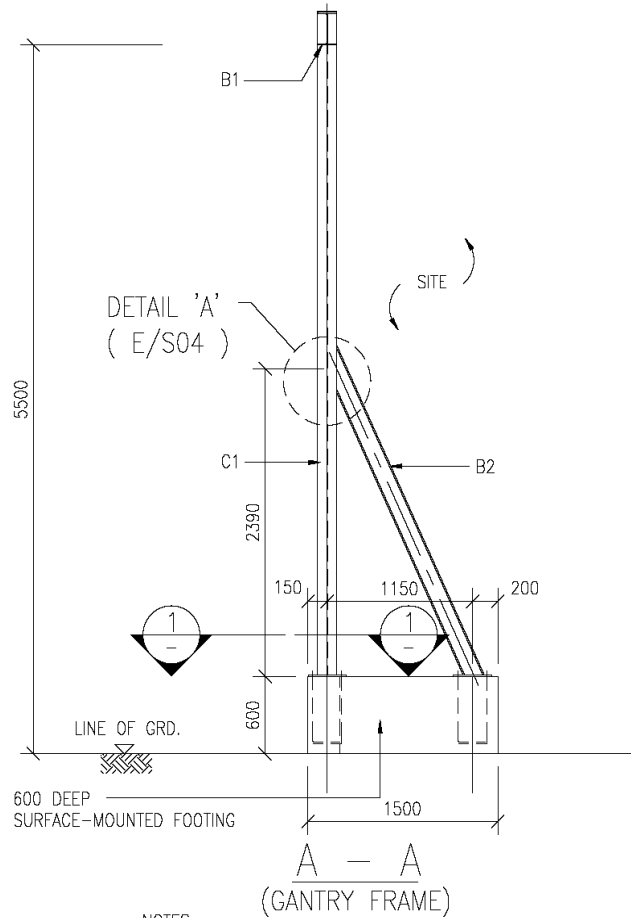
FOUNDATION PLAN OF GANTRY

- NOTES :
1. ALL WELDING TO BE 6 mm F.W. ALL ROUND IN ACCORDANCE WITH BS 5135:1984 UNLESS OTHERWISE STATED.
 2. ALL BOLTS TO BE GRADE 4.6 BLACK BOLTS TO BS 4190.
 3. ALL STRUCTURAL SECTIONS SHALL BE WELDABLE STRUCTURAL STEEL OF GRADE S275 UNLESS OTHERWISE SPECIFIED.
 4. THE DETAILS OF GANTRY MAY BE MODIFIED BY PROJECT OFFICER TO SUIT ACTUAL SITE CONDITIONS.
 5. ALL STEEL WORKS SHALL BE MANUALLY CLEANED TO CS CL. 15.61 (1) PRIMED WITH ONE COAT OF OIL-BASED ZINC PHOSPHATE PRIMER AND FINISHED WITH TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
 6. DESIGN WIND LOAD TO BE 0.67 kPa, i.e. 37% OF DESIGN WIND PRESSURE OF 1.82 kPa.

STEEL MEMBER SCHEDULE

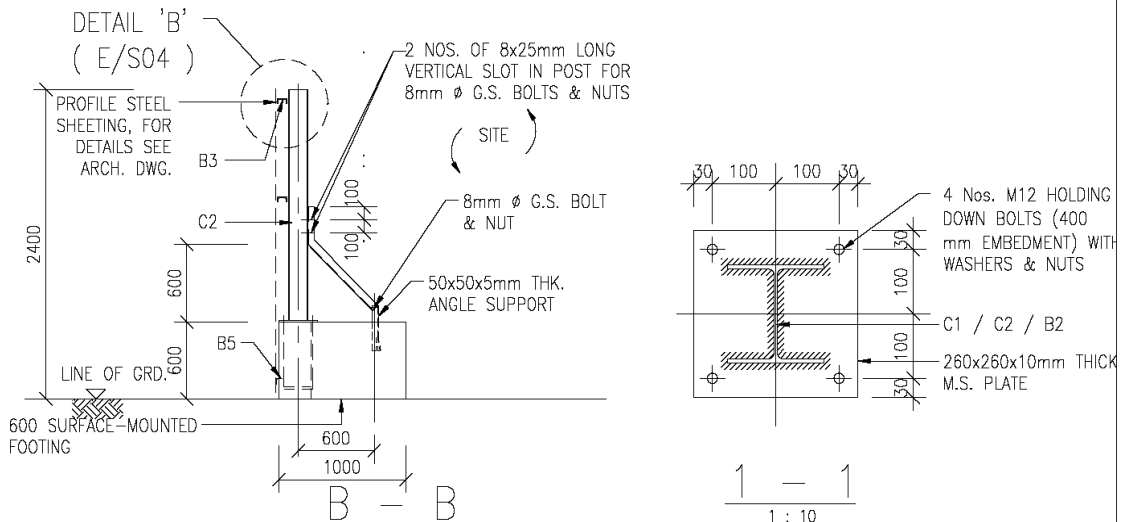
MEMBER MARK	MEMBER SIZE
C1	152 x 152 x 23 UC
C2	152 x 89 x 16 UB
B1	254 x 146 x 37 UB
B2	152 x 76 x 17.88 CHANNEL
B3	76 x 38 x 6.7 CHANNEL
B4	70 x 70 x 6 ANGLE
B5	50 x 50 x 5 ANGLE

THE SKETCHES ARE PREPARED TO MEET THE GENERAL REQUIREMENTS AS SPECIFIED IN PNAP224 ISSUED BY BD. SIZES OF FOOTINGS MAY BE MODIFIED BY PSE TO SUIT ACTUAL SITE CONDITIONS.



NOTES :-

1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.
2. TO BE USED WHEN PAVEMENT IS CONSTRUCTED WITH CONCRETE, CONCRETE PAVER BLOCK OR TARMAC. CONSULT PSE FOR OTHER SURFACE CONDITIONS ON ITS APPLICABILITY.



ARCHITECTURAL
SERVICES
DEPARTMENT

Title
**TYPE E HOARDING - CORRUGATED STEEL FENCE
(SURFACE-MOUNTED FOOTING)
STRUCTURAL DETAILS 2**

Scale
1 : 50
1 : 10

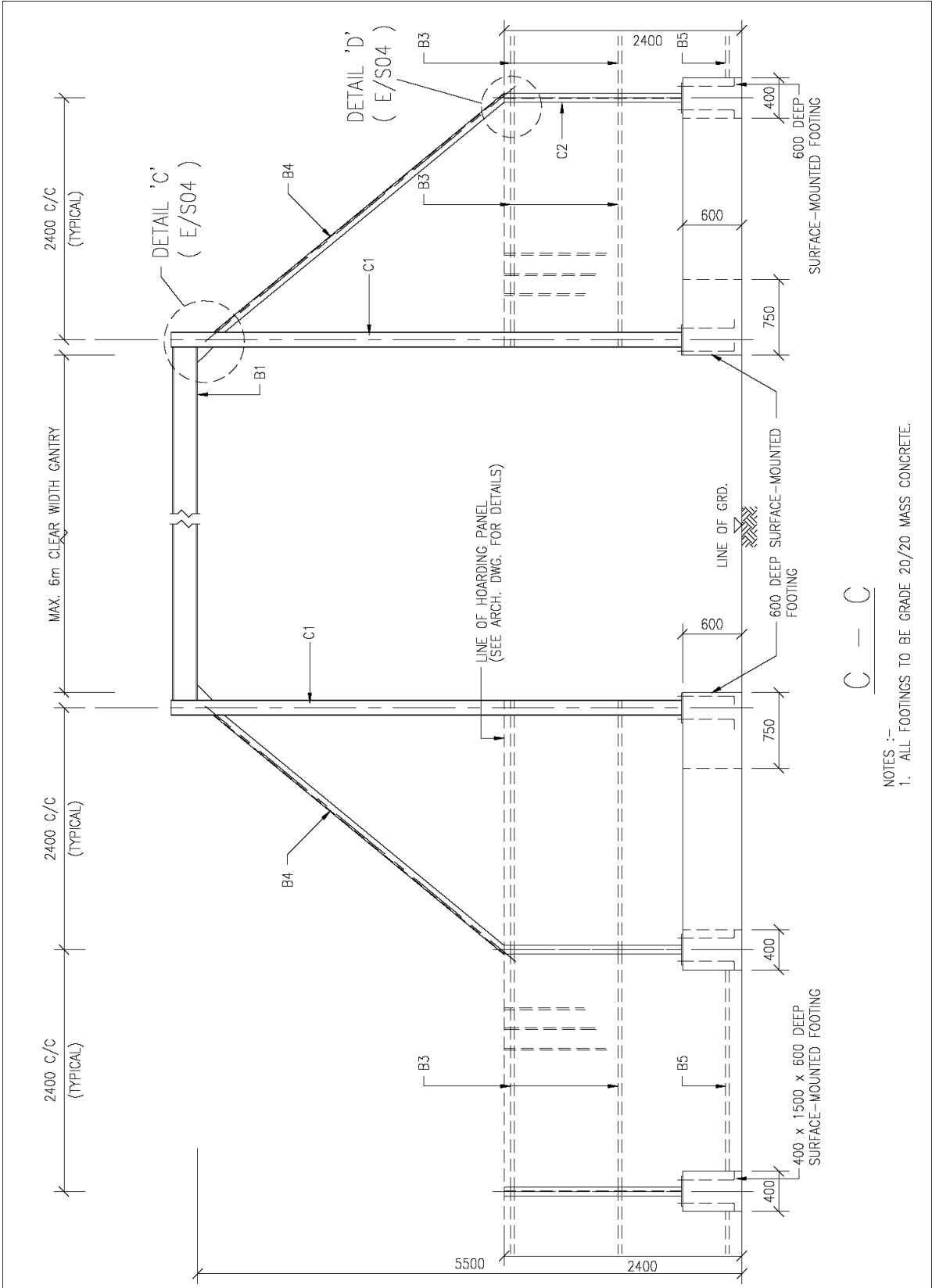
Drawing No.
9711/E/S02

Checked by
CSE/1 C.T. WONG

Date
11 Oct. 2007


Approved by
AD(SE) W.W. LI

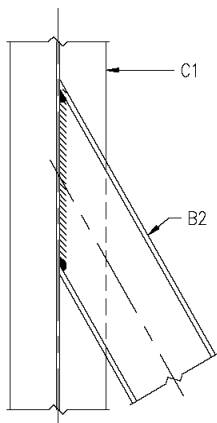
Date
11 Oct. 2007



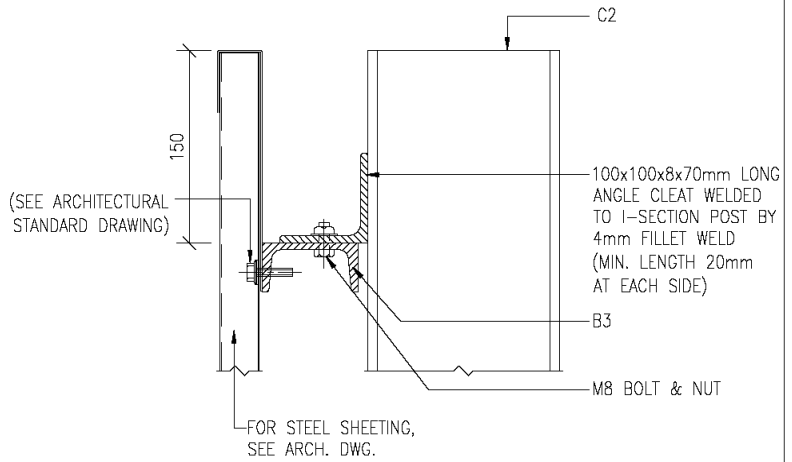
NOTES :-
 1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.

C - C

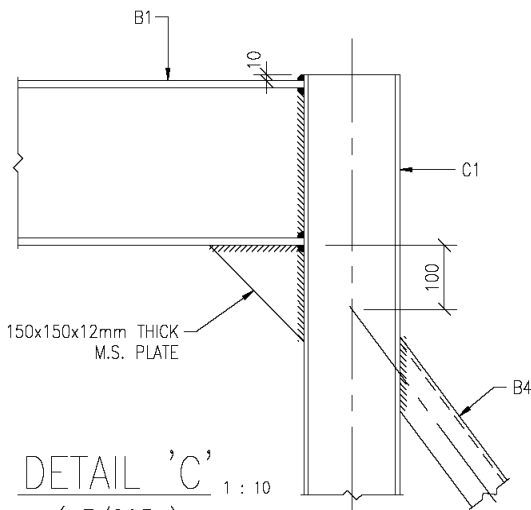
 ARCHITECTURAL SERVICES DEPARTMENT	Title CORRUGATED STEEL FENCE TYPE E HOARDING - (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 3		Scale 1 : 50	Drawing No. 9711/E/S03
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007



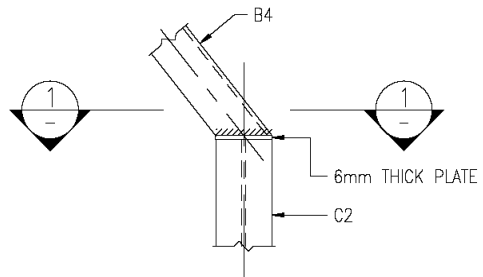
DETAIL 'A' 1 : 10
 (FLANGE OF C1 NOT SHOWN FOR CLARITY)
 (E/S02)



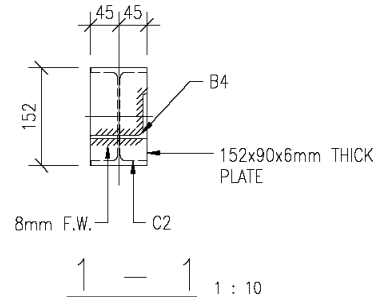
DETAIL 'B' 1 : 5
 (E/S02)



DETAIL 'C' 1 : 10
 (E/S03)



DETAIL 'D' 1 : 10
 (B3 NOT SHOWN FOR CLARITY)
 (E/S03)

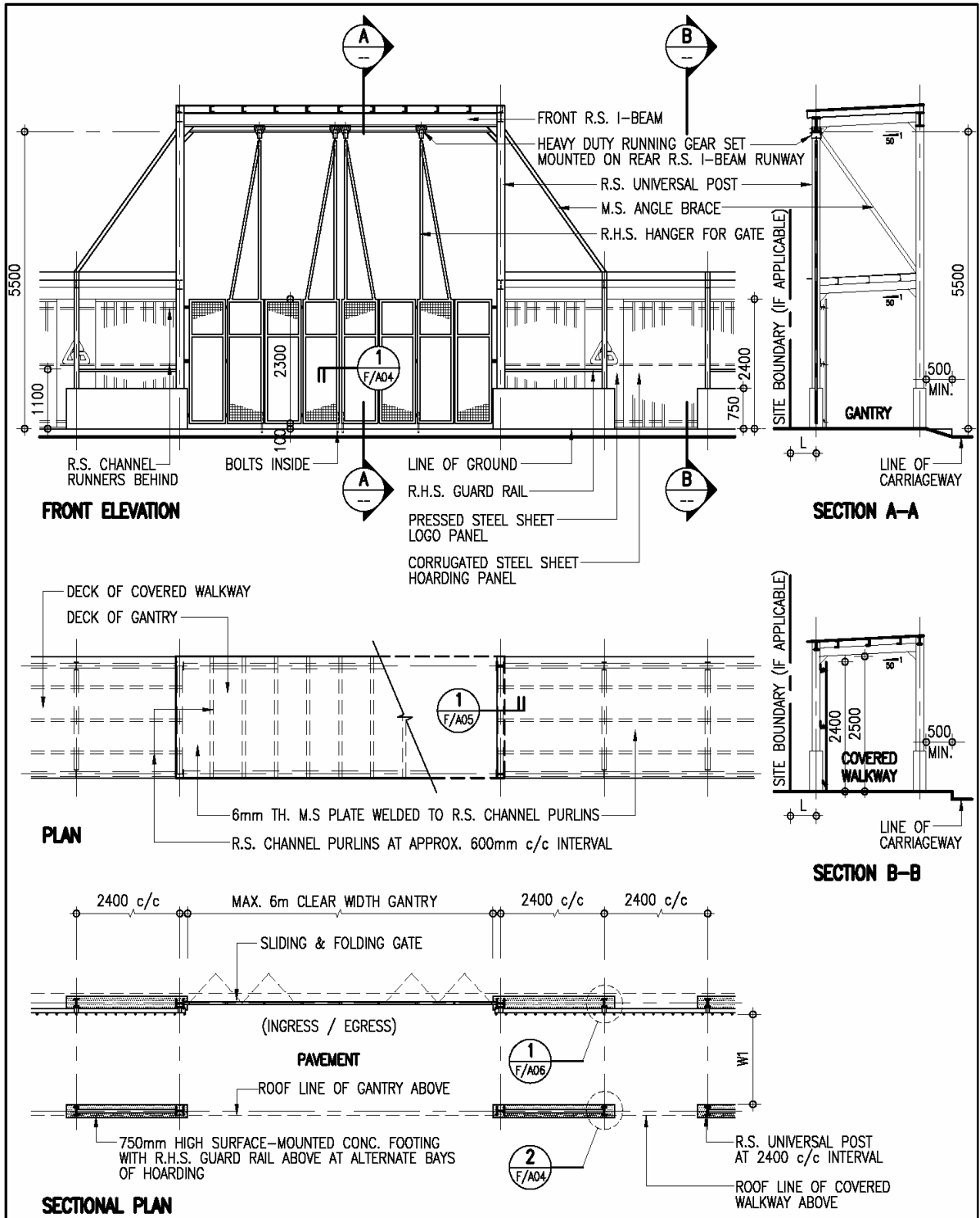


1 - 1 1 : 10




ARCHITECTURAL
 SERVICES
 DEPARTMENT

Title CORRUGATED STEEL FENCE TYPE E HOARDING - (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 4		Scale 1 : 10 1 : 5	Drawing No. 9711/E/S04
Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007




NOTES:

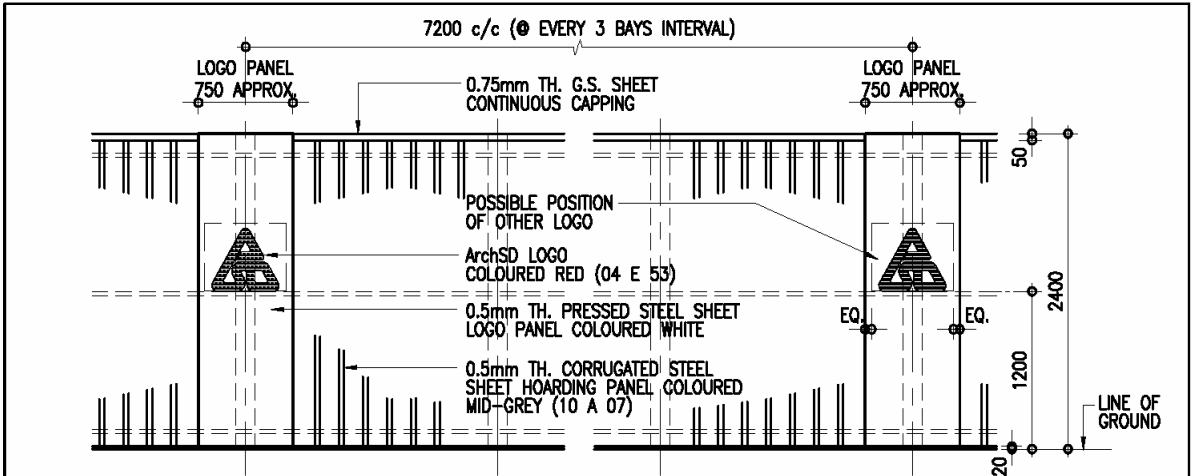
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH STRUCTURAL DRAWINGS NO. 9711/F/S01 TO S05.
2. REFER PT. 3 OF GENERAL NOTES IN DRAWING NO. 9711/F/A02 FOR THE REQUIRED CLEAR WIDTH (W1) OF COVERED WALKWAY.
3. REFER PNAP 71 & 75 OF BUILDINGS DEPARTMENT FOR THE PERMITTED WORKING SPACE (L). (500mm MAX. FOR DEMOLITION WORKS OR 300mm MAX. FOR OTHER WORKS)

 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY TYPE F HOARDING - (SURFACE-MOUNTED FOOTING) GENERAL PLANS	Scale 1 : 100	Drawing No. 9711/F/A01
	Checked by CPM303 C.F. HO <i>AO</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>

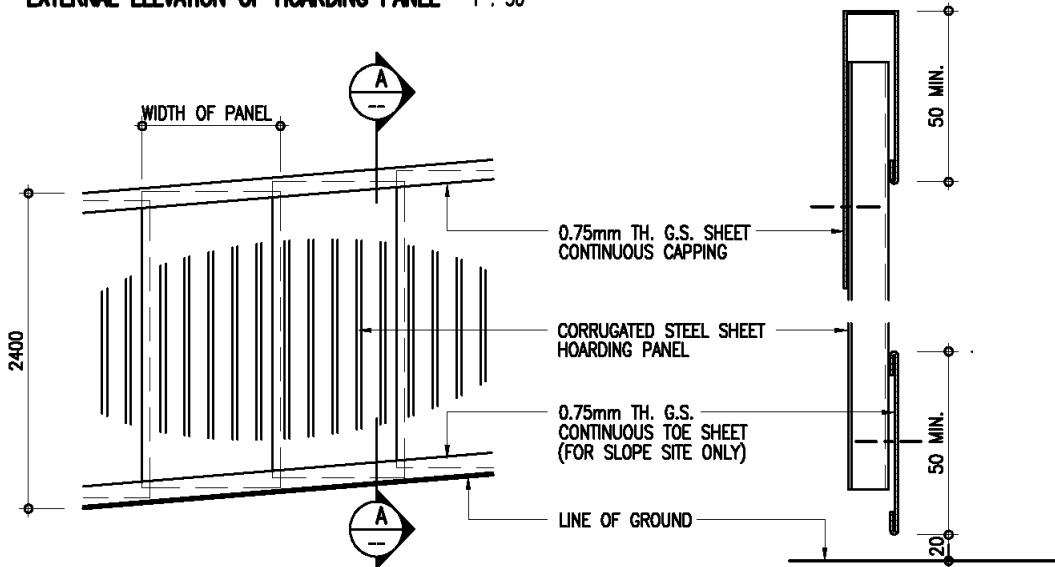
**GENERAL NOTES FOR CONSTRUCTION OF
HOARDINGS, COVERED WALKWAYS, AND ASSOCIATED GANTRIES AND CATCH PLATFORMS:**

1. THE ARCHITECTURAL HOARDING DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE APPROPRIATE STRUCTURAL HOARDING DRAWINGS AS REFERRED ON THE DRAWINGS.
2. IN DETERMINING THE TYPE OF HOARDING/COVERED WALKWAY CONSTRUCTION AND THE ASSOCIATED PROVISIONS TO SUIT THE PURPOSE, REFERENCE AND PROVISIONS SHOULD ALWAYS BE MADE TO MEET THE REQUIREMENTS OF THE CURRENTLY ENFORCED "CODE OF PRACTICE FOR DEMOLITION OF BUILDINGS" AND RELEVANT PNAPS ISSUED BY BUILDINGS DEPARTMENT.
3. A MINIMUM CLEAR WIDTH OF 1.1m AND RAISED FLOOR SHOULD BE PROVIDED FOR HOARDING/COVERED WALKWAY LOCATED ON CARRIAGEWAY. FOR HOARDING/COVERED WALKWAY LOCATED ON FOOTPATH, THE CLEAR WIDTH SHOULD BE RELATED TO THE EXISTING PAVEMENT WIDTH AND BE PROVIDED ACCORDING TO THOSE AS PROMULGATED IN PNAP 75 ISSUED BY THE BUILDINGS DEPARTMENT.
4. A TEMPORARY LIGHTING SYSTEM AS PROMULGATED IN PNAP 75 SHOULD BE PROVIDED FOR ALL COVERED WALKWAYS OF BUILDING SITES.
5. ALL METALWORK REFERRED IN THE DRAWINGS SHOULD COMPLY WITH SECTION 17 OF THE GENERAL SPECIFICATION FOR BUILDING 2007 EDITION OR THEREAFTER.
6. ALL CORRUGATED STEEL SHEET PANELS, CAPPINGS AND TOE SHEETS SHOULD BE OF GALVANIZED STEEL WITH MINIMUM ZINC COATING CONTENT $350\text{g}/\text{m}^2$ WITH TRIPLE-SPOT TEST, AND BE FINISHED ON BOTH SURFACES WITH ONE UNDERCOAT OF "LUXAPRIME 1600 PRIMER" OR EQUIVALENT AND TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
7. ALL EXPOSED SURFACES OF METALWORK SHOULD BE PAINTED IN MID-GREY COLOUR (10 A 07) UNLESS STATED OTHERWISE.
8. ArchSD LOGO SHOULD BE PAINTED AT A 3-BAY INTERVAL. IF THERE ARE OTHER LOGOS TO BE DISPLAYED, THE SPECIFIED LOGO AND THE ArchSD LOGO SHOULD BE PAINTED ALTERNATIVELY AT A 3-BAY INTERVAL.

 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY TYPE F HOARDING - (SURFACE-MOUNTED FOOTING) GENERAL NOTES		Scale NIL	Drawing No. 9711/F/A02
	Checked by CPM303 C.F. HO <i>RJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007

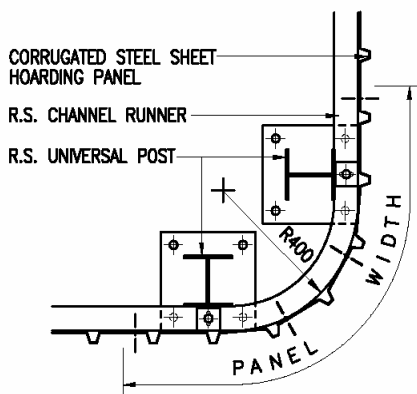


EXTERNAL ELEVATION OF HOARDING PANEL 1 : 50

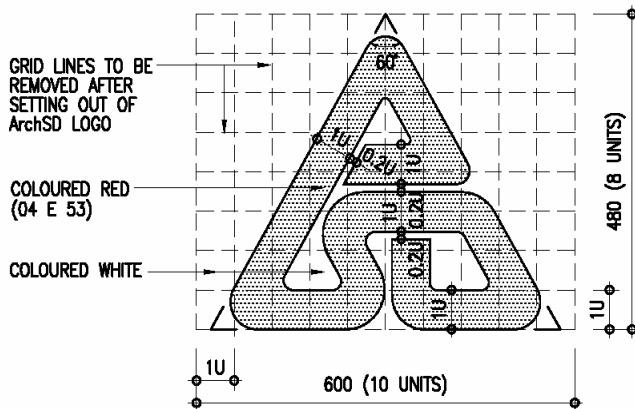


EXTERNAL ELEVATION OF HOARDING PANEL ON SLOPE 1 : 50


SECTION A-A 1 : 5



PLAN OF HOARDING PANEL AT CORNER 1 : 20



SETTING OUT OF ArchSD LOGO 1 : 10

 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY TYPE F HOARDING - (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 1		Scale as shown	Drawing No. 9711/F/A03
	Checked by CPM303 C.F. HO <i>HO</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007

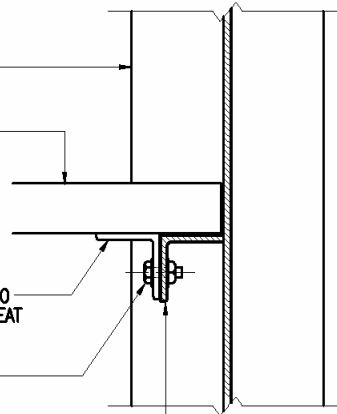
R.S. UNIVERSAL POST

63x38x2mm TH. R.H.S. GUARD RAIL PROVIDED AT ALTERNATE BAYS OF HOARDING AND FIXED AT 1.1m ABOVE GROUND LEVEL

50x50x5x50mm LONG M.S. ANGLE CLEAT WELDED TO R.H.S. GUARD RAIL AND BOLTED TO M.S. ANGLE CLEAT

8mm ϕ G.S. BOLT WITH NUT & WASHERS

50x50x5mm TH. M.S. ANGLE CLEAT WITH 8x25mm LONG VERTICAL SLOT FOR BOLT & NUT FIXING WELDED TO R.S. UNIVERSAL POST



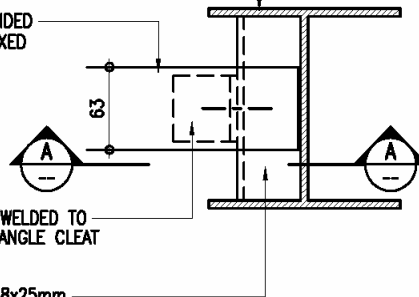
SECTION A-A

R.S. UNIVERSAL POST

63x38x2mm TH. R.H.S. GUARD RAIL PROVIDED AT ALTERNATE BAYS OF HOARDING AND FIXED AT 1.1m ABOVE GROUND LEVEL

50x50x5x50mm LONG M.S. ANGLE CLEAT WELDED TO R.H.S. GUARD RAIL AND BOLTED TO M.S. ANGLE CLEAT

50x50x5mm TH. M.S. ANGLE CLEAT WITH 8x25mm LONG VERTICAL SLOT FOR BOLT & NUT FIXING WELDED TO R.S. UNIVERSAL POST



2
F/A04

FIXING DETAILS OF R.H.S. GUARD RAIL

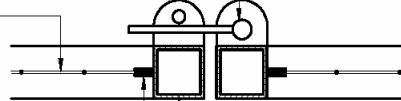
1 : 5

BOLTS INSIDE WITH HASP & STAPLE FOR PAD LOCK

50x50mm GALVANIZED HIGH-TENSILE FABRIC WELDED TO M.S. FLAT

3mm TH. M.S. FLAT WELDED TO FRAME OF GATE

40x40x2.6mm TH. R.H.S. AS FRAME OF SLIDING AND FOLDING GATE COMPLETED WITH 40x40x2.6mm TH. R.H.S. HANGERS AND ALL NECESSARY IRONMONGERY (REFER ELEVATION SHOWN ON DRAWING 9711/F/A01)



1
F/A04

DETAILS OF SLIDING AND FOLDING GATE

1 : 5



ARCHITECTURAL SERVICES DEPARTMENT

Title
**COVERED WALKWAY
TYPE F HOARDING - (SURFACE-MOUNTED FOOTING)
CONSTRUCTION DETAILS 2**

Scale

1 : 5

Drawing No.

9711/F/A04

Checked by
CPM303 C.F. HO

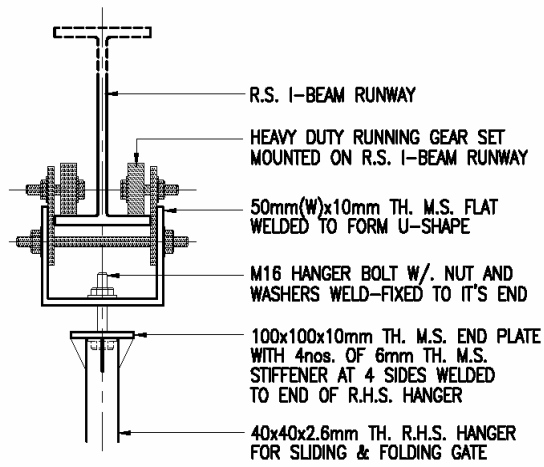
CF

Date
18 Sept. 2007

Approved by
AD(PS) K.K. LEUNG

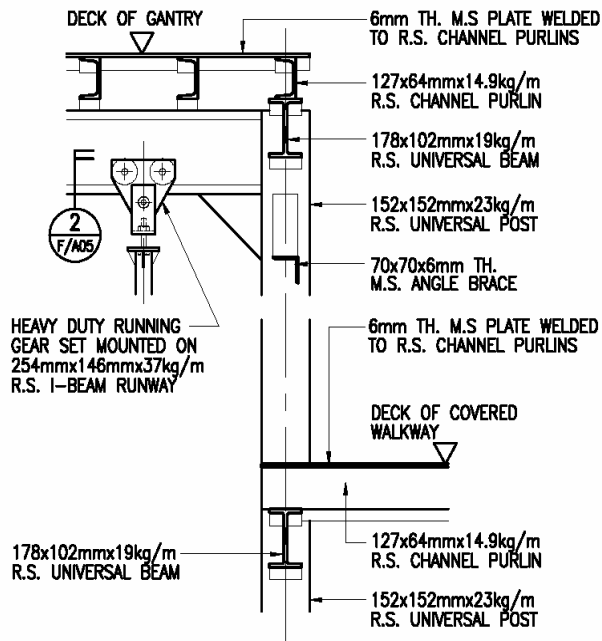
KL

Date
19 Sept. 2007



2 DETAIL*
F/A05 1 : 10

* THIS FIXING DETAIL IS FOR REFERENCE ONLY, SAMPLE OF RUNNING GEAR SET AND FIXING METHOD SHOULD BE SUBMITTED FOR APPROVAL BEFORE ORDERING.



1 DETAIL
F/A05 1 : 20



ARCHITECTURAL
SERVICES
DEPARTMENT

Title
TYPE F HOARDING - COVERED WALKWAY (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 3

Scale
as shown

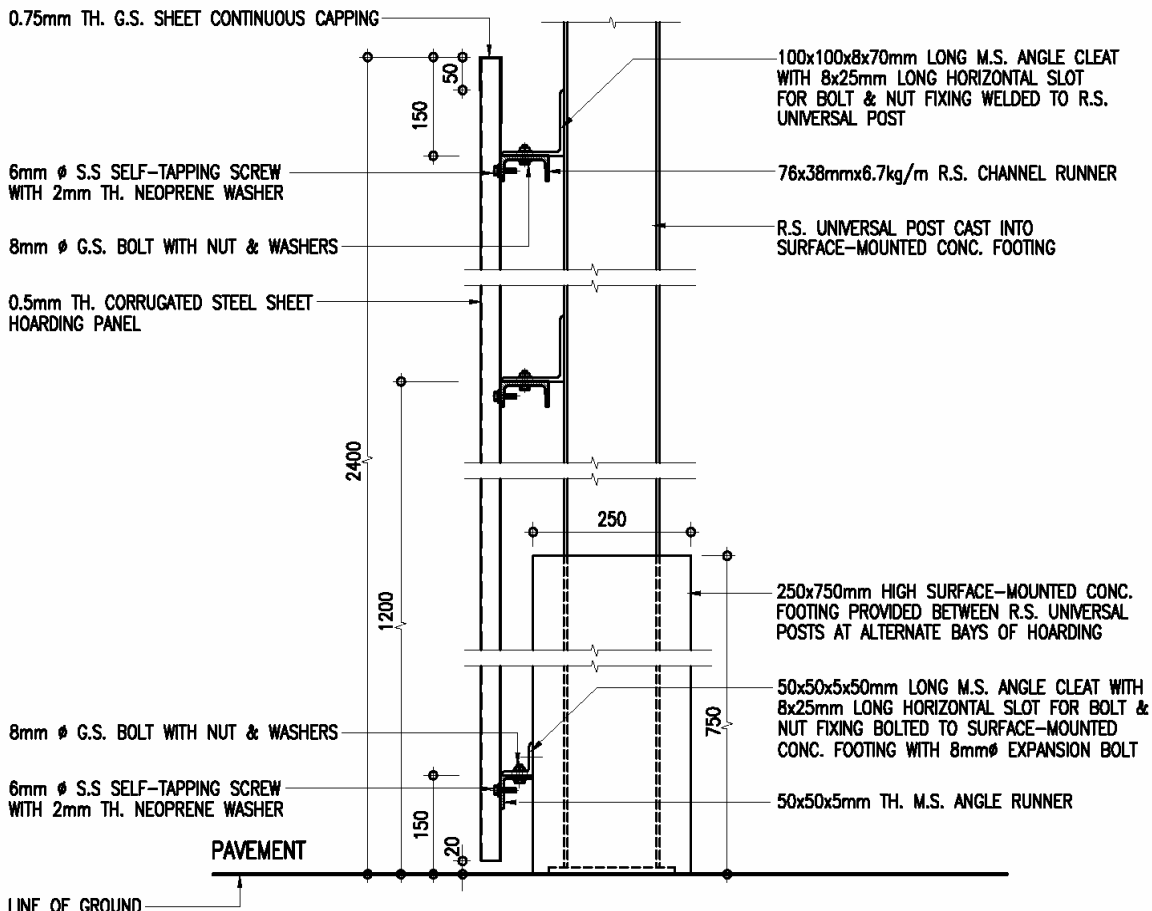
Drawing No.
9711/F/A05

Checked by
CPM303 C.F. HO *AO*

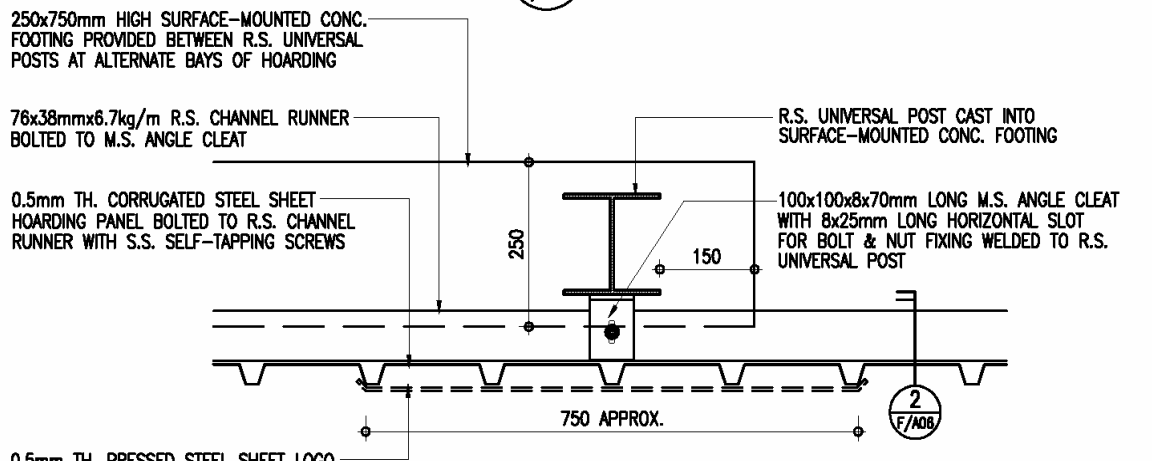
Date
18 Sept. 2007

Approved by
AD(PS) K.K. LEUNG *KL*


Date
19 Sept. 2007

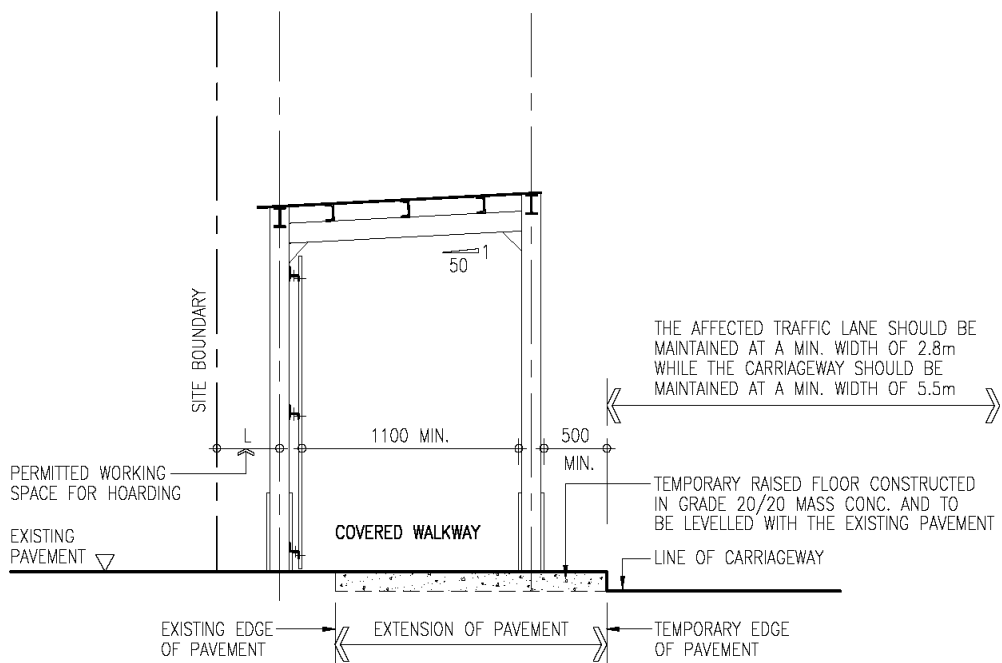


2 DETAIL
F/A06 1 : 10



1 DETAIL
F/A06 1 : 10

 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY TYPE F HOARDING - (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 4		Scale 1 : 10	Drawing No. 9711/F/A06
	Checked by CPM303 C.F. HO <i>RJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007



TYPICAL DETAILS OF COVERED WALKWAY HOARDING (SURFACE-MOUNTED FOOTING) SITED ON CARRIAGEWAY/NARROW PAVEMENT

1 : 50



ARCHITECTURAL SERVICES DEPARTMENT

Title COVERED WALKWAY TYPE F HOARDING - (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 5		Scale 1 : 50	Drawing No. 9711/F/A07
Checked by CPM303 C.F. HO <i>AJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>MR</i>	Date 19 Sept. 2007



ARCHITECTURAL SERVICES DEPARTMENT

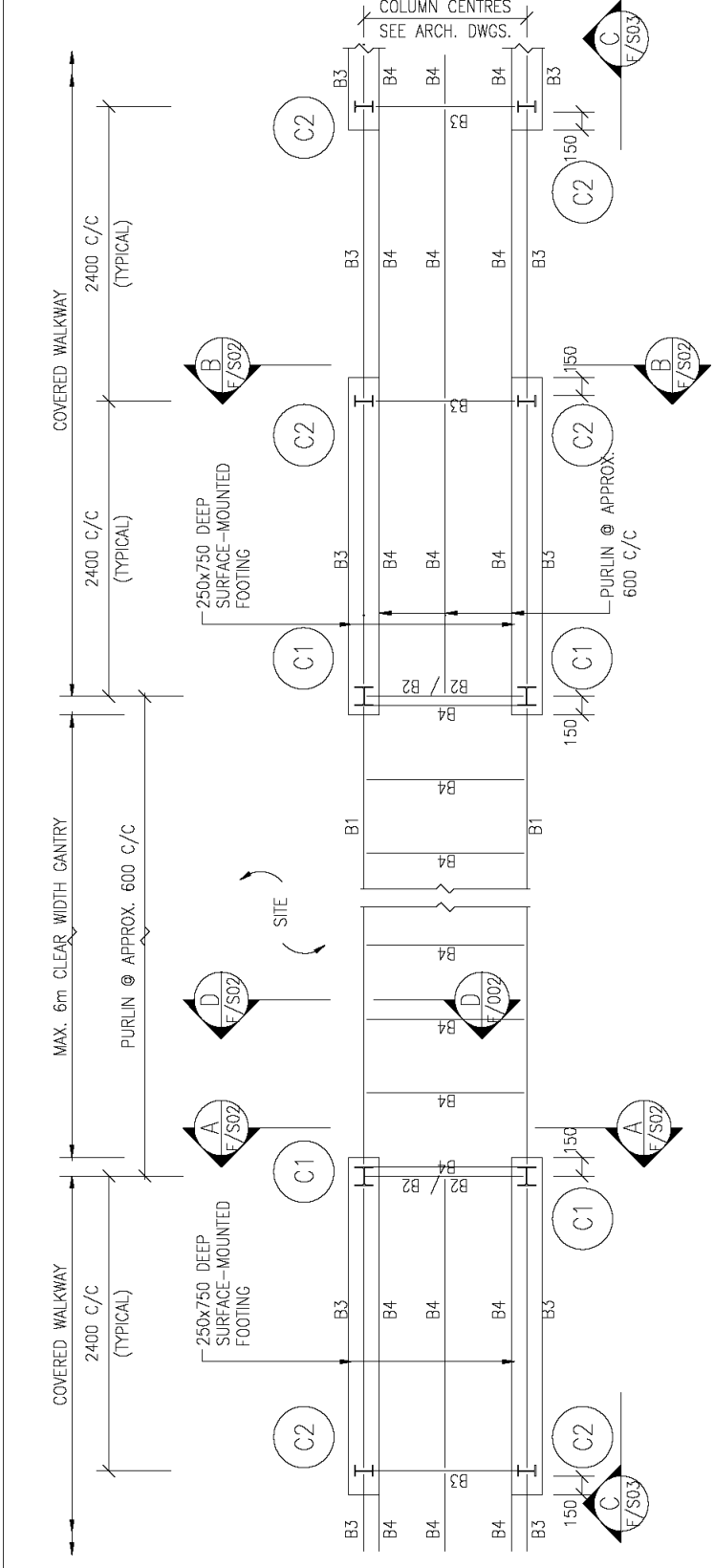
Title: **COVERED WALKWAY TYPE F HOARDING - (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 1**

Checked by: CSE/1 C.T. WONG *Ashwan* Date: 11 Oct. 2007

Approved by: AD(SE) W.W. LI *W.W. Li* Date: 11 Oct. 2007

Scale: 1 : 50

Drawing No. **9711/F/S01**



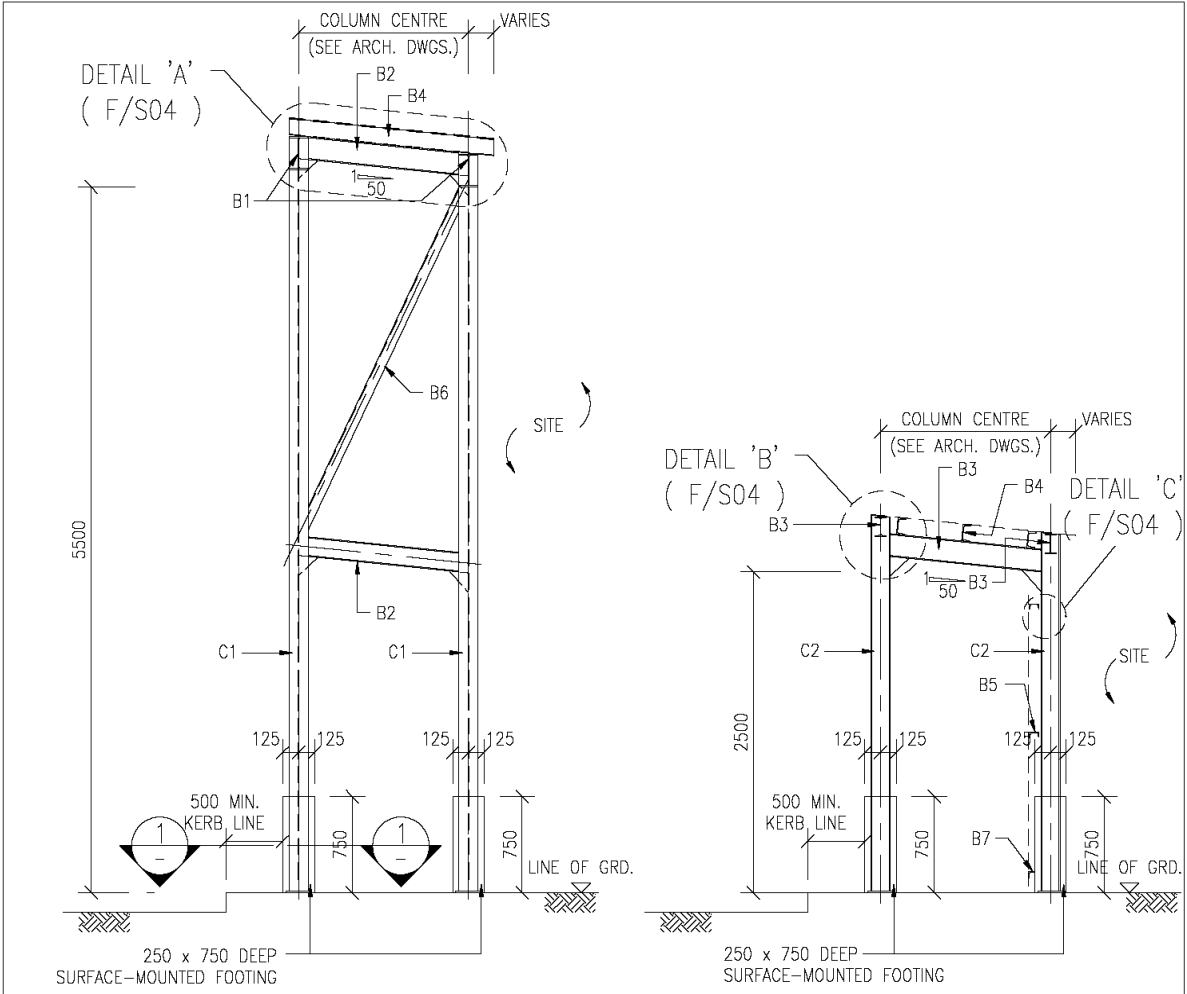
TOP PLAN OF GANTRY AND COVERED WALKWAY

- NOTES :
1. ALL WELDING TO BE 6 mm F.W. ALL ROUND IN ACCORDANCE WITH BS 5135:1984 UNLESS OTHERWISE STATED.
 2. ALL BOLTS TO BE GRADE 4.6 BLACK BOLTS TO BS 4190.
 3. ALL STRUCTURAL SECTIONS SHALL BE WELDABLE STRUCTURAL STEEL OF GRADE S275 UNLESS OTHERWISE SPECIFIED.
 4. THE DETAILS OF GANTRY MAY BE MODIFIED BY PROJECT OFFICER TO SUIT ACTUAL SITE CONDITIONS.
 5. ALL STEEL WORKS SHALL BE MANUALLY CLEANED TO GS CL. 15.61 (i), PRIMED WITH ONE COAT OF OIL BASED ZINC PHOSPHATE PRIMER AND FINISHED WITH TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
 6. DESIGN WIND LOAD TO BE 0.67 kPa, i.e. 37% OF DESIGN WIND PRESSURE OF 1.82 kPa.

STEEL MEMBER SCHEDULE

MEMBER MARK	MEMBER SIZE
C1	152 x 152 x 23 UC
C2, B3	152 x 89 x 16 UB
B1	254 x 146 x 37 UB
B2	178 x 102 x 19 UB
B4	127 x 64 x 14.9 CHANNEL
B5	76 x 38 x 6.7 CHANNEL
B6	70 x 70 x 6 ANGLE
B7	50 x 50 x 5 ANGLE

THE SKETCHES ARE PREPARED TO MEET THE GENERAL REQUIREMENTS AS SPECIFIED IN PNP224 ISSUED BY BD. SIZES OF FOOTINGS MAY BE MODIFIED BY PSE TO SUIT ACTUAL SITE CONDITIONS.

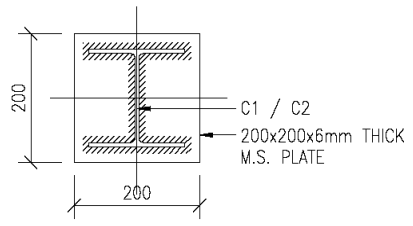


A - A

B - B

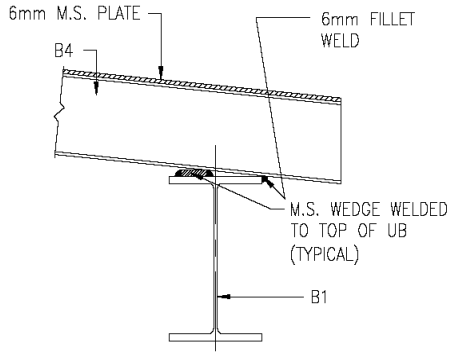
(TYPICAL SECTION OF COVERED WALKWAY)

- NOTES :-
1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.
 2. TO BE USED WHEN PAVEMENT IS CONSTRUCTED WITH CONCRETE, CONCRETE PAVER BLOCK OR TARMAC. CONSULT PSE FOR OTHER SURFACE CONDITIONS ON ITS APPLICABILITY.




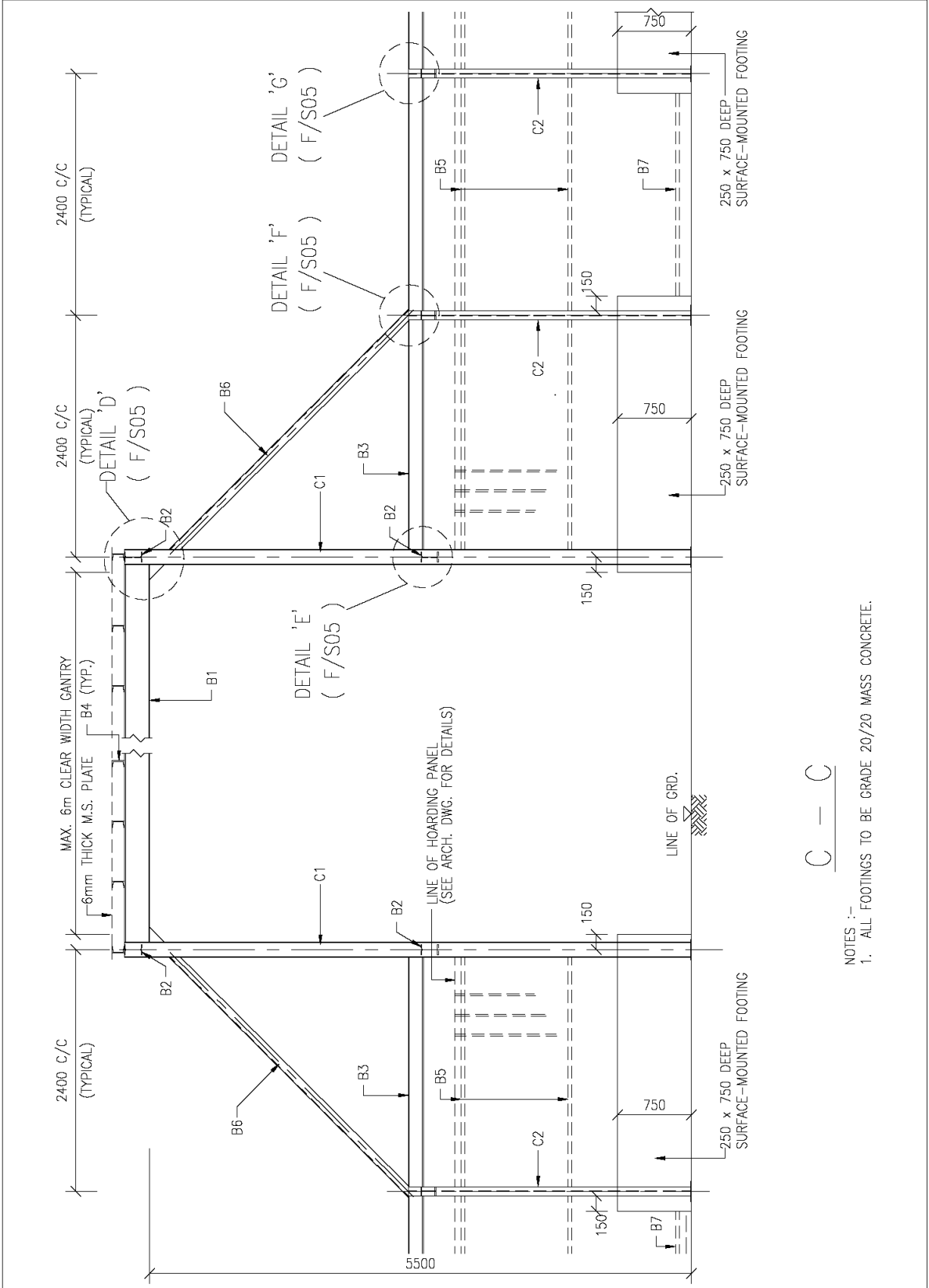
1 - 1

(FOOTING NOT SHOWN FOR CLARITY)



D - D 1 : 10

 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY TYPE F HOARDING - (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 2		Scale 1 : 50 1 : 10	Drawing No. 9711/F/S02
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007



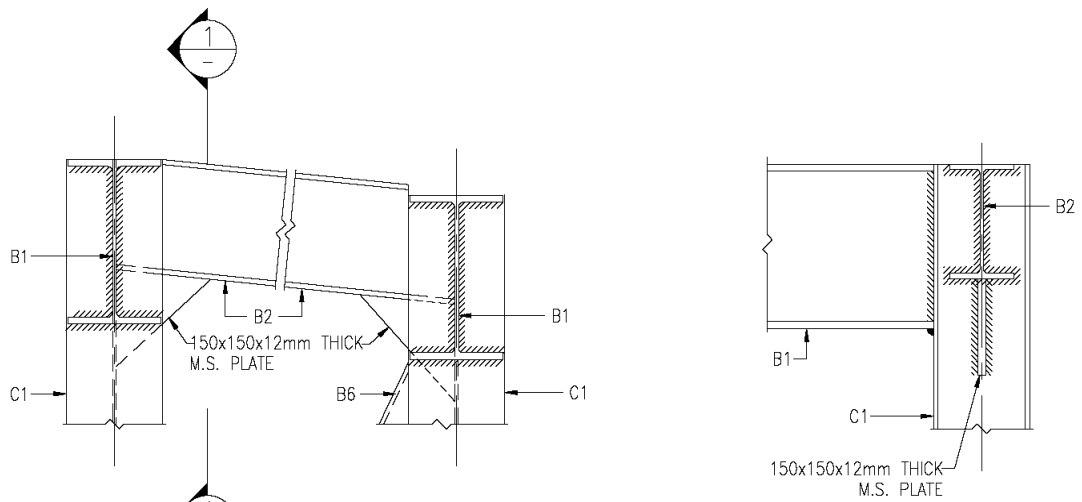
C - C

NOTES :-
1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.



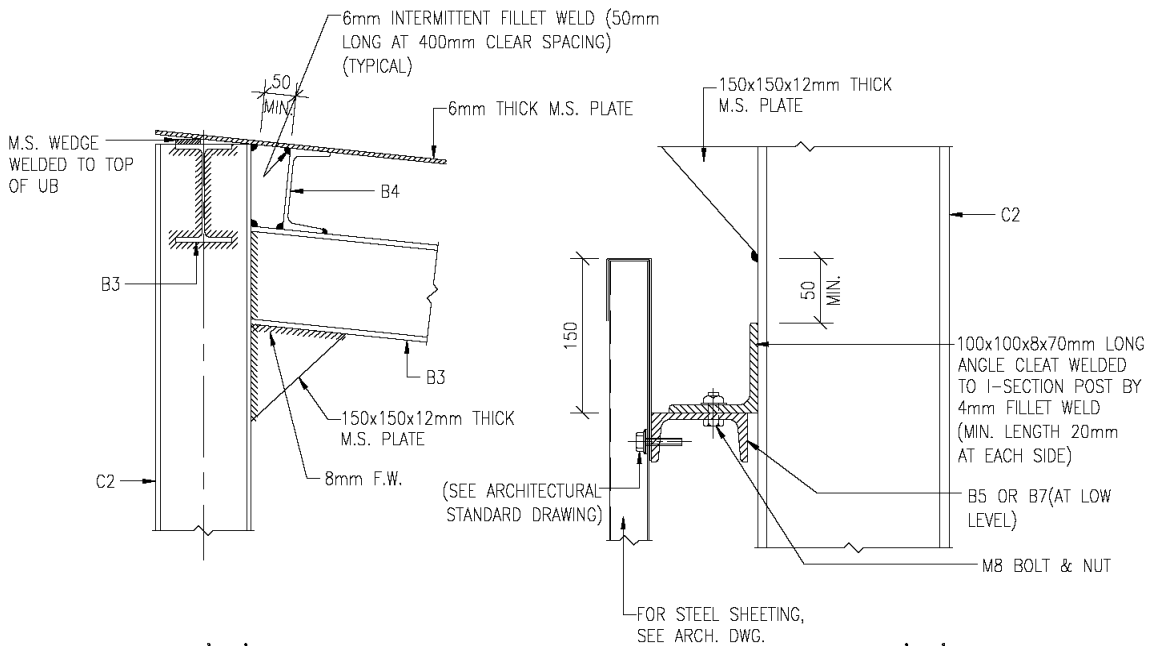
ARCHITECTURAL SERVICES DEPARTMENT

Title COVERED WALKWAY TYPE F HOARDING - (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 3		Scale 1 : 50	Drawing No. 9711/F/S03
Checked by CSE/1 C.T. WONG <i>Ashany</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. LI</i>	Date 11 Oct. 2007



DETAIL 'A' 1 : 10
 (B4 NOT SHOWN FOR CLARITY)
 (F/S02)

1 - 1 1 : 10



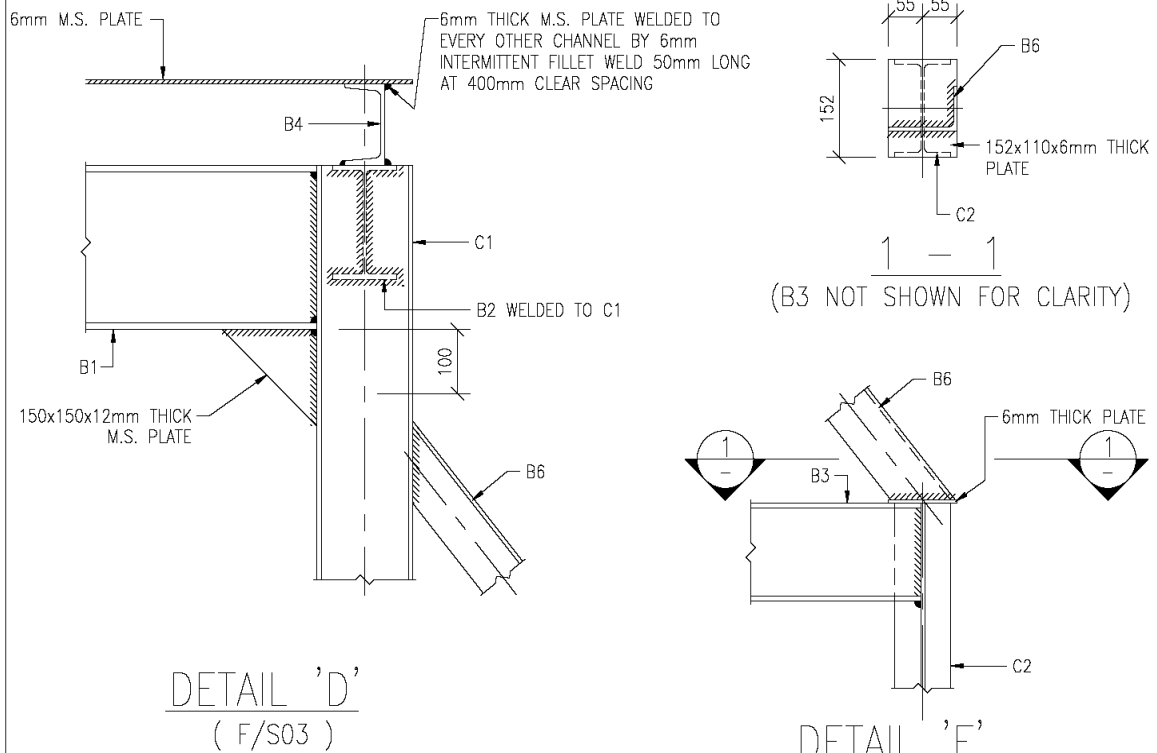
DETAIL 'B' 1 : 10
 (F/S02)

DETAIL 'C' 1 : 5
 (F/S02)

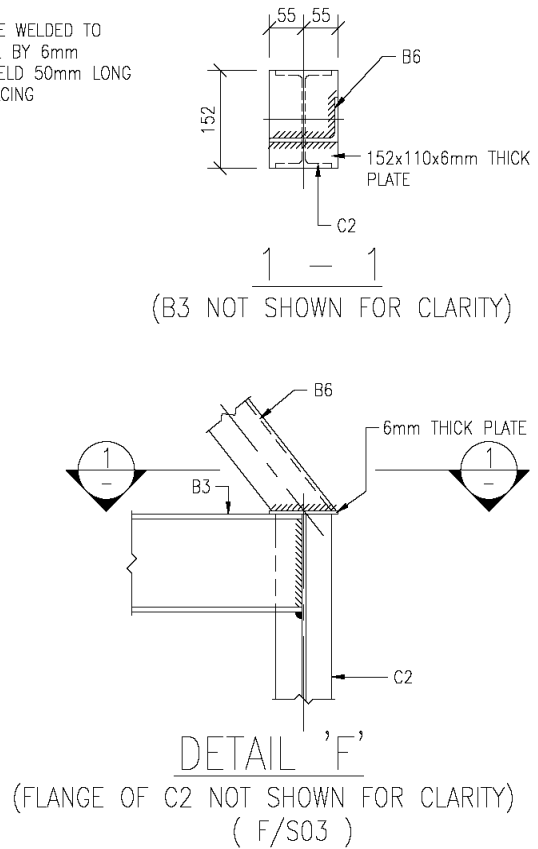


ARCHITECTURAL
 SERVICES
 DEPARTMENT

Title COVERED WALKWAY TYPE F HOARDING - (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 4		Scale 1 : 10 1 : 5	Drawing No. 9711/F/S04
Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007

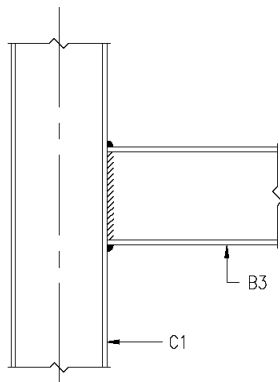


DETAIL 'D'
(F/S03)

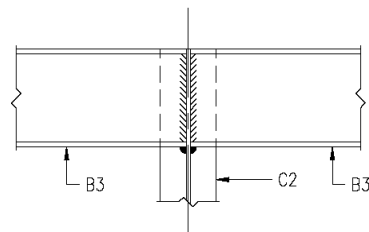


DETAIL 'F'

(FLANGE OF C2 NOT SHOWN FOR CLARITY)
(F/S03)



DETAIL 'E'
(F/S03)



DETAIL 'G'

(FLANGE OF C2 NOT SHOWN FOR CLARITY)
(F/S03)



ARCHITECTURAL
SERVICES
DEPARTMENT

Title
**COVERED WALKWAY
TYPE F HOARDING - (SURFACE-MOUNTED FOOTING)
STRUCTURAL DETAILS 5**

Scale
1 : 10

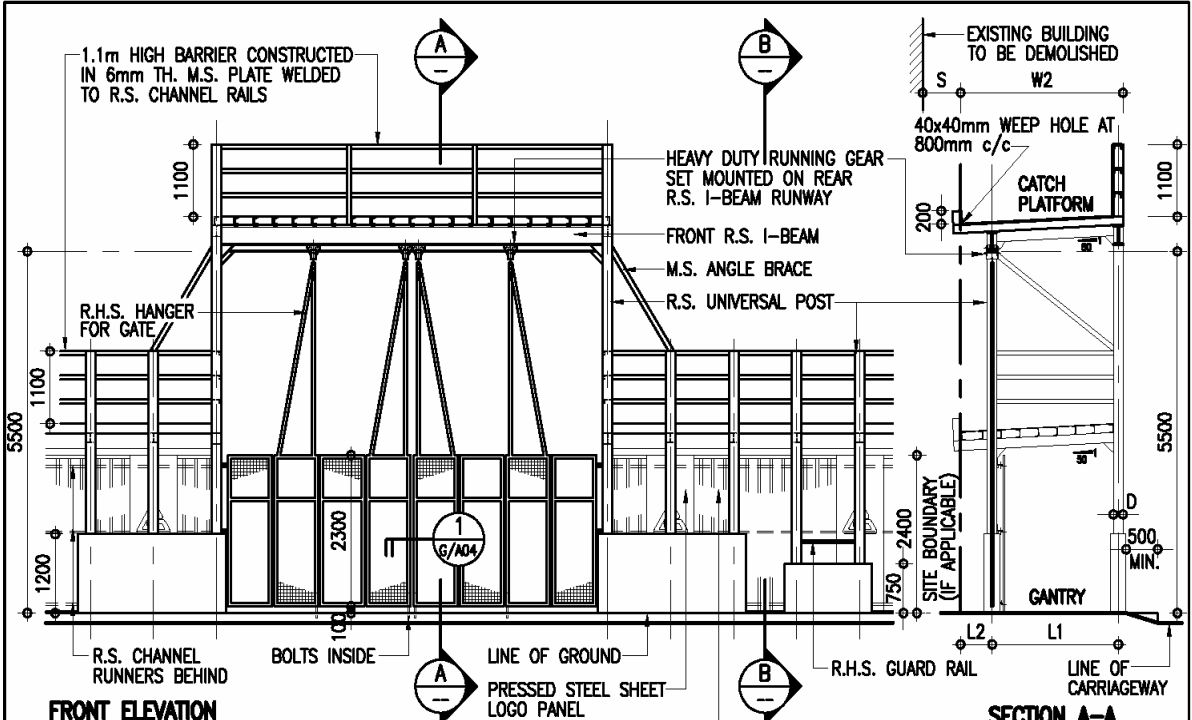
Drawing No.
9711/F/S05

Checked by
CSE/1 C.T. WONG *C.T. Wong*

Date
11 Oct. 2007

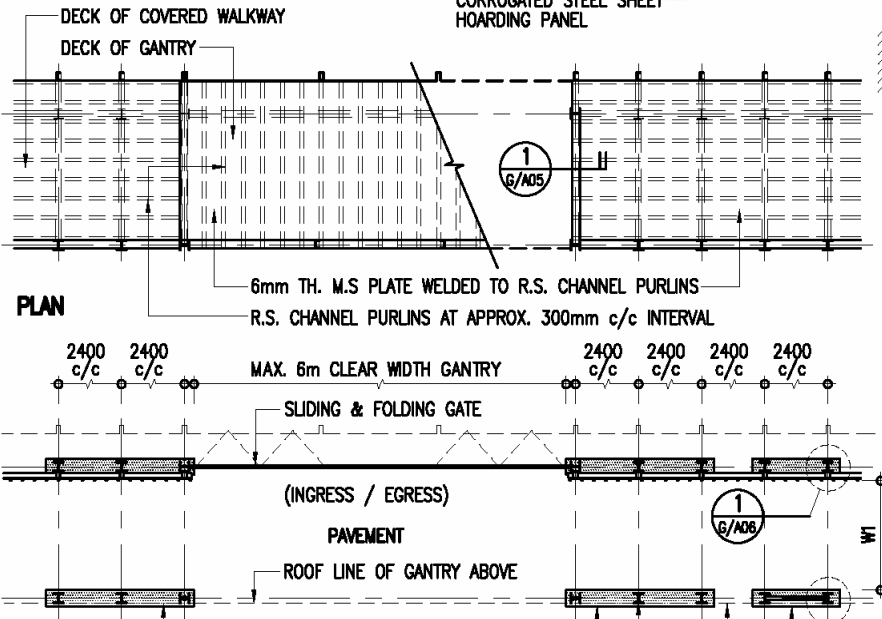
Approved by
AD(SE) W.W. LI *W.W. Li*

Date
11 Oct. 2007



FRONT ELEVATION

SECTION A-A



PLAN


SECTION B-B



SECTIONAL PLAN


NOTES:

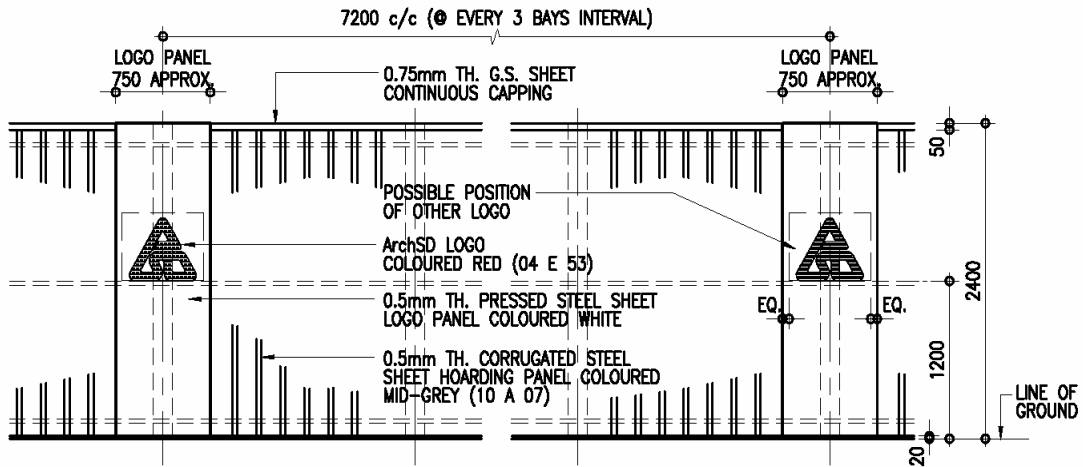
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH STRUCTURAL DRAWINGS NO. 9711/G/S01 TO S05.
2. REFER PT. 3 OF GENERAL NOTES IN DRAWING NO. 9711/G/A02 FOR THE REQUIRED CLEAR WIDTH (W1) OF COVERED WALKWAY.
3. REFER PNAP 71 & 75 OF BUILDINGS DEPARTMENT FOR THE PERMITTED WORKING SPACE (L2). (500mm MAX. FOR DEMOLITION WORKS OR 300mm MAX. FOR OTHER WORKS)
4. MIN. WIDTH OF CATCH PLATFORM (W2) FOR DEMOLITION WORKS = 2000mm-(S) SET BACK OR (L1)+(L2)+(D/2), WHICHEVER THE GREATER.

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE G HOARDING - COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) GENERAL PLANS		Scale 1 : 100	Drawing No. 9711/G/A01
	Checked by CPM303 C.F. HO <i>RJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007

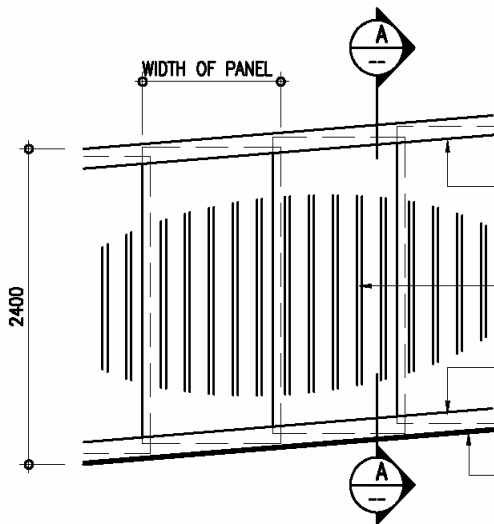
**GENERAL NOTES FOR CONSTRUCTION OF
HOARDINGS, COVERED WALKWAYS, AND ASSOCIATED GANTRIES AND CATCH PLATFORMS:**

1. THE ARCHITECTURAL HOARDING DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE APPROPRIATE STRUCTURAL HOARDING DRAWINGS AS REFERRED ON THE DRAWINGS.
2. IN DETERMINING THE TYPE OF HOARDING/COVERED WALKWAY CONSTRUCTION AND THE ASSOCIATED PROVISIONS TO SUIT THE PURPOSE, REFERENCE AND PROVISIONS SHOULD ALWAYS BE MADE TO MEET THE REQUIREMENTS OF THE CURRENTLY ENFORCED "CODE OF PRACTICE FOR DEMOLITION OF BUILDINGS" AND RELEVANT PNAPS ISSUED BY BUILDINGS DEPARTMENT.
3. A MINIMUM CLEAR WIDTH OF 1.1m AND RAISED FLOOR SHOULD BE PROVIDED FOR HOARDING/COVERED WALKWAY LOCATED ON CARRIAGEWAY. FOR HOARDING/COVERED WALKWAY LOCATED ON FOOTPATH, THE CLEAR WIDTH SHOULD BE RELATED TO THE EXISTING PAVEMENT WIDTH AND BE PROVIDED ACCORDING TO THOSE AS PROMULGATED IN PNAP 75 ISSUED BY THE BUILDINGS DEPARTMENT.
4. A TEMPORARY LIGHTING SYSTEM AS PROMULGATED IN PNAP 75 SHOULD BE PROVIDED FOR ALL COVERED WALKWAYS OF BUILDING SITES.
5. ALL METALWORK REFERRED IN THE DRAWINGS SHOULD COMPLY WITH SECTION 17 OF THE GENERAL SPECIFICATION FOR BUILDING 2007 EDITION OR THEREAFTER.
6. ALL CORRUGATED STEEL SHEET PANELS, CAPPINGS AND TOE SHEETS SHOULD BE OF GALVANIZED STEEL WITH MINIMUM ZINC COATING CONTENT $350\text{g}/\text{m}^2$ WITH TRIPLE-SPOT TEST, AND BE FINISHED ON BOTH SURFACES WITH ONE UNDERCOAT OF "LUXAPRIME 1600 PRIMER" OR EQUIVALENT AND TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
7. ALL EXPOSED SURFACES OF METALWORK SHOULD BE PAINTED IN MID-GREY COLOUR (10 A 07) UNLESS STATED OTHERWISE.
8. ArchSD LOGO SHOULD BE PAINTED AT A 3-BAY INTERVAL. IF THERE ARE OTHER LOGOS TO BE DISPLAYED, THE SPECIFIED LOGO AND THE ArchSD LOGO SHOULD BE PAINTED ALTERNATIVELY AT A 3-BAY INTERVAL.

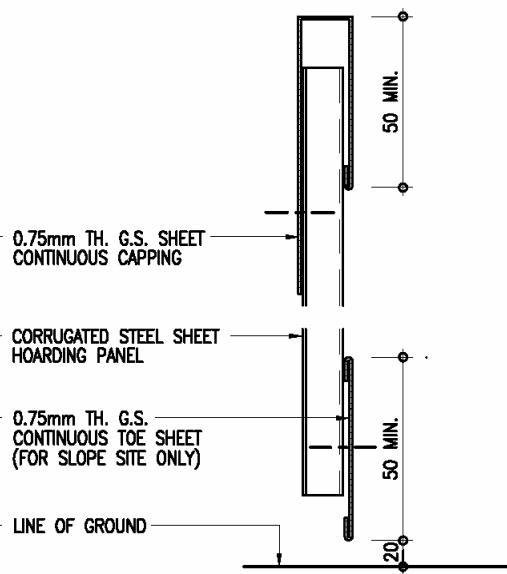
 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE G HOARDING - COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) GENERAL NOTES		Scale NIL	Drawing No. 9711/G/A02
	Checked by CPM303 C.F. HO <i>AJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KK</i>	Date 19 Sept. 2007



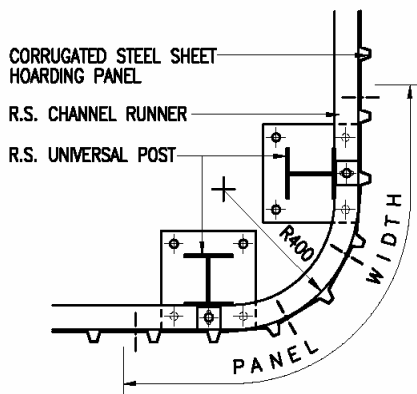
EXTERNAL ELEVATION OF HOARDING PANEL 1 : 50



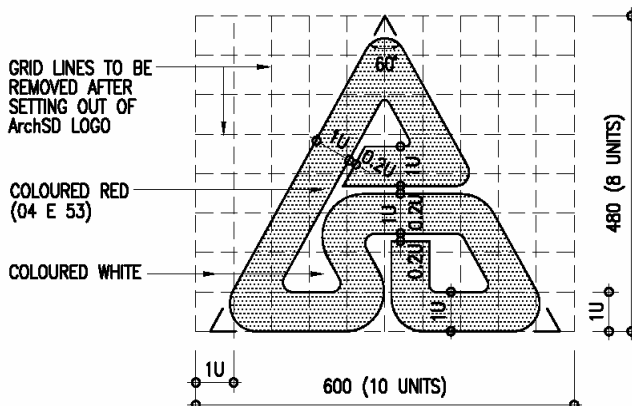
EXTERNAL ELEVATION OF HOARDING PANEL ON SLOPE 1 : 50



SECTION A-A 1 : 5



PLAN OF HOARDING PANEL AT CORNER 1 : 20



SETTING OUT OF ArchSD LOGO 1 : 10



ARCHITECTURAL SERVICES DEPARTMENT

Title
TYPE G HOARDING -
 COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 1

Scale
 as shown

Drawing No.
 9711/G/A03

Checked by
 CPM303 C.F. HO

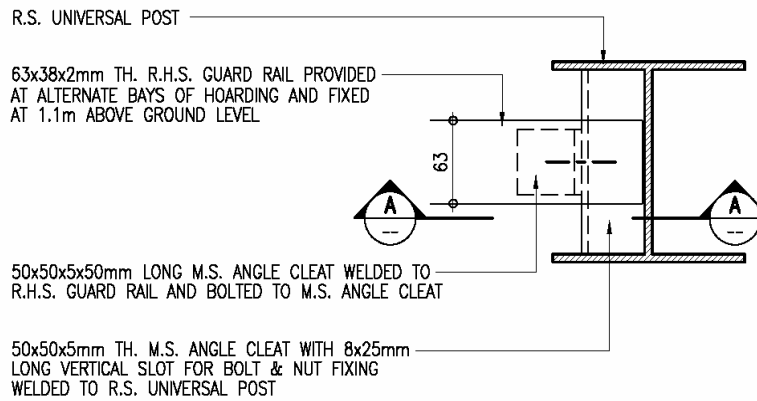
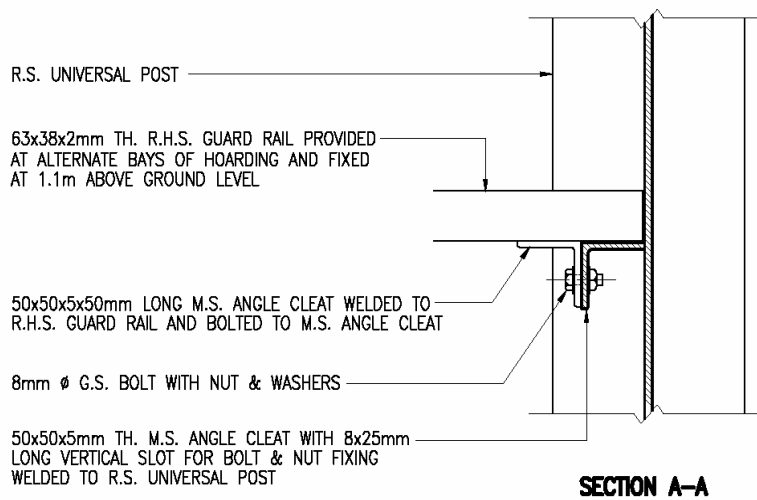
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Date
 18 Sept. 2007

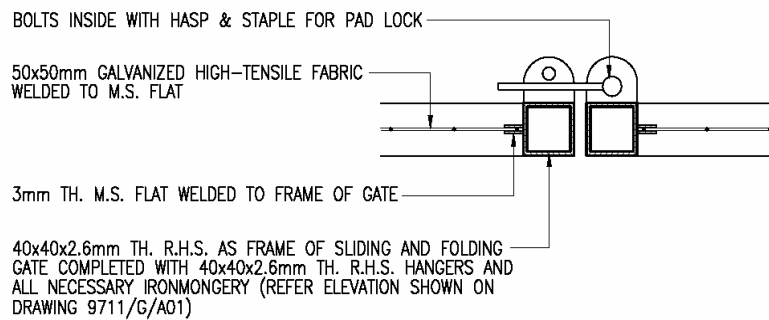
Approved by
 AD(PS) K.K. LEUNG

MA

Date
 19 Sept. 2007



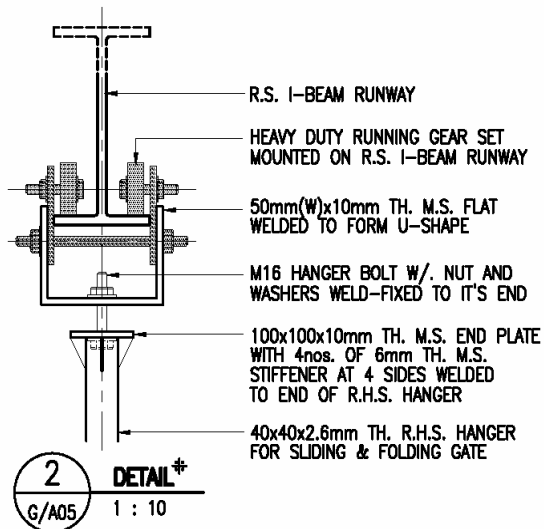
2 **FIXING DETAILS OF R.H.S. GUARD RAIL**
G/A04 1 : 5



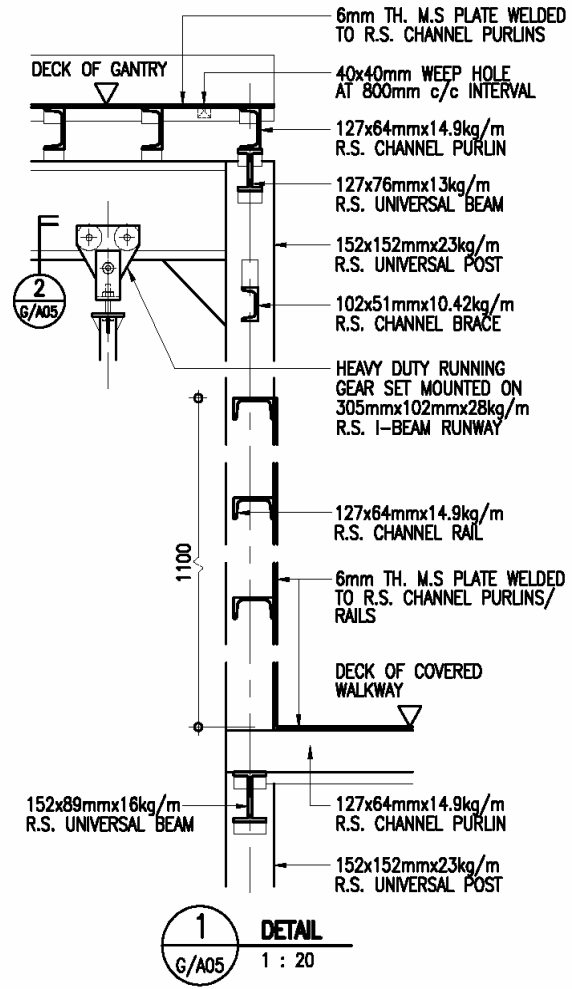
1 **DETAILS OF SLIDING AND FOLDING GATE**
G/A04 1 : 5




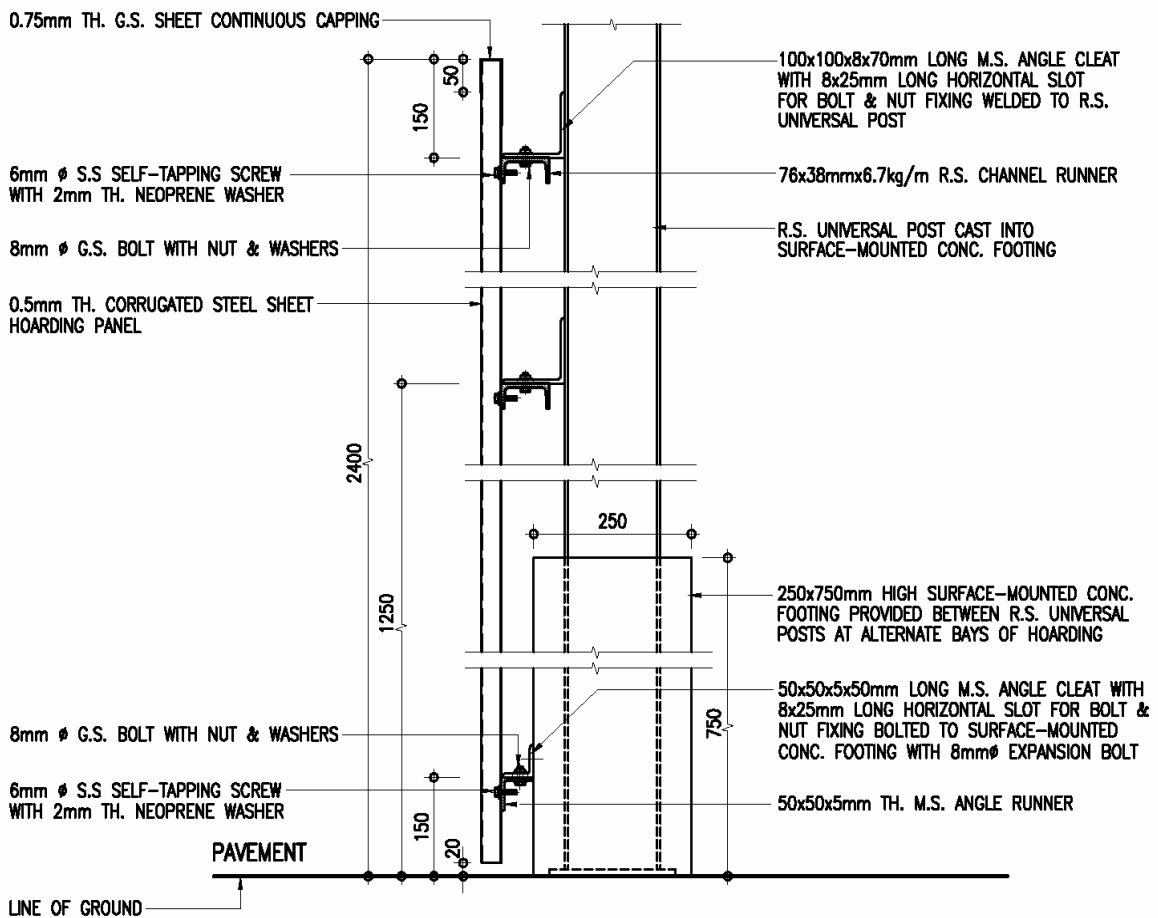
Title	COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 2		Scale	Drawing No.			
	TYPE G HOARDING				1 : 5	9711/G/A04	
Checked by	CPM303 C.F. HO <i>AL</i>	Date	18 Sept. 2007	Approved by	AD(PS) K.K. LEUNG <i>KL</i>	Date	19 Sept. 2007



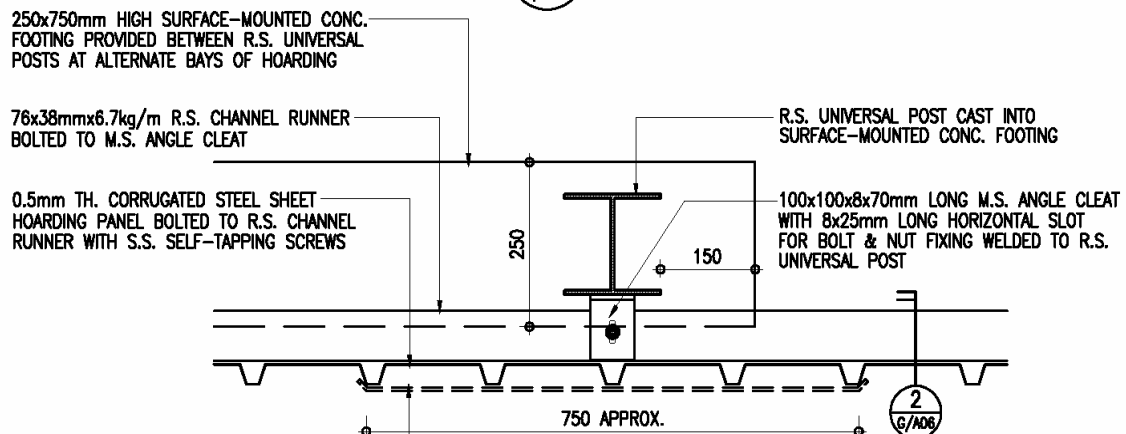
* THIS FIXING DETAIL IS FOR REFERENCE ONLY, SAMPLE OF RUNNING GEAR SET AND FIXING METHOD SHOULD BE SUBMITTED FOR APPROVAL BEFORE ORDERING.



 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE G HOARDING - COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 3		Scale as shown	Drawing No. 9711/G/A05
	Checked by CPM303 C.F. HO <i>RJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>NA</i>	Date 19 Sept. 2007



2 DETAIL
G/A06 1 : 10



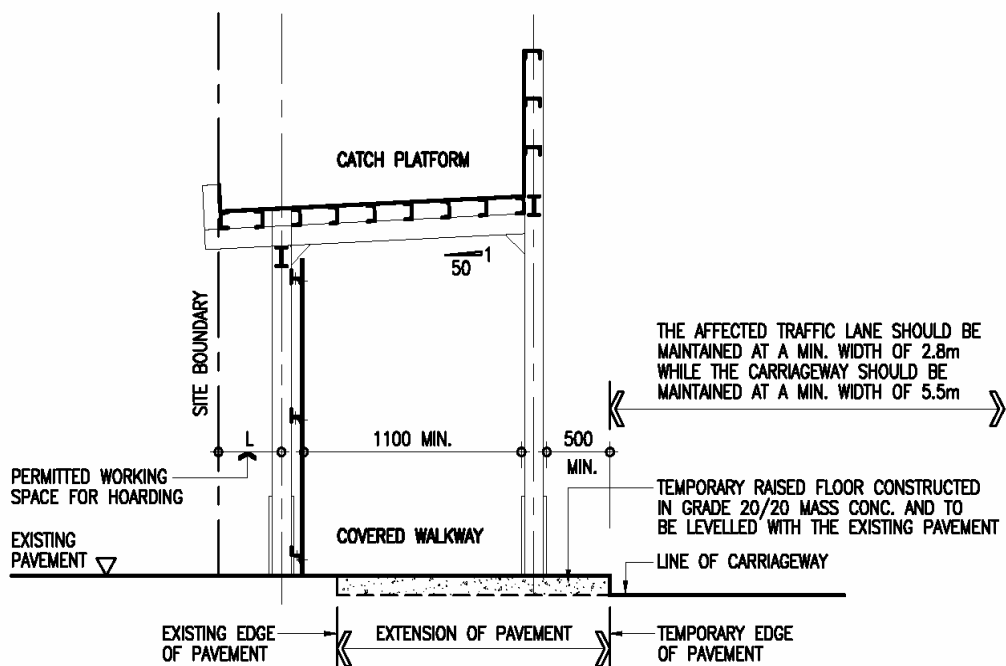
1 DETAIL
G/A06 1 : 10

0.5mm TH. PRESSED STEEL SHEET LOGO PANEL FIXED AT EVERY 3 BAYS INTERVAL WITH S.S. SELF-TAPPING SCREWS



ARCHITECTURAL SERVICES DEPARTMENT

Title TYPE G HOARDING - SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 4	Scale 1 : 10	Drawing No. 9711/G/A06
	Checked by CPM303 C.F. HO <i>HO</i>	Date 18 Sept. 2007
		Date 19 Sept. 2007



TYPICAL DETAILS OF COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM HOARDING (SURFACE-MOUNTED FOOTING) SITED ON CARRIAGEWAY/NARROW PAVEMENT

1 : 50



ARCHITECTURAL SERVICES DEPARTMENT

Title
TYPE G HOARDING - COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 5

Scale
1 : 50

Drawing No.
9711/G/A07

Checked by
CPM303 C.F. HO *HO*

Date
18 Sept. 2007

Approved by
AD(PS) K.K. LEUNG *KL*

Date
19 Sept. 2007



Title **COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 1**

Scale **1 : 50**

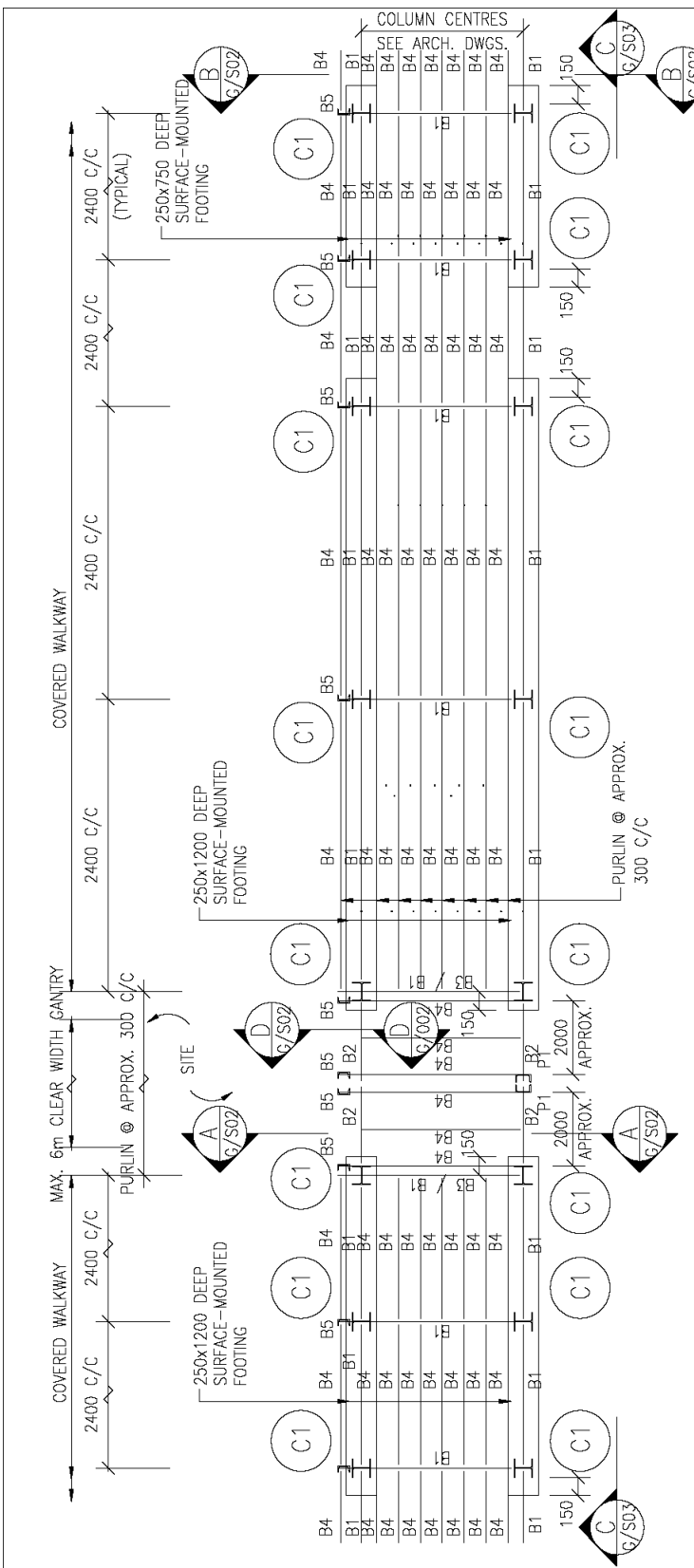
Drawing No. **9711/G/S01**

Checked by **CSE/1 C.T. WONG**

Date **11 Oct. 2007**

Approved by **AD(SE) W.W. LI**

Date **11 Oct. 2007**



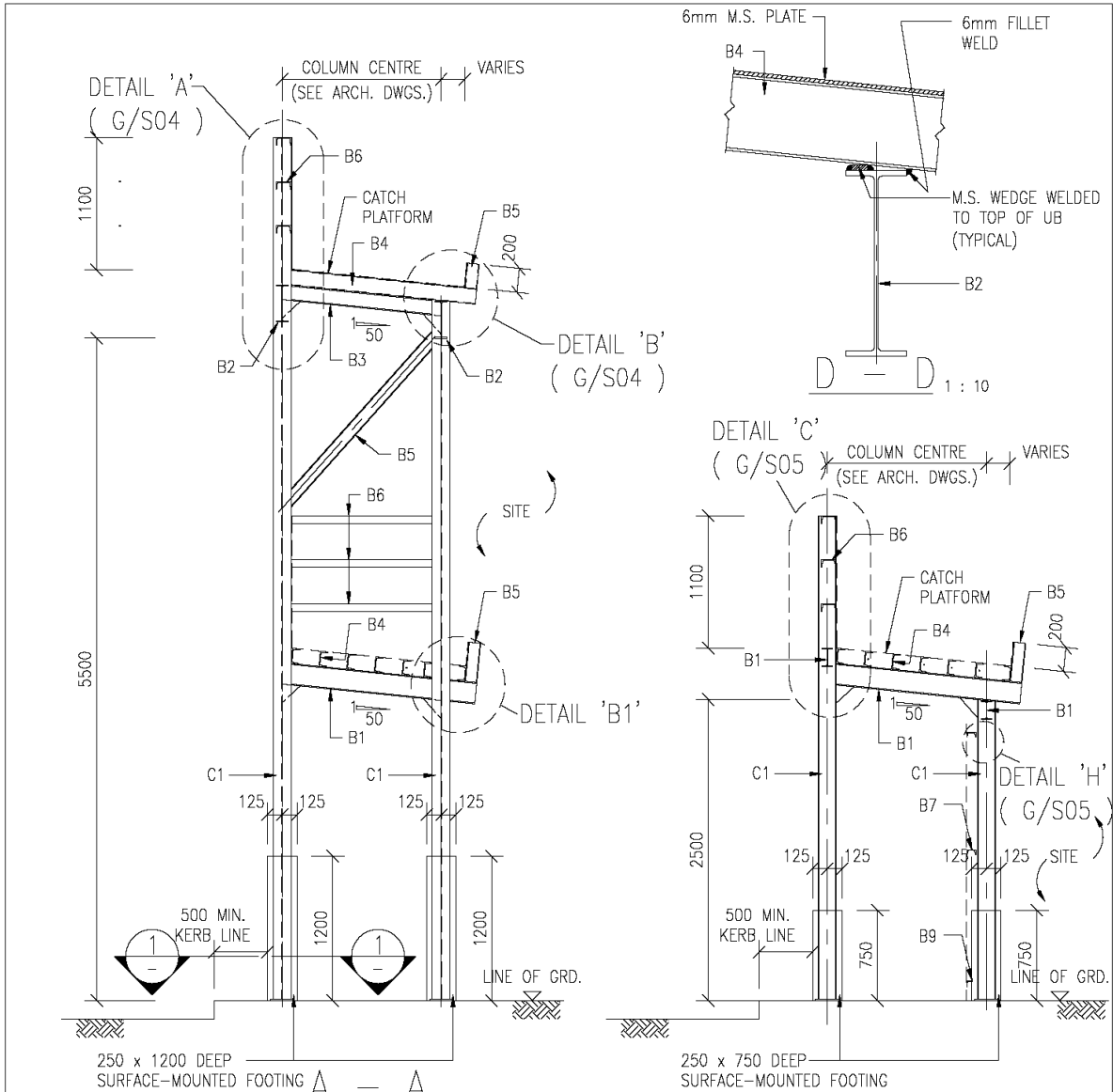
TOP PLAN OF GANTRY AND COVERED WALKWAY

- NOTES :
1. ALL WELDING TO BE 6 mm F.W. ALL ROUND IN ACCORDANCE WITH BS 5135:1984 UNLESS OTHERWISE STATED.
 2. ALL BOLTS TO BE GRADE 4.6 BLACK BOLTS TO BS 4190.
 3. ALL STRUCTURAL SECTIONS SHALL BE WELDABLE STRUCTURAL STEEL OF GRADE S275 UNLESS OTHERWISE SPECIFIED.
 4. THE DETAILS OF GANTRY MAY BE MODIFIED BY PROJECT OFFICER TO SUIT ACTUAL SITE CONDITIONS.
 5. ALL STEEL WORKS SHALL BE MANUALLY CLEANED TO CS CL. 15.61 (i), PRIMED WITH ONE COAT OF OIL BASED ZINC PHOSPHATE PRIMER AND FINISHED WITH TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
 6. DESIGN WIND LOAD TO BE 0.67 kPa, i.e. 37% OF DESIGN WIND PRESSURE OF 1.82 kPa.

STEEL MEMBER SCHEDULE

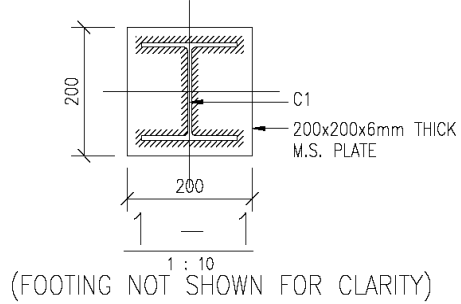
MEMBER MARK	MEMBER SIZE
C1	152 x 152 x 23 UC
B1	152 x 89 x 16 UB
B2	305 x 102 x 28 UB
B3	127 x 76 x 13 UB
B4, B6, P1	127 x 64 x 14.9 CHANNEL
B5	102 x 51 x 10.42 CHANNEL
B7	76 x 38 x 6.7 CHANNEL
B8	70 x 70 x 6 ANGLE
B9	50 x 50 x 5 ANGLE

THE SKETCHES ARE PREPARED TO MEET THE GENERAL REQUIREMENTS AS SPECIFIED IN PNAP224 ISSUED BY BD. SIZES OF FOOTINGS MAY BE MODIFIED BY PSE TO SUIT ACTUAL SITE CONDITIONS.

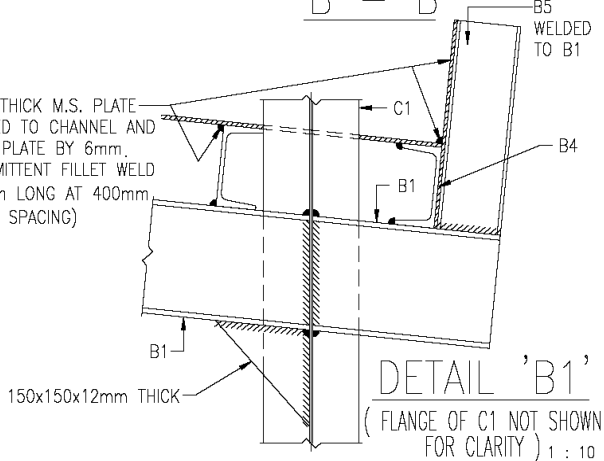


(TYPICAL SECTION OF COVERED WALKWAY)

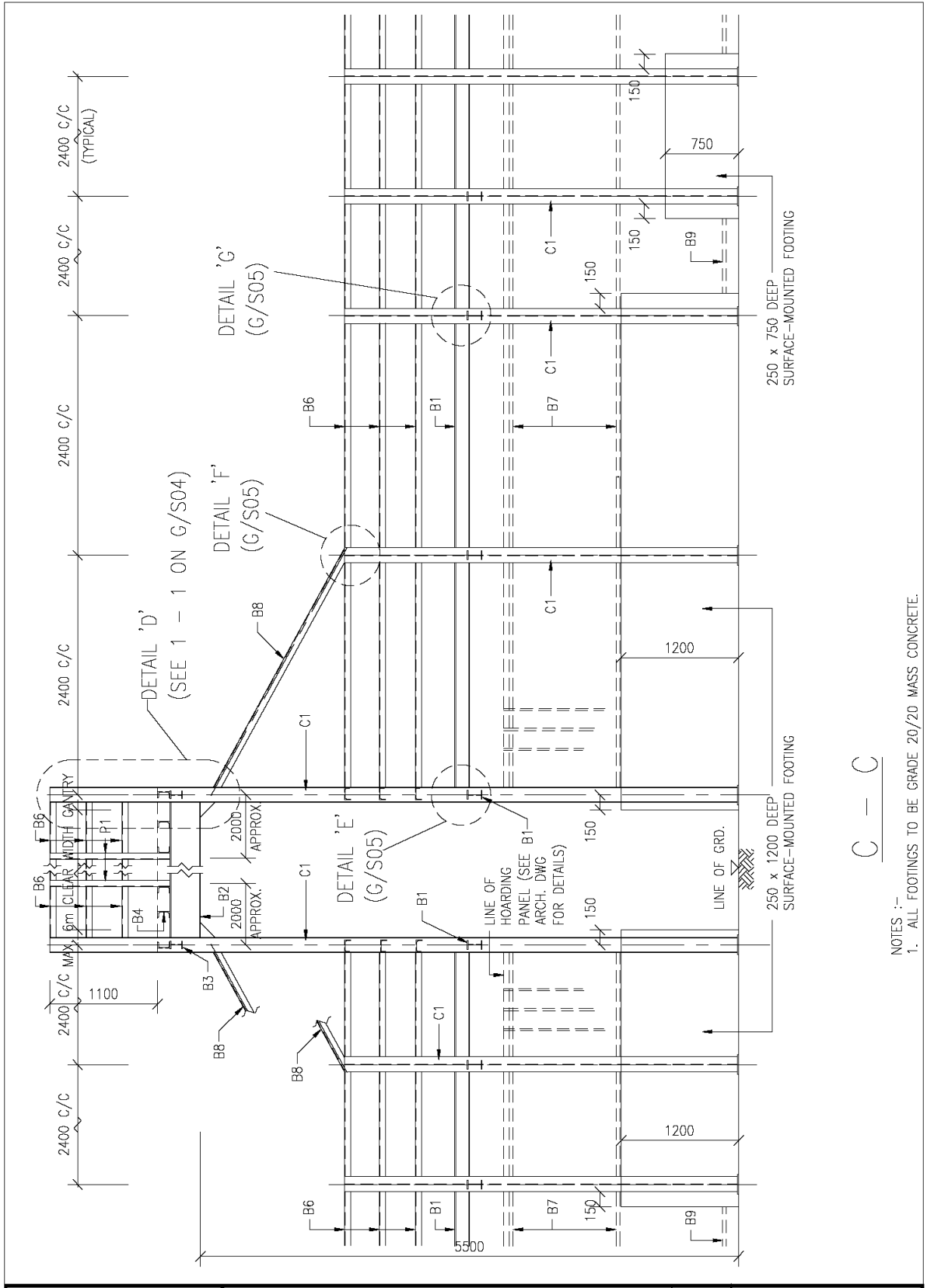
- NOTES :-
1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.
 2. TO BE USED WHEN PAVEMENT IS CONSTRUCTED WITH CONCRETE, CONCRETE PAVER BLOCK OR TARMAAC. CONSULT PSE FOR OTHER SURFACE CONDITIONS ON ITS APPLICABILITY.



6mm THICK M.S. PLATE WELDED TO CHANNEL AND ROOF PLATE BY 6mm. INTERMITTENT FILLET WELD (50mm LONG AT 400mm CLEAR SPACING)




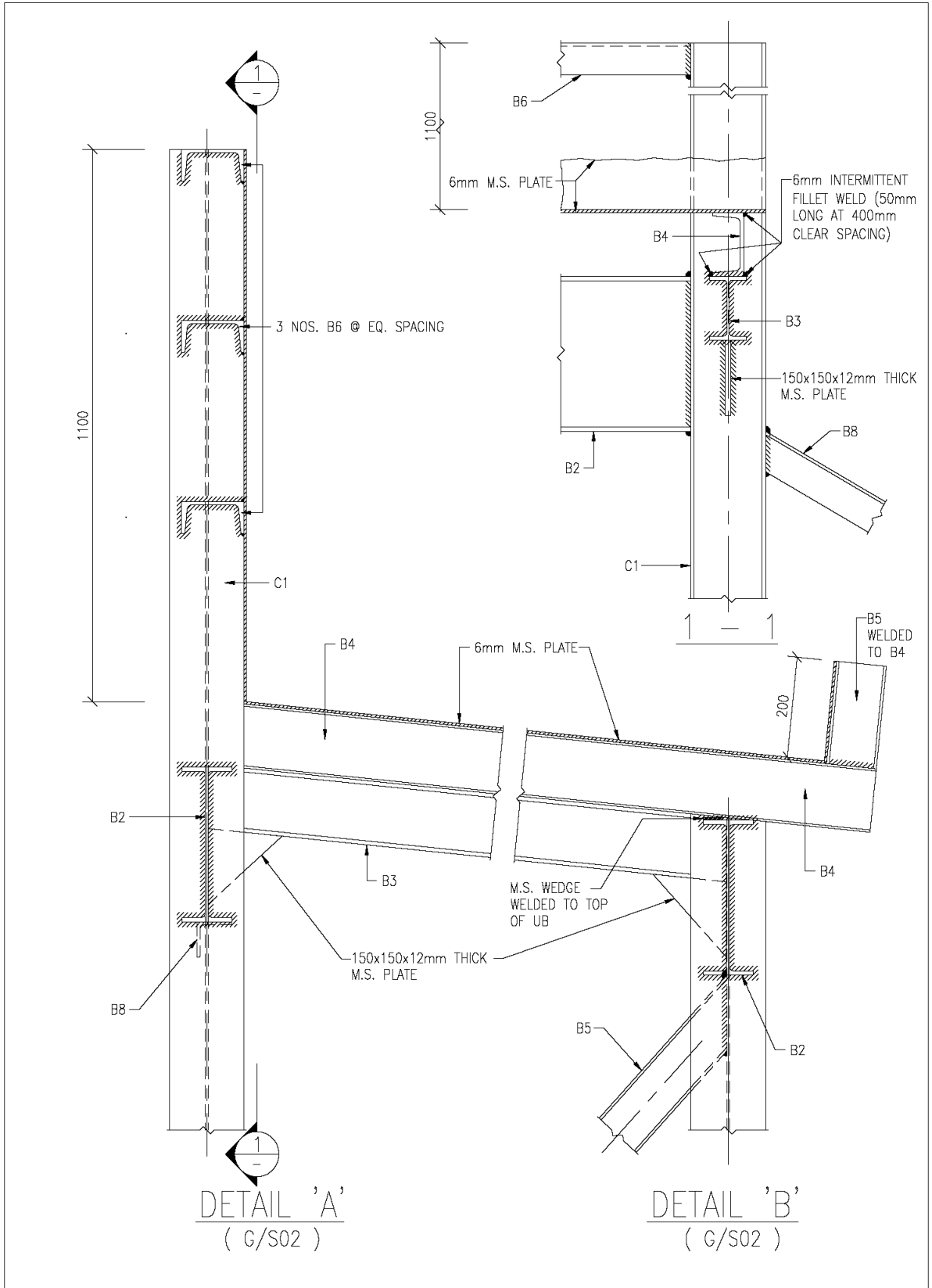
<p>ARCHITECTURAL SERVICES DEPARTMENT</p>	<p>Title COVERED WALKWAY WITH TYPE G HOARDING - SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 2</p>		<p>Scale 1 : 50 1 : 10</p>	<p>Drawing No. 9711/G/S02</p>
	<p>Checked by CSE/1 C.T. WONG <i>C.T. Wong</i></p>	<p>Date 11 Oct. 2007</p>	<p>Approved by AD(SE) W.W. LI <i>W.W. Li</i></p>	<p>Date 11 Oct. 2007</p>




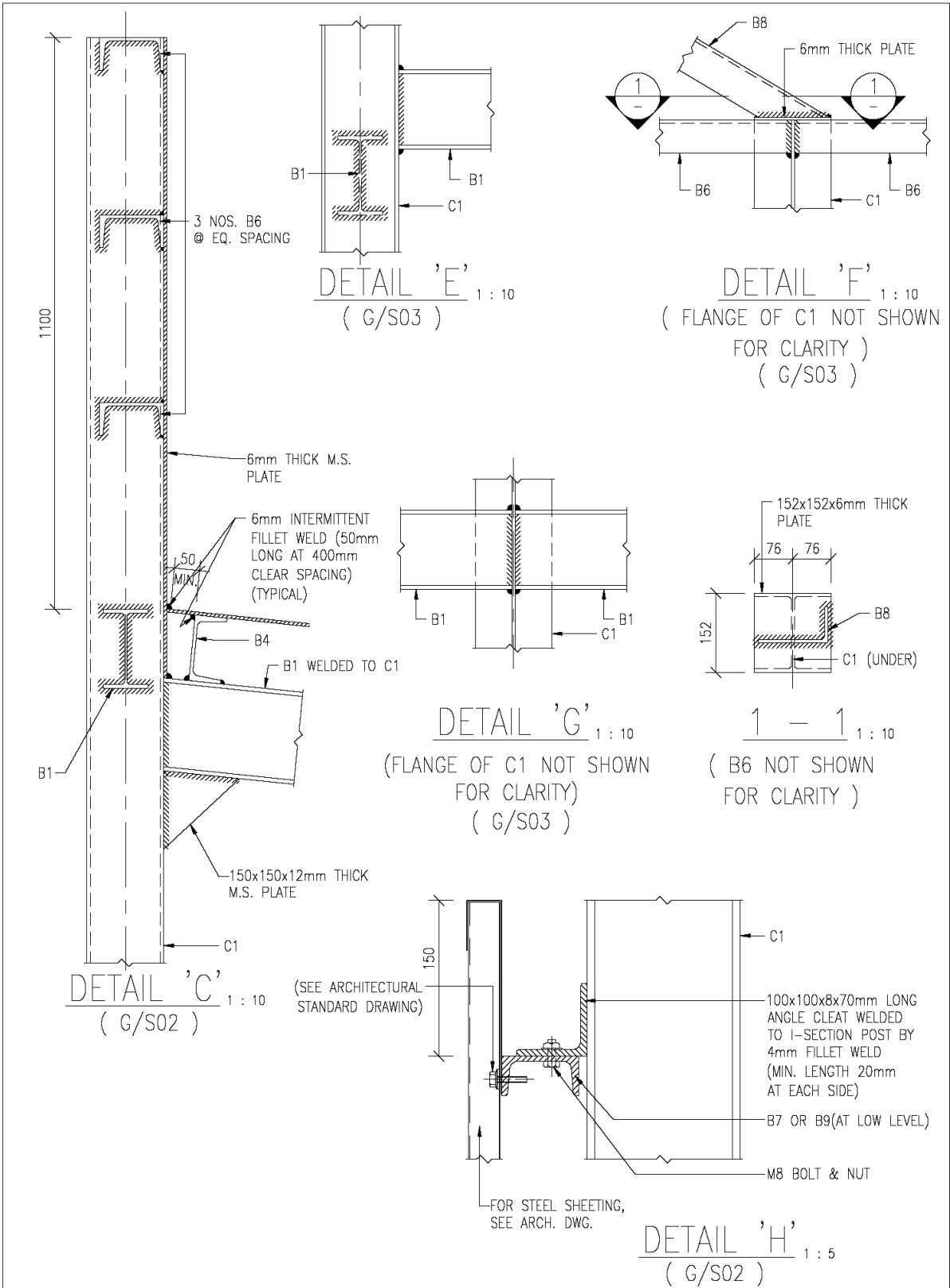
NOTES :-
 1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.


C - C

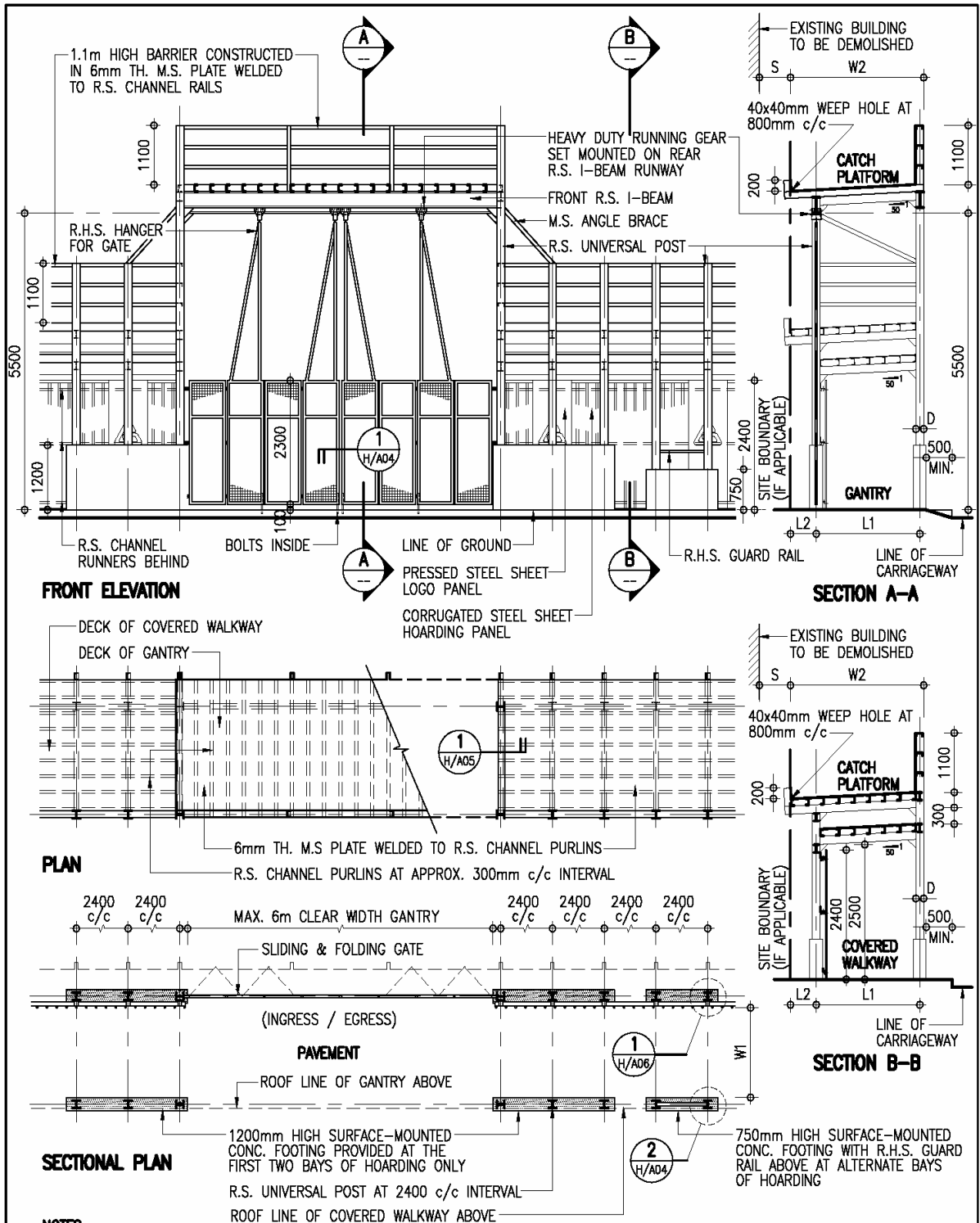
 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE G HOARDING - SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 3		Scale 1 : 50	Drawing No. 9711/G/S03
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007



 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE G HOARDING - SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 4		Scale 1 : 10	Drawing No. 9711/G/S04
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007




 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE G HOARDING - COVERED WALKWAY WITH SINGLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 5		Scale 1 : 10 1 : 5	Drawing No. 9711/G/S05
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007




NOTES:

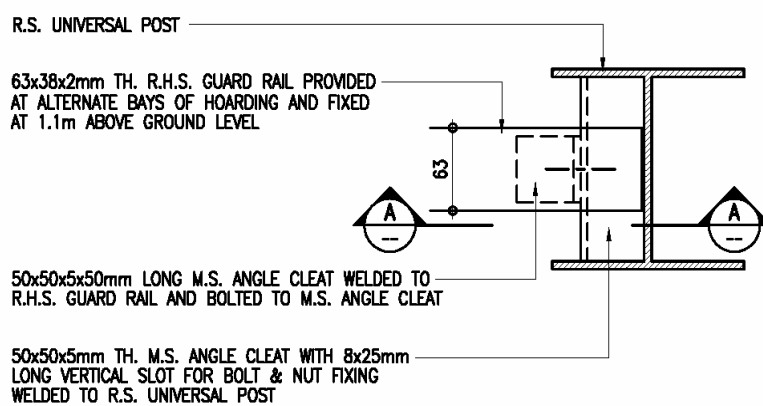
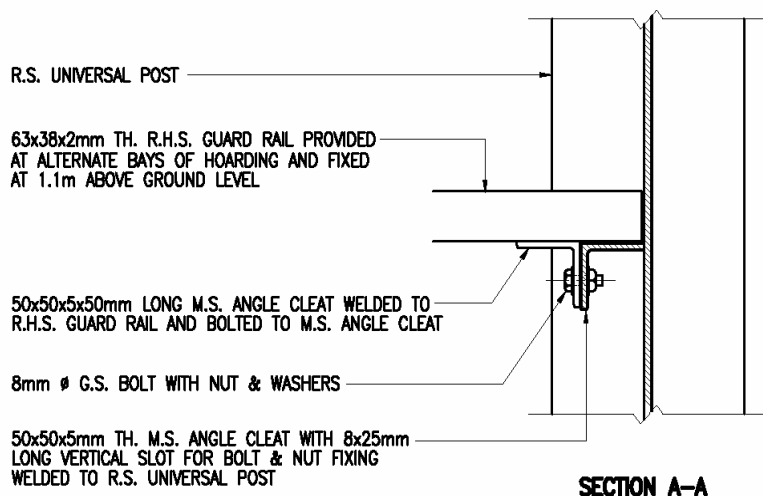
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH STRUCTURAL DRAWINGS NO. 9711/H/S01 TO S05.
2. REFER PT. 3 OF GENERAL NOTES IN DRAWING NO. 9711/H/A02 FOR THE REQUIRED CLEAR WIDTH (W1) OF COVERED WALKWAY.
3. REFER PNAP 71 & 75 OF BUILDINGS DEPARTMENT FOR THE PERMITTED WORKING SPACE (L2). (500mm MAX. FOR DEMOLITION WORKS OR 300mm MAX. FOR OTHER WORKS)
4. MIN. WIDTH OF CATCH PLATFORM (W2) FOR DEMOLITION WORKS = 2000mm-(S) SET BACK OR (L1)+(L2)+D/2, WHICHEVER THE GREATER.

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE H HOARDING- COVERED WALKWAY WITH DOUBLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) GENERAL PLANS	Scale 1 : 100	Drawing No. 9711/H/A01
	Checked by CPM303 C.F. HO <i>AO</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>ML</i>

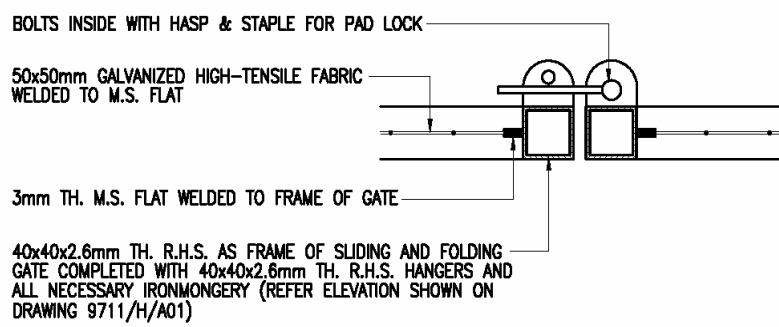
**GENERAL NOTES FOR CONSTRUCTION OF
HOARDINGS, COVERED WALKWAYS, AND ASSOCIATED GANTRIES AND CATCH PLATFORMS:**

1. THE ARCHITECTURAL HOARDING DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE APPROPRIATE STRUCTURAL HOARDING DRAWINGS AS REFERRED ON THE DRAWINGS.
2. IN DETERMINING THE TYPE OF HOARDING/COVERED WALKWAY CONSTRUCTION AND THE ASSOCIATED PROVISIONS TO SUIT THE PURPOSE, REFERENCE AND PROVISIONS SHOULD ALWAYS BE MADE TO MEET THE REQUIREMENTS OF THE CURRENTLY ENFORCED "CODE OF PRACTICE FOR DEMOLITION OF BUILDINGS" AND RELEVANT PNAPS ISSUED BY BUILDINGS DEPARTMENT.
3. A MINIMUM CLEAR WIDTH OF 1.1m AND RAISED FLOOR SHOULD BE PROVIDED FOR HOARDING/COVERED WALKWAY LOCATED ON CARRIAGEWAY. FOR HOARDING/COVERED WALKWAY LOCATED ON FOOTPATH, THE CLEAR WIDTH SHOULD BE RELATED TO THE EXISTING PAVEMENT WIDTH AND BE PROVIDED ACCORDING TO THOSE AS PROMULGATED IN PNAP 75 ISSUED BY THE BUILDINGS DEPARTMENT.
4. A TEMPORARY LIGHTING SYSTEM AS PROMULGATED IN PNAP 75 SHOULD BE PROVIDED FOR ALL COVERED WALKWAYS OF BUILDING SITES.
5. ALL METALWORK REFERRED IN THE DRAWINGS SHOULD COMPLY WITH SECTION 17 OF THE GENERAL SPECIFICATION FOR BUILDING 2007 EDITION OR THEREAFTER.
6. ALL CORRUGATED STEEL SHEET PANELS, CAPPINGS AND TOE SHEETS SHOULD BE OF GALVANIZED STEEL WITH MINIMUM ZINC COATING CONTENT $350\text{g}/\text{m}^2$ WITH TRIPLE-SPOT TEST, AND BE FINISHED ON BOTH SURFACES WITH ONE UNDERCOAT OF "LUXAPRIME 1600 PRIMER" OR EQUIVALENT AND TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
7. ALL EXPOSED SURFACES OF METALWORK SHOULD BE PAINTED IN MID-GREY COLOUR (10 A 07) UNLESS STATED OTHERWISE.
8. ArchSD LOGO SHOULD BE PAINTED AT A 3-BAY INTERVAL. IF THERE ARE OTHER LOGOS TO BE DISPLAYED, THE SPECIFIED LOGO AND THE ArchSD LOGO SHOULD BE PAINTED ALTERNATIVELY AT A 3-BAY INTERVAL.


 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE H HOARDING - COVERED WALKWAY WITH DOUBLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) GENERAL NOTES		Scale NIL	Drawing No. 9711/H/A02
	Checked by CPM303 C.F. HO <i>RJ</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KK</i>	Date 19 Sept. 2007

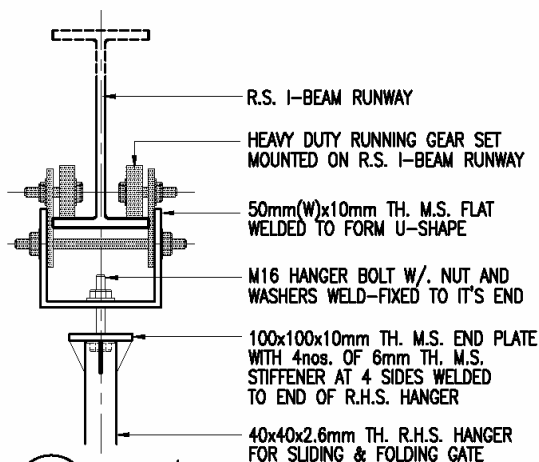


2 FIXING DETAILS OF R.H.S. GUARD RAIL
H/A04 1 : 5



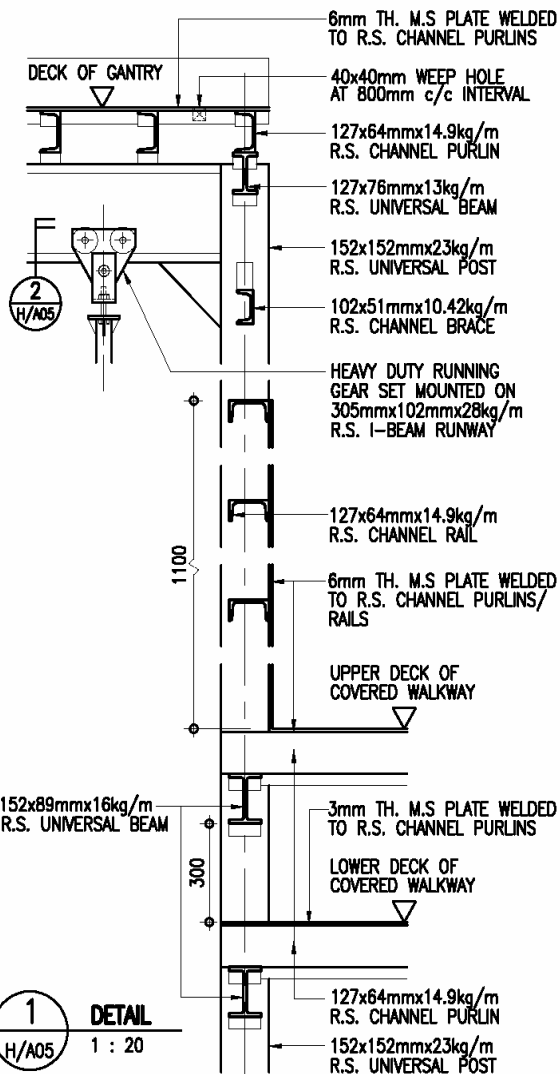
1 DETAILS OF SLIDING AND FOLDING GATE
H/A04 1 : 5

 ARCHITECTURAL SERVICES DEPARTMENT	Title COVERED WALKWAY WITH DOUBLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 2		Scale 1 : 5	Drawing No. 9711/H/A04
	Checked by CPM303 C.F. HO <i>CF</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KL</i>	Date 19 Sept. 2007



* THIS FIXING DETAIL IS FOR REFERENCE ONLY, SAMPLE OF RUNNING GEAR SET AND FIXING METHOD SHOULD BE SUBMITTED FOR APPROVAL BEFORE ORDERING.

2 DETAIL*
H/A05 1 : 10



1 DETAIL
H/A05 1 : 20



ARCHITECTURAL
SERVICES
DEPARTMENT

Title
**TYPE H HOARDING -
COVERED WALKWAY WITH
DOUBLE DECK CATCH PLATFORM
(SURFACE-MOUNTED FOOTING)
CONSTRUCTION DETAILS 3**

Scale
as shown

Drawing No.
9711/H/A05

Checked by
CPM303 C.F. HO

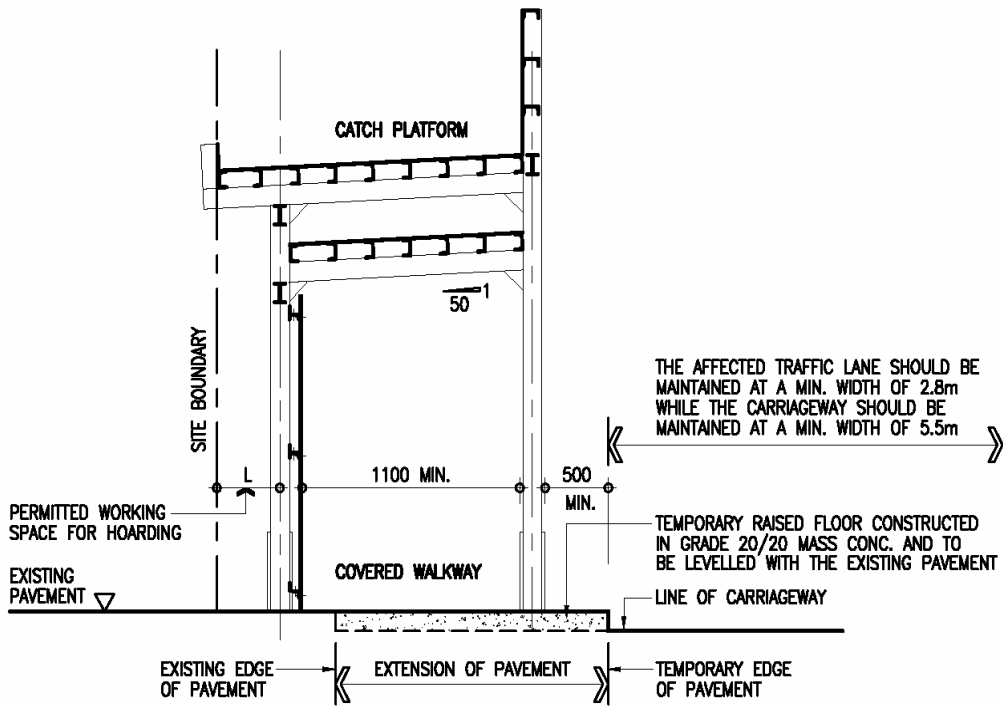
RF

Date
18 Sept. 2007

Approved by
AD(PS) K.K. LEUNG


KL

Date
19 Sept. 2007



TYPICAL DETAILS OF COVERED WALKWAY WITH DOUBLE DECK CATCH PLATFORM HOARDING (SURFACE-MOUNTED FOOTING) SITED ON CARRIAGEWAY/NARROW PAVEMENT

1 : 50

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE H HOARDING - COVERED WALKWAY WITH DOUBLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) CONSTRUCTION DETAILS 5		Scale 1 : 50	Drawing No. 9711/H/A07
	Checked by CPM303 C.F. HO <i>AO</i>	Date 18 Sept. 2007	Approved by AD(PS) K.K. LEUNG <i>KK</i>	Date 19 Sept. 2007



Title
**COVERED WALKWAY WITH
 TYPE H HOARDING -
 DOUBLE DECK CATCH PLATFORM
 (SURFACE-MOUNTED FOOTING)
 STRUCTURAL DETAILS 1**

Scale
 1 : 50

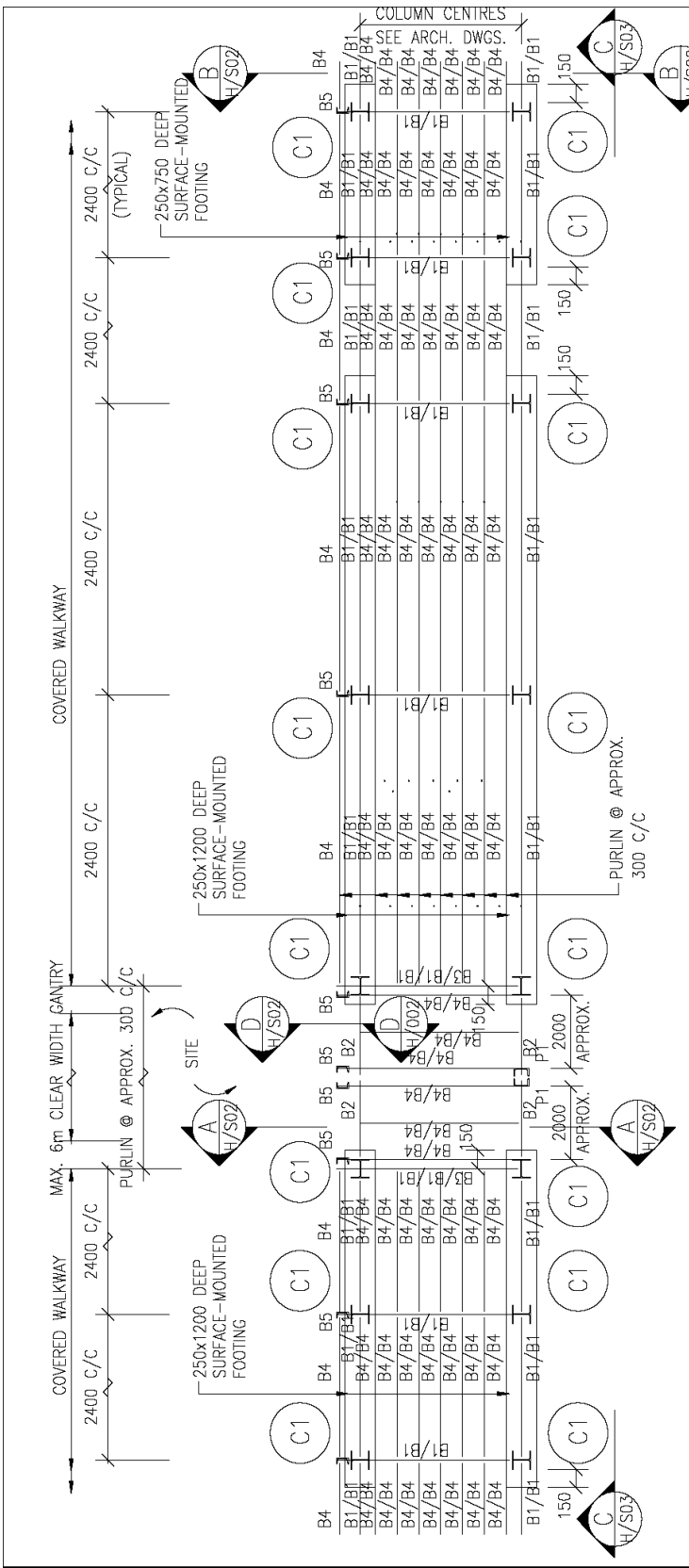
Drawing No.
9711/H/S01

Checked by
 CSE/1 C.T. WONG *C.T. Wong*

Date
 11 Oct. 2007

Approved by
 AD(SE) W.W. LI *W.W. Li*

Date
 11 Oct. 2007



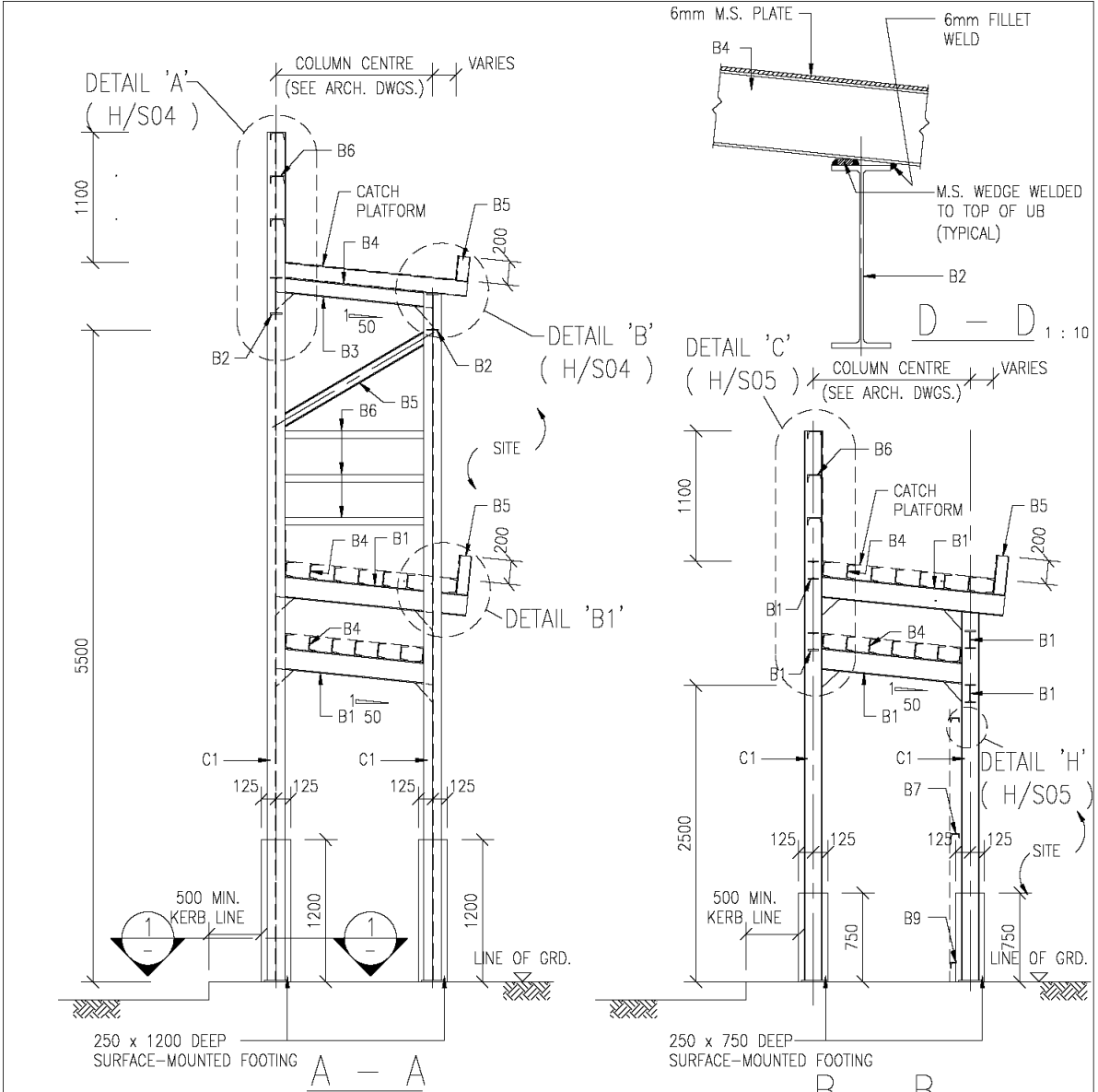
TOP PLAN OF GANTRY AND COVERED WALKWAY

- NOTES :
1. ALL WELDING TO BE 6 mm F.W. ALL ROUND IN ACCORDANCE WITH BS 5135:1984 UNLESS OTHERWISE STATED.
 2. ALL BOLTS TO BE GRADE 4.6 BLACK BOLTS TO BS 4190.
 3. ALL STRUCTURAL SECTIONS SHALL BE WELDABLE STRUCTURAL STEEL OF GRADE S275 UNLESS OTHERWISE SPECIFIED.
 4. THE DETAILS OF GANTRY MAY BE MODIFIED BY PROJECT OFFICER TO SUIT ACTUAL SITE CONDITIONS.
 5. ALL STEEL WORKS SHALL BE MANUALLY CLEANED TO CS CL. 15.61 (3) PRIMED WITH ONE COAT OF OIL BASED ZINC PHOSPHATE PRIMER AND FINISHED WITH TWO FINISHING COATS OF SYNTHETIC PAINT OF ALKYD RESIN BASE.
 6. DESIGN WIND LOAD TO BE 0.67 kPa, i.e. 37% OF DESIGN WIND PRESSURE OF 1.82 kPa.

STEEL MEMBER SCHEDULE

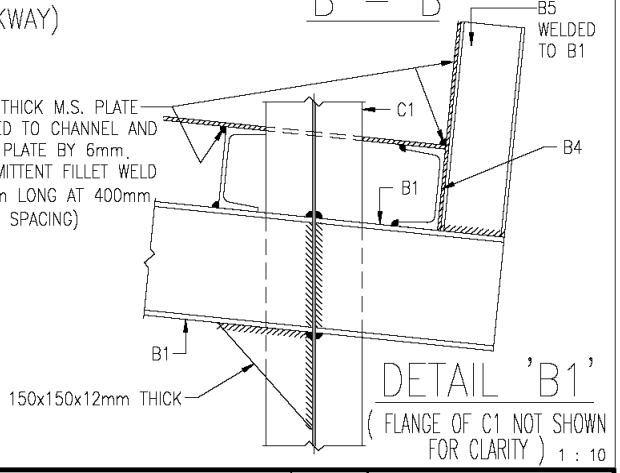
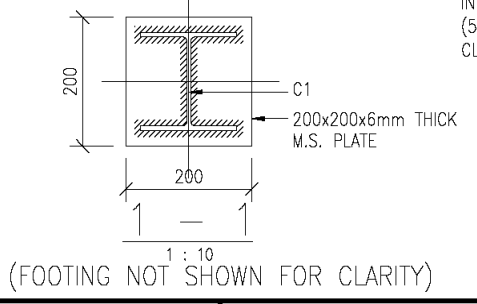
MEMBER MARK	MEMBER SIZE
C1	152 x 152 x 23 UC
B1	152 x 89 x 16 UB
B2	305 x 102 x 28 UB
B3	127 x 76 x 13 UB
B4, B6, P1	127 x 64 x 14.9 CHANNEL
B5	102 x 51 x 10.42 CHANNEL
B7	76 x 38 x 6.7 CHANNEL
B8	70 x 70 x 6 ANGLE
B9	50 x 50 x 5 ANGLE

THE SKETCHES ARE PREPARED TO MEET THE GENERAL REQUIREMENTS AS SPECIFIED IN PNAP224 ISSUED BY BD. SIZES OF FOOTINGS MAY BE MODIFIED BY PSE TO SUIT ACTUAL SITE CONDITIONS.

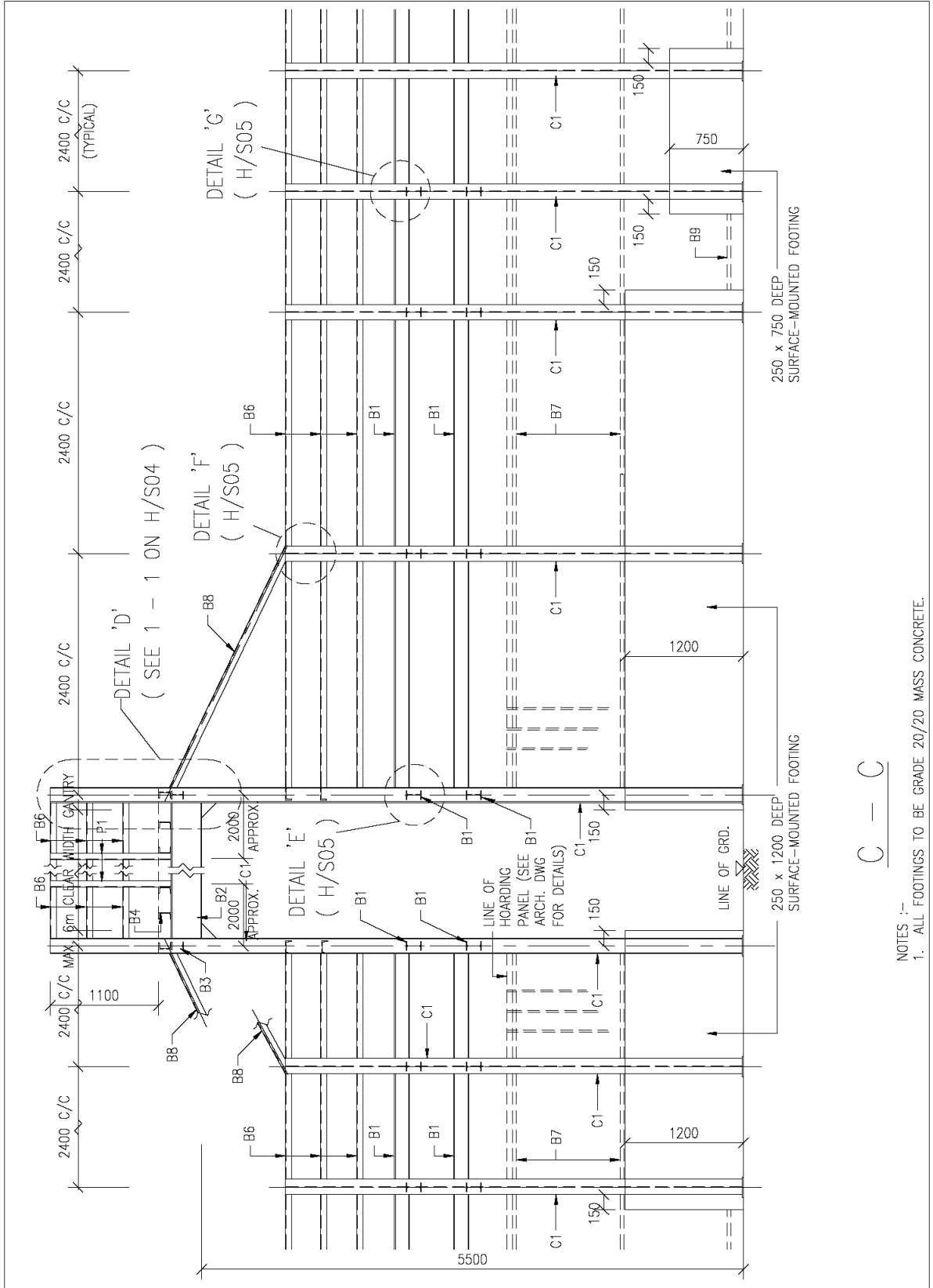


(TYPICAL SECTION OF COVERED WALKWAY)

- NOTES :-
1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.
 2. TO BE USED WHEN PAVEMENT IS CONSTRUCTED WITH CONCRETE, CONCRETE PAVER BLOCK OR TARMAC. CONSULT PSE FOR OTHER SURFACE CONDITIONS ON ITS APPLICABILITY.




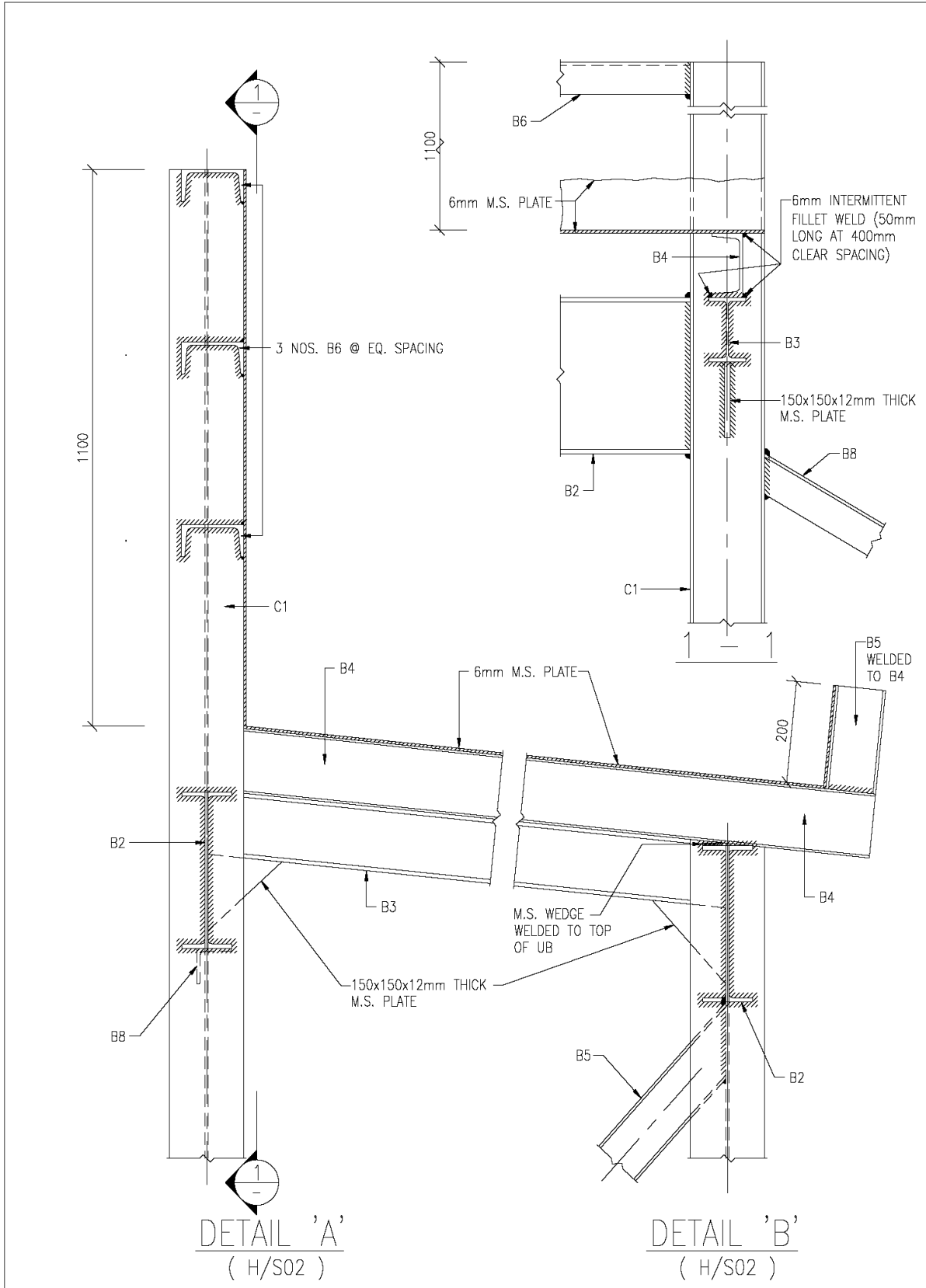
<p>ARCHITECTURAL SERVICES DEPARTMENT</p>	<p>Title COVERED WALKWAY WITH DOUBLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 2</p>		<p>Scale 1 : 50 1 : 10</p>	<p>Drawing No. 9711/H/S02</p>
	<p>Checked by CSE/1 C.T. WONG <i>C.T. Wong</i></p>	<p>Date 11 Oct. 2007</p>	<p>Approved by AD(SE) W.W. LI <i>W.W. Li</i></p>	<p>Date 11 Oct. 2007</p>




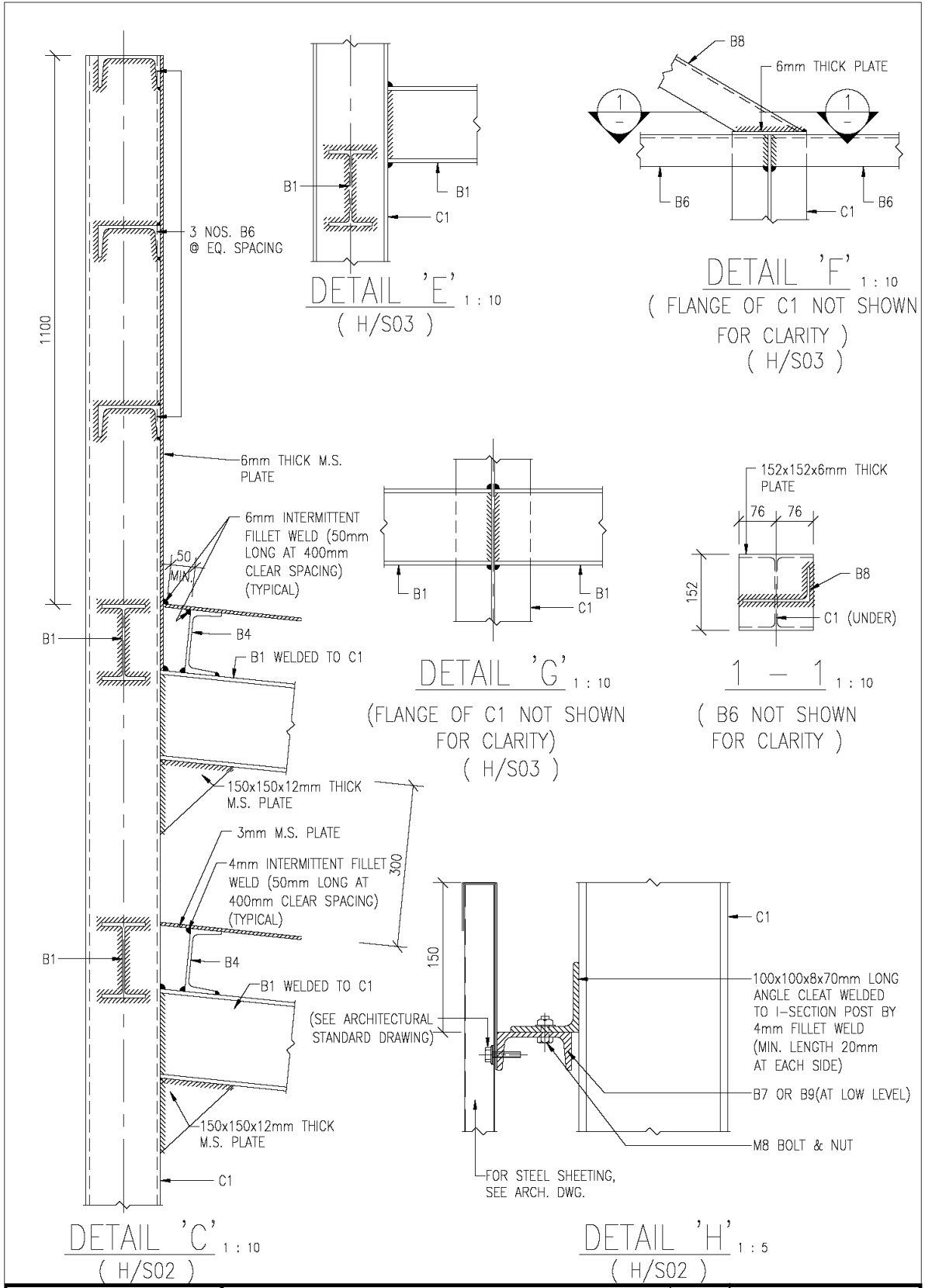
C - C

NOTES :-
 1. ALL FOOTINGS TO BE GRADE 20/20 MASS CONCRETE.

 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE H HOARDING - DOUBLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 3		Scale 1 : 50	Drawing No. 9711/H/S03
	Checked by CSE/1 C.T. WONG <i>Anthony</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007



 ARCHITECTURAL SERVICES DEPARTMENT	Title TYPE H HOARDING - COVERED WALKWAY WITH DOUBLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 4		Scale 1 : 10	Drawing No. 9711/H/S04
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007	Approved by AD(SE) W.W. LI <i>W.W. Li</i>	Date 11 Oct. 2007



ARCHITECTURAL
SERVICES
DEPARTMENT

Title TYPE H HOARDING - DOUBLE DECK CATCH PLATFORM (SURFACE-MOUNTED FOOTING) STRUCTURAL DETAILS 5	Scale 1 : 10 1 : 5	Drawing No. 9711/H/S05
	Checked by CSE/1 C.T. WONG <i>C.T. Wong</i>	Date 11 Oct. 2007
		Date 11 Oct. 2007

Section 11

PLASTERWORK AND OTHER FLOOR,

WALL AND CEILING FINISHES

PLASTERWORK AND OTHER FLOOR, WALL AND CEILING FINISHES

SPECIAL CONDITIONS

Measurement generally	I.	All works shall be measured the net area covered. Unless otherwise stated, no deduction shall be made for voids not exceeding 0.50 m ² , nor for unbracketed cornice, mouldings and the like of any width. Thickness shall be measured from the general face of the surface being covered and exclusive of any grooves, raked out joints or other irregularities.
Measurement of tiling	II.	Notwithstanding definitions of ceramic floor and wall tiles in BS EN 14411 and BS EN ISO 10545 :- (a) Measurement of ceramic tiles shall include porcelain, stoneware or similar tiles. (b) Measurement of quarry tiles shall include ceramic homogeneous, porcelain homogeneous, stoneware homogeneous or similar tiles. (c) Measurement of unglazed tiles shall include engobed, matt, non-slip or similar. (d) Measurement of glazed tiles shall include polished, gloss or similar.
Measurement of mouldings	III.	Mouldings and moulded cornices shall be measured the net length on wall or beam face by the net visible girth.
Measurement of skirting	IV.	Skirting shall be measured the net height above finished floor or paving level. The thickness of skirting shall be measured at the centre point of the height.
Measurement of hack out and replace tile in isolated patches	V.	Each isolated patch is defined as the isolated surface required for tile replacement up to a maximum of 10 number of tiles and area not exceeding 0.50 m ² .
Measurement of suspended ceiling systems	VI.	Suspended ceiling systems shall be measured over the net area covered including air grilles, light fittings, access panels and the like. No deduction shall be made for openings not exceeding 0.50 m ² . Deduction shall be made for areas covered by columns. Sheet metal or wooden bulkheads shall be measured separately and paid for at the appropriate rates under applicable Work Sections in this Schedule.
Measurement of proprietary suspension systems	VII.	Proprietary suspension systems shall be measured over the net area covered including air grilles, light fittings, access panels and the like. No deduction shall be made for openings not exceeding 0.50 m ² . Deduction shall be made for areas covered by columns.
Measurement of raised accessed flooring	VIII.	Raised accessed flooring shall be measured over the net area covered including air grilles, access openings and the like. No deduction shall be made for openings not exceeding 0.50 m ² .

SPECIAL CONDITIONS (CONT'D)

- | | | |
|-----|---|---|
| IX. | The rates shall generally include for any or all of the following as applicable : - | Rates generally |
| | <ul style="list-style-type: none"> (a) Narrow widths and small quantities. (b) Preparation of surfaces to receive the finishing and any necessary dubbing out of irregularities on the surface being covered. (c) Working into channels and recessed covers and working around pipes, metal sections and the like. (d) Laying or executing work in bays or between strips, circular or pattern. (e) Laying level or to slopes and finishing to falls or currents. (f) All temporary formwork or rules. (g) All cutting and wastes, holes, notches, cutting and fitting and making good. (h) Executing internally or externally, working in any position, at any height and on new or existing surfaces including any scaffolding and all temporary works. (i) All quoin points and other intersections of curved surfaces. (j) All making good up to existing finishes, door and window frames, around pipes, brackets and the like, and dishing to outlets. (k) All internal and external angles, fair ends, stopped ends and similar labours. (l) All joints between different types of materials and joints between new and existing surfaces including wire netting as G.S. Item 18.14. (m) Any dressing around pipes passing through roofs as G.S. Item 18.68. (n) Covering up and protecting where necessary. (o) Construction and subsequent demolition of trial panels of finishings. (p) Provision of samples and tests including submission of records and reports. (q) All necessary tests as specified under the Specification and provision of test certificates when required. | |
| X. | The rates for metal lathing and wire netting shall further include for : - | Rates for metal lathing and wire netting |
| | <ul style="list-style-type: none"> (a) Preparing and applying one coat of bituminous paint to cut ends. (b) Fixing to supports with staples or tying wire. (c) Allowing for bending and laps. (d) All circular cutting and waste. | |
| XI. | The rates for screeds, rendering, plastering, granolithic and terrazzo works and any other in-situ finishes shall further include for : - | Rates for screeds and in-situ finishes |
| | <ul style="list-style-type: none"> (a) Spatterdashing, hacking, raking out joints, washing over with cement grout, brushing down, cleaning and all other preparation works required to new or existing surfaces to provide key or bonding. (b) All internal angles, arrises, quirks, throats, drips, rounded angles and coves and similar labours, and forming "V" or square edged grooves in surface when required. (c) Scratching undercoats, and steel trowel, wood float, trowelled stucco, brushed, or combed finish as ordered. (d) All metal beads as G.S. Items 18.25 and 18.53. | |

SPECIAL CONDITIONS (CONT'D)

Rates for proprietary screeds and floor protection system	XII.	The rates for proprietary screeds and floor protection system shall further include for : - (a) Supplying and laying in accordance with the manufacturer's instructions. (b) Cleaning existing surfaces by high pressure water jets. (c) Repairing cracks and applying floor primer or bonding agent. (d) Submission of manufacturer's guarantee.
Rates for acoustic plaster or fire resisting cementitious fireproofing plaster	XIII.	The rates for acoustic plaster or cementitious fireproofing plaster shall further include for : - (a) Application by special spray equipment. (b) Coloured top coat. (c) Supply and spraying in accordance with the manufacturer's recommendations. (d) Submission of manufacturer's guarantee.
Rates for terrazzo	XIV.	The rates for terrazzo shall further include for : - (a) Preparing and applying one coat of wax polish to wall and floor finishes in accordance with G.S. Item 18.83.
Rates for terrazzo tiles	XV.	The rates for terrazzo tiles shall further include for : - (a) Forming rounded, squared or splayed edges as required. (b) Pointing in natural or coloured cement slurry. (c) Preparing and applying one coat of wax polish to wall tiles or two coats non-slip, matt emulsion polish on floor tiles.
Rates for tiling, slabs or paving blocks	XVI.	The rates for tiling, slabs or paving blocks shall further include for : - (a) Special tiles or fittings. In the case of no special tiles or fittings, mitring edges to external corners and the like. (b) All slurry, grout, mortar, tile adhesives and the like of approved type. (c) Pointing joints with natural or coloured cement slurry or cement and sand mortar to match colours of tiles. (d) Pointing and grouting joints in waterproofing slurry or proprietary grouting mortar of approved type as ordered. (e) Cutting and laying or fixing to patterns including graphics. (f) Unless otherwise stated, tiles of any configuration or dimension. (g) Unless otherwise stated, any type of finish, likewise, matt, non-slip or polished finishes. (h) Submission of technical literature and samples.

SPECIAL CONDITIONS (CONT'D)

- | | | |
|--------|--|--|
| XVII. | The rates for "Extra over" for rounded edge tiles, skirting tiles and the like shall further include for : - | Rates for
"Extra over"
for rounded
edge tiles,
skirting tiles
and the like |
| | (a) All internal and external corner tiles, corner end tiles and the like. | |
| XVIII. | The rates for flexible tiles and sheet finishes, or rubber tiles and sheet finishes shall further include for : - | Rates for flexible
tiles and sheet
finishes, or rubber
tiles and sheet
finishes |
| | (a) Providing and laying tiles or sheets with adhesives in accordance with the manufacturer's instructions. | |
| | (b) Laying tiles or sheets in plain or pattern including graphics. | |
| | (c) Preheating process with preheating tools as required. | |
| | (d) Any welding joints between sheets including P.V.C. welding rods as required. | |
| | (e) Treating surfaces of tiles or sheets as G.S. Item 18.125. | |
| | (f) Execution by approved specialist contractor. | |
| XIX. | The rates for pavers shall include for : - | Rates for pavers |
| | (a) Excavation to reduced level or filling to make up levels, compacting bottom properly to receive granular sub-base. | |
| | (b) Grading, measuring, mixing, transporting, depositing, spreading, levelling and compacting granular sub-base. | |
| | (c) Sand filling, mortar bedding and the like. | |
| | (d) Cutting and making good at boundaries, manholes and the like. | |
| | (e) Laying at any designated pattern or design as specified by the Maintenance Surveyor using multi-coloured paving slabs and paving blocks as required. | |
| | (f) Use of recycled aggregate as specified in the G.S. Items 6.42 (xiii) and 8.22 for designed concrete mixes and prescribed concrete mixes respectively, when required. | |

SPECIAL CONDITIONS (CONT'D)

- | | | |
|--|-------|--|
| Rates for stone or marble slabs / tiles and resin stone slabs | XX. | <p>The rates for stone or marble slabs/tiles and resin stone slabs shall further include for : -</p> <ul style="list-style-type: none"> (a) Forming rounded, squared or splayed edges as required. (b) Pointing in natural or coloured cement slurry. (c) Preparing and applying one coat of wax polish to wall slabs or two coats non-slip, matt emulsion polish on floor slabs. (d) Providing and fixing copper cramps and "S" hooks as G.S. Item 18.111 or stainless steel fixing as ordered. (e) Laying level or to slopes and finishing to falls, or falls and currents. (f) Preparing surfaces ready to receive cement and sand bedding or sand bedding to receive stone paving or slabs. (g) All joints between different types of materials and joints between new and existing materials. (h) Flushing up around pipes, floor drains, outlets and the like. (i) Covering up and protecting. (j) Submission of design and calculations endorsed by Registered Structural Engineer for fixing of stone or marble slabs and resin stone slabs to vertical or sloping surfaces. (k) Unless otherwise stated, natural stone or marble are of origin from China or Asian countries (other than Japan). |
| Rates for division strips | XXI. | <p>The rates for division strips, cover angles, strips at expansion joints etc. to finishes and pavings shall include for cutting to required lengths, splay cut ends, drilling, fixing with brass or stainless steel screws or the like and for countersinking the heads of all exposed screws.</p> |
| Rates for suspended ceiling systems | XXII. | <p>The rates for suspended ceiling systems shall include for : -</p> <ul style="list-style-type: none"> (a) Design and install complete with necessary linings and including the whole suspension systems (i.e. suspension framing, edge trims, runners, hangers and the like and fixing to concrete soffits and the like). (b) Edge trims at junction with bulkheads. (c) All cutting and narrow widths. (d) Unless otherwise stated, any drop length from soffits. (e) Forming openings and trimming around pipes, conduits, power points and the like and including extra supports and trimmers for same. (f) Trimming around sprinkler and detector heads, air grilles, light fittings, access panels and the like and including extra supports and trimmers for same. (g) Additional framing and supports etc. to bridge across ducts and the like. (h) Submission of catalogues, technical literature, data and the like documentation covering the systems. (i) Submission of design drawings, working details and shop drawings for Maintenance Surveyor's approval prior to commencement of installation. (j) Submission of test certificates and manufacturer's guarantee. |

SPECIAL CONDITIONS (CONT'D)

- XXIII. The rates for "Extra over" for forming openings shall further include for : -
- (a) Additional trimmer/suspension, stiffening plates, brackets, etc.
 - (b) Sealing edges.
- XXIV. The rates for raised accessed flooring shall further include for : -
- (a) Design, supply and installation in accordance with the manufacturer's instructions.
 - (b) Additional supports and framing for cut panels.
 - (c) All air grilles, skirting trims, integral fittings and the like.
 - (d) Forming openings for power points, trunking and other building services installations including sealing edges.
 - (e) Providing and laying insulation under floor as required.
 - (f) All preparation works, cleaning and protection of completed works.
 - (g) Submission of design drawings, working details and shop drawings for Maintenance Surveyor's approval prior to commencement of installation.
 - (h) Submission of test certificate, manual and manufacturer's guarantee.
- XXV. The rates for taking down existing plaster, paving, tiling, etc., shall include for : -
- (a) Cutting back edges of the retaining work.
 - (b) Cutting and clearing away steel lathing of wire netting as required.
 - (c) Making good adjoining surfaces disturbed in the taking down process.
 - (d) Preparing joints for new work.
 - (e) Preparing surfaces to receive new finish.
- XXVI. G.S. clauses for suspended ceiling systems can be found in the Carpentry and Joinery Section of the General Specification for Building.

**Rates for
"Extra over" for
forming openings**

**Rates for
raised accessed
flooring**

**Rates for taking
down existing
finishes**

**G.S. clauses
for suspended
ceiling systems**

Item	METAL LATHING AND NETTING				Item																																	
			<table border="1"> <thead> <tr> <th colspan="3">Supply and fix</th> </tr> <tr> <th>Plain expanded type 1.6kg/m²</th> <th>Ribbed expanded type 2.25kg/m²</th> <th>Wire netting 0.9 mm dia. x 50 mm mesh</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>			Supply and fix			Plain expanded type 1.6kg/m ²	Ribbed expanded type 2.25kg/m ²	Wire netting 0.9 mm dia. x 50 mm mesh	A	B	C	\$	\$	\$																					
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A	B	C																																				
\$	\$	\$																																				
	<i>Per square metre</i>																																					
11001	Vertical or horizontal surfaces.....	38.90	48.60	21.40	11001																																	
11002	Soffits or sloping soffits including beams and the like.....	40.70	50.80	22.40	11002																																	
	SAND BEDDING		<table border="1"> <thead> <tr> <th colspan="2">Thickness (mm)</th> </tr> <tr> <th>25</th> <th>50</th> </tr> <tr> <th>A</th> <th>B</th> </tr> <tr> <th>\$</th> <th>\$</th> </tr> </thead> </table>		Thickness (mm)		25	50	A	B	\$	\$																										
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A	B																																					
\$	\$																																					
	<i>Per square metre</i>																																					
11003	Sand bedding to receive paving slab or block, pavers, etc.....		20.00	28.70	11003																																	
	LIGHTWEIGHT FLOOR AND ROOF SCREEDS		<table border="1"> <thead> <tr> <th colspan="5">Thickness (mm)</th> </tr> <tr> <th>40</th> <th>50</th> <th>65</th> <th>75</th> <th></th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th></th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th></th> </tr> </thead> </table>				Thickness (mm)					40	50	65	75		A	B	C	D		\$	\$	\$	\$													
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40	50	65	75																																			
A	B	C	D																																			
\$	\$	\$	\$																																			
	<i>Per square metre</i>																																					
11004	Cement and vermiculite (1:8 by volume) roofing screed.....	109.20	123.70	176.00	200.50	11004																																
11005	Cement and vermiculite (1:6 by volume) floor screed	106.80	133.50	172.10	195.90	11005																																
11006	Air entrained screed having a dry density of not more than 1,200 kg/m ³	121.50	151.80	195.90	223.40	11006																																
	CEMENT PAVING, FLOOR SCREEDS, ETC.		<table border="1"> <thead> <tr> <th colspan="6">Cement and sand (1:3) or cement and granite fines (1:3)</th> </tr> <tr> <th colspan="6">Thickness (mm)</th> </tr> <tr> <th>15</th> <th>20</th> <th>25</th> <th>30</th> <th>40</th> <th></th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th></th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th></th> </tr> </thead> </table>					Cement and sand (1:3) or cement and granite fines (1:3)						Thickness (mm)						15	20	25	30	40		A	B	C	D	E		\$	\$	\$	\$	\$		
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15	20	25	30	40																																		
A	B	C	D	E																																		
\$	\$	\$	\$	\$																																		
	<i>Per square metre</i>																																					
11007	Paving or floor screeds.....	37.70	41.70	45.80	49.80	58.00	11007																															
11008	Paving or screed to treads and risers, strings, sides and top of upstand kerbs, sides and bottom of channels and sinkings and the like	53.70	57.40	63.10	66.80	76.20	11008																															
11009	Extra over Items 11007 to 11008 inclusive for approved admixture of hardener and/or dust proofer.....	22.50	27.90	33.30	38.70	49.50	11009																															
11010	Extra over Items 11007 to 11008 inclusive for approved admixture of waterproofing.....	6.80	7.40	9.20	9.80	12.20	11010																															
11011	Extra over Items 11007 to 11008 inclusive for approved colour cement or pigments.....	6.40	8.30	9.70	11.60	14.90	11011																															

Item	CEMENT PAVING, FLOORS SCREEDS, ETC. (CONT'D)			Item					
		Cement, sand or granite fines and coarse aggregate Grade 10 (1:1.5:3)							
		Thickness (mm)							
		50	60						
		A	B						
		\$	\$						
	<i>Per square metre</i>								
11012	Paving or floor screeds.....	65.10	74.90	11012					
11013	Paving or screed to treads and risers, strings, sides and top of upstand kerbs, sides and bottom of channels and sinkings and the like.....	74.20	85.50	11013					
11014	Extra over Items 11012 to 11013 inclusive for approved admixture of hardener and/or dust proofer.....	40.00	51.90	11014					
11015	Extra over Items 11012 to 11013 inclusive for approved admixture of waterproofing.....	16.20	21.00	11015					
11016	Extra over Items 11012 to 11013 inclusive for approved coloured cement or pigments.....	14.20	17.10	11016					
		Cement and sand (1:4) or cement and granite fines (1:4)							
		Thickness (mm)							
		15	20	25	30	40	50	65	
		A	B	C	D	E	F	G	
		\$	\$	\$	\$	\$	\$	\$	
	<i>Per square metre</i>								
11017	Floor screeds.....	35.30	39.00	43.70	47.60	55.70	64.10	75.80	11017
11018	Screed to treads and risers, strings, sides and top of upstand kerbs, sides and bottom of channels and sinkings and the like.....	38.30	42.30	47.20	51.30	60.50	70.40	82.80	11018
		ROOF SCREEDS							
		<i>Per square metre</i>							
11019	Screed on roofs.....	38.30	42.20	47.20	51.30	60.50	70.40	82.90	11019
11020	Screed to treads and risers, strings, sides and top of upstand kerbs, sides and bottom of channels and sinkings and the like.....	41.60	45.80	50.90	55.40	65.00	75.50	88.60	11020
		LEVELLING SKIM COAT							
		<i>Per square metre</i>							
11021	Prepare existing surface and apply resin based gypsum and cement skim coat of any thickness to level up floor before receiving rubber and vinyl floor tiles, sheets or carpet (measured separately)							A \$ 21.60	11021

Item	PROPRIETARY PAVING SYSTEM	Average thickness (mm)			Item
		10	12	15	
		A \$	B \$	C \$	
	<i>Per square metre</i>				
11022	Proprietary light duty self-levelling floor screed.....	157.50	179.50	212.60	11022
11023	Proprietary medium duty self-levelling floor screed.....	184.90	210.60	249.20	11023
11024	Proprietary heavy duty self-levelling floor screed.....	279.90	319.10	377.90	11024
11025	Proprietary super duty self-levelling floor screed.....	315.30	352.00	421.20	11025
11026	Proprietary light duty floor screed (with laying to fall property).....	162.20	184.30	217.40	11026
11027	Proprietary medium duty floor screed (ditto).....	190.50	216.20	254.80	11027
11028	Proprietary heavy duty floor screed (ditto).....	288.30	327.50	386.30	11028
11029	Proprietary super duty floor screed (ditto).....	318.30	362.30	421.50	11029
	<i>Per square metre</i>			A \$	
11030	Heavy duty mechanical scrubbling to existing surface			25.40	11030
	<i>Per linear metre</i>				
11031	Point movement joint with rubber granular based material and binder			19.00	11031
	PROPRIETARY SCREEDS AND FLOOR PROTECTION SYSTEM			Supply and fix	
	<i>Per square metre</i>			A \$	
11032	Proprietary floor protection coating and sealer system to concrete or rendered surface, clear colour to floor in accordance with the manufacturer's instructions. The system shall increase the abrasion resistance of the floor surface by minimum of 400% and also provide chemical resistance and dusting prevention. The system shall include (1) penetration treatment with water based liquid comprising blend of metallic silico fluorides with absorption and penetration agent, and (2) a final protection top coat.....			77.00	11032
11033	Ditto but of coloured floor protection coating and sealer system.....			158.40	11033
	(Note : - The above Items 11032 to 11033 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)				
	Proprietary waterproof protective screeding including mixing of 1 part of proprietary waterproofing and bonding styrene butadiene liquid additive, 1 part of water, 1 part of cement and 2 parts of sands including bond coat/primer all in strict accordance with manufacturer's instructions, and wood floated or steel trowelled as required.				
	<i>Per square metre</i>				
11034	20 mm Thick on floors			100.70	11034
11035	Add to Item 11034 for each additional 5 mm or part thereof in thickness			15.80	11035
11036	10 mm Thick on walls, columns, vertical surfaces or top of benchings			72.60	11036
11037	Add to Item 11036 for each additional 5 mm or part thereof in thickness			12.90	11037

Item	CEMENT RENDERING OR BACKING SCREEDS (CONT'D)					Item
		Cement and sand (1:4) or cement and granite fines (1:4)				
		Thickness (mm)				
		10	15	20	25	
		A	B	C	D	
		\$	\$	\$	\$	
11049	On surfaces between grounds to receive fitments (no deduction for grounds).....	34.40	38.30	42.20	47.10	11049
	INTERNAL LIME PLASTER					
		5 mm first coat	10 mm first coat	5 mm finish- ing coat	Two coats	
		A	B	C	D	
		\$	\$	\$	\$	
11050	On walls, columns or vertical surfaces	-	31.20	28.50	59.70	11050
11051	On soffits or sloping soffits including beams and the like	31.00	-	36.30	67.30	11051
	GYPSUM PLASTER					
	Mix of first coat : Browning plaster and sand (1:2) or cement and sand (1:3). Finishing coat as G.S. Item 18.49 (ii) with smooth finish 5 mm maximum.	Thickness (mm)				
		5	10	13		
		A	B	C		
		\$	\$	\$		
11052	On walls, columns or vertical surfaces	-	54.20	-		11052
11053	On soffits or sloping soffits including beams and the like surfaces.....	-	62.20	-		11053
11054	On walls, columns or vertical surfaces of expanded metal lathing (measured separately).....	-	-	57.50		11054
11055	On soffits or sloping soffits including beams and the like, surfaces of expanded metal lathing (measured separately).....	-	-	66.20		11055
11056	On walls, columns or vertical plasterboard surfaces	45.10	-	-		11056
11057	On soffits or sloping soffits including beams and the like, plasterboard surfaces.....	53.50	-	-		11057
	MOULDING AND MOULDED CORNICES					
	Lime putty and paper pulp or Plaster of Paris (1:1) moulding and moulded cornices on and including rough plaster backing, all necessary bracketing, lathing, dubbing out, moulds, mitres, stops and the like, and finishing true to details : -	Girth (mm)				
		N.e. 75	75 - 150	150 - 225	225 - 300	
		A	B	C	D	
		\$	\$	\$	\$	
11058	Moulding or moulded cornice	33.30	43.90	58.70	74.80	11058
11059	Ditto but circular on plan to radius n.e. 7.50 m	49.10	63.10	85.80	106.60	11059
11060	"Enriched" moulding or moulded cornice	36.30	48.70	64.90	82.70	11060
11061	Ditto but circular on plan to radius n.e. 7.50 m	53.80	69.30	94.00	118.80	11061
11062	Preformed cornices.....	84.30	95.00	106.10	116.40	11062
11063	Ditto but circular on plan to radius n.e. 7.50 m.....	95.40	107.50	121.80	134.00	11063

Item	PROPRIETARY ACOUSTIC AND CEMENTITIOUS FIREPROOFING PLASTER	Item																
	(Note : - The following items 11064 to 11067 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)																	
	Prepare and apply proprietary acoustic plaster in accordance with G.S. Items 18.35 and 18.56 and the minimum thickness and coats as recommended by the manufacturer : -	A \$																
	<i>Per square metre</i>																	
11064	On walls, columns, vertical surfaces, soffits or sloping soffits including beams and the like	130.20																
	Prepare and spray proprietary cementitious fireproofing plaster on the following structural steel surfaces in accordance with manufacturer's recommendation : -																	
	<i>Per square metre</i>																	
		<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="3">Fire rated period</th> </tr> <tr> <th>1 hour</th> <th>2 hours</th> <th>4 hours</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> </tbody> </table>	Fire rated period			1 hour	2 hours	4 hours	A	B	C	\$	\$	\$				
Fire rated period																		
1 hour	2 hours	4 hours																
A	B	C																
\$	\$	\$																
11065	Interior concealed structural steel surfaces with spray-texture finish.....	221.90 314.30 525.10																
11066	Interior exposed structural steel surfaces with spray-texture or trowelled smooth finish.....	377.50 469.20 684.20																
11067	Exterior exposed structural steel surfaces with spray-texture or trowelled smooth finish.....	627.90 782.70 1,041.40																
	EXTERNAL RENDERING																	
		<table border="1" style="width: 100%;"> <thead> <tr> <th></th> <th>First coat</th> <th>Finish-ing coat</th> <th>Two coats rendering</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Thickness (mm)</td> <td style="text-align: center;">10</td> <td style="text-align: center;">10</td> <td style="text-align: center;">20</td> </tr> <tr> <td></td> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> </tr> <tr> <td></td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> </tbody> </table>		First coat	Finish-ing coat	Two coats rendering	Thickness (mm)	10	10	20		A	B	C		\$	\$	\$
	First coat	Finish-ing coat	Two coats rendering															
Thickness (mm)	10	10	20															
	A	B	C															
	\$	\$	\$															
	<i>Per square metre</i>																	
11068	On walls, columns or vertical surfaces	37.70 46.90 84.50																
11069	On soffits or sloping soffits including beams and the like	45.40 50.90 96.40																
	EXPOSED AGGREGATE RENDERING (SHANGHAI PLASTER)																	
	Exposed aggregate rendering applied in two coats as G.S. Item 18.55 : -																	
	<i>Per square metre</i>																	
		<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="3">20 mm Thick</th> </tr> <tr> <th colspan="3">Colour</th> </tr> <tr> <th>Dark</th> <th>Medium</th> <th>White</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> </tbody> </table>	20 mm Thick			Colour			Dark	Medium	White	A	B	C	\$	\$	\$	
20 mm Thick																		
Colour																		
Dark	Medium	White																
A	B	C																
\$	\$	\$																
11070	On walls, columns or vertical surfaces	100.20 102.90 115.50																
11071	On soffits or sloping soffits including beams and the like.....	108.30 110.80 123.50																

Item	GRANOLITHIC FINISH					Item
	Granolithic paving, etc., of the mix and finish required :-	Mix A (Trowelled)		Mix B (Trowelled)		
		Thickness (mm)		Thickness (mm)		
		15	20	15	20	
	<i>Per square metre</i>	A	B	C	D	
		\$	\$	\$	\$	
11072	On floors.....	63.90	74.90	71.90	85.90	11072
11073	To treads and risers, ends of stairs, sides and top of upstand kerbs, sides and bottom of channels and sinkings, tops, sides, soffits and edges of shelves, working slabs and the like.....	71.80	83.10	79.70	92.80	11073
11074	On walls, columns or vertical surfaces.....	-	79.10	-	89.00	11074
11075	Add to either of Items 11072 to 11074 inclusive for rubbed finish	50.10	50.10	50.10	50.10	11075
11076	Extra over either of Items 11072 to 11074 inclusive for paving hardened with approved liquid hardener and/or dust proofer.....	14.20	18.50	14.20	18.50	11076
11077	Extra over either of Items 11072 to 11074 inclusive for approved coloured cement or pigments.....	7.60	9.90	7.60	9.90	11077
	Granolithic paving, etc., of the mix and finish required :-	Mix C (Washed)		Mix D (Washed)		
		Thickness (mm)		Thickness (mm)		
		15	20	15	20	
	<i>Per square metre</i>	A	B	C	D	
		\$	\$	\$	\$	
11078	On floors.....	83.70	96.80	92.60	108.10	11078
11079	To treads and risers, ends of stairs, sides and top of upstand kerbs, sides and bottom of channels and sinkings, tops, sides, soffits and edges of shelves, working slabs and the like	94.10	107.70	103.80	119.70	11079
11080	On walls, columns or vertical surfaces.....	-	102.40	-	114.00	11080
11081	Extra over either of Items 11078 to 11080 inclusive for paving hardened with approved liquid hardener and/or dust proofer.....	14.00	18.40	14.00	18.40	11081
11082	Extra over either of Items 11078 to 11080 inclusive for approved coloured cement or pigments.....	8.90	11.10	8.90	11.10	11082

Item	GRANOLITHIC FINISH (CONT'D)								Item				
	Granolithic paving, etc., of the mix and finish required :-												
	20 mm Thick				25 mm Thick								
	Height (mm)				Height (mm)								
	N.e. 75	75 - 150	150 - 225	225 - 300	N.e. 75	75 - 150	150 - 225	225 - 300					
	A	B	C	D	E	F	G	H					
	\$	\$	\$	\$	\$	\$	\$	\$					
11083	<i>Per linear metre</i>												
	Granolithic Mix A skirting with splayed, rounded or rebated top edge, and square, splayed or coved bottom trowelled finish.....	9.90	20.50	30.30	40.80	10.50	21.70	34.10	46.70	11083			
11084	Granolithic Mix B ditto	10.60	21.30	32.00	43.70	11.00	24.80	36.40	50.10	11084			
11085	Add to either of Items 11083 to 11084 inclusive for rubbed finish	3.80	7.70	11.70	15.20	3.70	7.60	11.40	15.20	11085			
11086	Granolithic Mix C skirting with splayed, rounded or rebated top edge, and square, splayed or coved bottom washed finish.....	12.90	27.50	40.80	56.50	13.90	30.30	45.70	63.00	11086			
11087	Granolithic Mix D ditto.....	13.30	28.20	41.40	60.00	14.40	31.90	48.40	66.20	11087			
11088	Add to either of Items 11083 to 11084 inclusive and Items 11086 to 11087 inclusive for labour forming open string or stepped wall string at side of stairs	1.40	2.60	3.80	5.20	1.40	2.60	3.70	5.30	11088			
11089	Add to either of Items 11083 to 11084 inclusive and Items 11086 to 11087 inclusive for full thickness in coloured cement or pigments	0.70	1.80	2.80	3.80	0.90	1.90	3.20	4.40	11089			
	Mix A and B				Mix C and D								
	Height (mm)				Height (mm)								
	N.e. 75	75 - 150	150 - 225	225 - 300	N.e. 75	75 - 150	150 - 225	225 - 300					
	A	B	C	D	E	F	G	H					
	\$	\$	\$	\$	\$	\$	\$	\$					
11090	<i>Per linear metre</i>												
	Add to skirting of any thickness if executed in two coats with finishing coat 10 mm thick mixed with coloured cement or pigments.....	0.50	1.10	1.60	2.30	0.50	1.10	1.70	2.50	11090			
	TERRAZZO WORK												
				Type A (white or coloured cement)			Type B (white or coloured cement)			Type C (white or coloured cement)			
				A			B			C			
				\$			\$			\$			
11091	25 mm Thick on floors			136.60			136.30			136.00			11091
11092	25 mm Thick on treads of stairs			142.50			142.50			142.50			11092
11093	15 mm Thick to risers and ends of stair, sides and top of upstand kerbs, sides and bottom of channels and sinkings, and the like			144.60			144.40			144.10			11093
11094	20 mm Thick on walls, columns or vertical surfaces including 1 coat of wax polish on finished surface.....			167.70			167.10			166.70			11094
11095	15 mm Thick to tops, sides, soffits and edges of shelves, working slabs, sinks, cills and the like			147.80			147.40			147.00			11095

Item	TERRAZZO WORK (CONT'D)				Item	
		Type A (white or coloured cement)	Type B (white or coloured cement)	Type C (white or coloured cement)		
	<i>Per linear metre</i>	A \$	B \$	C \$		
11096	20 mm Thick skirting n.e. 75 mm high with splayed, rounded or rebated top edge, and square, splayed or coved bottom including 1 coat of wax polish on finished surface.....	14.90	14.90	14.90	11096	
11097	Ditto but 75 - 150 mm high	32.30	32.20	32.20	11097	
11098	Ditto but 150 - 225 mm high	56.10	56.10	55.90	11098	
11099	Ditto but 225 - 300 mm high.....	77.20	77.20	76.90	11099	
	Add to either of Items 11096 to 11099 inclusive for labour forming open string or stepped wall string at side of stairs	20%	20%	20%		
CERAMIC AND QUARRY FLOOR TILES, SKIRTINGS, ETC.						
Ceramic floor tiles, quarry floor tiles, skirtings etc. to BS EN 14411 and BS EN ISO 10545 in any colour and size :-						
		Ceramic tiles				Quarry tiles
		glazed		unglazed		
		Thickness (mm)		Thickness (mm)		Thickness (mm)
		N.e. 9.5	exceed- ing 9.5	N.e. 9.5	exceed- ing 9.5	N.e. 9.5
		A \$	B \$	C \$	D \$	E \$
11100	Tiling on floor.....	210.60	233.80	188.20	203.00	210.60
11101	Ditto but to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like	228.90	253.70	207.60	221.50	228.90
11102	Extra over Items 11100 to 11101 inclusive for slip resistant tiles satisfying the standard as set out in DIN 51130 and DIN 51097	10.10	10.10	10.10	10.10	20.10
		<i>Per linear metre</i>				
11103	Extra over Item 11101 for stair tread tile.....	9.20	10.70	7.80	8.50	8.40
11104	Skirting 100 mm high with rounded top edges and coved bottom.....	60.00	66.30	54.00	60.20	62.00
11105	Ditto but 150 mm high.....	75.40	83.60	67.30	75.70	77.40
11106	Ditto but 200 mm high.....	96.80	105.20	86.70	95.20	100.50
	Add to either of Items 11104 to 11106 inclusive for labour forming open string or stepped wall string at side of stairs.....	20%	20%	20%	20%	20%
		<i>Per square metre</i>				
11107	Lay only tiling on floors.....	83.40	93.60	84.70	80.90	83.40
11108	Lay only tiling to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like.....	91.00	101.20	82.20	88.50	91.00
11109	Rake out joints between tiles and point in natural or coloured cement and sand mortar on existing tiled surface.....	38.00	38.90	38.00	38.90	38.00
11110	Hack out and replace tiling on floor in isolated patches and point to match existing.....	221.40	244.20	201.60	214.40	221.40
	Add to either of Items 11100 to 11101 inclusive, Items 11104 to 11106 inclusive and Item 11110 for floor tiles of specific quality.....					20%

Item	CONCRETE FLOOR TILING				Item	
	Concrete floor tiles to BS 1197 in any colour and size :-					
		30 mm thick (maximum)				
	Finish	Concrete		Granolithic		
	Tile Size	N.e. 0.05 m ²	Exceeding 0.05 m ²	N.e. 0.05 m ²	Exceeding 0.05 m ²	
		A	B	C	D	
		\$	\$	\$	\$	
11111	Tiling on floor.....	152.90	109.40	245.30	209.60	11111
11112	Tiling to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like	161.90	116.10	254.90	214.60	11112
	<i>Per linear metre</i>					
11113	Extra over for tile with rounded edge.....	11.90	16.70	9.80	12.00	11113
11114	Skirting 100 mm high with rounded top edges and coved bottom.....	42.50	45.30	56.70	60.40	11114
11115	Ditto but 150 mm high.....	61.10	64.70	82.50	87.80	11115
11116	Ditto but 200 mm high.....	78.60	81.70	105.60	110.90	11116
	Add to either of Items 11114 to 11116 inclusive for labour forming open string or stepped wall string at side of stairs.....	20%	20%	20%	20%	
	<i>Per square metre</i>					
11117	Lay only tiling on floors.....	57.40	40.90	57.40	40.90	11117
11118	Lay only tiling to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like	65.00	46.00	65.00	46.00	11118
	TERRAZZO FLOOR TILES					
	Terrazzo floor tiles to BS EN 13748 in any size, colour and surface finish :-					
		Thickness (mm)				
		20	30			
		A	B			
		\$	\$			
11119	Tiling on floor.....		203.70	229.80		11119
11120	Tiling to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like		212.50	242.00		11120
	<i>Per linear metre</i>					
11121	Extra over Item 11120 for stair tread tile.....		29.30	30.90		11121
11122	Skirting 100 mm high with rounded top edges and coved bottom.....		53.20	59.40		11122
11123	Ditto but 150 mm high.....		68.70	76.30		11123
11124	Ditto but 200 mm high.....		86.70	94.70		11124
	Add to either of Items 11122 to 11124 inclusive for labour forming open string or stepped wall string at side of stairs.....		20%	20%		

Item	TERRAZZO FLOOR TILES (CONT'D)	Thickness (mm)		Item	
	Terrazzo floor tiles to BS EN 13748 in any size, colour and surface finish : -	20	30		
	<i>Per square metre</i>	A	B		
		\$	\$		
11125	Lay only tiling on floors.....	56.80	64.40	11125	
11126	Lay only tiling to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like	65.70	74.50	11126	
11127	Hack out and replace tiling on floor in isolated patches and point to match existing.....	208.30	238.60	11127	
	CORK TILING	Thickness (mm)			
	Cork tiles of any size laid and fixed with adhesive including cleaning down and polishing with wax emulsion : -	6	9	12	
	<i>Per square metre</i>	A	B	C	
		\$	\$	\$	
11128	On floors.....	130.20	177.60	218.50	11128
11129	To walls, columns and vertical surfaces.....	132.10	179.60	220.40	11129
11130	To ceilings	134.00	181.60	222.40	11130
11131	Lay only cork tiles on floors.....	42.90	42.90	42.90	11131
11132	Ditto to walls, columns and vertical surfaces.....	44.20	44.20	44.20	11132
11133	Ditto to ceilings.....	46.70	46.70	46.70	11133
	FLEXIBLE TILES OR SHEET FINISHES	Thickness (mm)			
	Supply and lay flexible tiles as G.S. Items 18.115, 18.116 and 18.119 in any colour and patterns : -	2.5	2	3.2	
	<i>Per square metre</i>	Semi-flexible p.v.c. tiles	Unbacked flexible vinyl tiles	Lino-leum tiles	
		A	B	C	
		\$	\$	\$	
11134	Tiling on floors.....	147.30	127.70	253.80	11134
11135	Tiling to treads and risers of stairs.....	157.30	136.40	266.00	11135
11136	Lay only tiles on floors.....	47.90	47.90	47.90	11136
11137	Lay only tiles to treads and risers of stairs.....	54.20	54.20	54.20	11137

Item	FLEXIBLE TILES OR SHEET FINISHES (CONT'D)			Item	
	Supply and lay in any colour and patterns : - (cont'd)		A \$		
	<i>Per square metre</i>				
11154	Scrub, clean and apply two coats wax polish with machine buffed on floors.....	8.90		11154	
11155	Scrub, clean and apply sealer and two coats machine applied polish on floors.....	11.50		11155	
	<i>Per linear metre</i>				
11156	Take up loose skirting of any description and size, clean back of skirting, prepare bed for and re-fix skirting with approved mastic or adhesive to match existing and wax polish to an approved finish	6.80		11156	
	RUBBER TILES AND SHEET				
	Supply and lay as G.S. Item 18.120 in any size, colour and patterns : -				
	<i>Per square metre</i>				
			Thickness (mm)		
			4	4	
			tiles	sheet	
			A	B	
			\$	\$	
11157	Tiling/Sheeting on floors.....	355.10	456.80	11157	
11158	Tiling/Sheeting to treads and risers of stairs.....	374.40	484.70	11158	
11159	Lay only tiles/sheet on floors.....	39.10	63.20	11159	
11160	Lay only tiles/sheet to treads and risers of stairs.....	45.50	73.40	11160	
	<i>Per square metre</i>				
			A		
			\$		
11161	Take up loose tiles of any description and size, clean back of tiles, prepare bed for and re-lay tiles, in plain or in patterns, with approved mastic or adhesive to match existing and wax polish to an approved finish.....	46.50		11161	
11162	Ditto but sheeting on floors.....	63.90		11162	
11163	Scrub, clean and apply two coats wax polish with machine buffed on floors.....	8.70		11163	
11164	Scrub, clean and apply sealer and two coats machine applied polish on floors.....	9.90		11164	
	MOSAIC FLOOR AND WALL TILING				
	Supply and lay as G.S. Item 18.96 but of any colour, size and surface finish : -				
	<i>Per square metre</i>				
			Glass mosaic tile	Glazed ceramic mosaic tile	Unglazed vitreous mosaic tile
			A	B	C
			\$	\$	\$
11165	Tiling on floors.....	155.10	188.50	181.90	11165
11166	Tiling on walls or columns.....	155.40	184.60	178.80	11166
11167	Tiling to treads and risers, return ends, sides and top of upstand kerbs, sides and bottom of channels and sinkings, surfaces of fitments, working benches and the like	167.60	198.10	192.00	11167
	<i>Per linear metre</i>				
11168	Extra over for setting one row of tiles on splay at internal angle or junction of floor and wall tiling and the like.....	3.80	3.80	3.80	11168
11169	Skirting n.e. 75 mm high, with square top edge and square or splay bottom edge.....	11.50	12.70	12.40	11169
11170	Ditto but 75 - 150 mm high.....	17.40	20.70	20.00	11170
11171	Ditto but 150 - 225 mm high.....	22.70	28.20	27.10	11171
11172	Ditto but 225 - 300 mm high.....	29.30	37.00	35.50	11172
	Add to either of Items 11169 to 11172 inclusive for labour forming open string or stepped wall string at side of stairs	20%	20%	20%	

Item	MOSAIC FLOOR AND WALL TILING (CONT'D)				Item
	Supply and lay as G.S. Item 18.96 but of any colour, size and surface finish : - (cont'd)				
		Glass mosaic tile	Glazed ceramic mosaic tile	Unglazed vitreous mosaic tile	
	<i>Per square metre</i>	A \$	B \$	C \$	
11173	Lay only tiling on floors.....	53.00	53.00	53.00	11173
11174	Lay only tiling on walls or columns.....	56.80	56.80	56.80	11174
11175	Lay only tiling to treads and risers, end of stairs, sides and top of upstand kerbs, sides and bottom of channels and sinkings, surfaces of fitment, working slabs and the like	61.80	61.80	61.80	11175
11176	Rake out joints between tiles and point in natural or coloured cement and sand mortar on existing tiled surface	53.40	53.50	53.50	11176
	Add to either of Items 11165 to 11167 and 11169 to 11172 inclusive for mosaic tiles of specific quality.....			20%	
	CERAMIC WALL TILING				
	Unglazed ceramic wall tiles to BS EN 14411 and BS EN ISO 10545 in any colour and surface finish : -	Thickness	4 - 7 mm		
		Tile Size	N.e. 0.05 m ²	Exceed- ing 0.05 m ²	
	<i>Per square metre</i>		A \$	B \$	
11177	Tiling on walls, columns, cills, top and edges of slabs, surfaces of fitment and the like.....		171.00	155.40	11177
11178	Lay only tiling on walls, columns, cills, top edges of slabs and the like.....		74.50	53.00	11178
11179	Rake out joints between tiles and point in natural or coloured cement and sand mortar on existing tiled surface		41.90	26.50	11179
11180	Hack out and replace tile in isolated patches and point to match existing.....		188.40	170.10	11180
	Add to either of Items 11177 and 11180 inclusive for unglazed ceramic wall tiles of specific quality.....			20%	
	Glazed ceramic wall tiles to BS EN 14411 and BS EN ISO 10545 in any colour and surface finish : -	Thickness	4 - 7 mm		
		Tile Size	N.e. 0.05 m ²	Exceed- ing 0.05 m ²	
	<i>Per square metre</i>		A \$	B \$	
11181	Tiling on walls, columns, cills, top and edges of slabs, surfaces of fitment and the like.....		162.30	156.10	11181
11182	Lay only tiling on walls, columns, cills, top edges of slabs and the like.....		74.50	53.00	11182
11183	Rake out joints between tiles and point in natural or coloured cement and sand mortar on existing tiled surface		41.90	26.50	11183
11184	Hack out and replace tile in isolated patches and point to match existing.....		207.30	199.30	11184
	Add to either of Items 11181 and 11184 inclusive for glazed ceramic wall tiles of specific quality.....			20%	

Item	PROPRIETARY SWIMMING POOL TILING	Supply and fix	Fix only	Item
	Proprietary glazed ceramic swimming pool tiles of non-decaying and corrosion-proof, resistant to aggressive water treated with chlorine and ozone, cleaning agents and disinfectants and slip resistant complying with DIN 51097, in any size, colour, surface finish and thickness, all in accordance with the Particular Specification : -	A \$	B \$	
	<i>Per square metre</i>			
11185	Pool wall tiles; laid in pattern.....	503.60	126.30	11185
11186	Pool floor tiles.....	485.10	109.20	11186
11187	Ditto; sloping.....	490.90	114.60	11187
11188	Pool tiles to steps, reveal, sides and soffit of recess.....	514.00	134.80	11188
	<i>Per linear metre</i>			
11189	Extra over Item 11185 for pool edging tile with safety marking.....	888.80	-	11189
11190	Extra over Item 11185 for pool edging tile with grooved and safety marking.....	928.30	-	11190
11191	Extra over for tile with coved bottom between sides and bottom of swimming pool.....	34.70	-	11191
11192	Extra over for tile with coved bottom between sides and bottom of overflow channel.....	73.90	-	11192
11193	Extra over for corner tiles.....	57.80	-	11193
11194	Coved skirting tiles in any size, colour and thickness.....	206.20	-	11194
11195	Nosing tiles with embossed surface and finger grip in any size, colour and thickness.....	427.90	-	11195
11196	Overflow channel in any size, colour and thickness.....	1,536.20	-	11196
11197	PVC channel grating of any size, colour and thickness.....	438.90	-	11197
	<i>Each</i>			
11198	Add to Item 11196 for overflow channel with drainage outlet of any size.....	150.20	-	11198
11199	Lane/depth marker tiles in any size, colour and thickness.....	646.80	-	11199
	<i>Per pair</i>			
11200	Overflow channel internal angle	371.90	-	11200
11201	Pool edging tile internal angle with safety marking.....	359.80	-	11201
	<i>Per square metre</i>			
11202	Rake out joints between tiles and point in approved grouting material on existing tiled surfaces.....		A \$ 61.10	11202

Item **EXPANSION JOINTS IN TILING ON SWIMMING POOL AND POOL DECK** Item

Prepare and apply proprietary one part medium modulus sealant based on hybrid silyl modified polyether technology to form a tough, highly durable and water resistant elastomer suitable for intermittent and permanent immersion in potable water complying with the following including priming surfaces with proprietary primer before applying sealant; all in strict compliance with the manufacturer's recommendations :

Form	Smooth, non-slumping paste
Colour	White / Grey / Black / Portland / Buff / Rustic Red / Brown
Movement accommodation	25% butt joints
factor	50% lap joints
Skinning time at 20°C /50% RH	30 minutes
Cure rate at 20°C /50% RH	24 hours 48 hours 72 hours
Application temperature	50°C to 50°C
Service temperature	Dry Wet
Hardness shore 'A' 20°C	32
Standard compliance	ISO 11600 Type F 25HM DWI Water Quality Regulations 25(1)(b) - Products having a small surface area in contact with water for public supply BS 6920:Part 1:2000 - Water Regulations Advisory Service ASTM C920 Class 25, Type NS, NT, G Performance criteria of BS 4254(1991)
Chemical resistance	Resistant to occasional spillage of many chemicals subject to the following limitations : (a) should not be applied at temperatures below 5°C (b) not suitable for contact with bituminous materials (c) must be fully cured prior to immersion in water (d) should not be considered a substitute for a good standard of joint preparation (e) chlorine concentrations should be less than 10 mg/litre
Biological resistance	Resistant to aerobic and anaerobic conditions evaluated in microbiologically active situations
UV resistance	Excellent

Joint Size (mm)						
5 x 20	5 x 25	15 x 20	15 x 25	15 x 50	25 x 25	25 x 50
A	B	C	D	E	F	G
\$	\$	\$	\$	\$	\$	\$
19.70	22.90	43.10	48.80	99.80	84.40	161.30

Per linear metre

11203 Proprietary sealant to expansion joints in tiling on swimming pool and pool deck including priming surfaces with proprietary primer before applying sealant

11203

Item	PRECAST CONCRETE PAVING SLAB OR BLOCK			Item																								
	Precast concrete paving slabs (1:2:4) in any size, colour and surface finish, rectangular or irregular shape :-		<table border="1"> <tr> <th>Supply and lay</th> <th>Lay only</th> </tr> <tr> <td>A</td> <td>B</td> </tr> <tr> <td>\$</td> <td>\$</td> </tr> <tr> <td>113.10</td> <td>26.00</td> </tr> </table>	Supply and lay	Lay only	A	B	\$	\$	113.10	26.00																	
Supply and lay	Lay only																											
A	B																											
\$	\$																											
113.10	26.00																											
	<i>Per square metre</i>																											
11204	Slab 50 mm thick.....			11204																								
	Precast concrete blocks laid in stretcher bond, basket weave, herring bone patterns or any mixed colour patterns including all necessary cutting and trimming edges with cement and pouring sand to joints :-		<table border="1"> <tr> <th colspan="2">Supply and lay</th> <th rowspan="2">Lay only</th> </tr> <tr> <th colspan="2">Block thickness (mm)</th> </tr> <tr> <th>60</th> <th>80</th> <td></td> </tr> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </table>	Supply and lay		Lay only	Block thickness (mm)		60	80		A	B	C	\$	\$	\$											
Supply and lay		Lay only																										
Block thickness (mm)																												
60	80																											
A	B	C																										
\$	\$	\$																										
	<i>Per square metre</i>																											
11205	200 x 100 mm Natural grey colour rectangular blocks.....	168.40	231.60	34.30	11205																							
11206	200 x 100 mm Red, brown, yellow or charcoal colour rectangular blocks.....	173.90	254.40	34.30	11206																							
11207	225 x 112.50 mm Natural grey colour interlocking blocks.....	173.90	254.40	34.30	11207																							
11208	225 x 112.50 mm Red, brown, yellow or charcoal colour interlocking blocks	188.10	269.90	34.30	11208																							
	RE-CONSTITUTED ARTIFICIAL GRANITE WALL AND FLOOR TILING																											
	Re-constituted artificial granite tiles in any colour and surface finish :-		<table border="1"> <tr> <th rowspan="2">Tile Size</th> <th colspan="2">Strip tile</th> <th colspan="2">Square/ rectangular tile</th> </tr> <tr> <th colspan="2">10 - 15 mm thick</th> <th colspan="2">12 - 18 mm thick</th> </tr> <tr> <td></td> <th>N.e. 0.01 m²</th> <th>Exceeding 0.01 m²</th> <th>N.e. 0.01 m²</th> <th>Exceeding 0.01 m²</th> </tr> <tr> <td></td> <td>A</td> <td>B</td> <td>C</td> <td>D</td> </tr> <tr> <td></td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </table>	Tile Size	Strip tile		Square/ rectangular tile		10 - 15 mm thick		12 - 18 mm thick			N.e. 0.01 m ²	Exceeding 0.01 m ²	N.e. 0.01 m ²	Exceeding 0.01 m ²		A	B	C	D		\$	\$	\$	\$	
Tile Size	Strip tile		Square/ rectangular tile																									
	10 - 15 mm thick		12 - 18 mm thick																									
	N.e. 0.01 m ²	Exceeding 0.01 m ²	N.e. 0.01 m ²	Exceeding 0.01 m ²																								
	A	B	C	D																								
	\$	\$	\$	\$																								
	<i>Per square metre</i>																											
11209	Tiling on floors.....	311.90	295.10	289.90	273.30	11209																						
11210	Tiling on walls or columns.....	315.30	298.00	296.80	284.10	11210																						
11211	Tiling to treads and risers, return ends, sides and top of upstand kerbs, sides and bottom of channels and sinkings, surface of fitment, working benches and the like.....	331.50	311.30	314.20	296.30	11211																						
	<i>Per linear metre</i>																											
11212	Extra over for corner tiles.....	23.60	23.10	92.40	89.60	11212																						
	Add to either of Items 11209 to 11211 inclusive for re-constituted artificial granite tile of specific quality.....				25%																							

Item	RE-CONSTITUTED ARTIFICIAL GRANITE WALL AND FLOOR TILING (CONT'D)						Item
	Re-constituted artificial granite tiles in any colour and surface finish :- (cont'd)						
		Strip tile		Square/ rectangular tile			
		10 - 15 mm thick		12 - 18 mm thick			
	Tile Size	N.e. 0.01 m ²	Exceeding 0.01 m ²	N.e. 0.01 m ²	Exceeding 0.01 m ²		
		A	B	C	D		
		\$	\$	\$	\$		
11213	Lay only tiling on floor.....	87.20	66.90	87.20	66.90	11213	
11214	Lay only tiling on walls or columns.....	94.80	78.30	94.80	78.30	11214	
11215	Lay only tiling to treads and risers, end of stairs, sides and top of upstand kerbs, sides and bottom of channels and sinkings, surfaces of fitment, working slabs and the like.....	99.90	75.80	99.90	75.80	11215	
11216	Rake out joints between tiles and point in natural or coloured cement and sand mortar on existing tiled surface.....	30.30	22.70	30.30	22.70	11216	
11217	Hack out and replace tile in isolated patches and point to match existing.....	343.00	320.50	318.80	301.50	11217	
	Add to Item 11217 for re-constituted artificial granite tile of specific quality.....					25%	
CLAY / BRICK PAVERS							
	Clay/ brick pavers in any size and colour, laid in stretcher bond, basket weave, herring bone patterns :-						
		Thickness (mm)					
		43	50	55	60	65	76
		A	B	C	D	E	F
		\$	\$	\$	\$	\$	\$
11218	Clay/brick pavers on floor.....	231.40	249.90	270.70	290.40	310.00	352.30
11219	Lay only pavers on floor.....	30.20	31.50	32.80	34.00	35.30	36.60
	Add to Item 11218 for one layer of geogrid reinforcement of 50 KN/m strength and grid size of 25.4 x 25.4 mm underneath sand/sand and cement bedding of clay/brick paver as detailed on drawing No. H5136 and 5137 (Payment will only be paid for this item, if ordered by the Maintenance Surveyor in writing.).....	12%	12%	11%	10%	9%	8%
		<i>Per linear metre</i>					
11220	232 x 115 x 76 mm Kerb brick on sand bed.....						A \$ 59.10
11221	232 x 115 x 76 mm Kerb brick on mortar.....						62.50
	Add to either of Item 11218 and Items 11220 to 11221 inclusive for clay/brick pavers of specific quality.....						25%

Item	STONE SLABS/TILES								Item																				
	Natural marble or granite slabs/tiles in any size, shape, pattern and colour :-	Tiles		Slabs																									
		Thickness (mm)	Thickness (mm)																										
	<i>Per square metre</i>	8-12	20	25	32	40	50	75	100																				
		A	B	C	D	E	F	G	H																				
		\$	\$	\$	\$	\$	\$	\$	\$																				
11222	Marble slabs/tiles, polished/flamed surface laid on floors.....	327.00	565.60	684.80	851.80	925.80	1,018.30	1,272.90	1,591.20	11222																			
11223	Marble slabs/tiles, polished/flamed surface fixed on walls, columns or vertical surfaces.....	547.50	837.70	880.70	906.50	1,030.60	-	-	-	11223																			
11224	Marble slabs/tiles, polished/flamed surface laid to treads and risers, steps, return ends, top and sides of counters, cills, door or window jambs and heads, bands, string courses, copings, arches and the like including all necessary cutting and forming holes.....	398.60	697.30	764.40	864.50	948.30	-	-	-	11224																			
11225	Granite slabs/tiles, polished/flamed surface laid on floors.....	321.50	554.60	671.10	834.20	975.30	1,072.90	1,341.10	1,475.20	11225																			
11226	Granite slabs/tiles, fine hammered dressed surface laid on floors.....	385.40	682.40	830.80	1,026.30	1,118.50	1,230.30	1,537.90	1,691.70	11226																			
11227	Granite slabs/tiles, polished/flamed surface fixed on walls, columns or vertical surfaces.....	579.10	900.80	959.00	1,112.10	1,200.70	-	-	-	11227																			
11228	Granite slabs/tiles, fine hammer dressed surface fixed on walls, columns or vertical surfaces.....	709.90	1,159.10	1,235.30	1,316.40	1,442.50	-	-	-	11228																			
11229	Granite slabs/tiles, polished/flamed surface laid to treads and risers, steps, return ends, top and sides of counters, cills, door or window jambs and heads, bands, string courses, copings, arches and the like including all necessary cutting and forming holes.....	456.60	813.30	877.00	994.60	1,075.60	-	-	-	11229																			
11230	Granite slabs/tiles, fine hammered dressed surface laid to treads and risers, return ends, top and sides of counters, cills, door or window jambs and heads, bands, string courses, copings, arches and the like including all necessary cutting and forming holes.....	523.70	947.40	1,017.50	1,147.60	1,241.90	-	-	-	11230																			
		<table border="1"> <thead> <tr> <th colspan="5">Thickness (mm)</th> </tr> <tr> <th>20-30</th> <th>30-40</th> <th>40-50</th> <th>50-75</th> <th>75-100</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </tbody> </table>								Thickness (mm)					20-30	30-40	40-50	50-75	75-100	A	B	C	D	E	\$	\$	\$	\$	\$
Thickness (mm)																													
20-30	30-40	40-50	50-75	75-100																									
A	B	C	D	E																									
\$	\$	\$	\$	\$																									
	<i>Per linear metre</i>																												
11231	Marble/granite mouldings, polished/flamed surface n.e. 100 mm wide.....	202.10	288.80	375.40	525.50	735.70				11231																			
11232	Ditto but 100 - 200 mm wide.....	317.60	438.90	548.60	768.10	1,075.30				11232																			
	Add to either Items 11222 to 11232 inclusive for natural marble or granite of European origin.....								40%																				

Item	STONE SLABS/TILES (CONT'D)							Item	
	Natural marble or granite slabs/tiles in any size, shape, pattern and colour : - (cont'd)	Marble / Granite tiles	Marble/Granite slabs						
		Thickness (mm)	Thickness (mm)						
		8-12	20-30	30-40	40-50	50-75	75-100		
	<i>Per square metre</i>	A	B	C	D	E	F		
		\$	\$	\$	\$	\$	\$		
11233	Lay only slabs/tiles on floors.....	70.70	84.70	88.50	92.30	98.70	108.80	11233	
11234	Fix/lay only slabs/tiles to walls, columns or vertical surfaces.....	212.90	257.30	262.40	-	-	-	11234	
11235	Ditto but including metal support backing frame.....	-	831.30	897.60	-	-	-	11235	
11236	Lay only slabs/tiles to treads and risers, steps, return ends, top and sides of counters, cills, door or window jambs and heads, bands, string courses, copings, arches and the like including all necessary cutting and forming holes.....	83.40	99.90	111.30	-	-	-	11236	
		Thickness (mm)							
		20-30	30-40	40-50	50-75	75-100			
	<i>Per linear metre</i>	A	B	C	D	E			
		\$	\$	\$	\$	\$			
11237	Lay only moulding n.e. 100 mm wide.....		28.90	31.40	33.90	37.70	44.10	11237	
11238	Lay only moulding 100 - 200 mm wide.....		33.90	37.70	41.50	47.90	58.00	11238	
	RESIN STONE SLAB								
	Resin stone slabs 13 mm thick, in any size, shape, pattern and colour including forming splayed edges and polishing : -								
	<i>Per square metre</i>							A	
								\$	
11239	Slabs on floors.....							362.00	11239
11240	Slabs on walls, columns or vertical surfaces.....							510.50	11240
11241	Slabs to treads and risers, steps, return ends, end of stairs, top and sides of counters, cills, door or window jambs and heads, bands, string courses, copings, arches and the like including all necessary cutting and forming holes.....							409.40	11241
11242	Lay only slabs on floors							75.80	11242
11243	Fix only slabs on walls, columns or vertical surfaces.....							231.90	11243
11244	Lay only tiling to treads and risers, steps, return ends, end of stairs, top and sides of counters, cills, door or window jambs and heads, bands, string courses, copings, arches and the like including all necessary cutting and forming holes							86.00	11244

Item	SUNDRY PAVING, ETC.	A \$	Item
	<i>Per square metre</i>		
11245	Pebble finish 20 mm thick Mix "A" comprising cement, sand and pebble (2:2:3) laid on floor with washed finish.....	148.50	11245
11246	Pebble finish 20 mm thick Mix "B" comprising cement and pebble (2:3) rendering to vertical surfaces with washed finish.....	187.70	11246
11247	Pebble paving formed with selected pebbles exceeding 25 mm but n.e. 75 mm gauge, pressed into top of concrete bed (measured separately) before setting to give roughly level surfaces, including neatly recess pointing between pebbles in cement and sand (1:3) mortar	297.80	11247
11248	Small stone paving formed with selected stones exceeding 25 mm but n.e. 100 mm gauge, pressed into top of concrete bed (measured separately) before setting to give roughly level surfaces, including dressing off top of stones after setting to give roughly level surfaces and neatly recess pointing between stones in cement and sand (1:3) mortar	409.70	11248
11249	Silicone carbide non-slip grains sprinkled on and lightly trowelled into surface of paving before setting, at a rate of 0.50 kg/m ² paving.....	36.30	11249
11250	Ditto but at rate of 1 kg/m ² paving	72.70	11250
	<i>Per linear metre</i>		
11251	15 x 25 mm Non-slip insert strips bedded in paving, stair treads or steps as G.S. Clause 18.74.....	33.20	11251
11252	75 x 150 x 10 mm Plain vitreous clay or quarry non-slip nosing tiles with grooves or raisings on top surface, bedded, jointed and pointed in cement and sand (1:3) mortar	30.20	11252
	TACTILES		
	Supply and fix rubber/PVC tactiles with adhesive in any pattern, colour, size and thickness, all in strict accordance with manufacturer's instructions : -		
	<i>Per square metre</i>		
11253	Rubber/plastic tactiles for indoor use.....	452.80	11253
11254	Rubber/plastic tactiles for outdoor use.....	720.60	11254
	Supply and fix concrete block tactiles with mortar in any pattern, colour, size and thickness, all in strict accordance with manufacturer's instructions : -		
	<i>Per square metre</i>		
11255	Concrete block tactiles	634.10	11255
11256	Synthetic rubber tactiles with concrete base.....	1,510.10	11256
	Supply and fix ceramic/homogeneous ceramic tactiles with mortar in any pattern, colour, size and thickness, all in strict accordance with manufacturer's instructions : -		
	<i>Per square metre</i>		
11257	Ceramic/homogeneous ceramic tactiles.....	1,027.20	11257
	Supply and fix artificial granite tactiles with mortar in any pattern, colour, size and thickness, all in strict accordance with manufacturer's instructions : -		
	<i>Per square metre</i>		
11258	Artificial granite tactiles.....	1,618.60	11258

Item	TACTILES (CONT'D)	Item										
	Supply and fix proprietary stainless steel tactile marker grade 316 with studs or strips with plastic cover and with adhesive, fixing bolts and nuts including drilling, cut holes, make good and all necessary fixing accessories, lay in any pattern and all in strict accordance with the manufacturer's instructions:-	Supply and fix										
	<i>Each</i>	A \$										
11259	23mm dia. x 5mm (positional).....	14.20	11259									
11260	35mm dia. x 5mm (hazard warning tile).....	20.50	11260									
11261	30mm x 280mm x 5mm (directional).....	103.50	11261									
DIVISION STRIPS												
		3 mm thick										
	Depth (mm)	Plastic			Stainless steel			Brass				
		20	25	40	20	25	40	20	25	40		
		A	B	C	D	E	F	G	H	I		
	<i>Per linear metre</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$		
11262	Division strips set between different floor or wall finishes.....	8.30	9.20	10.50	21.20	25.10	33.60	25.10	29.70	41.40	11262	
PROPRIETARY SUSPENDED CEILING SYSTEM FOR ACOUSTIC CEILING TILES; SUSPENSION SYSTEM (GRIDS) ONLY												
	Proprietary suspension system as G.S. Items 13.23 and 13.45 :-									Fit for square or rectangular		
										Tile size (m ²)		
										n.e. 0.36	exc. 0.36	
	<i>Per square metre</i>									A \$	B \$	
11263	Galvanised mild steel suspension system.....									72.30	65.10	11263
11264	Aluminium suspension system.....									63.70	57.30	11264
11265	Composite galvanised mild steel and aluminium suspension system.....									67.50	60.70	11265
	Add to either of Items 11263 to 11265 inclusive for suspension system suitable for foam tape or sealing mastic.....									15%	15%	
	Add to either of Items 11263 to 11265 inclusive for suspension system of specific quality.....									20%	20%	
11266	Fix only suspension system of any type.....									31.70	31.70	11266
11267	Take down and clear away suspension system of any type.....									12.90	12.90	11267
11268	Take down and set aside for re-use suspension system of any type except suspension system suitable for foam tape or sealing mastic.....									19.70	19.70	11268
	<i>Per linear metre</i>											
11269	Extra over Items 11263 to 11265 inclusive for forming openings for light fittings or air grilles module size exceeding 1.50 m long and n.e. 200 mm wide.....									27.00	27.00	11269
	<i>Each</i>											
11270	Extra over Items 11263 to 11265 inclusive for forming openings for light fittings or air grilles module size n.e. 1.50 m long.....									34.20	34.20	11270

Item	PROPRIETARY SUSPENDED CEILING SYSTEM FOR ACOUSTIC CEILING TILES; ACOUSTIC CEILING TILES ONLY	Tile size (m ²)		Item
		n.e. 0.36	exc. 0.36	
		A \$	B \$	
	Proprietary acoustic ceiling tiles in any thickness as G.S. Item 13.22, measured net (no deduction to openings for light fittings, sprinkler heads, smoke detectors, etc. of less than 0.05 m ²) : -			
	<i>Per square metre</i>			
11271	Wood or other organic fibre perforated acoustic ceiling tiles fixed to timber soffits or walls.....	56.90	60.90	11271
11272	Ditto but fixing with adhesive to plastered soffits or walls.....	56.50	59.20	11272
11273	Ditto but fixing to suspension system (measured separately).....	54.90	56.90	11273
11274	Proprietary mineral fibre/rock wool acoustic tiles with fissured design tiles fixed to timber soffits or walls.....	78.30	84.30	11274
11275	Ditto but fixing with adhesive to plastered soffits or walls.....	77.90	82.70	11275
11276	Ditto but fixing to suspension system (measured separately).....	76.20	80.50	11276
11277	Proprietary moisture resistant mineral fibre/rock wool acoustic tiles fixed to timber soffits or wall.....	118.50	128.50	11277
11278	Ditto but fixing with adhesive to plastered soffits or walls.....	118.10	126.90	11278
11279	Ditto but fixing to suspension system (measured separately).....	116.40	124.60	11279
11280	Proprietary moisture resistant vinyl faced mineral fibre/rock wool acoustic tiles fixed to timber soffits or wall.....	138.50	150.50	11280
11281	Ditto but fixing with adhesive to plastered soffits or walls.....	138.10	148.90	11281
11282	Ditto but fixing to suspension system (measured separately).....	136.40	146.60	11282
11283	Proprietary moisture resistant hygiene acoustic tiles fixed to timber soffits or wall.....	166.00	181.00	11283
11284	Ditto but fixing with adhesive to plastered soffits or walls.....	165.60	179.40	11284
11285	Ditto but fixing to suspension system (measured separately).....	164.20	177.40	11285
11286	Proprietary moisture resistant metal foil faced mineral fibre/rock wool acoustic tiles fixed to timber soffits or wall.....	238.00	260.10	11286
11287	Ditto but fixing with adhesive to plastered soffits or walls.....	237.70	258.70	11287
11288	Ditto but fixing to suspension system (measured separately).....	236.10	256.70	11288
11289	Proprietary moisture resistant metal foil faced bio-proof hygiene mineral fibre/rock wool acoustic tiles fixed to suspension system (measured separately).....	258.30	281.00	11289
11290	Ditto but sealed into the suspension system with low compression foam tape and/or silicone sealing mastic (suspension system measured separately).....	310.40	328.40	11290
11291	Take down and clear away acoustic ceiling tiles of any type.....	6.90	6.90	11291
11292	Take down, set aside for re-use acoustic ceiling tiles of any type (other than sealed type).....	20.60	20.60	11292
11293	Take down, set aside for re-use sealed acoustic ceiling tiles.....	42.00	42.00	11293
11294	Fix only ceiling tiles to timber soffits or wall of any type.....	19.00	19.00	11294
11295	Fix only ceiling tiles to plastered soffits or wall of any type.....	19.00	19.00	11295
11296	Fix only ceiling tiles to suspension system of any type.....	19.00	19.00	11296
11297	Fix only ceiling tiles sealed into the suspension system with low compression foam tape and/or silicone sealing mastic.....	50.80	50.80	11297

Item	PROPRIETARY SUSPENDED CEILING SYSTEM FOR ACOUSTIC CEILING TILES; ACOUSTIC CEILING TILES ONLY (CONT'D)	Tile size (m ²)		Item	
	<i>Each</i>	n.e. 0.36	exc. 0.36		
		A \$	B \$		
11298	Forming openings through acoustic tiles (non-sealed type) for light fittings, sprinkler heads, smoke detectors, etc. in size n.e. 0.05 m ² including plywood backing as required.....	8.70	8.70	11298	
11299	Forming openings through acoustic tiles (sealed type) for light fittings, sprinkler heads, smoke detectors, etc. in size n.e. 0.05 m ² including plywood backing as required and sealed into the system with low compression foam tape and/or silicone sealing mastic.....	24.20	24.20	11299	
	Add to either of Items 11271 to 11290 inclusive for acoustic tiles of specific quality.....	20%			
	PROPRIETARY SUSPENDED CEILING SYSTEM FOR METAL CEILING; SUSPENSION SYSTEM (GRIDS) ONLY				
	Proprietary suspension system recommended by the manufacturer for approved ceiling type :-	Strip/panel			
		Lay-in	Clip-in		
		Internal type	Internal type	External type	
	<i>Per square metre</i>	A \$	B \$	C \$	
11300	Galvanised mild steel suspension system	108.60	118.70	142.50	11300
11301	Aluminium suspension system.....	106.80	124.50	140.10	11301
11302	Composite galvanised mild steel and aluminium suspension system.....	107.70	121.60	141.30	11302
11303	Extra over Items 11300 to 11302 inclusive for air-tight suspension system.....	61.80	133.30	-	11303
	Add to either of Items 11300 to 11302 inclusive for suspension system of specific quality.....	20%	20%	20%	
11304	Take down and clear away suspension system of any type.....	16.30	16.30	16.30	11304
11305	Take down and set aside for re-use suspension system generally.....	29.10	29.10	29.10	11305
11306	Take down and set aside for re-use suspension system of air-tight type.....	43.70	43.70	-	11306
11307	Fix only suspension system generally.....	35.50	35.50	35.50	11307
11308	Fix only suspension system of air-tight type.....	69.80	69.80	-	11308
	<i>Per linear metre</i>				
11309	Extra over Items 11300 to 11302 inclusive for forming openings for light fittings or air grilles module size exceeding 1.50 m long and n.e. 200 mm wide generally.....	24.10	24.10	24.10	11309
11310	Extra over Items 11300 to 11302 inclusive for forming openings for light fittings or air grilles module size exceeding 1.50 m long and n.e. 200 mm wide for suspension system of air-tight type.....	52.20	52.20	-	11310
	<i>Each</i>				
11311	Extra over Items 11300 to 11302 inclusive for forming openings for light fittings or air grilles module size n.e. 1.50 m long for suspension system generally.....	30.10	30.10	30.10	11311
11312	Extra over Items 11300 to 11302 inclusive for forming openings for light fittings or air grilles module size n.e. 1.50 m long for suspension system air-tight type.....	122.70	122.70	-	11312

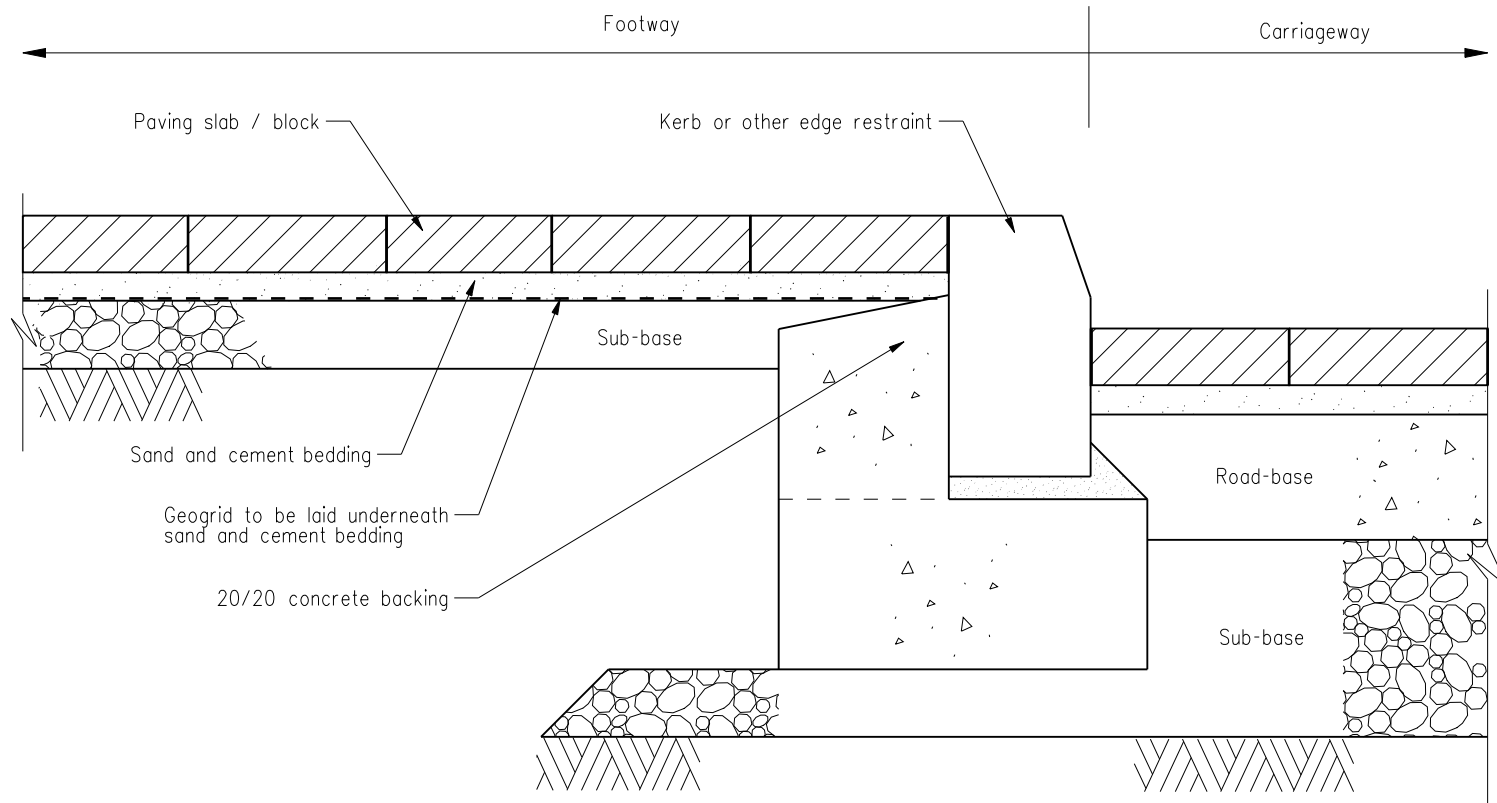
Item	PROPRIETARY SUSPENDED CEILING SYSTEMS FOR METAL CEILING; PANEL/STRIP ONLY Proprietary non-perforated ceiling panel/strip in any thickness and colour fixed to suspension system in accordance with the manufacturer's instructions (suspension system measured separately) : - <i>Per square metre</i>	Aluminium panel/strip			G.M.S. panel/strip			Item
		Lay-in		Clip-in	Lay-in		Clip-in	
		Internal type	Internal type	External type	Internal type	Internal type	External type	
		A	B	C	D	E	F	
		\$	\$	\$	\$	\$	\$	
11313	Proprietary ceiling panel/strip module size n.e. 0.36 m ²	209.10	220.20	245.30	220.20	231.20	309.70	11313
11314	Ditto, exceeding 0.36 m ²	215.20	225.20	301.60	221.20	232.20	310.70	11314
11315	Extra over Items 11313 to 11314 inclusive for additional sound absorbing matts on the rear side of the panel/strip.....	45.20	45.20	45.20	45.20	45.20	45.20	11315
11316	Extra over Items 11313 to 11314 inclusive for air-tight panel/strip.....	269.80	465.20	-	273.70	-	-	11316
11317	Take down and clear away ceiling panel/strip of any type.....	14.60	14.60	14.60	14.60	14.60	14.60	11317
11318	Take down and clear away ceiling panel/strip of air-tight type.....	35.10	35.10	-	35.10	-	-	11318
11319	Take down and set aside for re-use away ceiling panel/strip generally.....	22.30	22.30	22.30	22.30	22.30	22.30	11319
11320	Take down and set aside for re-use away ceiling panel/strip of any type of air-tight type.....	56.60	56.60	-	56.60	-	-	11320
11321	Fix only ceiling panel/strip generally.....	19.00	19.00	19.00	19.00	19.00	19.00	11321
11322	Fix only ceiling panel/strip of air-tight type.....	180.80	180.80	-	180.80	-	-	11322
	<i>Per linear metre</i>							
11323	Extra over Items 11313 to 11314 inclusive for forming openings for light fittings or air grilles module size exceeding 1.50 m long and n.e. 200 mm wide for panel/strip generally.....	135.60	135.60	135.60	135.60	135.60	135.60	11323
11324	Extra over Items 11313 to 11314 inclusive for forming openings for light fittings or air grilles module size exceeding 1.50 m long and n.e. 200 mm wide for panel/strip of air-tight type.....	145.60	145.60	-	145.60	-	-	11324
	<i>Each</i>							
11325	Extra over Items 11313 to 11314 inclusive for forming openings for light fittings, air grilles and the like module size n.e. 1.50 m long for panel/strip generally.....	82.40	82.40	82.40	82.40	82.40	82.40	11325
11326	Ditto for forming opening for sprinkler heads, smoke detectors, etc.....	38.20	38.20	38.20	38.20	38.20	38.20	11326
11327	Extra over Items 11313 to 11314 inclusive for forming openings for light fittings, air grilles and the like module size n.e. 1.50 m long for panel/strip of air-tight type.....	150.70	150.70	-	150.70	-	-	11327
11328	Ditto for forming opening for sprinkler heads, smoke detectors, etc.....	78.30	78.30	-	78.30	-	-	11328
	Add to either of Items 11313 to 11314 inclusive for panel/strip of specific quality.....	20%	20%	20%	20%	20%	20%	
	Add to either of Items 11313 to 11314 inclusive for panel/strip of perforated ceiling type.....	10%	10%	10%	10%	10%	10%	

Item	RAISED ACCESSED FLOORING				Item	
	Raised accessed flooring in any pedestals height as G.S. Items 18.148 to 18.165 :-					
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
11329	Flooring with bare panel.....	471.80	34.30	42.00	86.20	11329
11330	Flooring with high pressure laminated panel finish.....	668.20	34.30	42.00	87.20	11330
11331	Flooring with carpet tile finish.....	655.60	34.30	42.00	87.20	11331
11332	Flooring with vinyl tile finish.....	714.40	34.30	42.00	87.20	11332
11333	Access ramp.....	1,883.20	35.10	48.00	206.50	11333
11334	Steps.....	1,588.10	31.70	41.10	155.80	11334
	Per linear metre					
11335	Standard railing.....	2,050.30	16.30	22.30	157.00	11335
	Each				A \$	
11336	Set of picker and tool (lifting device).....				462.00	11336
	TAKING DOWN EXISTING PLASTER, PAVINGS, TILING, SUSPENDED CEILING, ETC.					
	(Note :- The items under column A hereafter shall not be measured if the wall or slab, etc. to which the finish being affixed is to be taken down.)					
	Take down and clear away, or set aside for re-use as required, the following from any position :-					
	Per square metre					
				Take down and clear away	Take down and set aside for re-use	
				A \$	B \$	
11337	Expanded metal lathing			4.30	-	11337
11338	Lightweight screeds to floors and roofs of any thickness			15.40	-	11338
11339	Cement and sand paving, floor screeds or floor rendering of any mix or thickness, including covering to stair treads, risers, kerbs, channels and the like			12.90	-	11339
11340	Cement and sand wall or ceiling rendering, screeds, skirting and the like			16.30	-	11340
11341	Internal plaster, external plaster, acoustic plaster, Shanghai plaster or gypsum plaster of any mix, thickness, or number of coats.....			15.40	-	11341
11342	Flexible sheets and skirting of any type to floor or wall (screed measured separately).....			11.10	14.60	11342
11343	"Sandtex-trowel" finish including backing screed if any			23.10	-	11343
11344	Granolithic or terrazzo paving of any mix or thickness, including covering to stair treads, risers, kerbs, channels and the like, and backing screed if any			22.30	-	11344
11345	Granolithic or terrazzo wall dadoes and skirting of any mix or thickness including backing screed if any.....			18.00	-	11345
11346	Ceramic or quarry floor tiling, skirting, etc., of any type (screed measured separately)			15.40	-	11346
11347	Precast concrete floor tiling or skirting of any thickness (ditto)			14.60	19.70	11347
11348	Terrazzo floor tiling, skirting, etc. of any type (ditto).....			17.10	24.00	11348
11349	Cork tiling of any thickness to floor, wall or ceiling (ditto)			6.00	7.70	11349

Item	TAKING DOWN EXISTING PLASTER, PAVINGS, TILING, SUSPENDED CEILING, ETC. (CONT'D)			Item	
	(Note : - The items under column A hereafter shall not be measured if the wall or slab, etc. to which the finish being affixed is to be taken down.)		Take down and clear away	Take down and set aside for re-use	
	Take down and clear away, or set aside for re-use as required, the following from any position : - (cont'd)				
	Per square metre		A \$	B \$	
11350	Flexible tiles and skirting of any type to floor or wall (ditto).....	11.10	14.60	11350	
11351	Rubber tiles and sheets to floors, and treads and risers of any type (ditto)	11.10	14.60	11351	
11352	Mosaic floor or wall tiling of any type (ditto)	15.40	-	11352	
11353	Glazed or ceramic wall tiling of any type (ditto)	15.40	-	11353	
11354	Precast concrete paving slabs of any thickness (screed measured separately)	14.60	19.70	11354	
11355	Rectangular or interlocking precast concrete paving blocks of any thickness (ditto)	17.10	23.10	11355	
11356	Artificial granite floor or wall tiling of any thickness (ditto).....	18.00	24.90	11356	
11357	Clay brick paver of any size (ditto).....	16.30	21.40	11357	
11358	Natural marble or granite slabs in any thickness on floors, walls, columns, vertical surfaces in dadoes and wall lining, treads and risers, end of stairs, top and sides of counters, window cills and the like	18.00	24.90	11358	
11359	Resin stone slabs in any thickness (screed measured separately)	16.30	23.10	11359	
	Per square metre				
11360	Marble/granite tiles of any size (ditto).....	15.40	20.60	11360	
11361	Pebble or small stone paving of any mix or thickness.....	11.10	-	11361	
	Per linear metre				
11362	Plaster of paris mouldings and moulded cornices n.e. 150 mm girth, complete with bracketing and the like.....	4.30	-	11362	
11363	Ditto 150 - 300 mm girth, ditto	5.10	-	11363	
11364	Brick curb of any size.....	6.90	9.40	11364	
11365	Natural marble or granite moulding n.e. 100 mm wide.....	6.90	9.40	11365	
11366	Ditto 100 - 200 mm wide.....	7.70	12.00	11366	
	SUPPLY ONLY OF MATERIALS				
	Per square metre				
11367	6 mm Thick cork tiles		80.60	11367	
11368	9 mm Ditto		125.60	11368	
11369	12 mm Ditto		163.90	11369	
11370	Glazed ceramic floor tiles to BS EN 14411 and BS EN ISO 10545 n.e. 9.5 mm thick.....		120.70	11370	

Item	SUPPLY ONLY OF MATERIALS (CONT'D)		Item
	<i>Per square metre</i>	A \$	
11371	Glazed ceramic floor tiles to BS EN 14411 and BS EN ISO 10545 exceeding 9.5 mm thick	134.00	11371
11372	Glazed ceramic stair tread tiles to BS EN 14411 and BS EN ISO 10545 n.e. 9.5 mm thick	131.30	11372
11373	Glazed ceramic stair tread tiles to BS EN 14411 and BS EN ISO 10545 exceeding 9.5 mm thick	145.50	11373
11374	Unglazed ceramic floor tiles to BS EN 14411 and BS EN ISO 10545 n.e. 9.5 mm thick	99.10	11374
11375	Unglazed ceramic floor tiles to BS EN 14411 and BS EN ISO 10545 exceeding 9.5 mm thick	116.40	11375
11376	Unglazed ceramic stair tread tiles to BS EN 14411 and BS EN ISO 10545 n.e. 9.5 mm thick	119.00	11376
11377	Unglazed ceramic stair tread tiles to BS EN 14411 and BS EN ISO 10545 exceeding 9.5 mm thick	127.00	11377
	<i>Per linear metre</i>		
11378	Glazed ceramic skirting tiles 100 mm high	44.40	11378
11379	Glazed ceramic skirting tiles 150 mm high.....	57.10	11379
11380	Glazed ceramic skirting tiles 200 mm high.....	75.00	11380
11381	Unglazed ceramic skirting tiles 100 mm high	39.30	11381
11382	Unglazed ceramic skirting tiles 150 mm high	49.90	11382
11383	Unglazed ceramic skirting tiles 200 mm high	66.00	11383
	<i>Per square metre</i>		
11384	Quarry floor tiles to BS EN 14411 and BS EN ISO 10545 n.e. 9.5 mm thick	120.70	11384
11385	Quarry floor tiles to BS EN 14411 and BS EN ISO 10545 exceeding 9.5 mm thick	128.20	11385
11386	Quarry floor tiles stair tread tiles to BS EN 14411 and BS EN ISO 10545 n.e. 9.5 mm thick	131.30	11386
11387	Quarry floor tiles stair tread tiles to BS EN 14411 and BS EN ISO 10545 exceeding 9.5 mm thick	139.30	11387
	<i>Per linear metre</i>		
11388	Quarry skirting tiles 100 mm high	43.90	11388
11389	Quarry skirting tiles 150 mm high	54.70	11389
11390	Quarry skirting tiles 200 mm high	71.10	11390
	Add to either of Items 11370 to 11390 inclusive for glazed ceramic floor tile/unglazed ceramic floor tiles/ quarry floor tiles of specific quality.....	30%	
	<i>Per square metre</i>	A \$	
11391	Re-constituted artificial granite strip tile n.e. 0.01 m ² , 10 - 15 mm thick.....	214.50	11391
11392	Re-constituted artificial granite strip tile exceeding 0.01 m ² , 10 - 15 mm thick.....	217.80	11392
11393	Re-constituted artificial granite square/rectangular tile n.e. 0.01 m ² , 12 - 18 mm thick.....	193.60	11393
11394	Re-constituted artificial granite square/rectangular tile exceeding 0.01 m ² , 12 - 18 mm thick.....	198.00	11394
	Add to either of Items 11391 to 11394 inclusive for re-constituted artificial granite of specific quality.....	35%	

Item	SUPPLY ONLY OF MATERIALS (CONT'D)		Item
		A \$	
	<i>Per square metre</i>		
11395	Terrazzo floor tiles to BS EN 13748 in any colour and surface finish, 20 mm thick.....	168.90	11395
11396	Semi-flexible p.v.c. tiles in any colour and surface finish, 2.5 mm thick.....	94.70	11396
11397	Vinyl tiles in any colour and surface finish 2 mm thick.....	76.00	11397
11398	Linoleum tiles in any colour and surface finish 3.2 mm thick.....	196.10	11398
11399	Unbacked flexible sheet in any colour and surface finish, 1.2 mm thick.....	138.10	11399
11400	Unbacked flexible sheet in any colour and surface finish, 2 mm thick.....	184.40	11400
11401	Foam backed (1.5 mm thick) flexible sheet in any colour and surface finish, overall 3 mm thick.....	192.90	11401
11402	Linoleum flexible sheet in any colour and surface finish, 3.2 mm thick.....	295.80	11402
11403	Linoleum flexible sheet in any colour and surface finish, 4.5 mm thick.....	399.00	11403
11404	Antistatic homogeneous vinyl tiles, 2 mm thick.....	264.40	11404
11405	Antistatic homogeneous vinyl sheet, 2 mm thick.....	343.70	11405
11406	Rubber tiles in any colour and surface finish, 4 mm thick.....	301.80	11406
11407	Rubber sheet in any colour and surface finish, 4 mm thick.....	377.00	11407
	<i>Per linear metre</i>		
11408	Preformed flexible PVC skirting 100 mm high coved bottom.....	34.00	11408
11409	L' shape PVC skirting, 100 x 45 x 2 mm thick.....	40.80	11409
	<i>Per square metre</i>		
11410	Glazed ceramic mosaic tiles in any colour and size.....	129.00	11410
11411	Unglazed vitreous mosaic tiles in any colour and size.....	122.90	11411
11412	Unglazed ceramic wall tiles n.e. 0.05 m ²	91.70	11412
11413	Unglazed ceramic wall tiles exceeding 0.05 m ²	97.60	11413
11414	Glazed ceramic wall tiles n.e. 0.05 m ²	86.60	11414
11415	Glazed ceramic wall tiles exceeding 0.05 m ²	83.30	11415
	Add to either of Items 11410 to 11415 inclusive for mosaic tiles/unglazed ceramic wall tiles/ glazed ceramic wall tile of specific quality.....	30%	
		A \$	
11416	Proprietary glazed ceramic swimming pool tiles in any colour size, surface finish and thickness.....	377.30	11416



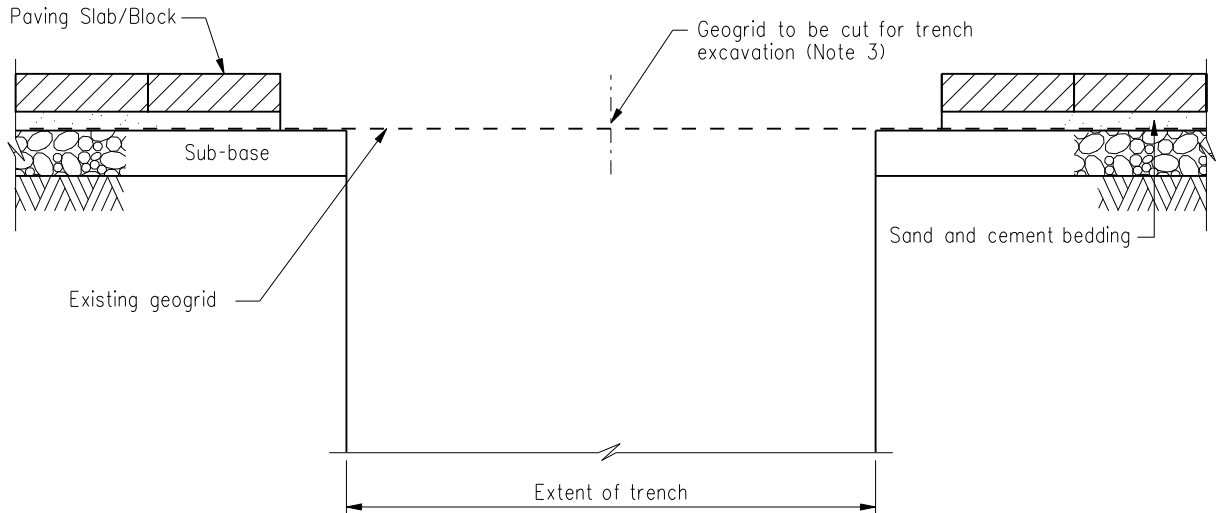
Notes:

1. This drawing is to be read in conjunction with latest version of HyD Standard Drawing No. H 1103.
2. Geogrid to be used shall be with a minimum tensile strength of 50 kN/m across width and 50 kN/m along length, a maximum grid size of 25.4 mm x 25.4 mm and a maximum elongation of 10% under tensile load of 50 kN/m.
3. Lapping of geogrid, wherever necessary, shall not be less than 300 mm.
4. Details shown in this drawing shall be applicable to selected block paved footways in difficult areas, that carry heavy pedestrian traffic, as instructed by the Engineer.

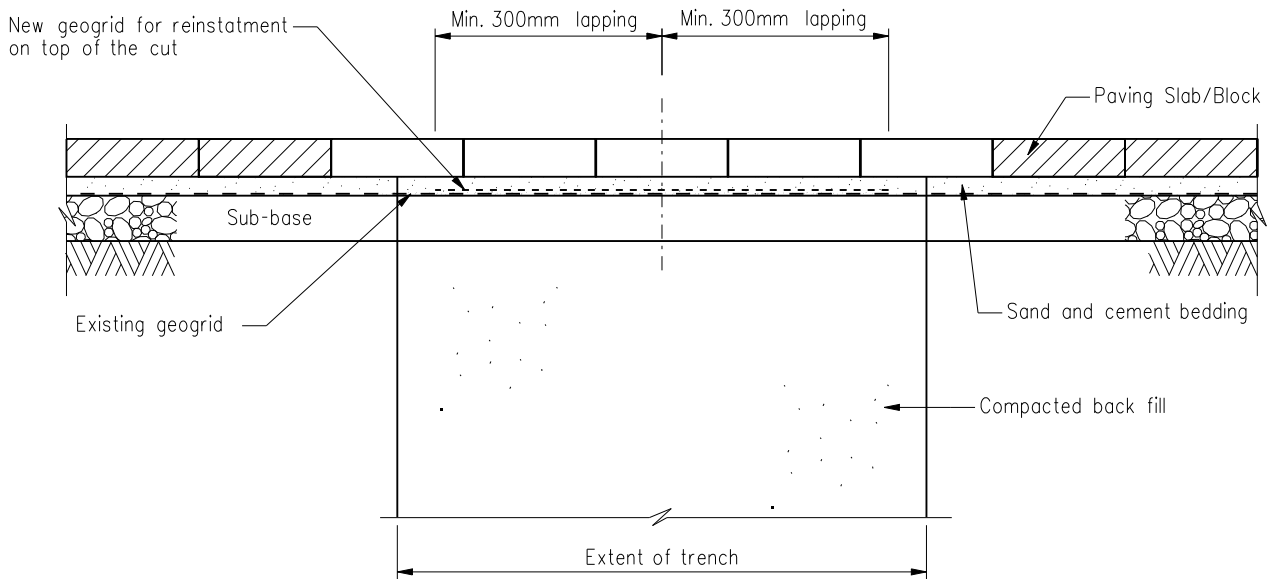
	New Issue		Aug 10
REF.	REVISION	SIGNATURE	DATE

BLOCK PAVED FOOTWAY WITH GEOGRID

HIGHWAYS DEPARTMENT			
REFERENCE	DRAWING No.		CAD
SCALE	H 5136		
	Diagrammatic		



TRENCH EXCAVATION



REINSTATEMENT OF FOOTWAY AFTER TRENCH EXCAVATION

Notes :

1. For other details, refer to the latest version of HyD Standard Drawing Nos. H1131 and H5136.
2. Minimum extent of reinstatement shall not be less than that required in the latest version of HyD Standard Drawing No. H1131.
3. Geogrid shall be exposed, folded up and properly protected during trench excavation.

	New Issued		Aug 10
REF.	REVISION	SIGNATURE	DATE

PERMANENT REINSTATEMENT OF PAVEMENT - BLOCK PAVED FOOTWAY WITH GEOGRID

HIGHWAYS DEPARTMENT

REFERENCE	DRAWING No.	CAD
SCALE Diagrammatic	H 5137	

Section 12

ROADWORK

ROADWORK

SPECIAL CONDITIONS

- | | |
|---|---|
| Measurement of excavation, concrete work, etc. | I. All excavation, concrete work, steel and metal work, plaster work and drainage work will be measured separately and paid for at appropriate rates under applicable Work Sections of this Schedule unless specifically described in this Section. |
| Measurement generally | <p>II. The measurement shall be the compacted thickness as specified by the Maintenance Surveyor, whether laid in one or more layers. No deductions shall be made for manholes, gullies, catchpits, inspection covers, columns or piers, etc. not exceeding 1.00 m².</p> <p>In the case of quadrants, the outer circular girth shall be measured.</p> |
| Rates generally | <p>III. Rates for all items shall include for any or all of the following as applicable : -</p> <ul style="list-style-type: none"> (a) Finishing surfaces level or to falls, gradients, crowns and cambers to exact profile required, with each successive surface finished parallel to the final finished surface. (b) Additional bulk of material required to allow for compaction and consolidation. (c) All wheeling and multi-handing of material to place of final incorporation in the work. (d) Maintenance and cleaning of surfaces. (e) Protection of curbs, masking and unmasking of drainage channels, manhole covers, gully gratings, expansion joints, road studs and road marking. (f) Provision, maintenance and removal of measures to maintain traffic flow including all temporary traffic diversion lighting and signs including labours and all charges incurred. (g) Provision, maintenance and removal of temporary road, walkway covers to trenches and the like. (h) Obtaining permits from Government departments before execution of the works. (i) Mobilization, maintenance and demobilization of paving machine, rollers, compaction plant, milling machine and the like. (j) Coring, testing and reinstatement with bituminous material shall include for : - <ul style="list-style-type: none"> (i) Marking the edges of the surfaces to be cored. (ii) Making good any overbreak, cracking or other damages. (iii) Cleaning up and removing surplus material and waste. (iv) Taking core samples, sealing and transferring in the proper sequence to core box and delivering them to place of testing. (v) Recording and submitting records and reports. (vi) Filling up core holes with appropriate materials. |

SPECIAL CONDITIONS (CONT'D)

- | | | |
|-----|--|---|
| IV. | Rates for granular sub-base and/or lean concrete sub-base shall further include for : - | Rates for granular sub-base and/or lean concrete |
| | (a) Trial areas. | |
| | (b) Grading, measuring, mixing, transporting, depositing, spreading, levelling and compacting. | |
| | (c) Making of all joints. | |
| | (d) In the case of lean concrete sub-base, all testing and formwork. | |
| | (e) Spillage and slopes at edges. | |
| | (f) Edge support. | |
| V. | Rate for bituminous road base shall further include for : - | Rates for bituminous road base |
| | (a) Trail areas. | |
| | (b) Grading, measuring, mixing, transporting, depositing, spreading, levelling and compacting. | |
| | (c) Making of all joints. | |
| | (d) Spillage and slopes at edges. | |
| | (e) Edge support. | |
| | (f) Sealing surfaces, priming and tack coats. | |
| VI. | The rates for bituminous flexible surfacing shall further include for : - | Rates for bituminous flexible surfacing |
| | (a) Preparation and cleaning of surface to receive bituminous materials. | |
| | (b) Grading, measuring, mixing, transporting, depositing, spreading, levelling and compacting. | |
| | (c) Cutting back and making of joints including applying bituminous priming coats. | |
| | (d) Maintenance of surface and cleaning or removal and replacement of contaminated layers. | |
| | (e) Spillage and slopes at edges. | |
| | (f) Making good up to curbs and around manholes and gully covers and frames and up to existing services and around expansion joints. | |
| | (g) Making good up to existing flexible surfacing. | |
| | (h) Sealing surfaces, priming and tack coats. | |

SPECIAL CONDITIONS (CONT'D)

Rates for cold milling of wearing course

- VII. The rates for cold milling of wearing course shall further include for : -
- (a) Removal of all material arising.
 - (b) Preparation and brushing of surface.
 - (c) Multiple milling to the depth, profile shape, fall and the texture surface required.
 - (d) Making good up to curbs and around manholes and gully covers and frames and up to existing services and around expansion joints.
 - (e) Making good up to existing flexible surfacing.
 - (f) Loosing, breaking of milled particles.
 - (g) Cleaning milled surface by mechanical vacuum road sweeper.

Rates for stone mastic asphalt surface

- VIII. The rates for stone mastic asphalt surface shall further include for : -
- (a) Preparation and cleaning of surface to receive stone mastic asphalt materials.
 - (b) Grading, measuring, mixing, transporting, depositing, spreading, levelling and compacting.
 - (c) Cutting back and making of joints including applying bituminous priming coats.
 - (d) Maintenance of surface and cleaning or removal and replacement of contaminated layers.
 - (e) Spillage and slopes at edges.
 - (f) Making good up to curbs and around manholes and gully covers and frames and up to existing services and around expansion joints.
 - (g) Making good up to existing flexible surfacing.
 - (h) Sealing surfaces, priming and tack coats.

Rates for patching up potholes with bituminous material

- IX. The rates for patching up potholes with bituminous material shall further include for : -
- (a) Potholes of any thickness.
 - (b) Removal of debris and loose material from potholes.
 - (c) Drying out water in potholes.
 - (d) Preparation of surface and applying bituminous priming coat.
 - (e) Placing and compacting bituminous material marrying in with existing surfaces.

Rates for patching up potholes with instant filling material

- X. The rates for patching up potholes with instant filling material shall further include for : -
- (a) Potholes of any thickness.
 - (b) Removal of debris and loose material from potholes.
 - (c) Drying out water in potholes.
 - (d) Placing and compacting instant hole filling material marrying in with existing surfaces.

SPECIAL CONDITIONS (CONT'D)

XI.	The rates of concrete carriageway shall further include for : -	Rates for concrete carriageway
	(a) Trial mixes.	
	(b) Waterproofing membrane underlays.	
	(c) Formwork and trimming bars.	
	(d) Spreading, compacting and finishing the concrete.	
	(e) In the case of rapid hardening concrete, providing and mixing approved concrete admixture for early strength or rapid hardening cement.	
	(f) Surface texturing, curing and protection.	
	(g) Forming channels as an integral part of the slab.	
	(h) Forming recesses, openings and bays for manholes, gullies and road studs.	
	(i) Forming surfaces within vertical and horizontal tolerances and surface regularity.	
	(j) Restrictions on the use of pavement courses by construction traffic.	
	(k) Making good up to existing.	
	(l) Forming expansion, longitudinal and contraction joints including all necessary formwork.	
XII.	The rates for steel fabric reinforcement shall include for : -	Rates for steel fabric reinforcement
	(a) Extra fabric reinforcement at laps.	
	(b) All requirements of sampling and testing.	
	(c) Cleaning, cutting to size, bending, fixing and securely supporting in the required position.	
	(d) Plastic cover spacers, spacer blocks, steel spacer rods, steel chairs and annealed iron tying wire or tack welding.	
XIII.	The rates for longitudinal, expansion and contraction joints shall include for : -	Rates for longitudinal, expansion and contraction joints
	(a) Forming joints through full thickness of concrete slab carriageway and surfacing including formwork.	
	(b) Removal of dust and debris.	
	(c) Provision of bond breaker or backing strips.	
	(d) Masking tape to sides of groove.	
	(e) Application of primer to sides of sealing grooves.	
	(f) Joint assemblies complete including, as appropriate, groove forming strip, tie bars with PVC sleeves, crack inducers, dowel bars, dowel sheaths, dowel bar cradles, joint filler and joint sealant.	
	(g) Removal of groove forming strip at movement joints after concrete has set.	

SPECIAL CONDITIONS (CONT'D)

- | | |
|--|--|
| Rates for run-in | <p>XIV. The rate for run-in shall further include for : -</p> <ul style="list-style-type: none"> (a) Cutting pavement by saw cut, excavating and clearing away or filling and compacting excavated materials. (b) Taking up and clearing away from Site or setting aside for re-lay existing curbs. (c) Breaking up and clearing away from Site existing concrete bedding for curbs. (d) Preparation of formation and compacting base. (e) Laying and compacting of 150 mm granular sub-base. (f) Concrete pavement up to 200 mm thick and finishing surface. (g) Supplying and laying steel fabric reinforcement. (h) Supplying and laying additional/replacement drop curbs including concrete bedding as required. |
| Rates for curbs, precast concrete footway edgings, etc. | <p>XV. The rates for granite or precast concrete curbs, precast concrete footway edgings, etc. shall include for : -</p> <ul style="list-style-type: none"> (a) Excavating in any materials, ramming bottom, back filling and removal surplus materials from Site. (b) Concrete bedding, backing and foundation for curbs or edgings. (c) Formwork. (d) Reinforcement. (e) Keying of surface and tack coat. (f) Finishing, protecting and curing. (g) Making and sealing joints. (h) Dressing of curbs as required. |
| Rates for concrete footways | <p>XVI. The rates for concrete footways shall include for : -</p> <ul style="list-style-type: none"> (a) Trial mixes. (b) Waterproofing membrane underlays. (c) Formwork and trimming bars. (d) Spreading, compacting and finishing the concrete. (e) In the case of rapid hardening concrete, providing and mixing approved concrete admixture for early strength or rapid hardening cement. (f) Surface texturing, curing and protection. (g) Spillage and slopes at sides. (h) Forming channels as an integral part of the slab. (i) Forming recesses, openings and bays for manholes, gullies and road studs. (j) Forming surfaces within vertical and horizontal tolerances and surface regularity. |

SPECIAL CONDITIONS (CONT'D)

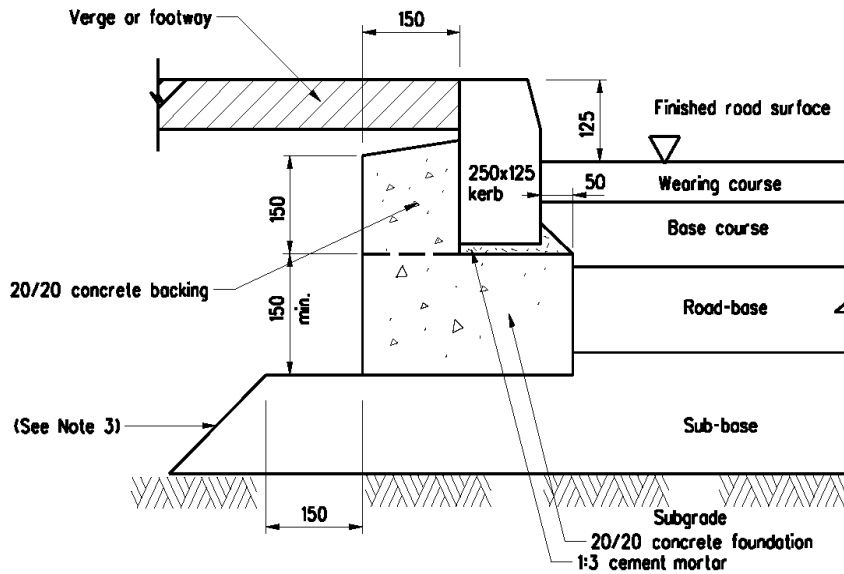
XVI.	(k)	Forming and including expansion, longitudinal and contraction joints including all necessary formwork.	Rates for concrete footways (cont'd)
	(l)	Restrictions on the use of pavement courses by construction traffic.	
	(m)	Making good up to existing.	
XVII.		G.S. clauses for Roadwork can be found in the External Work Section of the General Specification for Building.	G.S. clauses

Item	ROAD, CARPARKS AND PAVED AREAS				Item	
	SUB-BASE					
	<i>Per cubic metre</i>					
				A \$		
12001	Granular sub-base.....			174.60	12001	
12002	Lean concrete sub-base.....			683.80	12002	
	ROAD BASE					
	<i>Per cubic metre</i>					
12003	Bituminous road base.....			750.80	12003	
	FLEXIBLE SURFACING					
	Supply, lay and roll with roller for the following bituminous surfacing (consolidated thickness stated) : -					
	<i>Per square metre</i>					
		Nominal aggregate size (mm)				
		37.5	28	20	10	
		A	B	C	D	
		\$	\$	\$	\$	
12004	55 mm Thick bituminous base course.....	77.40	-	-	-	12004
12005	Extra over Item 12004 for each 5 mm thickness or part thereof in excess of 55 mm.....	6.90	-	-	-	12005
12006	55 mm Thick bituminous base course.....	-	83.20	-	-	12006
12007	Extra over Item 12006 for each 5 mm thickness or part thereof in excess of 55 mm.....	-	7.50	-	-	12007
12008	40 mm Thick bituminous wearing course.....	-	-	82.00	-	12008
12009	Extra over Item 12008 for each 5 mm thickness or part thereof in excess of 40 mm.....	-	-	8.10	-	12009
12010	30 mm Thick bituminous wearing course.....	-	-	-	56.60	12010
12011	Extra over Item 12010 for each 5 mm thickness or part thereof in excess of 30 mm.....	-	-	-	9.20	12011
		Thickness (mm)				
		10	20	40		
		A	B	C		
		\$	\$	\$		
12012	Stone mastic asphalt surfaces.....		21.60	41.30	75.10	12012
					A \$	
12013	Extra over Item 12012 for each 5 mm thickness or part thereof in excess of 40 mm.....				8.10	12013
	COLD MILLING WORK					
	<i>Per square metre</i>					
12014	Cold mill 25 mm thick wearing course with shaving machine and remove from Site all materials arising.....				18.10	12014
12015	Extra over Item 12014 for each 25 mm thickness or part thereof in excess of 25 mm.....				17.30	12015

Item	ROAD, CARPARKS AND PAVED AREAS (CONT'D)							Item		
	PATCHING UP POTHOLES									
	(Note : - The following two items shall only be measured when individual potholes n.e. 2.0 m ² each are repaired.)									
	<i>Each</i>									
		Pothole size (m ²)								
		n.e. 0.2	0.2 - 0.5	0.5 - 1.0	1.0 - 2.0					
		A	B	C	D					
		\$	\$	\$	\$					
12016	Patch up pot-hole with bituminous material.....	25.90	37.90	58.60	117.00		12016			
12017	Patch up pot-hole with instant hole filling material.....	100.00	261.30	524.10	1,048.20		12017			
	CONCRETE CARRIAGEWAY									
	<i>Per cubic metre</i>									
12018	Concrete Grade 40S, Grade 40D or 40MPa carriageway.....					A	12018			
						\$				
						853.00				
12019	Extra over Item 12018 for rapid hardened concrete.....					262.90	12019			
	STEEL FABRIC REINFORCEMENT									
	<i>Per square metre</i>									
		BS 4483 or SS-32 Reference number								
		C785	C636	C503	C385	C283				
		A	B	C	D	E				
		\$	\$	\$	\$	\$				
12020	Supply and lay steel fabric reinforcement.....	57.60	50.40	39.70	30.90	23.40	12020			
	RUN-IN									
	<i>Each</i>									
		Run-in size (m ²)								
		n.e. 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40		
		A	B	C	D	E	F	G		
		\$	\$	\$	\$	\$	\$	\$		
12021	Concrete run-in.....	2,858.60	4,417.90	5,615.00	6,837.20	8,141.20	9,345.40	10,667.60		
	<i>Per square metre</i>									
12022	Concrete run-in size exceeding 40 m ²							A		
								\$		
								260.00		
	REPAIRS TO EXISTING CONCRETE SURFACING									
	<i>Per linear metre</i>									
		Depth of grooves (mm)		n.e. 15	15 - 25	n.e. 20	20 - 25	n.e. 20	20 - 35	n.e. 40
		Width of grooves (mm)		n.e. 10	n.e. 10	10 - 15	10 - 15	15 - 20	15 - 20	20 - 25
		A	B	C	D	E	F	G		
		\$	\$	\$	\$	\$	\$	\$		
12023	Saw cut groove in concrete carriageway for joint sealant.....	27.20	38.20	42.10	53.50	58.60	129.20	171.70	12023	
	<i>Each</i>									
		Bar diameter (mm)			12	20	25			
		Embedded length (mm)			200	325	325			
					A	B	C			
					\$	\$	\$			
12024	Drill hole in edge of concrete carriageway for dowel bar and PVC sleeve.....				31.20	60.50	75.70	12024		

Item	ROAD, CARPARKS AND PAVED AREAS (CONT'D)	Item																								
	LONGITUDINAL, EXPANSION AND CONTRACTION JOINTS TO EXISTING CONCRETE SURFACING																									
		<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">Thickness of slab (mm)</th> </tr> <tr> <th>n.e. 150</th> <th>150-310</th> </tr> <tr> <th>A</th> <th>B</th> </tr> <tr> <th>\$</th> <th>\$</th> </tr> </thead> </table>	Thickness of slab (mm)		n.e. 150	150-310	A	B	\$	\$																
Thickness of slab (mm)																										
n.e. 150	150-310																									
A	B																									
\$	\$																									
	<i>Per linear metre</i>																									
12025	Form expansion joint through full thickness of slab.....	12025																								
12026	Form longitudinal joint ditto.....	12026																								
12027	Form contraction joint ditto.....	12027																								
	FOOTWAYS, CYCLE TRACKS, PAVING AND CURBING																									
		<table border="1" style="width: 100%;"> <thead> <tr> <th>A</th> </tr> <tr> <th>\$</th> </tr> </thead> </table>	A	\$																						
A																										
\$																										
	<i>Per linear metre</i>																									
12028	Granite curb n.e. 200 mm high including backing and foundations.....	12028																								
12029	Extra over Item 12028 for each additional 50 mm high or part thereof in excess 200 mm high.....	12029																								
12030	Extra over Items 12028 to 12029 inclusive for curb n.e. 15.00 m radius.....	12030																								
12031	Granite quadrant n.e. 200 mm high including backing and foundations.....	12031																								
12032	Extra over Item 12031 for each additional 50 mm high or part thereof in excess 200 mm.....	12032																								
12033	Lay only granite curbs/quadrants of any size including backing and foundations.....	12033																								
12034	Ditto but n.e. 15.00 m radius.....	12034																								
		<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="6">Concrete curb type</th> </tr> <tr> <th>K1</th> <th>K2</th> <th>K3</th> <th>K5 or K9</th> <th>K6 or K8</th> <th>K7</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>	Concrete curb type						K1	K2	K3	K5 or K9	K6 or K8	K7	A	B	C	D	E	F	\$	\$	\$	\$	\$	\$
Concrete curb type																										
K1	K2	K3	K5 or K9	K6 or K8	K7																					
A	B	C	D	E	F																					
\$	\$	\$	\$	\$	\$																					
	<i>Per linear metre</i>																									
12035	Precast concrete curb including backing and foundations.....	12035																								
12036	Extra over Item 12035 for curb n.e. 15.00 m radius.....	12036																								
12037	Lay only precast concrete curb including backing and foundations.....	12037																								
12038	Ditto but n.e. 15.00 m radius.....	12038																								
		<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="3">Edging type</th> </tr> <tr> <th>E1</th> <th>E2</th> <th>E3</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>	Edging type			E1	E2	E3	A	B	C	\$	\$	\$												
Edging type																										
E1	E2	E3																								
A	B	C																								
\$	\$	\$																								
	<i>Per linear metre</i>																									
12039	Precast concrete footpath edging including backing and foundations.....	12039																								
		<table border="1" style="width: 100%;"> <thead> <tr> <th>A</th> </tr> <tr> <th>\$</th> </tr> </thead> </table>	A	\$																						
A																										
\$																										
	<i>Per linear metre</i>																									
12040	Precast concrete quadrant to suit curbs and edgings of any size and radius including backing and foundations.....	12040																								

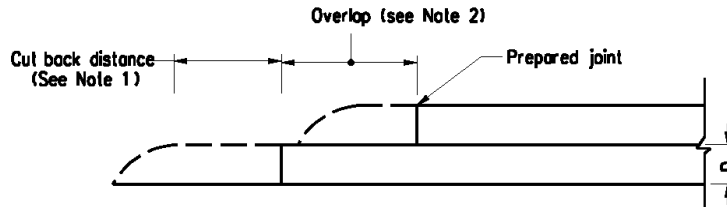
Item	FOOTWAYS, CYCLE TRACKS, PAVING AND CURBING (CONT'D)		Item
	<i>Per cubic metre</i>	A \$	
12041	Concrete Grade 30S, Grade 30D or 30MPa footway.....	720.90	12041
12042	Concrete Grade 30S, Grade 30D or 30MPa margin or edging.....	1,395.60	12042
12043	Ditto flat channel.....	1,439.60	12043
12044	Ditto dish channel.....	1,498.00	12044
12045	Extra over Items 12041 to 12044 inclusive for concrete footpath with rapid hardening concrete.....	336.10	12045
	SUNDRIES		
	<i>Per square metre</i>	A \$	
12046	Take up and clear away from Site existing paving slabs/blocks and sand bedding.....	41.40	12046
12047	Take up, set aside for re-use and re-lay existing paving slabs/blocks and sand bedding including additional sand filling and bedding.....	76.10	12047
	<i>Per linear metre</i>		
12048	Take up and clear away from Site existing granite curbs, in any size and any radius, and associated concrete bedding, backing and foundation.....	41.00	12048
12049	Take up, set aside for re-use and re-lay existing granite curbs, ditto.....	196.40	12049
12050	Take up and clear away from Site existing precast concrete curbs, ditto.....	41.00	12050
12051	Take up, set aside for re-use and re-lay existing precast concrete curbs, ditto.....	193.20	12051



PAVEMENT CROSS-SECTION

Layers	Material	Thickness	
Wearing course	Bituminous	40	Total thickness to be designed to the Pavement Design Manual and min. = 170
Base course		65	
Road base		min.65	
Sub-base	Granular	Designed to the Pavement Design Manual	

THICKNESS OF PAVEMENT LAYERS



Notes:

JOINTS IN BITUMINOUS MATERIALS LAYERS

1. Minimum cut back distance = $2 \times D$ or 100 whichever is greater.
2. Minimum overlap between adjoining layers: 150 for joints longitudinal to carriageway, 500 for joints transverse to carriageway.
3. Where the crossfall of road surface is towards the kerb the sub-base should be carried through to the edge of the embankment or to the filter drain.
4. Refer to the general specification for the nominal sizes of materials.
5. Kerb units shall be laid on 1:3 cement mortar not less than 10 mm thick and not more than 40 mm thick.
6. All dimensions are in millimetres.

	Former Drg. No. H1016/A with general revision		June 94
REF.	REVISION	SIGNATURE	DATE

TYPICAL BITUMINOUS PAVEMENT CONSTRUCTION

HIGHWAYS DEPARTMENT

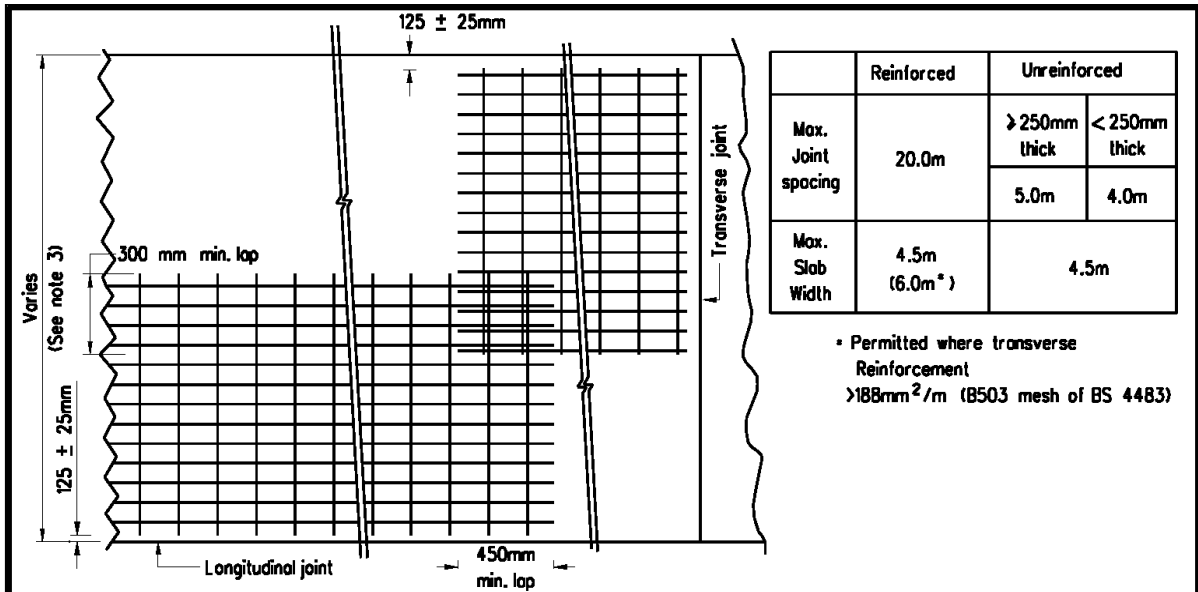
REFERENCE
Pavement Design Manual

DRAWING No.

CAD

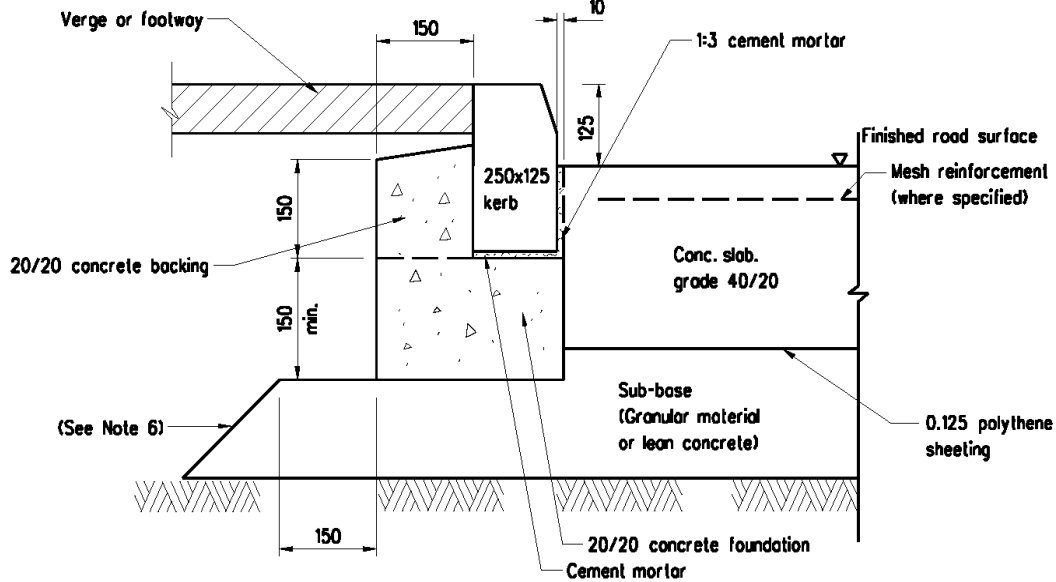
SCALE
Diagrammatic

H 1101



• Permitted where transverse Reinforcement > 188mm²/m (B503 mesh of BS 4483)

ARRANGEMENT OF MESH REINFORCEMENT, JOINT SPACING AND SLAB WIDTH



PAVEMENT CROSS - SECTION

Notes:

1. Dimensions are in millimetres.
2. Top cover to reinforcement should be 60 ± 10mm.
3. Maximum width between longitudinal joints shall be 4500mm unless the reinforcement in the transverse direction of the slab is greater than 188mm²/m when the maximum width of slab may be extended to 6000mm.
4. For unreinforced slabs, $\frac{\text{Length}}{\text{Width}} \geq 2.0$
5. Refer to Drg. No. H1105 - H1109 for details of transverse and longitudinal joints.

6. Where the crossfall of road surface is towards the kerb the sub-base should be carried through to the edge of the embankment or to the filter drain.
7. Kerb units shall be laid on cement mortar at least 10 mm thick and not more than 40 mm thick.

A	Note 4 revised		Jan 95
	Former Drg. No. H1002A & H1016A with general revision		June 94
REF.	REVISION	SIGNATURE	DATE

TYPICAL CONCRETE PAVEMENT CONSTRUCTION

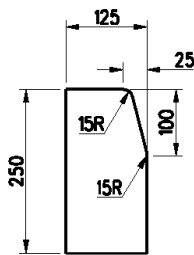
HIGHWAYS DEPARTMENT

REFERENCE DRAWING No. CAD

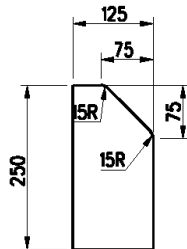
SCALE Diagrammatic

H 1102A

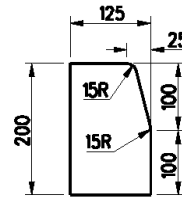
STRAIGHT KERBS



TYPE K1

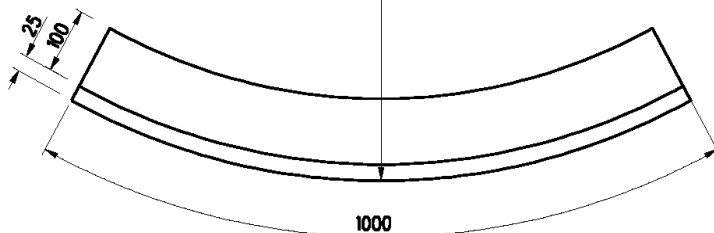


TYPE K2



TYPE K3

RADIUS KERBS



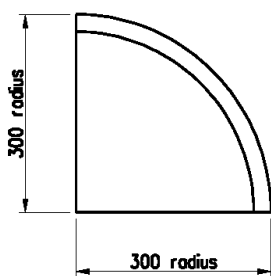
PLAN VIEW

External radius kerbs shall have a radius (R) of 1,3,6 or 9 metres and shall be of kerb type K1 section.

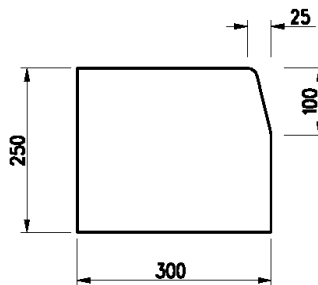
Notes:

1. The nominal length of a kerb unit shall be 1000 mm and an edging unit 750.
2. Concrete shall be grade 30/20.
3. Type K1 kerbs should be used in urban areas and where a footway is adjacent to the carriageway.
4. Type K2 kerbs should be used in rural areas and on high speed roads where there is no adjoining footway.
5. Type K3 kerbs should be used only on bridge decks.
6. Precast concrete kerbs, edgings and quadrants shall comply with B.S. 7263: Part 1 except that the requirement for testing of water absorption shall not be applied.
7. All dimensions are in millimetres.

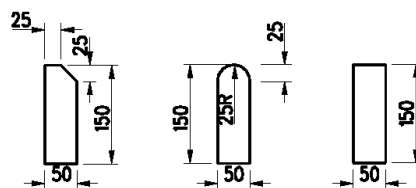
QUADRANTS



PLAN VIEW



END VIEW



Type E1 Type E2 Type E3
FOOTPATH EDGINGS

	Former Drg. No. H1015/1 with general revision		June 94
REF.	REVISION	SIGNATURE	DATE

PRECAST CONCRETE
KERBS (SHEET 1 OF 2)

HIGHWAYS DEPARTMENT

REFERENCE

DRAWING No.

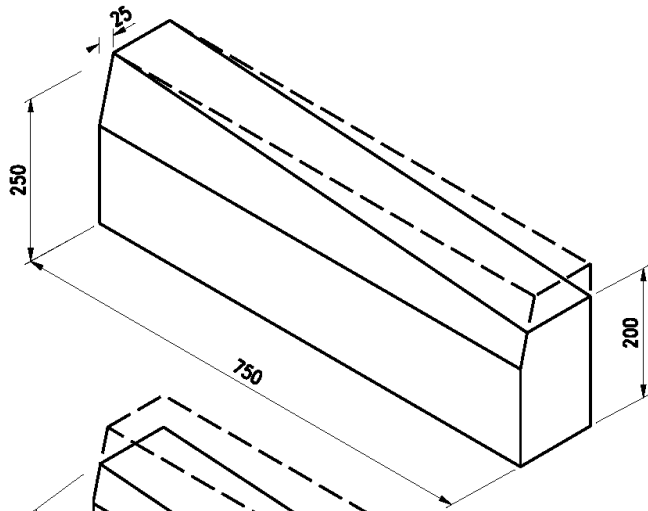
CAD

SCALE

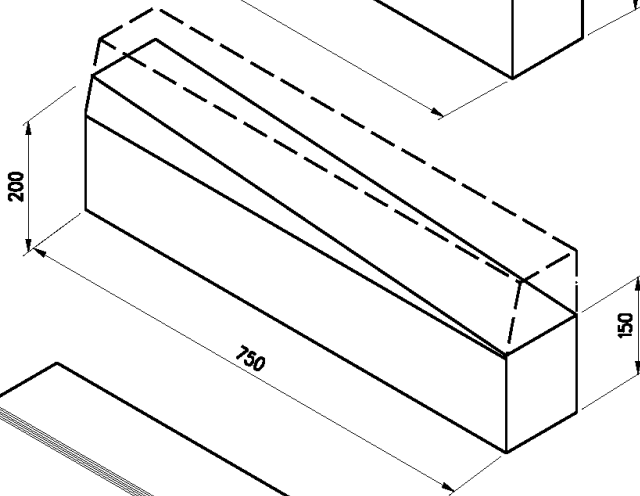
1 : 10

H 1118

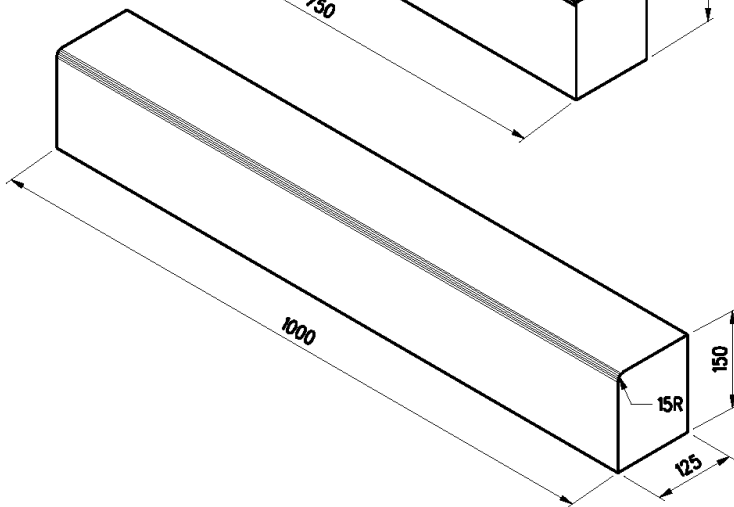
DOUBLE DROP CROSSING KERBS



Left hand drop kerb
Type K5
(Right Hand - K9)



Left hand drop kerb
Type K6
(Right Hand - K8)



Centre drop kerb
Type K7



Former Drg. No. H1015/2 with general revision		June 94	
REF.	REVISION	SIGNATURE	DATE

**PRECAST CONCRETE
KERBS
(SHEET 2 OF 2)**

HIGHWAYS DEPARTMENT

REFERENCE

DRAWING No.

CAD

SCALE
1 : 10

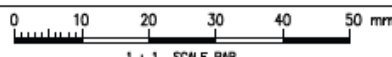
H 1119

RANGE OF GRADING	
B. S. SIEVE SIZE	PERCENTAGE BY WEIGHT PASSING
75 mm	100
37.5 mm	85 ~ 100
20 mm	60 ~ 85
10 mm	40 ~ 70
5 mm	25 ~ 45
600 μ m	8 ~ 22
75 μ m	0 ~ 10

- a. GRANULAR SUB-BASE MATERIAL SHALL BE COMPRISED OF CRUSHED ROCK, RE-CYCLED AGGREGATE OR APPROVED RE-CYCLED SUB-BASE MATERIAL. THE MATERIAL SHALL BE WELL-GRADED AND LIE WITHIN THE ABOVE GRADING LIMITS. THE PARTICLE SIZE SHALL BE DETERMINED IN ACCORDANCE WITH THE REQUIREMENTS OF BS 1377.
- b. THE MATERIAL PASSING THE B.S. SIEVE 425 μ m WHEN TESTED IN ACCORDANCE WITH BS 1377 SHALL BE NON-PLASTIC.
- c. THE MATERIAL SHALL BE LAID AND COMPACTED TO THE REQUIREMENTS OF PARTICULAR SPECIFICATIONS FOR ROADWORKS.

TABLE 8 GRANULAR SUB-BASE MATERIAL

drawing title TYPICAL DETAIL OF EXTERNAL DRIVEWAY AND CARPARK GROUND SLAB ON GRADE (5 OF 5)	checked CSE/1 <u>C.T. WONG</u> <i>Ashway</i> date JULY, 2008	drawing no. SD/026	scale N.T.S.
	approved AD(SE) <u>W.W. LI</u> <i>W.W. Li</i> date JULY, 2008		



1 : 1 SCALE BAR

A4 210 x 297

Section 13

PLUMBING

PLUMBING

SPECIAL CONDITIONS

Measurements of excavations, chases, holes and other subsidiary work	I.	All trench excavation shall be measured separately and paid for at the appropriate rates under the Excavation Section. All chases in and holes through existing walls, ceilings, etc. for tubing and pipes, other than mortices or holes for brackets, shall be measured and paid for at the appropriate rates under the Concrete Work Section, Brickwork and Blockwork Section or other applicable Work Sections.
Measurements generally	II.	<p>Pipes shall generally be measured the mean length over all bends, branches, junctions and the like unless otherwise stated. Pipe sizes are referred to nominal sizes.</p> <p>Gutters shall be measured the net length as fixed. No allowance for laps shall be measured.</p> <p>Fittings shall be identified by the largest diameter.</p> <p>Insulation to pipe shall be measured the diameter of the pipes to be insulated.</p> <p>Insulation to cylinder shall be measured the net area cover. No deduction shall be made for opening or void not exceeding 0.50 m².</p>
Measurements of sheet lead work	III.	Sheet lead shall be measured the net weight as laid or fixed. The weight of tacks, wedges and the like shall be added in.
Measurements of fittings	IV.	<p>Fittings shall be measured as "Extra over" the gutter, tubing or pipe run. Taper pipes, taper bends, tees and junctions with diminishing branches shall be measured as the size of the largest end.</p> <p>Coupling shall include slip coupling, female or male construction.</p> <p>Connector shall include valve connector, pressfitting, flat seal etc. and the like, female or male construction.</p> <p>Elbow shall include all degree elbow, reducing elbow, pre-formed pipebridge, adapter, with or without sort, plain end, wall plate, outlet, etc. and the like, female or male construction.</p> <p>Tee shall include equal tee, branch tee, reducing tee, with or without outlet, etc. and the like, female or male construction.</p> <p>All stainless steel pipe fittings shall include pressfitting and any other construction recommended by the manufacturer.</p>
Rates for lead work	V.	Rates for lead work shall include for all dressing, bossing up, forming angles and inter-sections, bossing ends and the like to rolls and welts.
Rates generally	VI.	<p>The rates shall generally include for : -</p> <p>(a) Working at any height and any position.</p> <p>(b) Working internally or externally.</p> <p>(c) All short lengths, cutting and waste.</p> <p>(d) All joints in the running length, capillary joint or compression joint for copper pipe, and joints to all bends, branches, tees and other pipe fittings and heads, roof and floor outlets and the like.</p> <p>(e) Provision of all pipe sleeves of any kind of materials but excluding fire collars through walls or slabs.</p>

SPECIAL CONDITIONS (CONT'D)

VI.	<ul style="list-style-type: none"> (f) Provision of stainless steel or other brackets and clips as G.S. Item 19.05. (g) All jointing materials including gaskets, bolts and nuts for flanged pipes and any other special jointing materials recommended by the manufacturer. (h) Fixing in any position to floors, walls and soffits including fixing in chases, ducts, false ceilings and similar positions. (i) Protection of underground and concealed metal pipes with "Denso" tape or other materials as G.S. Item 19.69. (j) Connection to existing plumbing system. (k) All pipework fittings (e.g. bends, elbows, branches, tees, caps and the like) in respect of pipework not exceeding 40 mm diameter. (l) Provision of connection point for the purposes of connection of equipotential bonding connection as required by the I.E.E. Regulations. (m) Testing as G.S. Item 19.72. 	Rates generally (Cont'd)
VII.	Rates for P.V.C. and U.P.V.C. tubing and pipes, galvanized mild steel pipes, UPVC lined galvanized mild steel pipes, stainless steel pipes and copper pipes shall further include for made bends.	Rates for tubing and pipes include for made bends
VIII.	Rates for fittings on gutters, tubing and pipes of all types shall include for : - <ul style="list-style-type: none"> (a) Additional cutting and waste on gutter, tubing or pipe and all extra joints. (b) In the case of pipe bends and gutter angles, bends and gutter angles of any angle. (c) In the case of tees, crosses and single or double junctions, square or oblique connections with straight or curved offsets and all ends either equal or reducing. 	Rates for fittings
IX.	The rates for take up or take down and clear away or take up or take down and set aside for re-use gutters, tubing or pipes shall further include for : - <ul style="list-style-type: none"> (a) All fittings including brackets or hangers. (b) Cutting into existing gutter, tubing or pipe in position. (c) Preparing remaining ends to receive joint with new pipe if required. (d) Plugging ends with plugs or caps as required. (e) Making good surfaces disturbed. (f) Arranging for temporary plumbing system and diversion, if required. 	Rates for take up or take down, etc. gutters, tubing or pipes
X.	The rates for fix only or lay only gutters, tubing or pipes shall further include for : - <ul style="list-style-type: none"> (a) All fitting including brackets, bolts, nuts and washers. (b) Cutting mortices and grouting in cement mortar. (c) Preparing ends to receive joints with pipes. (d) Making good surfaces disturbed. 	Rates for fix only or lay only gutters, tubing or pipes

SPECIAL CONDITIONS (CONT'D)

Rates for cut into pipes or tubing in position

- XI. The rates for cut into pipes or tubing in position shall further include for : -
- (a) Temporary suspension of the water supplies.
 - (b) Arranging for temporary plumbing system and diversion, if required.
 - (c) Making good surfaces disturbed.

Rates for insulation

- XII. The rates for insulation to tubing and cylinders shall include for : -
- (a) All cutting, waste and fitting.
 - (b) Fixing bands.

Rates for cisterns, tanks and cylinders

- XIII. The rates for cisterns, tanks and cylinders shall include for : -
- (a) Supply and installation in accordance with the manufacturer's instructions.
 - (b) Water tank suitable for storage of fresh water, portable water and/or flushing water.
 - (c) Water tank in any colour, rectangular or square shape.
 - (d) Supply and fix nozzles, air vent, electrode seat and cover, internal ladder, external ladder, galvanized mild steel base supporting frames, etc. and all necessary accessories, fittings and the like recommended by the manufacturer.
 - (e) Providing and fixing with anchor bolts.
 - (f) Cutting mortice, sinking or drilling in concrete, brick, stone or other surfaces as required.
 - (g) Grouting into new or existing mortice or holes.
 - (h) Making good disturbed surfaces.
 - (i) Providing test certificate, operation manuals and manufacturer's guarantee.
 - (j) Masking, protecting and cleaning.
 - (k) Testing and commissioning.
 - (l) Submission of catalogues, technical literature, operation manuals and manufacturer's guarantee.

Rates for pressure vessels

- XIV. The rates for pressure vessels shall further include for : -
- (a) Supply and installation in accordance with the manufacturer's instructions.
 - (b) Providing and fixing all accessories, fittings and the like as recommended by the manufacturer.
 - (c) Testing the supply and installation works.
 - (d) Providing test certificate, operation manuals and manufacturer's guarantee.

SPECIAL CONDITIONS (CONT'D)

- XV. The rates for sanitary fittings and parts of sanitary fittings shall further include for : -
- (a) Supply and installation in accordance with the manufacturer's recommendations.
 - (b) Providing and fixing all accessories, fittings and the like as recommended by the manufacturer.
 - (c) Providing all necessary jointing compound, mortar, lead plugs and other accessory material including cutting and pinning or plugging and screwing brackets.
 - (d) Applying white or coloured silicone sealant after de-greasing and drying of fittings.
 - (e) Providing and making all necessary connections to water supply services, overflow, wastes and ventilating pipes.
 - (f) Providing temporary sealing off of water supply services, wastes and ventilating pipes in case when the installation work cannot be completed on time.
 - (g) Providing and maintaining protective coverings during the progress of work and cleaning off when required and upon completion of works.

**Rates for
sanitary fittings
and parts of
sanitary fittings**

Item	LEAD WORK					Item
	Milled lead and all labours including provision of all nails, screws, holdfasts, wedges, tacks and solder in :-	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per kg</i>	A \$	B \$	C \$	D \$	
13001	Flats (including rolls), gutters (including cesspools), cornices, dormers, flashings, hips, ridges, linings to sinks, cisterns, safes, drawers and the like	75.50	8.60	10.30	18.70	13001
	<i>Each</i>					
13002	1.80 mm Thick sheet lead sleeve, 150 mm high, with top secured to pipe n.e. 50 mm bore using galvanized screw clip and pointed with mastic, and bottom dressed over lead collar or pipe sleeve (measured separately)	85.60	12.90	17.10	56.20	13002
13003	Ditto but to pipe exceeding 50 mm bore and n.e. 100 mm bore ditto	130.10	15.40	21.40	75.00	13003
13004	Ditto but to pipe exceeding 100 mm bore and n.e. 150 mm bore ditto	171.20	17.10	22.30	102.50	13004
13005	1.80 mm Thick sheet lead slate, size 450 x 450 mm, perforated for and with outlet collar 75 mm deep soldered on and dressed down into top of pipe of any bore	380.00	13.70	20.60	140.00	13005
13006	Ditto but with upstand collar 150 mm high soldered on and dressed up around pipe of any bore	420.80	24.00	35.10	150.00	13006
	<i>Per linear metre</i>				A \$	
13007	Copper nail to existing sheet lead at approximately 75 mm centres				40.80	13007
13008	Wiped soldered seam or angle (approximately 2 kg solder per linear metre) to existing sheet including cutting out defective joint if required				323.90	13008
	<i>Each</i>					
13009	Clean and cut out as necessary and solder small holes n.e. 0.001 m ² in sheet lead				76.60	13009
13010	Run with lead to mortice in concrete, brick, stone or other surface around end of baluster, bolt and the like n.e. 0.0001 m ³ (net size of end of baluster, bolt and the like measured)				124.50	13010

Item	CAST IRON RAINWATER GUTTERS AND FITTINGS	Half round section				Ogee section		Item
		Internal diameter (mm)				Internal diameter (mm)		
		75	100	125	150	100	125	
		A	B	C	D	E	F	
	<i>Per linear metre</i>	\$	\$	\$	\$	\$	\$	
13011	Gutter fixed on brackets at 1.00 m (maximum) centres	101.60	127.10	152.50	207.90	127.10	150.20	13011
	Extra over gutter for :-							
	<i>Each</i>							
13012	Stop end	37.00	46.20	50.80	57.80	46.20	57.80	13012
13013	Internal or external angle	46.20	57.80	80.90	104.00	69.80	90.40	13013
13014	Nozzle outlet	73.90	92.40	129.40	161.70	104.00	138.60	13014
13015	Combined stop end nozzle outlet	92.40	115.50	161.70	196.40	150.20	196.40	13015
	<i>Per linear metre</i>							
13016	Take down and clear away gutter complete with all fittings and brackets	11.10	15.40	16.30	18.90	12.90	15.40	13016
13017	Take down and set aside for re-use ditto	12.00	16.30	17.10	19.70	15.40	17.10	13017
13018	Fix only gutter complete with all fittings and brackets at 1.00 m (maximum) centres	68.30	80.80	93.30	118.30	93.30	105.80	13018
	<i>Each</i>							
13019	Re-make existing joint including cleaning ends	28.30	33.30	43.30	53.30	43.30	53.30	13019

Item	CAST IRON RAINWATER PIPES AND FITTINGS	Pipe diameter (mm)				Item
		50	75	100	150	
		A	B	C	D	
	<i>Per linear metre</i>	\$	\$	\$	\$	
13020	Pipe fixed to floor, wall or soffits	78.70	96.20	124.80	185.70	13020
	<i>Each</i>					
13021	Extra over pipe for shoe	87.40	113.10	134.30	189.20	13021
13022	Ditto for bend	25.40	40.80	47.60	83.40	13022
13023	Ditto for single junction	40.10	57.60	68.90	127.20	13023
13024	Ditto for double junction	71.50	88.10	125.80	237.20	13024
13025	Add to either of Items 13022 to 13024 inclusive if fitted with bolted access door	28.00	30.70	33.40	37.10	13025
13026	Swan-neck of any projection	75.10	97.30	119.20	195.30	13026
13027	Roof outlet with square or circular, flat or domed grating	169.90	182.40	214.50	276.70	13027
13028	Rainwater head, flat or angular	54.30	56.60	60.50	68.40	13028
	<i>Per linear metre</i>					
13029	Take down and clear away pipe fixed to floor, wall or soffits	5.10	6.00	8.60	11.10	13029
13030	Take down and set aside for re-use pipe fixed to floor, wall or soffits	7.70	10.30	11.10	13.70	13030
13031	Fix only pipe to floor, wall or soffits	26.20	28.60	32.40	51.10	13031
	<i>Each</i>					
13032	Re-make existing joint including cleaning ends	41.00	53.50	66.00	91.00	13032
13033	Cut into and remove short length of pipe laid in position, and provide and joint in new single junction complete with loose collar if required	190.90	290.90	353.40	565.80	13033
13034	Ditto but new double junction ditto	378.40	440.90	503.40	753.30	13034

Item	CAST IRON SOIL, WASTE AND VENTILATION PIPES AND FITTINGS								Item	
	Pipe diameter (mm)									
	50	65	75	100	150	200	300	500		
	A	B	C	D	E	F	G	H		
	\$	\$	\$	\$	\$	\$	\$	\$		
	<i>Per linear metre</i>									
13035	Pipe fixed to floor, wall or soffits	83.40	110.20	122.80	130.60	225.90	323.70	470.20	890.90	13035
	<i>Each</i>									
13036	Extra over pipe for loose socket	18.20	20.40	23.00	29.10	42.40	44.10	65.40	108.80	13036
13037	Ditto for large socket for and including joint to clayware pipe	-	-	-	53.60	74.00	99.40	140.00	234.70	13037
13038	Ditto for swan-neck of any projection	52.10	52.90	71.40	82.70	148.80	205.30	332.10	565.10	13038
13039	Ditto for plug to socket end	40.10	44.90	60.00	72.70	102.90	136.80	202.30	317.70	13039
13040	Ditto for cap to spigot end	40.20	58.70	68.30	76.00	108.90	163.60	212.70	334.90	13040
13041	Ditto for bend	25.00	30.80	35.60	46.60	80.30	96.90	141.40	223.50	13041
13042	Ditto for single junction	35.50	48.60	53.30	62.10	118.30	164.80	262.80	461.20	13042
13043	Ditto for double junction	65.40	73.70	82.60	118.40	212.40	291.40	448.00	738.90	13043
13044	Add to either of Items 13041 to 13043 inclusive if fitted with bolted access door	29.80	35.80	41.80	43.10	47.90	53.90	59.80	68.20	13044
	<i>Per linear metre</i>									
13045	Take down and clear away pipe fixed to floor, wall or soffits	5.10	6.00	7.70	9.40	11.10	14.60	18.00	26.60	13045
13046	Take down and set aside for re-use pipe fixed to floor, wall or soffits	7.70	8.60	9.40	11.10	12.00	15.40	24.00	36.90	13046
13047	Fix only pipe to floor, wall or soffits	19.90	26.20	28.60	32.40	41.10	55.80	68.30	87.00	13047
	<i>Each</i>									
13048	Cut or burn out existing joint, clean socket and spigot ends and re-make joint	87.50	100.00	112.50	137.50	175.00	225.00	312.40	499.90	13048
13049	Cut or burn out existing joint, remove cap or plug and clear away, clean spigot or socket end and joint new pipe to the same	93.70	106.20	118.70	150.00	193.70	243.70	349.90	562.40	13049
13050	Cut into and remove short length of pipe laid in position, and provide and joint in new single junction complete with loose collar if required	187.50	249.90	287.40	349.90	562.40	749.80	1,062.30	1,624.60	13050
13051	Ditto but new double junction ditto	374.90	399.90	437.40	499.90	724.80	974.80	1,437.20	2,249.50	13051

Item	FLANGED DUCTILE IRON PIPES AND FITTINGS											Item	
	Standard pipe and fittings with PN16 Class K9 - K12 : -	Pipe diameter (mm)											
		80	100	150	200	250	300	350	400	450	500	600	
		A	B	C	D	E	F	G	H	I	J	K	
	<i>Per linear metre</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
13052	Pipe laid in trench	248.90	257.10	335.40	408.80	597.00	810.90	933.70	1,082.10	1,304.40	1,703.70	2,160.80	13052
13053	Pipe fixed to floor, wall or soffits	272.60	282.10	359.10	440.00	638.30	859.60	983.70	1,144.60	1,379.40	1,791.20	2,273.30	13053
	<i>Each</i>												
13054	Extra over pipe for cover plate to flanged end	82.70	100.30	146.90	238.70	348.40	397.30	448.50	542.30	556.60	729.30	890.70	13054
13055	Ditto for flanged socket end	401.00	603.60	945.00	1,802.20	2,863.00	4,833.90	8,469.10	9,300.90	10,438.00	10,835.30	13,613.90	13055
13056	Ditto for flanged spigot end	278.30	380.80	602.40	888.30	1,244.50	1,643.40	2,145.00	2,621.60	3,162.40	3,676.00	4,158.90	13056
13057	Ditto for flanged connector	351.20	424.50	588.50	1,016.90	1,529.20	1,998.70	2,563.35	2,922.00	3,292.80	4,814.90	7,808.00	13057
13058	Ditto for bend	271.90	375.00	618.00	1,026.90	1,495.70	2,244.90	2,984.60	3,505.20	4,750.50	6,093.10	10,280.40	13058
13059	Ditto for tee	545.70	721.50	1,192.60	1,825.00	2,991.40	4,438.50	5,474.90	6,799.80	8,450.00	9,009.50	9,933.90	13059
13060	Ditto for cross	622.00	829.00	1,572.50	2,872.90	4,793.80	8,722.30	9,764.50	11,676.20	13,268.60	18,684.00	23,209.20	13060
	<i>Per linear metre</i>												
13061	Take up and clear away pipe laid in trench (trench excavation measured separately)	10.30	11.10	15.40	18.90	24.90	31.70	37.70	43.70	49.70	60.00	75.40	13061
13062	Take up and set aside for re-use pipe laid in trench (ditto)	12.90	15.40	17.10	18.90	22.30	24.90	27.40	31.70	33.40	36.00	40.30	13062
13063	Take down and clear away pipe fixed to floor, wall or soffits	11.10	13.70	18.90	22.30	28.30	35.10	40.30	47.10	56.60	65.10	81.40	13063
13064	Take down and set aside for re-use pipe fixed to floor, wall or soffits	12.90	15.40	19.70	24.00	27.40	30.00	33.40	37.70	40.30	43.70	47.10	13064
13065	Lay only pipe in trench	41.00	43.50	69.70	79.60	94.60	112.10	148.30	187.00	224.50	312.00	399.40	13065
13066	Fix only pipe to floor, wall or soffits	64.70	68.40	93.50	110.90	135.80	160.80	198.30	249.50	299.50	399.40	511.90	13066

Item	FLANGED DUCTILE IRON PIPES AND FITTINGS (CONT'D)											Item	
Standard pipe and fittings with PN16 Class K9 - K12 : - (cont'd)	Pipe diameter (mm)												
	80	100	150	200	250	300	350	400	450	500	600		
	A	B	C	D	E	F	G	H	I	J	K		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
Each													
13067	Unbolt existing joint, remove gasket and clear away, clean flange faces, provide new gasket and re-bolt joint	68.70	77.50	87.50	97.50	106.20	112.50	131.20	137.50	150.00	162.50	175.00	13067
13068	Remove flange cover plate and clear away, clean flange face, provide new gasket and joint new pipe to the same	65.00	72.50	80.00	90.00	97.50	102.50	116.20	122.50	132.50	143.70	156.20	13068
13069	Cut into and remove short length of pipe in position, provide and joint in pipe ends with new flanged connector with screwed end to receive new fitting (measured separately)	999.80	1,224.70	1,562.10	2,124.50	3,499.20	3,874.10	6,748.40	6,998.40	8,498.00	11,247.40	16,246.20	13069
EPOXY LINED CAST IRON PIPES AND FITTINGS													
Epoxy lined cast iron pipes and fittings to BS EN877 and ISO 6594 : -	Pipe diameter (mm)												
	40	50	75	100	150	200	250	300					
	A	B	C	D	E	F	G	H					
	\$	\$	\$	\$	\$	\$	\$	\$					
Per linear metre													
13070	Pipe fixed to floor, wall or soffits.....			98.90	121.20	151.90	182.80	380.40	512.30	763.50	955.20		13070
Each													
13071	Extra over pipe for cap end or plug.....			53.20	90.20	142.70	178.90	236.00	331.90	380.20	403.80		13071
13072	Joint to existing pipe including socket, connector or coupling required.....			90.00	136.00	174.60	217.40	257.90	306.40	369.90	406.90		13072
13073	Extra over for bend or elbow.....			61.10	100.00	142.10	191.00	311.10	465.30	599.60	784.90		13073
13074	Ditto for three-way elbow or tee.....			99.00	147.40	201.00	284.60	554.80	811.80	1,735.00	2,170.90		13074
13075	Ditto for access door.....			240.20	260.40	364.30	529.30	1,082.00	1,483.70	1,294.40	1,582.20		13075
13076	Ditto for reducer.....			65.80	101.20	142.10	185.20	233.70	289.80	495.70	611.70		13076

Item	EPOXY LINED CAST IRON PIPES AND FITTINGS (CONT'D)								Item	
	Pipe diameter (mm)									
	40	50	75	100	150	200	250	300		
	A	B	C	D	E	F	G	H		
	\$	\$	\$	\$	\$	\$	\$	\$		
	<i>Per linear metre</i>									
13077	Take up and clear away pipe laid in trench (trench excavation measured separately).....	3.40	4.30	5.10	6.90	8.60	10.30	12.00	13.70	13077
13078	Take up and set aside for re-use pipe laid in trench (ditto).....	5.10	6.00	7.70	8.60	10.30	12.90	13.70	15.40	13078
13079	Take down and clear away pipe fixed to floor, wall or soffits.....	4.30	5.10	6.90	7.70	9.40	11.10	12.90	14.60	13079
13080	Take down and set aside for re-use pipe fixed to floor, wall or soffits.....	6.90	7.70	8.60	10.30	12.90	13.70	15.40	16.30	13080
13081	Lay only pipe in trench.....	9.80	11.10	12.30	14.80	16.10	17.30	18.60	19.80	13081
13082	Fix only pipe to floor, wall or soffits.....	14.80	16.10	17.30	21.10	23.60	24.80	27.30	33.60	13082
	<i>Each</i>									
13083	Re-make existing joint including cleaning ends	24.70	34.70	44.70	47.20	52.20	57.10	67.10	88.30	13083
13084	Seal off existing pipe laid or fixed in position including threading end and providing and jointing on cap or plug	62.50	125.00	187.50	249.90	312.40	374.90	437.40	499.90	13084
13085	Re-make cap or plug and clear away, prepare end of existing pipe for and joint new pipe to the same including providing connector	62.50	93.70	125.00	156.20	187.50	218.70	249.90	281.20	13085
13086	Cut into and remove short length of pipe laid or fixed in position, and provide and joint in new tee complete with connector, barrel nipple, etc., as required	223.50	298.00	394.20	456.30	778.60	1,365.20	2,573.30	3,029.30	13086
13087	Take down and clear away existing coupling, prepare ends of existing pipes and joint to the existing pipes with and including new coupling	105.60	140.90	188.00	208.00	240.80	327.70	410.30	401.80	13087

Item	GALVANIZED MILD STEEL PIPES AND FITTINGS											Item	
	Pipe diameter (mm)												
	15	20	25	32	40	50	65	80	100	125	150		
	A	B	C	D	E	F	G	H	I	J	K		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
	<i>Per linear metre</i>												
13088	Pipe laid in trench	17.70	25.60	34.10	39.20	55.80	68.80	72.60	93.70	121.70	155.50	184.70	13088
13089	Pipe fixed to floor, wall or soffits	18.50	26.60	35.20	43.30	60.10	73.40	77.40	98.80	127.10	161.10	190.60	13089
	<i>Each</i>												
13090	Extra over for cap end or plug	-	-	-	-	-	51.20	64.20	81.80	108.30	135.10	167.80	13090
13091	Joint to existing pipe including socket, connector or coupling required	34.70	45.10	52.00	57.80	75.10	80.90	113.20	137.50	138.60	180.20	277.20	13091
13092	Extra over for bend or elbow	-	-	-	-	-	116.00	125.30	165.40	209.10	262.20	425.20	13092
13093	Ditto for three-way elbow or tee	-	-	-	-	-	173.30	242.60	294.50	311.90	405.40	531.30	13093
13094	Ditto for cross	-	-	-	-	-	197.90	211.30	256.50	308.60	387.20	507.20	13094
13095	Ditto for reducer	-	-	-	-	-	112.40	116.30	149.60	180.10	219.30	248.80	13095
13096	Flanged tank connector or double nut tank connector with back-nuts and washers, and joint to water tank or cistern including drilling if required	84.60	110.60	141.50	168.30	217.40	267.10	320.80	388.30	452.30	594.10	706.40	13096
13097	Cast iron puddle flange tank connector but with joint to existing concrete water tank wall (any thickness) including grouting, bedding in mastic (taking down work measured separately)	228.20	266.50	320.60	610.00	715.10	862.80	1,030.80	1,357.80	1,522.00	1,834.90	2,119.30	13097
13098	Ditto but in gunmetal	488.40	666.10	703.00	1,754.30	1,924.30	2,681.30	2,884.80	3,624.20	4,533.50	5,722.40	6,849.80	13098
13099	Cast iron puddle flange tank connector cast in concrete	243.50	281.30	338.70	629.00	741.70	893.50	1,062.20	1,386.30	1,559.40	1,887.20	2,167.40	13099
13100	Ditto but in gunmetal	503.70	680.80	721.00	1,773.30	1,950.70	2,712.00	2,916.10	3,652.70	4,571.00	5,774.80	6,897.70	13100
13101	Cement joint to junction arm on cast pipe	-	-	-	18.30	19.40	22.90	27.40	33.90	40.40	49.60	59.80	13101

Item	GALVANIZED MILD STEEL PIPES AND FITTINGS (CONT'D)											Item	
	Pipe diameter (mm)												
	15	20	25	32	40	50	65	80	100	125	150		
	A	B	C	D	E	F	G	H	I	J	K		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
	<i>Per linear metre</i>												
13102	Take up and clear away pipe laid in trench (trench excavation measured separately)	2.00	2.60	3.40	4.00	4.30	5.20	6.20	7.70	8.60	10.30	12.90	13102
13103	Take up and set aside for re-use pipe laid in trench (ditto)	2.60	3.40	4.30	5.10	6.00	6.90	7.70	9.40	10.30	12.00	15.40	13103
13104	Take down and clear away pipe fixed to floor, wall or soffits	2.60	3.40	4.30	5.10	6.00	6.90	7.70	9.40	10.30	12.00	15.40	13104
13105	Take down and set aside for re-use pipe fixed to floor, wall or soffits.....	3.40	4.30	5.10	6.00	6.90	7.70	8.60	10.30	11.10	13.70	16.30	13105
13106	Lay only pipe in trench.....	6.20	7.40	8.70	9.90	11.20	12.40	13.70	14.90	16.20	18.70	21.20	13106
13107	Fix only pipe to floor, wall or soffits.....	8.70	11.20	12.40	13.70	14.90	17.40	19.90	22.40	26.20	28.60	31.20	13107
	<i>Each</i>												
13108	Re-make existing joint including cleaning ends.....	28.50	32.20	38.50	41.00	47.20	49.70	53.50	59.70	66.00	80.90	115.90	13108
13109	Seal off existing pipe laid or fixed in position including threading end and providing and jointing on cap or plug.....	53.50	66.00	78.50	91.00	105.90	118.40	140.90	165.90	228.40	278.40	353.40	13109
13110	Re-make cap or plug and clear away, prepare end of existing pipe for and joint new pipe to the same including providing connector.....	42.80	49.00	55.30	67.80	79.80	92.30	110.60	135.60	173.10	209.60	309.60	13110
13111	Cut into and remove short length of pipe laid or fixed in position, and provide and joint in new tee complete with connector, barrel nipple, etc., as required.....	156.20	168.70	206.20	256.20	318.70	368.70	543.60	731.10	1,068.50	1,530.90	2,124.50	13111

Item	UPVC LINED GALVANIZED MILD STEEL PIPES AND FITTINGS											Item	
	UPVC lined galvanised steel pipes and fittings :-	Pipe diameter (mm)											
		15	20	25	32	40	50	65	80	100	125	150	
		A	B	C	D	E	F	G	H	I	J	K	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
	<i>Per linear metre</i>												
13112	Pipe laid in trench.....	43.10	50.80	54.90	69.30	90.10	115.50	161.70	184.80	291.00	390.40	458.80	13112
13113	Pipe fixed to floor, wall or soffits.....	46.20	55.40	60.10	74.90	97.00	123.80	171.50	196.90	306.10	413.20	485.10	13113
	<i>Each</i>												
13114	Extra over pipe for cap end or plug.....	-	-	-	-	-	127.10	155.10	187.70	247.60	389.20	511.80	13114
13115	Joint to existing pipe including socket, connector or coupling required.....	69.30	83.20	88.90	106.30	138.50	165.90	223.20	272.40	333.70	539.40	713.80	13115
13116	Extra over for bend or elbow.....	-	-	-	-	-	226.60	309.30	401.30	543.50	861.60	1,009.00	13116
13117	Ditto for three-way elbow or tee.....	-	-	-	-	-	332.80	451.50	574.20	774.40	1,082.70	1,401.60	13117
13118	Ditto for cross.....	-	-	-	-	-	358.30	499.60	617.80	801.10	1,383.70	1,854.60	13118
13119	Ditto for reducer.....	-	-	-	-	-	242.60	319.30	396.00	564.60	618.50	685.50	13119
	<i>Per linear metre</i>												
13120	Take up and clear away pipe laid in trench (trench excavation measured separately).....	2.60	3.20	3.40	4.30	4.70	5.00	7.00	7.70	8.60	11.20	13.60	13120
13121	Take up and set aside for re-use pipe laid in trench (ditto).....	3.40	4.30	5.10	6.00	6.90	7.70	8.60	9.40	10.30	12.90	15.40	13121
13122	Take down and clear away pipe fixed to floor, wall or soffits.....	2.60	3.40	4.30	5.10	6.00	6.90	7.70	8.60	9.40	12.00	16.30	13122
13123	Take down and set aside for re-use pipe fixed to floor, wall or soffits.....	3.40	4.30	5.10	6.00	6.90	8.60	9.40	10.30	12.90	14.60	17.10	13123
13124	Lay only pipe in trench.....	6.20	7.40	8.70	9.90	11.20	12.40	13.70	14.90	16.20	17.40	19.90	13124
13125	Fix only pipe to floor, wall or soffits.....	8.70	11.20	12.40	13.70	16.20	18.70	19.90	23.70	26.20	28.60	31.20	13125

Item	UPVC LINED GALVANIZED MILD STEEL PIPES AND FITTINGS (CONT'D)											Item	
UPVC lined galvanised steel pipes and fittings : - (cont'd)	Pipe diameter (mm)												
	15	20	25	32	40	50	65	80	100	125	150		
	A	B	C	D	E	F	G	H	I	J	K		
<i>Each</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
13126	Re-make existing joint including cleaning ends	31.00	36.00	41.00	43.50	49.70	52.20	61.00	64.70	70.90	87.20	122.20	13126
13127	Seal off existing pipe laid or fixed in position including threading end and providing and jointing on cap or plug	69.70	82.20	103.40	127.20	153.40	184.70	234.60	303.40	436.90	630.60	805.50	13127
13128	Re-make cap or plug and clear away, prepare end of existing pipe for and joint new pipe to the same including providing connector	51.50	62.80	75.30	96.50	123.50	146.00	205.60	265.50	376.70	567.00	726.90	13128
13129	Cut into and remove short length of pipe laid or fixed in position, and provide and joint in new tee complete with connector, barrel nipple, etc., as required	174.90	199.90	237.40	299.90	367.20	449.90	687.30	937.20	1,312.10	1,874.40	2,749.10	13129

Item	STAINLESS STEEL PIPES AND FITTINGS										Item	
	Stainless steel Grade 316 pipe and fittings recommended by the manufacturer : -											
	Pipe diameter (mm)											
	15	18	22	28	35	42	54	76	89	108		
	A	B	C	D	E	F	G	H	I	J		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
13130	Pipe laid in trench	65.50	74.80	93.50	110.20	152.00	182.70	225.50	388.30	436.60	586.50	13130
13131	Pipe fixed to floor, wall or soffits	68.60	79.00	98.60	116.40	158.20	191.00	233.80	396.90	446.30	597.10	13131
	<i>Each</i>											
13132	Extra over for cap end or plug.....	-	-	-	-	-	96.30	99.70	103.70	129.40	142.90	13132
13133	Ditto for bend or elbow	-	-	-	-	-	305.40	356.70	491.60	558.10	648.20	13133
13134	Ditto for three-way elbow or tee	-	-	-	-	-	317.10	360.90	1,196.30	1,246.70	1,741.00	13134
13135	Ditto for cross	-	-	-	-	-	420.20	458.00	1,535.70	1,734.10	2,748.30	13135
13136	Ditto for reducer	-	-	-	-	-	251.80	292.10	431.40	520.30	622.10	13136
13137	Flanged tank connector or double nut tank connector with back-nuts and washers and joint to water tank or cistern including drilling if required.....	84.20	99.70	121.00	144.60	177.70	205.70	281.10	361.60	410.20	513.40	13137
13138	Ditto but in gunmetal.....	190.70	227.20	266.30	281.10	361.10	439.80	732.50	801.90	869.30	1,146.90	13138
13139	Ditto but in stainless steel	207.70	247.20	294.90	304.60	393.00	477.80	804.80	902.30	1,011.70	1,317.60	13139
13140	Cast iron puddle flange tank connector but with joint to existing concrete water tank wall (any thickness) including grouting, bedding in mastic (taking down work measured separately)	188.10	212.50	230.00	264.20	502.70	540.00	651.40	778.20	1,025.80	1,149.40	13140
13141	Ditto but in gunmetal	402.50	541.90	552.10	579.30	1,445.70	1,452.90	2,024.30	2,179.70	2,738.40	3,425.40	13141
13142	Ditto but in stainless steel	446.50	605.70	616.40	629.00	1,510.30	1,520.40	2,347.60	2,501.10	3,290.80	4,028.90	13142
13143	Cast iron puddle flange tank connector cast in concrete	200.70	224.80	242.10	279.10	518.40	560.00	674.60	802.40	1,047.30	1,178.10	13143
13144	Ditto but in gunmetal	415.10	553.10	564.30	594.20	1,461.30	1,472.90	2,047.70	2,203.30	2,759.90	3,453.70	13144
13145	Ditto but in stainless steel	444.40	596.80	628.60	683.50	1,525.90	1,540.50	2,316.90	2,491.90	3,312.40	4,052.70	13145
13146	Cement joint to junction arm on cast pipe	-	-	-	-	13.80	15.30	18.50	24.00	28.20	32.80	13146
13147	Joint to existing pipe including socket, connector or coupling required	63.90	69.90	75.70	88.20	107.00	112.30	135.30	485.40	535.60	719.20	13147

Item	STAINLESS STEEL PIPES AND FITTINGS (CONT'D)										Item	
	Stainless steel Grade 316 pipe and fittings recommended by the manufacturer : - (cont'd)											
	Pipe diameter (mm)											
	15	18	22	28	35	42	54	76	89	108		
	A	B	C	D	E	F	G	H	I	J		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
	<i>Per linear metre</i>											
13148	Take up and clear away pipe laid in trench (trench excavation measured separately)	2.00	2.20	2.40	2.70	3.30	4.00	4.60	5.60	6.90	7.90	13148
13149	Take up and set aside for re-use pipe laid in trench (ditto)	2.70	2.90	3.60	3.70	4.40	5.20	6.00	7.30	8.30	9.60	13149
13150	Take down and clear away pipe fixed to floor wall or soffits	2.30	2.60	2.90	3.30	4.00	4.60	5.50	6.70	8.20	9.50	13150
13151	Take down and set aside for re-use pipe fixed to floor, wall or soffits.....	3.30	3.60	3.70	4.60	5.50	6.20	7.30	8.70	10.00	11.50	13151
13152	Lay only pipe in trench.....	14.70	15.70	16.80	17.80	19.90	22.00	24.00	30.30	32.30	34.40	13152
13153	Fix only pipe to floor, wall or soffits	17.80	19.90	22.00	24.00	26.10	30.30	32.30	36.50	38.60	42.70	13153
	<i>Each</i>											
13154	Re-make existing joint including cleaning ends.....	26.30	29.50	32.60	35.70	38.80	43.00	47.10	51.30	55.40	61.70	13154
13155	Seal off existing pipe laid or fixed in position including threading end and providing and jointing on cap or plug	65.80	70.00	76.20	97.00	117.80	138.60	159.40	180.20	234.50	296.80	13155
13156	Re-make cap or plug and clear away, prepare end of existing pipe for and joint new pipe to the same including providing connector	53.60	64.00	65.00	72.30	86.40	94.70	111.30	350.00	391.60	537.10	13156
13157	Cut into and remove short length of pipe laid or fixed in position, and provide and joint in new tee complete with connector, barrel nipple, etc., as required	176.70	187.10	197.50	228.70	280.70	322.30	374.20	1,351.40	1,455.30	1,871.10	13157

Item	COPPER PIPES AND FITTINGS	Pipe diameter (mm)									Item
		15	22	28	35	42	54	67	76	108	
		A	B	C	D	E	F	G	H	I	
	<i>Per linear metre</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$	
13158	Pipe laid in trench.....	51.90	90.60	120.00	185.30	225.70	286.30	364.90	502.40	763.40	13158
13159	Pipe fixed to floor, wall or soffits	56.00	94.70	124.20	189.40	229.90	290.50	369.00	506.60	767.50	13159
	Brass "Compression type" fittings :-										
	<i>Each</i>										
13160	Extra over pipe for stop end	-	-	-	-	132.10	154.90	243.60	302.90	418.80	13160
13161	Ditto for bend or elbow (copper to copper)	-	-	-	-	111.70	162.30	193.20	215.50	297.90	13161
13162	Ditto (copper to steel)	-	-	-	-	231.00	365.80	490.70	543.60	634.40	13162
13163	Ditto for tee (all ends for copper)	-	-	-	-	142.40	240.70	284.80	316.00	673.40	13163
13164	Ditto (copper to copper to steel)	-	-	-	-	164.80	264.30	416.00	616.60	1,771.10	13164
13165	Ditto for cross (all ends for copper)	-	-	-	-	406.80	557.80	681.50	754.80	1,048.90	13165
13166	Flanged tank connector or double nut tank connector with back-nuts and washers, and joint to water tank or cistern including drilling if required	171.80	248.50	365.70	535.50	1,227.20	2,524.30	3,921.40	4,895.80	8,304.90	13166
13167	Joint to existing pipe including connector or coupling as required (copper to copper)	25.80	33.40	46.70	70.30	89.00	121.80	123.10	145.20	212.00	13167
13168	Ditto (copper to steel)	42.90	59.40	130.50	212.40	294.80	362.80	574.90	652.80	940.30	13168
	Brass or copper "Capillary type" fittings :-										
	<i>Each</i>										
13169	Extra over pipe for stop end	-	-	-	-	80.50	90.40	131.00	133.40	168.90	13169
13170	Ditto for bend or elbow (copper to copper)	-	-	-	-	59.20	78.10	133.10	188.10	246.30	13170
13171	Ditto (copper to steel)	-	-	-	-	115.30	174.50	255.90	283.60	381.20	13171
13172	Ditto for tee (all ends for copper)	-	-	-	-	101.00	152.30	549.30	654.40	1,210.10	13172
13173	Ditto (copper to copper to steel)	-	-	-	-	212.60	316.00	460.60	700.00	962.10	13173
13174	Ditto for cross (all ends for copper)	-	-	-	-	574.10	697.00	776.30	829.50	981.50	13174
13175	Flanged tank connector or double nut tank connector with back-nuts and washers, and joint to water tank or cistern including drilling if required	171.80	248.50	365.70	535.50	1,227.20	2,524.30	3,921.40	4,895.80	8,304.90	13175
13176	Joint to existing pipe including connector or coupling as required (copper to copper)	25.20	29.10	35.00	54.50	63.00	84.50	123.60	160.90	300.90	13176
13177	Ditto (copper to steel)	59.60	77.60	74.60	81.50	115.80	181.10	249.40	345.60	604.30	13177

Item	COPPER PIPES AND FITTINGS (CONT'D)									Item																															
	Outside diameter (mm)																																								
	15	22	28	35	42	54	67	76	108																																
	A	B	C	D	E	F	G	H	I																																
	\$	\$	\$	\$	\$	\$	\$	\$	\$																																
	<i>Per linear metre</i>																																								
13178	Take up and clear away pipe laid in trench (trench excavation measured separately)	1.70	2.00	2.50	2.80	3.50	4.00	4.90	5.60	6.70	13178																														
13179	Take up and set aside for re-use pipe laid in trench (ditto).....	2.30	2.70	3.30	3.70	4.40	5.00	6.00	6.90	8.20	13179																														
13180	Take down and clear away pipe fixed to floor, wall or soffits	2.00	2.70	3.00	3.30	4.20	4.60	5.60	6.50	7.90	13180																														
13181	Take down and set aside for re-use pipe fixed to floor, wall or soffits	2.70	3.60	4.00	4.40	5.50	6.00	7.20	7.90	9.50	13181																														
13182	Lay only pipe in trench	5.30	6.40	7.00	8.00	9.10	9.90	11.60	12.20	14.10	13182																														
13183	Fix only pipe to floor, wall or soffits	14.50	16.50	17.20	18.20	19.50	24.00	26.90	28.60	30.70	13183																														
	<i>Each</i>																																								
13184	Re-make one existing joint for "compression type" fittings including loosening nut and compression ring, cleaning tube end and re-tightening	8.20	9.50	10.90	12.60	14.10	15.70	17.80	20.30	26.10	13184																														
13185	Re-make one existing joint for "capillary type" fittings including heating, re-tinning tub end and re-soldering as necessary	33.50	37.70	43.90	48.10	54.30	64.70	75.10	85.50	110.40	13185																														
13186	Seal off existing pipe laid or fixed in position including providing and jointing on "compression type" stop end	35.70	43.00	57.50	119.90	163.60	186.40	207.20	221.80	263.30	13186																														
13187	Ditto but "capillary type" stop end	38.80	45.10	53.40	97.00	107.40	122.00	169.80	201.00	263.30	13187																														
13188	Remove "compression type" stop end and clear away, prepare end of existing pipe for and joint new pipe to the same including providing "compression type" coupling	34.70	43.00	60.60	86.60	107.40	146.90	284.10	356.90	502.40	13188																														
13189	Ditto but for "capillary type" stop end and "capillary type" coupling	36.70	43.20	49.40	61.90	72.30	121.70	174.90	212.30	408.90	13189																														
13190	Cut into and remove short length of pipe laid or fixed in position, and provide and joint in new "compression type" tee complete with connector if required	66.50	74.80	93.60	137.20	193.40	301.50	706.90	790.00	1,392.90	13190																														
13191	Ditto but for new "capillary type" tee	62.40	71.10	91.50	124.70	160.10	205.80	557.20	623.70	1,039.50	13191																														
		<table border="1"> <thead> <tr> <th colspan="6">Pipe diameter (mm)</th> </tr> <tr> <th>15</th> <th>22</th> <th>28</th> <th>35</th> <th>42</th> <th>54</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> <td>F</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> <tr> <td>20.80</td> <td>25.00</td> <td>27.00</td> <td>41.60</td> <td>43.70</td> <td>54.10</td> </tr> </tbody> </table>									Pipe diameter (mm)						15	22	28	35	42	54	A	B	C	D	E	F	\$	\$	\$	\$	\$	\$	20.80	25.00	27.00	41.60	43.70	54.10	
Pipe diameter (mm)																																									
15	22	28	35	42	54																																				
A	B	C	D	E	F																																				
\$	\$	\$	\$	\$	\$																																				
20.80	25.00	27.00	41.60	43.70	54.10																																				
	<i>Per linear metre</i>																																								
13192	Add to either of Items 13158 to 13159 inclusive for approved white polyethylene sleeve covered copper pipe in lieu of plain copper pipe including all cutting and fitting at joints, tees, bends and other fittings or alternatively covering such fittings with insulation quilt or insulation rope to the thickness required	20.80	25.00	27.00	41.60	43.70	54.10				13192																														

Item	PLASTIC RAINWATER GUTTERS AND FITTINGS				Item
	Internal diameter (mm)				
	75	100	125	150	
	A	B	C	D	
	\$	\$	\$	\$	
	<i>Per linear metre</i>				
13193	Half round gutter fixed on brackets at 1 m (maximum) centres				13193
	125.90	155.90	216.00	283.00	
	<i>Each</i>				
13194	Extra over half round gutter for stop end				13194
	55.40	69.30	90.10	115.50	
13195	Ditto for internal or external angle				13195
	203.30	254.10	368.50	485.10	
13196	Nozzle outlet				13196
	83.20	104.00	135.10	161.70	
13197	Combined stop end and nozzle outlet				13197
	101.60	127.10	165.20	184.80	
	<i>Per linear metre</i>				
13198	Take down and clear away gutter				13198
	9.50	11.50	12.80	14.60	
13199	Take down and set aside for re-use gutter				13199
	10.50	13.00	14.60	16.60	
13200	Fix only gutter including providing brackets at 1 m (maximum) centres				13200
	53.60	64.00	88.90	120.10	

Item	PLASTIC RAINWATER, WASTE, SOIL OR VENTILATING PIPES AND FITTINGS	Pipe diameter (mm)						Item
		32	40	50	82	110	160	
		A	B	C	D	E	F	
	<i>Per linear metre</i>	\$	\$	\$	\$	\$	\$	
13201	Pipe fixed to floor, wall or soffits	30.70	34.10	46.70	78.70	120.10	215.60	13201
	<i>Each</i>							
13202	Extra over pipe for cap end	-	-	46.80	95.00	148.40	309.20	13202
13203	Joint to existing pipe including all necessary sockets, connector or coupling	42.50	57.60	66.80	103.60	124.40	370.00	13203
13204	Extra over pipe for bend or elbow	-	-	38.40	82.70	104.50	337.30	13204
13205	Ditto for branch	-	-	48.50	83.90	99.30	353.60	13205
13206	Ditto for double branch	-	-	73.10	277.00	358.10	905.40	13206
13207	Add to either of Items 13204 to 13206 inclusive for screwed access	-	-	167.10	179.50	188.00	260.70	13207
13208	Tapered socket with cap nut and joint to steel tubing or brass fittings	21.60	39.40	74.90	-	-	-	13208
13209	Flat roof outlet with raised grating	-	-	-	152.90	208.90	359.80	13209
13210	Cement joint to junction arm on cast iron pipe	12.50	16.00	16.80	23.20	27.80	-	13210
	<i>Per linear metre</i>							
13211	Take down and clear away pipe fixed to floor, wall or soffits	3.00	3.70	4.20	6.20	7.30	11.50	13211
13212	Take down and set aside for re-use pipe fixed to floor, wall or soffits	4.00	4.60	5.20	7.20	8.30	12.90	13212
13213	Fix only pipe to floor, wall or soffits	9.90	11.00	12.00	15.10	16.20	19.30	13213
	<i>Each</i>							
13214	Seal off existing pipe fixed in position including providing and jointing on cap or plug	43.20	57.80	66.10	120.10	188.30	344.20	13214
13215	Remove cap or plug and clear away, prepare end of existing pipe for and joint new pipe to the same	39.00	48.40	53.60	67.70	82.20	109.30	13215
13216	Cut into and remove short length of pipe fixed in position, provide and joint in new single junction complete with special sockets	145.50	197.50	249.50	374.20	478.20	790.00	13216

Item	PLASTIC FLUSHING WATER SERVICE PIPES AND FITTINGS	Pipe diameter (mm)										Item
		15	20	25	32	40	50	65	80	100	150	
		A	B	C	D	E	F	G	H	I	J	
	<i>Per linear metre</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
13217	Pipe laid in trench.....	14.20	18.90	28.20	34.10	61.90	109.30	133.70	161.50	198.50	247.20	13217
13218	Pipe fixed to floor, wall or soffits.....	24.40	30.90	42.60	49.60	78.60	128.80	156.90	186.00	223.30	274.50	13218
	<i>Each</i>											
13219	Extra over pipe for cap end.....	-	-	-	-	-	50.30	52.20	106.70	264.50	617.90	13219
13220	Ditto for bend or elbow.....	-	-	-	-	-	150.90	234.30	339.80	894.30	1,657.60	13220
13221	Ditto for tee.....	-	-	-	-	-	298.50	543.90	620.90	944.40	1,391.90	13221
13222	Joint to existing pipe including socket, connector or coupling as required.....	39.00	47.30	59.30	69.70	104.00	136.00	238.60	295.70	606.60	1,093.10	13222
13223	Straight or bent connector and joint to steel tubing or brass fittings.....	78.70	91.00	108.40	131.10	179.50	201.80	-	-	-	-	13223
13224	Flanged tank connector or double nut tank connector with back-nuts and washers and joint to water tank or cistern including drilling if required.....	242.80	325.80	409.10	514.80	827.90	1,062.10	1,075.60	1,165.30	1,842.50	2,315.70	13224
	<i>Per linear metre</i>											
13225	Take up and clear away pipe laid in trench (trench excavation measured separately).....	1.70	2.00	2.30	2.90	3.30	3.90	5.00	6.00	6.90	10.00	13225
13226	Take up and set aside for re-use pipe laid in trench (ditto).....	2.30	2.60	3.00	3.70	4.20	4.80	5.90	7.20	8.20	11.50	13226
13227	Take down and clear away pipe fixed to floor, wall or soffits.....	2.00	2.60	2.90	3.60	3.90	4.30	5.90	6.70	7.60	9.70	13227
13228	Take down and set aside for re-use pipe fixed to floor, wall or soffits.....	2.60	3.20	4.00	4.70	5.30	6.00	7.60	8.60	9.50	11.90	13228
13229	Lay only pipe in trench.....	4.90	6.20	7.40	8.70	9.90	11.20	12.40	13.70	13.70	16.20	13229
13230	Fix only pipe to floor, wall or soffits.....	12.30	13.60	16.10	17.30	18.60	24.80	29.80	33.60	38.50	43.50	13230
	<i>Each</i>											
13231	Seal off existing pipe laid or fixed in position including threading end and providing and jointing on cap or plug.....	24.70	32.20	43.50	53.50	69.70	79.50	90.80	162.00	367.70	829.60	13231
13232	Re-make cap or plug and clear away, prepare end of existing pipe for and joint new pipe to the same including providing connector.....	21.00	28.50	33.50	43.50	53.50	60.80	70.80	78.30	99.00	129.80	13232
13233	Cut into and remove short length of pipe laid or fixed in position, and provide and joint in new tee complete with connector, barrel nipple, etc., as required.....	100.00	137.50	200.00	237.50	399.90	537.40	962.30	1,124.70	1,687.10	2,499.40	13233

Item	DRAW-OFF TAPS AND VALVES, BALL VALVES ETC.									Item	
	Supply and fix						Take down and clear away				
	Brass			Chromium plated brass							
	Nominal size (mm)			Nominal size (mm)			Nominal size (mm)				
	13	20	25	13	20	25	13	20	25		
	A	B	C	D	E	F	G	H	I		
	\$	\$	\$	\$	\$	\$	\$	\$	\$		
13254	Screw down bib cock with crutch handle	70.50	98.20	138.60	123.20	221.80	323.40	15.00	15.00	15.00	13254
13255	Ditto but with crutch handle and hose union	92.40	129.40	231.00	161.70	258.70	404.30	15.00	15.00	15.00	13255
13256	Ditto but for "Easy-clean" pattern with capstan or lever head marked "Hot" or "Cold"	-	-	-	231.00	346.50	-	15.00	15.00	15.00	13256
13257	Self closing non-concussive bib cock marked "Hot" or "Cold"	242.60	-	-	410.60	-	-	15.00	-	-	13257
13258	"Easy-clean" pattern screw down pillar cock with capstan or lever head marked "Hot" or "Cold"	-	-	-	236.80	358.10	-	15.00	15.00	-	13258
13259	Lever action pillar tap for cold water	-	-	-	373.60	-	-	15.00	-	-	13259
13260	Lever action self-closing non-concussive basin pillar tap with time delay action for cold water	-	-	-	807.90	-	-	15.00	-	-	13260
13261	Self closing non-concussive pillar cock marked "Hot" or "Cold"	-	-	-	438.30	-	-	15.00	-	-	13261
13262	Self-closing non-concussive basin pillar tap with time delay action for cold	-	-	-	429.10	-	-	15.00	-	-	13262
13263	Screw down stop cock with crutch handle or square head for key (measured separately)	138.60	194.00	242.60	207.90	254.10	-	15.00	15.00	15.00	13263
13264	"Easy-clean" pattern screw down stop cock with capstan head capstan heads marked "Hot" or "Cold"	-	-	-	207.90	254.10	-	15.00	15.00	-	13264
13265	Sink mixer fitting with "Easy-clean" pattern screw down pillar cocks and marked "Hot" and "Cold", and swivel nozzle	-	-	-	566.00	-	-	15.00	-	-	13265
13266	Ditto but for basin with fixed nozzle	-	-	-	635.30	-	-	15.00	-	-	13266
13267	Ditto but for bath with fixed nozzle	-	-	-	716.10	-	-	15.00	-	-	13267
13268	Ditto but for bath with fixed nozzle, diverter automatic and flexible hand held shower with hose including wall bracket / wall mount tower pole.....	-	-	-	912.50	-	-	15.00	-	-	13268
13269	Shower mixer fitting with "Easy-clean" pattern screw down pillar cocks and capstan or lever heads marked "Hot" and "Cold", and flexible hand held shower with hose including wall bracket / wall mount tower pole.....	-	-	-	693.00	-	-	15.00	-	-	13269
13270	Add to either of Items 13254 to 13269 inclusive if fitted with "Compression type" connector for copper tubing (per one end)	28.50	34.70	46.20	-	-	-	-	-	-	13270
13271	Ditto if fitted with "Capillary type" connector for copper tubing (per one end)	46.20	52.00	69.30	-	-	-	-	-	-	13271

Item	DRAW-OFF TAPS AND VALVES, BALL VALVES ETC. (CONT'D)								Item	
	Supply and fix									
	Nominal size (mm)									
	13	20	25	32	38	51	65	76		
	A	B	C	D	E	F	G	H		
	\$	\$	\$	\$	\$	\$	\$	\$		
	Draw-off taps and valves as G.S. Item 19.50 : - (cont'd)									
	<i>Each</i>									
13272	P.V.C. screw down diaphragm valve with wheel head	69.30	83.20	124.70	173.30	329.20	369.60	-	-	13272
13273	Ditto but flanged	138.60	166.30	249.50	311.90	374.20	405.40	499.00	600.60	13273
13274	Copper alloy gate valve with wheel head	115.50	138.60	173.30	219.50	395.00	438.90	658.40	762.30	13274
13275	Copper alloy non-return valve	184.80	240.20	369.60	496.70	745.00	993.30	1,490.00	1,692.10	13275
	Ball valves as G.S. Items 19.52 : -									
	<i>Each</i>									
13276	Brass ball valve with plastic float	231.00	277.20	346.50	369.60	512.80	555.60	940.20	1,155.00	13276
13277	Gun metal ball valve with plastic float	381.20	457.40	571.70	727.70	873.20	946.00	1,600.80	2,032.80	13277
	Ball valves for flushing cisterns as G.S. Item 19.53 : -									
	<i>Each</i>									
13278	Plastic ball valve with plastic float	92.40	104.00	-	-	-	-	-	-	13278
	Take down and clear away									
	Nominal size (mm)									
	13	20	25	32	38	51	65	76		
	A	B	C	D	E	F	G	H		
	\$	\$	\$	\$	\$	\$	\$	\$		
	<i>Each</i>									
13279	P.V.C. screw down diaphragm valve with wheel head.....	15.00	16.30	17.50	18.70	20.00	21.20	-	-	13279
13280	Ditto but flanged	16.30	17.50	18.70	20.00	21.20	22.50	23.80	25.00	13280
13281	Copper alloy gate valve with wheel head	28.70	30.00	31.20	32.50	33.70	35.00	36.30	37.50	13281
13282	Copper alloy non-return valve	28.70	30.00	31.20	32.50	33.70	35.00	36.30	37.50	13282
13283	Brass ball valve with plastic float	23.80	25.00	26.30	27.50	28.70	30.00	31.20	32.50	13283
13284	Gun metal ball valve with plastic float	23.80	25.00	26.30	27.50	28.70	30.00	31.20	32.50	13284
13285	Plastic ball valve with plastic float	23.80	25.00	-	-	-	-	-	-	13285

Item	DRAW-OFF TAPS AND VALVES, BALL VALVES ETC. (CONT'D)										Item	
	Take down and set aside for re-use											
	Nominal size (mm)											
	13	20	25	32	38	51	65	76				
	A	B	C	D	E	F	G	H				
	\$	\$	\$	\$	\$	\$	\$	\$				
13286	P.V.C. screw down diaphragm valve with wheel head	16.30	17.50	18.70	20.00	21.20	22.50	-	-		13286	
13287	Ditto but flanged	18.70	20.00	21.20	22.50	23.80	25.00	26.30	27.50		13287	
13288	Copper alloy gate valve with wheel head	37.50	40.00	41.30	42.50	43.70	45.00	46.20	47.50		13288	
13289	Copper alloy non-return valve	37.50	40.00	41.30	42.50	43.70	45.00	46.20	47.50		13289	
13290	Brass ball valve with plastic float	31.20	32.50	33.70	35.00	36.30	37.50	38.70	40.00		13290	
13291	Gun metal ball valve with plastic float	31.20	32.50	33.70	35.00	36.30	37.50	38.70	40.00		13291	
13292	Plastic ball valve with plastic float	31.20	32.50	-	-	-	-	-	-		13292	
	Fix only											
	Nominal size (mm)											
	13	20	25	32	38	51	65	76				
	A	B	C	D	E	F	G	H				
	\$	\$	\$	\$	\$	\$	\$	\$				
13293	P.V.C. screw down diaphragm valve with wheel head	17.30	18.60	19.80	21.10	22.30	23.60	-	-		13293	
13294	Ditto but flanged	32.30	33.60	34.80	52.30	57.30	59.80	64.80	104.80		13294	
13295	Copper alloy gate valve with wheel head	46.10	48.50	52.30	56.10	58.50	62.30	64.80	71.10		13295	
13296	Copper alloy non-return valve	46.10	48.50	52.30	56.10	58.50	62.30	64.80	71.10		13296	
13297	Brass ball valve with plastic float	39.80	42.30	44.80	47.30	49.80	53.60	56.10	58.50		13297	
13298	Gun metal ball valve with plastic float	39.80	42.30	44.80	47.30	49.80	53.60	56.10	58.50		13298	
13299	Plastic ball valve with plastic float	33.60	36.10	-	-	-	-	-	-		13299	
	Nominal size (mm)											
	15	18	22	28	35	42	54	76	89	108		
	A	B	C	D	E	F	G	H	I	J		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
13300	Supply and fix stainless steel gate valve	496.70	596.00	704.60	915.90	951.20	1,328.30	1,992.40	4,123.40	4,948.00	6,086.90	13300
13301	Supply and fix stainless steel check valve	427.40	512.80	600.60	780.80	810.80	1,062.60	1,593.90	3,453.50	4,144.10	5,082.00	13301
13302	Take down and clear away gate or check valve	27.40	28.30	30.00	31.70	32.60	33.40	35.10	36.00	37.70	38.60	13302
13303	Take down and set aside for re-use ditto	35.10	36.00	37.70	39.40	40.30	41.10	42.90	44.60	46.30	48.00	13303
13304	Fix only ditto	43.60	46.10	48.50	51.10	54.80	58.50	59.80	64.80	67.30	77.30	13304

Item	DRAW-OFF TAPS AND VALVES, BALL VALVES ETC. (CONT'D)					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	Valve as G.S. Item 19.50 :-					
	<i>Each</i>					
13305	100 mm Nominal size copper alloy gate valve with wheel head.....	1,120.40	17.50	25.00	87.50	13305
13306	150 mm Ditto.....	1,484.20	20.00	27.50	93.70	13306
13307	100 mm Ditto but flanged.....	1,270.50	18.70	26.30	162.50	13307
13308	150 mm Ditto.....	1,669.00	21.20	28.70	175.00	13308
13309	76 mm Nominal size flanged cast iron gate valve with wheel head.....	1,721.00	16.30	23.80	156.20	13309
13310	100 mm Ditto.....	2,333.10	18.70	26.30	162.50	13310
13311	150 mm Ditto.....	5,832.80	20.00	28.70	175.00	13311
13312	200 mm Ditto.....	9,099.10	21.20	31.20	225.00	13312
13313	250 mm Ditto.....	12,668.00	22.50	32.50	249.90	13313
13314	300 mm Ditto.....	15,835.10	30.00	35.00	274.90	13314
13315	350 mm Ditto.....	25,336.10	31.20	36.30	287.40	13315
13316	400 mm Ditto.....	34,837.10	32.50	38.70	312.40	13316
13317	450 mm Ditto.....	43,547.00	33.70	40.00	324.90	13317
13318	500 mm Ditto.....	53,526.20	35.00	41.30	337.40	13318
13319	600 mm Ditto.....	71,367.50	36.30	42.50	349.90	13319
13320	76 mm Nominal size heavy pattern gunmetal full way gate valve with wheel head.....	4,897.20	21.20	23.80	77.50	13320
13321	100 mm Ditto.....	9,009.00	22.50	25.00	87.50	13321
13322	150 mm Ditto.....	15,477.00	23.80	27.50	93.70	13322
13323	76 mm Nominal size flanged heavy pattern gunmetal full way gate valve with wheel head.....	6,283.20	21.20	25.00	77.50	13323
13324	100 mm Ditto.....	10,106.30	22.50	26.30	87.50	13324
13325	150 mm Ditto.....	16,170.00	25.00	30.00	93.70	13325
13326	200 mm Ditto.....	28,297.50	27.50	32.50	212.50	13326
13327	250 mm Ditto.....	41,031.40	28.70	35.00	237.50	13327
13328	300 mm Ditto.....	58,616.30	30.00	36.30	274.90	13328
13329	350 mm Ditto.....	59,788.60	31.20	37.50	299.90	13329
13330	400 mm Ditto.....	70,339.50	32.50	38.70	312.40	13330
13331	450 mm Ditto.....	87,924.40	33.70	40.00	324.90	13331
13332	500 mm Ditto..... (The actual rate should be : \$136,001.30 for Item 13332A)	13,600.13	35.00	41.30	343.70	13332
13333	600 mm Ditto..... (The actual rate should be : \$181,335.00 for Item 13333A)	18,133.50	36.30	42.50	356.20	13333
13334	100 mm Nominal size copper alloy non-return valve.....	2,379.30	22.50	26.30	87.50	13334
13335	150 mm Ditto.....	4,100.30	25.00	28.70	93.70	13335

Item	DRAW-OFF TAPS AND VALVES, BALL VALVES ETC. (CONT'D)				Item	
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A	B	C	D	
		\$	\$	\$	\$	
13336	Thermostatic mixing valve 15mm	1,189.70	43.70	66.20	85.90	13336
13337	Ditto 20 mm	1,559.30	43.70	66.20	85.90	13337
13338	Ditto 22 mm	1,715.20	43.70	66.20	85.90	13338
13339	Ditto 25 mm	1,928.90	43.70	66.20	85.90	13339
13340	Thermostatic mixing valve 15 mm with safety shut-off device	1,305.20	43.70	77.50	85.90	13340
13341	Ditto 20 mm	1,696.70	43.70	77.50	85.90	13341
13342	Ditto 22 mm	1,893.10	43.70	77.50	85.90	13342
13343	Ditto 25 mm	2,113.70	43.70	77.50	85.90	13343
13344	15 mm Thermoscopic mixing valve.....	1,952.00	47.50	66.20	85.90	13344
13345	Ditto with safety shut-off device.....	2,125.20	47.50	66.20	85.90	13345
13346	32 mm Self-closing non-concussive flushing devices, inlet connector and remote control system	2,910.60	48.70	71.20	153.40	13346
13347	32 mm Diameter stainless steel flushing valve	1,651.70	27.50	37.50	39.80	13347
		Supply and fix		Take down and clear away		
	Diameter (mm)	15	20	15	20	
		A	B	C	D	
		\$	\$	\$	\$	
13348	Vandal proof surface mounted self closing non-concussive shower stopcock with time delay closing action with built-in adjustable flow rate device, supplied with anti-theft device fixed overhead shower and riser pipe	1,790.30	1,969.30	31.20	37.50	13348
13349	Vandal proof concealed self closing non-concussive shower stopcock ditto	2,148.30	2,363.10	31.20	37.50	13349
13350	Vandal proof surfaces mounted self closing non-concussive shower mixer stopcock with time delay closing action, knob to select showering temperature, built in adjustable flow device supplied with anti-theft device fixed overhead shower and riser pipe	2,818.20	3,100.00	25.00	31.20	13350
13351	Vandal proof concealed self closing non-concussive shower mixer stopcock ditto	3,407.30	3,748.00	25.00	31.20	13351
13352	Vandal proof self closing non-concussive basin pillar tap with time delay closing action, built in adjustable flow rate device, self cleaning piston and anti-splash gauze strainer	785.40	1,413.70	31.20	37.50	13352
13353	Ditto but with lever action for handicapped	1,362.90	1,499.20	31.20	37.50	13353
13354	Electronic operated basin bib type or pillar type tap for cold water with adjustable self closing timing device, infra-red sensor, self-cut-off in case sensor being blocked, anti-blocking device, powered by transformer, supplied with angle stop cock with built in filter and check valve with or without water saving device (electrical connection measured separately)	2,841.30	3,125.40	31.20	37.50	13354
13355	Ditto but operated by battery	2,222.70	2,441.90	31.20	37.50	13355
13356	Electronic operated basin bib type or pillar type thermostatic mixer for cold/hot water with adjustable self closing timing device, infra-red sensor, self-cut-off in case sensor being blocked, anti-blocking device, powered by transformer, supplied with angle stopcock with built in filter and check valve with or without water saving device (electrical connection measured separately)	4,063.40	4,463.40	31.20	37.50	13356
13357	Ditto but operated by lithium battery	3,874.00	4,105.00	31.20	37.50	13357

Item	DRAW-OFF TAPS AND VALVES, BALL VALVES ETC. (CONT'D)	Supply and fix		Take down and clear away		Item		
		Diameter (mm)		15	20		15	20
		A	B	C	D			
	<i>Each</i>	\$	\$	\$	\$			
13358	Wall mounted electronic sensor tap for cold water with self closing device or premixed with adjustable sensing distance with special 220 mm project spout supplied with extra flexible hose and electric cable with adaptor for 1 m length, including anti-blocking device, powered by transformer, supplied with angle stopcock with built in filler and check valve (electrical connection measured separately)	2,772.00	5,082.00	47.50	58.70	13358		
13359	Ditto but operated by battery.....	2,252.30	3,821.00	47.50	58.70	13359		
13360	Wall mounted electronic operated thermostatic mixer for cold/hot water with self closing device and anti-blocking device, powered by transformer, supplied with angle stopcock with built in filter and check valve and with or without water saving device (electrical connection measured separately).....	4,562.30	5,336.10	51.20	63.70	13360		
13361	Ditto but operated by battery.....	3,635.20	5,220.30	51.20	63.70	13361		

LABOUR ON DRAW-OFF TAPS AND VALVES, BALL VALVES, ETC.

Take down and set aside for re-use bib cocks, pillar cocks, stop cocks, full way gate valves, mixing valves or other fittings with joints as follows including taking down and setting aside all necessary connectors : -

	Nominal size (mm)										Item	
	13	20	25	32	38	51	65	76	100	150		
	A	B	C	D	E	F	G	H	I	J		
<i>Each</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
13362	Fitting jointed to galvanized steel or P.V.C. tubing at one end.....	24.90	26.60	29.10	31.70	33.40	36.00	38.60	41.10	43.70	48.80	13362
13363	Ditto but at two ends.....	49.70	52.30	57.40	62.60	67.70	72.80	77.10	82.30	87.40	97.70	13363
13364	Fitting solder jointed to lead pipe at one end.....	51.40	54.00	56.60	61.70	66.00	71.10	76.30	81.40	86.60	96.00	13364
13365	Ditto but at two ends.....	102.80	105.40	112.30	122.50	132.80	142.30	152.50	162.80	172.20	192.80	13365
13366	Fitting jointed to copper tubing with "Compression type" or "Capillary type" connector at one end.....	12.90	13.70	15.40	16.30	17.10	18.90	22.30	24.00	29.10	30.00	13366
13367	Ditto but at two ends.....	24.90	27.40	30.00	32.60	35.10	37.70	45.40	47.10	57.40	60.00	13367
	Fix only bib cocks, pillar cocks, stop cocks, full way gate valves, mixing valves or other fittings with joints as follows including providing all necessary connectors : -											
<i>Each</i>												
13368	Fitting jointed to galvanized steel or P.V.C. tubing at one end.....	38.50	41.00	43.50	44.70	48.50	51.00	57.20	62.20	67.00	72.00	13368
13369	Ditto but at two ends.....	59.50	63.30	67.00	69.50	72.00	75.80	88.30	95.80	104.20	109.20	13369
13370	Fitting solder jointed to lead pipe at one end.....	116.70	128.00	146.70	159.20	178.00	227.90	259.20	315.40	367.30	504.70	13370
13371	Ditto but at two ends.....	-	-	-	-	355.90	455.90	518.40	630.80	734.50	1,009.40	13371
13372	Fitting jointed to copper tubing with "Compression type" or "Capillary type" connector at one end.....	28.60	29.80	32.30	34.80	37.30	39.80	43.60	44.80	54.50	58.30	13372
13373	Ditto but at two ends.....	57.10	59.60	64.60	69.60	74.60	79.60	87.10	89.60	109.00	116.50	13373

Item	SUNDRY REPAIRS TO COCKS, VALVES, BALL VALVES, ETC.											Item
	Nominal size (mm)											
	13	20	25	32	38	51	65	76	100	150		
	A	B	C	D	E	F	G	H	I	J		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
13374	<i>Each</i> Take off copper float from ball valve, solder to watertight and re-fix in position.....											13374
	71.40	72.30	73.50	82.40	82.40	82.40	82.40	82.40	102.60	125.40		
13375	Take off and clear away existing copper or plastic float from ball valve, provide and fix new plastic float.....											13375
	112.20	122.80	165.40	190.30	225.10	274.40	347.30	-	-	-		
13376	Take off and clear away metal or plastic connecting rod from ball valve, provide and fix new rod.....											13376
	100.10	103.90	112.30	122.90	137.30	193.20	237.10	-	-	-		
	<i>Each</i>											
13377	Re-washer valve of bib cock, pillar cock, stop cock or ball valve including providing leather, vulcanised fibre, plastic or rubber washer as ordered.....											13377
	43.70	50.00	62.50	68.70	81.20	93.70	132.50	145.00	175.00	212.50		
13378	Re-pack stuffing box, grind in valve, and regulate and adjust bib cock, pillar cock or stop cock.....											13378
	87.50	100.00	112.50	137.50	156.20	187.50	237.50	274.90	299.90	312.40		
	TRAPS AND WASTE OUTLETS											
	Supply and fix			Take down and clear away			Take down and set aside for re-use			Fix only		
	Nominal size (mm)			Nominal size (mm)			Nominal size (mm)			Nominal size (mm)		
	32	38	51	32	38	51	32	38	51	32	38	51
	A	B	C	D	E	F	G	H	I	J	K	L
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
13379	<i>Each</i> Plastic re-sealing anti-syphonic trap with 80 mm seal.....											13379
	161.70	194.00	231.00	29.10	31.70	35.10	29.10	31.70	35.10	60.00	72.50	85.00
13380	Galvanized malleable iron "P", "S" or running trap with 38 mm or 76 mm seal, as ordered, and screwed cleaning eye including joints to fitting, waste outlet, or galvanized steel or P.V.C. tubing.....											13380
	127.10	152.50	196.40	45.40	51.40	58.30	45.40	51.40	57.40	70.00	81.20	97.50
13381	Cast brass ditto.....											13381
	219.50	263.30	381.20	45.40	51.40	59.10	45.40	51.40	57.40	70.00	81.20	97.50
13382	Chromium plated brass ditto.....											13382
	231.00	277.20	427.40	45.40	51.40	59.10	45.40	51.40	57.40	70.00	81.20	97.50
13383	Add to Items 13380 to 13382 if fitted with connector for copper tubing.....											13383
	138.60	166.30	231.00	-	-	-	-	-	-	-	-	-
13384	Approved "P" or "S" plastic bottle trap including joints to fitting, waste outlet or P.V.C. tubing.....											13384
	127.10	152.50	-	29.10	31.70	-	29.10	31.70	-	60.00	72.50	-

Item	TRAPS AND WASTE OUTLETS (CONT'D)												Item	
	Supply and fix			Take down and clear away			Take down and set aside for re-use			Fix only				
	Nominal size (mm)			Nominal size (mm)			Nominal size (mm)			Nominal size (mm)				
	32	38	51	32	38	51	32	38	51	32	38	51		
	<i>Each</i>													
	A	B	C	D	E	F	G	H	I	J	K	L		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
13385	Brass waste outlet with chromium plated flange and grating flynut, long shank slotted for overflow if required, and screwed for joint to galvanized steel tubing or trap including rubber or vulcanite plug with chromium plated ring and chain and fixing stud if required, and bedded in red lead cement in sink or basin.....	173.30	207.90	323.40	31.70	38.60	42.90	32.60	41.10	47.10	53.80	73.70	82.50	13385
13386	Ditto but with chromium plated brass overflow grid and connection for bath.....	207.90	249.50	-	33.40	42.90	-	35.10	45.40	-	60.00	78.70	-	13386

CISTERNS, TANKS AND CYLINDERS

Item	Description	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	Item
		A	B	C	D	
		\$	\$	\$	\$	
Galvanized low carbon steel to be manufactured to comply with G.S. Item 19.49 : -						
	<i>Each</i>					
13387	Cistern, tank or cylinder n.e. 100 litre nominal capacity.....	3,517.00	162.80	57.40	150.00	13387
13388	Ditto but 100 - 200 litre nominal capacity.....	4,527.60	202.20	67.70	175.00	13388
13389	Ditto but 200 - 300 litre nominal capacity.....	6,190.80	277.60	90.00	225.00	13389
13390	Ditto but 300 - 500 litre nominal capacity.....	7,715.40	368.50	137.10	312.40	13390
13391	Ditto but 500 - 1,000 litre nominal capacity.....	10,406.60	493.60	200.50	462.40	13391
13392	Ditto but 1,000 - 2,000 litre nominal capacity.....	13,998.60	649.50	279.40	687.40	13392
13393	Ditto but 2,000 - 3,000 litre nominal capacity.....	17,475.20	874.90	341.90	899.80	13393
13394	Ditto but 3,000 - 5,000 litre nominal capacity.....	24,255.00	1,088.30	499.60	1,349.70	13394
13395	Ditto but 5,000 - 10,000 litre nominal capacity.....	28,748.00	2,124.20	749.80	1,999.50	13395
13396	Add to Item 13395 for additional 2,500 litres nominal capacity.....	2,298.50	624.70	225.40	374.90	13396

Item	FIBREGLASS WATER TANKS	Item				
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	One-piece fibreglass reinforced polyester water tank with cover comprising all necessary bolts, nuts and all necessary sealing and reinforcing fittings as required and including all joints to tubing :-					
	<i>Each</i>					
13397	Water tank n.e. 100 litre nominal capacity.....	1,216.50	93.40	62.60	125.00	13397
13398	Ditto but 100 - 200 litre nominal capacity.....	1,969.10	112.30	75.40	150.00	13398
13399	Ditto but 200 - 300 litre nominal capacity.....	2,650.50	135.40	90.00	225.00	13399
13400	Ditto but 300 - 500 litre nominal capacity.....	3,695.60	202.20	135.40	299.90	13400
13401	Ditto but 500 - 1,000 litre nominal capacity.....	5,773.50	303.30	202.20	437.40	13401
13402	Ditto but 1,000 - 1,500 litre nominal capacity.....	8,261.50	395.00	263.90	499.90	13402
13403	Ditto but 1,500 - 2,000 litre nominal capacity.....	12,267.30	473.90	316.20	624.90	13403
13404	Ditto but 2,000 - 3,000 litre nominal capacity.....	16,273.00	562.10	400.20	749.80	13404
13405	Ditto but 3,000 - 5,000 litre nominal capacity.....	24,409.50	924.60	624.70	1,124.70	13405
13406	Ditto but 5,000 - 10,000 litre nominal capacity.....	56,080.80	975.10	949.40	1,749.60	13406
13407	Add to Item 13406 for additional 1,000 litre nominal capacity.....	6,418.80	187.70	100.30	112.50	13407
	Panel type fibreglass reinforced polyester water tank with cover; comprising all necessary bolts, nuts and all necessary sealing and reinforcing fittings as required and including all joints to tubing :					
	<i>Each</i>					
13408	Water tank 2,000 - 3,000 litre (nominal) capacity.....	23,118.90	1,285.30	1,114.00	1,999.50	13408
13409	Ditto but 3,000 - 4,000 litre (nominal) capacity.....	30,420.60	1,456.70	1,285.30	2,249.50	13409
13410	Ditto but 4,000 - 5,000 litre (nominal) capacity.....	34,516.90	1,874.90	1,624.70	2,749.40	13410
13411	Ditto but 5,000 - 6,000 litre (nominal) capacity.....	39,548.60	2,374.50	2,124.20	3,499.20	13411
13412	Ditto but 6,000 - 7,000 litre (nominal) capacity.....	47,742.70	2,749.80	2,499.60	4,124.00	13412
13413	Ditto but 7,000 - 8,000 litre (nominal) capacity.....	50,780.70	3,186.80	3,000.00	4,998.80	13413
13414	Ditto but 8,000 - 9,000 litre (nominal) capacity.....	53,872.70	3,999.10	3,941.70	6,248.60	13414
13415	Ditto but 9,000 - 10,000 litre (nominal) capacity.....	57,671.20	4,249.30	4,061.70	6,498.50	13415
13416	Ditto but 10,000 - 12,500 litre (nominal) capacity.....	67,311.30	4,999.10	4,873.20	7,248.30	13416
13417	Ditto but 12,500 - 15,000 litre (nominal) capacity.....	78,122.10	6,248.50	5,248.50	8,498.00	13417
13418	Ditto but 15,000 - 17,500 litre (nominal) capacity..... (The actual rate should be : \$132,549.90 for item 13418A)	13,254.99	6,874.00	6,498.70	10,247.60	13418
13419	Ditto but 17,500 - 20,000 litre (nominal) capacity..... (The actual rate should be : \$144,573.40 for item 13419A)	14,457.34	7,998.20	7,248.50	11,497.30	13419
13420	Ditto but 20,000 - 25,000 litre (nominal) capacity..... (The actual rate should be : \$150,502.90 for item 13420A)	15,050.29	9,497.80	8,997.40	13,122.00	13420
13421	Ditto but 25,000 - 30,000 litre (nominal) capacity..... (The actual rate should be : \$177,980.30 for item 13421A)	17,798.03	11,508.10	11,497.80	18,120.80	13421
13422	Add to Item 13421 for each additional 5,000 litre (nominal) capacity from 30,000 - 50,000 litre (nominal) capacity in total.....	23,839.20	2,999.10	3,084.80	5,998.60	13422
13423	Add to Item 13421 for each additional 5,000 litre (nominal) capacity from 50,000 - 100,000 litre (nominal) capacity in total.....	22,162.10	2,742.10	3,084.80	4,998.80	13423
13424	Add to Item 13421 for each additional 5,000 litre (nominal) capacity from 100,000 - 150,000 litre (nominal) capacity in total.....	21,194.30	2,742.10	3,084.80	4,998.80	13424

Item	PROPRIETARY STERILIZER SYSTEM AND DRINKING FOUNTAIN				Item	
	Proprietary sterilizer system and drinking fountain including U.V. water sterilizer system/filter and all necessary accessories and fixing in accordance with the manufacturer's recommendations : -	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per Set</i>	A \$	B \$	C \$	D \$	
13425	Single-station satin finished stainless steel barrier-free wall mounted drinking fountain 308 mm long x 165 mm high x 476 mm deep with backsplash comprising safety bubbler; a contoured basin; vandal-resistant push-button control; vandal-resistant bottom cover plate; and drain and trap assembly	18,371.60	112.30	91.70	312.40	13425
13426	Satin finish stainless steel counter top mounted drinking fountain 250 mm diameter x 48 mm deep comprising safety bubbler; a contoured basin; vandal-resistant push-button control; and drain and trap assembly	10,964.70	127.70	103.70	399.90	13426
13427	Satin finished stainless steel wall mounted drinking fountain 305 mm long x 152 mm high x 310 mm deep comprising polished chrome plated forged brass, integral basin shank, shielded, anti-squirt, vandal-resistant bubbler head; in-line bowl type strainer with positive rubber seals moulded onto a fine 60 micron mesh screen; push button activation, front adjustable, automatic diaphragm pressure regulation with fully adjustable flow; polished chrome-plated brass vandal-resistant combination waste strainer and tailpiece assembly; a polished chrome plated finish push button assembly; a low profile trap; and bottom plate with vandal resistant screws	7,162.80	112.30	91.70	424.90	13427
13428	Reinforced concrete pedestal drinking fountain 362 x 362 x 1016 mm high overall with exposed aggregate finish comprising polished chrome plated forged brass, integral basin shank, shielded, anti-squirt, vandal-resistant bubbler head; in-line bowl type strainer with rubber seals moulded onto a fine 60 micron mesh screen; push button activation, front adjustable, automatic diaphragm pressure regulation with fully adjustable flow; polished chrome-plated vandal-resistant waste strainer, a polished chrome plated finish push button; a lead-free brass screwdriver stop; and integral mounting plate	15,065.50	112.30	91.70	437.40	13428
	PROPRIETARY PRESSURE VESSELS					
	Proprietary pressure vessel complete with all necessary accessories in accordance with the manufacturer's recommendations : -					
	<i>Per Set</i>					
13429	Proprietary pressure vessel, vertical type, of 10 bars working pressure and 60 litres capacity	2,841.30	128.50	144.80	449.90	13429
13430	Ditto but 200 litres capacity	7,357.40	181.70	212.50	624.90	13430
13431	Ditto but 300 litres capacity	10,325.70	242.50	293.90	824.80	13431
13432	Ditto but 500 litres capacity	15,708.00	319.60	393.30	1,124.70	13432
13433	Ditto but 1,000 litres capacity	38,311.40	481.60	578.40	1,574.60	13433
	CLEARING TRAPS AND WASTE PIPES					
	<i>Each</i>				A \$	
13434	Clear blocked trap and waste pipe complete with combined overflow if necessary to lavatory basin, sink, bath or wall urinal bowl including taking off and re-fixing cleaning eye from trap, etc., if required and leaving trap and pipe in clean and perfect condition.....				56.20	13434
13435	Ditto but for trap and waste pipe to W.C., gully, stall or slab urinal				62.50	13435

Item	INSULATION TO PIPES OR CYLINDERS								Item									
	Insulation as G.S. Items 19.56 and 19.58 :-				Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only										
	<i>Per square metre</i>				A \$	B \$	C \$	D \$										
13436	Cover cylinder with insulation				271.40	30.00	31.70	137.50	13436									
	<i>Per linear metre</i>																	
13437	Fit pipework n.e. 15 mm diameter with insulation				69.30	18.90	20.60	43.70	13437									
13438	Ditto but 15 - 30 mm diameter ditto				92.40	21.40	24.00	52.50	13438									
13439	Ditto but 30 - 40 mm diameter ditto				104.00	24.00	24.90	61.20	13439									
13440	Ditto but 40 - 55 mm diameter ditto				127.10	28.30	30.00	71.20	13440									
	WASTE PLUGS AND CHAINS																	
	<i>Each</i>																	
13441	Rubber or vulcanite waste plug n.e. 64 mm top diameter with chromium plated ring to receive chain (measured separately)				9.20	3.40	5.10	6.30	13441									
13442	Stout chromium plated brass chain ring and screw fixing stud if required n.e. 0.80 m long				23.10	6.90	7.70	10.00	13442									
	BALLOON GRATINGS AND FRESH AIR INLETS																	
	<i>Each</i>																	
					Supply and fix				Take down and clear away	Take down and set aside for re-use	Fix only							
					Nominal size (mm)													
					51	75	100	150										
					A \$	B \$	C \$	D \$	E \$	F \$	G \$							
13443	Stout galvanized iron wire balloon grating with pronged feet and set in top of pipe				23.10	30.00	34.70	46.20	7.70	8.60	12.50							
13444	Stout copper wire ditto				69.30	76.20	80.90	92.40	7.70	8.60	12.50							
									Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only						
									A \$	B \$	C \$	D \$						
13445	Galvanized cast iron fresh air inlet valve with brass front and mica flap, and joint to top of 100 mm cast iron pipe								184.80	40.30	37.70	68.70						
												A \$						
13446	Take off and clear away existing mica flap, and provide and fix new											87.50						
	FIRE COLLAR																	
									Pipe diameter (mm)									
									15	20	25	32	40	50	65	80	100	150
									A \$	B \$	C \$	D \$	E \$	F \$	G \$	H \$	I \$	J \$
13447	Pyrosleeve 'GV' type fire collar as ordered by the Maintenance Surveyor in writing								127.10	129.60	133.40	138.60	152.50	161.70	177.90	202.10	231.00	306.10

Item	PROPRIETARY LABORATORY FITTINGS	Supply and fix	Take down and clear away	Take down set aside for re-use	Fix only	Item																		
	Proprietary laboratory fittings in solid brass free from impurity coated with chemically resistant polyester powder coating complying with EN 200/DIN 17660 with nitrite seat for leak prove and approved by W.W.O. with international code colour index to DIN EN 13792-2002	A \$	B \$	C \$	D \$																			
	<i>Each</i>																							
13448	15 mm Bore single outlet drop tap with removable nozzle	565.00	11.10	12.90	125.00	13448																		
13449	15 mm Bore single outlet bib cock with removable nozzle	565.00	11.10	12.90	125.00	13449																		
13450	15 mm Bore swivel 225 mm swanneck single water standard with removable nozzle	1,074.00	13.70	15.40	150.00	13450																		
13451	15 mm Bore swivel 225 mm swanneck single water standard with anti-splash nozzle	1,074.00	13.70	15.40	150.00	13451																		
13452	15 mm Bore swivel 225 mm swanneck three way water standard with serrated nozzle	2,267.10	13.70	15.40	150.00	13452																		
13453	15 mm Bore swivel 225 mm swanneck two way water standard with removable serrated nozzle	1,902.10	13.70	15.40	150.00	13453																		
	Proprietary laboratory fittings surface treated with polyester powder lacquer with the following technical properties :																							
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Layer thickness</td> <td>≥ 60 my</td> </tr> <tr> <td>Temperature range</td> <td>30°C to -120°C</td> </tr> <tr> <td>UV resistance</td> <td>Excellent (according to Xenon test)</td> </tr> <tr> <td>Light fastness</td> <td>≥ 7 according to DIN54C03 or ISO 105-1978/B/01</td> </tr> <tr> <td>Adhesion</td> <td>Grid section according to DIN 53151 or ISO 2409-1972 Requirement : GT O</td> </tr> <tr> <td>Flexibility</td> <td>Bending test according to DIN 53152 / ISO 1519 Requirement : 6 mm (no cracks)</td> </tr> <tr> <td>Impact resistance</td> <td>According to ASTM D2794 Requirement : minimum 10 inches lbs. (without cracks)</td> </tr> <tr> <td>Visual inspection</td> <td>100%</td> </tr> <tr> <td>Resistance to chemicals</td> <td>Lacquer resistant to following chemicals (immersed for one year or more) : Brine / Fresh water / Distilled water / Sodium chloride 20% Sulphuric acid 20% / Hydrochloric acid conc. / Nitric acid 10% / Phosphoric acid 43% / Xylene / Ethyl alcohol 96% / Butanol Isopropyl alcohol / Glycerine / Acetone / Ethyl acetate Sodium bichromate, saturated / Hydrogen peroxide Urea, saturated / Acetic acid 10% / Lactic acid 10% Lemon acid 10% / Sodium carbonate 10% / Kerosene Crude oil / Sweet oil / Purified petrol / Turpentine High-octane petrol / Toluene</td> </tr> </table>	Layer thickness	≥ 60 my	Temperature range	30°C to -120°C	UV resistance	Excellent (according to Xenon test)	Light fastness	≥ 7 according to DIN54C03 or ISO 105-1978/B/01	Adhesion	Grid section according to DIN 53151 or ISO 2409-1972 Requirement : GT O	Flexibility	Bending test according to DIN 53152 / ISO 1519 Requirement : 6 mm (no cracks)	Impact resistance	According to ASTM D2794 Requirement : minimum 10 inches lbs. (without cracks)	Visual inspection	100%	Resistance to chemicals	Lacquer resistant to following chemicals (immersed for one year or more) : Brine / Fresh water / Distilled water / Sodium chloride 20% Sulphuric acid 20% / Hydrochloric acid conc. / Nitric acid 10% / Phosphoric acid 43% / Xylene / Ethyl alcohol 96% / Butanol Isopropyl alcohol / Glycerine / Acetone / Ethyl acetate Sodium bichromate, saturated / Hydrogen peroxide Urea, saturated / Acetic acid 10% / Lactic acid 10% Lemon acid 10% / Sodium carbonate 10% / Kerosene Crude oil / Sweet oil / Purified petrol / Turpentine High-octane petrol / Toluene					
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	<i>Each</i>																							
13454	Proprietary bench fitting with 2 fixed valves and detachable nozzles and 1 valve with swivel spout and fixed nozzle complying with the following :																							
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Materials with medium contact:</td> </tr> <tr> <td>Metals</td> <td>Brass DIN 17660 cu-zn 39Pb3 and Nickel</td> </tr> <tr> <td>Sealing</td> <td>EPDM</td> </tr> <tr> <td>Plastics</td> <td>Hostaform 9021R</td> </tr> <tr> <td>Lubricant</td> <td>Unisilicon L 250L x L 641 Molykote 111</td> </tr> <tr> <td>Glue</td> <td>Loctite 638</td> </tr> <tr> <td>Solder</td> <td>DIN L-Ag 55:Sn</td> </tr> </table>	Materials with medium contact:		Metals	Brass DIN 17660 cu-zn 39Pb3 and Nickel	Sealing	EPDM	Plastics	Hostaform 9021R	Lubricant	Unisilicon L 250L x L 641 Molykote 111	Glue	Loctite 638	Solder	DIN L-Ag 55:Sn									
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Glue	Loctite 638																							
Solder	DIN L-Ag 55:Sn																							
	1,547.70	18.00	21.40	78.70	13454																		

Item	PROPRIETARY LABORATORY FITTINGS (CONT'D)					Item																		
	<p>Proprietary laboratory fittings surface treated with polyester powder lacquer with the following technical properties : (Cont'd)</p> <table border="1"> <tr> <td>Layer thickness</td> <td>≥ 60 my</td> </tr> <tr> <td>Temperature range</td> <td>30°C to -120°C</td> </tr> <tr> <td>UV resistance</td> <td>Excellent (according to Xenon test)</td> </tr> <tr> <td>Light fastness</td> <td>≥ 7 according to DIN54C03 or ISO 105-1978/B/01</td> </tr> <tr> <td>Adhesion</td> <td>Grid section according to DIN 53151 or ISO 2409-1972 Requirement : GT O</td> </tr> <tr> <td>Flexibility</td> <td>Bending test according to DIN 53152 / ISO 1519 Requirement : 6 mm (no cracks)</td> </tr> <tr> <td>Impact resistance</td> <td>According to ASTM D2794 Requirement : minimum 10 inches lbs. (without cracks)</td> </tr> <tr> <td>Visual inspection</td> <td>100%</td> </tr> <tr> <td>Resistance to chemicals</td> <td>Lacquer resistant to following chemicals (immersed for one year or more) : Brine / Fresh water / Distilled water / Sodium chloride 20% Sulphuric acid 20% / Hydrochloric acid conc. / Nitric acid 10% / Phosphoric acid 43% / Xylene / Ethyl alcohol 96% / Butanol Isopropyl alcohol / Glycerine / Acetone / Ethyl acetate Sodium bichromate, saturated / Hydrogen peroxide Urea, saturated / Acetic acid 10% / Lactic acid 10% / Lemon acid 10% / Sodium carbonate 10% / Kerosene / Crude oil / Sweet oil / Purified petrol / Turpentine / High-octane petrol / Toluene</td> </tr> </table>	Layer thickness	≥ 60 my	Temperature range	30°C to -120°C	UV resistance	Excellent (according to Xenon test)	Light fastness	≥ 7 according to DIN54C03 or ISO 105-1978/B/01	Adhesion	Grid section according to DIN 53151 or ISO 2409-1972 Requirement : GT O	Flexibility	Bending test according to DIN 53152 / ISO 1519 Requirement : 6 mm (no cracks)	Impact resistance	According to ASTM D2794 Requirement : minimum 10 inches lbs. (without cracks)	Visual inspection	100%	Resistance to chemicals	Lacquer resistant to following chemicals (immersed for one year or more) : Brine / Fresh water / Distilled water / Sodium chloride 20% Sulphuric acid 20% / Hydrochloric acid conc. / Nitric acid 10% / Phosphoric acid 43% / Xylene / Ethyl alcohol 96% / Butanol Isopropyl alcohol / Glycerine / Acetone / Ethyl acetate Sodium bichromate, saturated / Hydrogen peroxide Urea, saturated / Acetic acid 10% / Lactic acid 10% / Lemon acid 10% / Sodium carbonate 10% / Kerosene / Crude oil / Sweet oil / Purified petrol / Turpentine / High-octane petrol / Toluene	Supply and fix	Take down and clear away	Take down set aside for re-use	Fix only	
Layer thickness	≥ 60 my																							
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		A	B	C	D																			
		\$	\$	\$	\$																			
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13455	<p>Proprietary bench fitting with 2 valves and detachable nozzles complying with the following :</p> <table border="1"> <tr> <td colspan="2">Materials with medium contact:</td> </tr> <tr> <td>Metals</td> <td>Brass DIN 17660 cu-zn 39Pb3 and Nickel</td> </tr> <tr> <td>Sealing</td> <td>EPDM</td> </tr> <tr> <td>Plastics</td> <td>Hostaform 9021R</td> </tr> <tr> <td>Lubricant</td> <td>Unisilicon L 250L x L 641 Molykote 111</td> </tr> <tr> <td>Glue</td> <td>Loctite 638</td> </tr> <tr> <td>Solder</td> <td>DIN L-Ag 55:Sn</td> </tr> </table>	Materials with medium contact:		Metals	Brass DIN 17660 cu-zn 39Pb3 and Nickel	Sealing	EPDM	Plastics	Hostaform 9021R	Lubricant	Unisilicon L 250L x L 641 Molykote 111	Glue	Loctite 638	Solder	DIN L-Ag 55:Sn	3,107.00	13.70	15.40	58.70	13455				
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13456	<p>Proprietary bench fitting with 1 valve and detachable nozzle complying with the following :</p> <table border="1"> <tr> <td colspan="2">Materials with medium contact:</td> </tr> <tr> <td>Metals</td> <td>Brass DIN 17660 cu-zn 39Pb3 and Nickel</td> </tr> <tr> <td>Sealing</td> <td>EPDM</td> </tr> <tr> <td>Plastics</td> <td>Hostaform 9021R</td> </tr> <tr> <td>Lubricant</td> <td>Unisilicon L 250L x L 641 Molykote 111</td> </tr> <tr> <td>Glue</td> <td>Loctite 638</td> </tr> </table>	Materials with medium contact:		Metals	Brass DIN 17660 cu-zn 39Pb3 and Nickel	Sealing	EPDM	Plastics	Hostaform 9021R	Lubricant	Unisilicon L 250L x L 641 Molykote 111	Glue	Loctite 638	1,282.10	13.70	15.40	58.70	13456						
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Glue	Loctite 638																							
13457	<p>Proprietary bench mounted fitting with one hole mixer with swivel spout and detachable nozzle and aerator 360 mm high and 150 mm stand out complying with the following :</p> <table border="1"> <tr> <td colspan="2">Materials with medium contact:</td> </tr> <tr> <td>Metals</td> <td>Brass DIN 17660 cu-zn 39Pb3 and Nickel</td> </tr> <tr> <td>Sealing</td> <td>EPDM</td> </tr> <tr> <td>Plastics</td> <td>Hostaform 9021R</td> </tr> <tr> <td>Lubricant</td> <td>Unisilicon L 250L x L 641 Molykote 111</td> </tr> <tr> <td>Inlet pipe</td> <td>Cu sis 5015</td> </tr> <tr> <td>Solder</td> <td>DIN L-Ag 55:Sn</td> </tr> </table>	Materials with medium contact:		Metals	Brass DIN 17660 cu-zn 39Pb3 and Nickel	Sealing	EPDM	Plastics	Hostaform 9021R	Lubricant	Unisilicon L 250L x L 641 Molykote 111	Inlet pipe	Cu sis 5015	Solder	DIN L-Ag 55:Sn	3,430.40	13.70	15.40	58.70	13457				
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Item	PROPRIETARY LABORATORY FITTINGS (CONT'D)				Item	
	Proprietary laboratory sinks :	Supply and fix	Take down and clear away	Take down set aside for re-use	Fix only	
	<i>Each</i>	A \$	B \$	C \$	D \$	
13458	Proprietary laboratory sink in fireclay with flanged edge and no overflow. Resistant to acids and alkalis. Dimension : 560 mm (L) x 355 mm (W) x 230 mm (H). With 1 1/4 inches acid resistant waste with loose lift out grid and 125 mm stand tube overflow (taps measured separately)	1,284.30	90.00	93.40	499.90	13458
	SANITARY FITTINGS					
	<i>Each</i>					
13459	Lavatory basin size 455 x 250mm, complete with waste fitting, plug and chain, trap, two taps or one tap and one tap hole stopper, and brackets or wall hanger.....	792.10	100.30	102.80	399.90	13459
13460	Ditto but size 365 x 255mm	767.10	100.30	102.80	399.90	13460
13461	Ditto but size 480 x 280mm	818.30	100.30	102.80	399.90	13461
13462	Ditto but size 380 x 330mm	818.30	100.30	102.80	399.90	13462
13463	Ditto but size 367 x 282mm	786.90	100.30	102.80	399.90	13463
13464	White vitreous china counter top wash basin, size 475 x 400 mm, complete with fittings, plug and chain and fixing brackets	795.40	90.00	93.40	349.90	13464
13465	White vitreous china under-counter wash basin, size 560 x 420 mm, complete with waste fittings, plug and chain and fixing brackets	904.30	90.00	93.40	474.90	13465
13466	Ditto but coloured	988.10	90.00	93.40	474.90	13466
13467	Sink (any size) complete with waste fitting, plug and chain, trap and brackets or bedding on bearer wall (taps measured separately)	1,906.50	90.00	93.40	349.90	13467
13468	W.C. suite comprising pedestal pan complete with 50mm thick seat with or without cover, low or high level cistern with brackets or hanger, and flush bend or flush pipe including bedding and fixing pan as described	1,156.10	102.80	106.30	349.90	13468
13469	White vitreous china pedestal W.C. pan, wash down pattern with "P" or "S" trap and with or without vent	470.00	42.90	45.40	150.00	13469
13470	W.C. suite comprising pedestal pan for disable complete with 50mm thick seat with or without cover, low level cistern	3,674.40	103.70	112.30	377.40	13470
13471	Vitreous china close-coupled washdown w.c. pan with "P" or "S" trap and with or without vent	884.80	42.90	43.70	155.00	13471
13472	Proprietary 1.6 mm thick type 316 AISI 18/8 Quality stainless steel floor mounted pedestal pan complete with seat with or without cover, high level cistern	11,002.90	103.70	112.30	377.40	13472
13473	W.C. suite comprising Asiatic type pan complete with high level cistern with brackets or hanger, and flush pipe including bedding pan in cement mortar (concrete surround measured separately)	1,233.90	103.70	112.30	381.20	13473
13474	Proprietary 0.9 mm thick type 316 AISI 18/8 Quality stainless steel squatting W.C. pan complete with high level cistern, flush pipes	3,982.10	92.60	97.70	349.90	13474
13475	Proprietary stainless steel grade 316 squatting WC pan complete with p-trap, low level cistern, and foot control, size : 700 x 700 x 270 mm	5,189.20	152.50	150.00	499.90	13475
13476	White vitreous china Asiatic type W.C. pan with "P" or "S" trap and with or without vent (concrete surround measured separately)	572.70	42.90	43.70	165.00	13476
13477	Squatting w.c. suite comprising white fireclay plate with integral foot treads, white vitreous china washdown pan washdown pan and white vitreous china S-trap	804.90	42.90	43.70	165.00	13477
13478	Single individual stall pattern urinal complete with grating and trap including bedding in cement mortar and pointing in white cement (cistern, spreader, etc., measured separately)	2,112.10	81.40	85.70	287.40	13478
13479	Add to Item 13478 for each additional individual stall in the same range including overlap facings if required.....	2,112.10	81.40	85.70	287.40	13479

Item	SANITARY FITTINGS (CONT'D)					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	<i>Each</i>					
13480	Single section slab pattern urinal n.e. 1 m wide complete with two return ends, floor channel, outlet grating and trap including bedding in cement mortar and pointing in white cement (cistern, spreader, etc., measured separately)	5,202.00	150.00	162.80	687.40	13480
13481	Add to Item 13480 for each additional 610 mm wide back section and length of floor channel in the same range	2,828.40	82.30	86.60	374.90	13481
13482	Ditto for each intermediate division slab	754.90	42.90	43.70	187.50	13482
13483	Stall urinal manufactured from 1.6 mm thick type 316 AISI 18/8 Quality stainless steel, size 975 mm high x 600 mm wide and n.e. 750 mm long, complete with stainless steel hinged foot grating, level floor or tile step, outlet grating (cistern, spreader, etc. measured separately)	8,426.20	150.00	206.50	387.40	13483
13484	Add to Item 13483 for each additional 300 mm long in the same range	3,281.80	38.60	30.00	62.50	13484
	<i>Per linear metre</i>					
13485	Add to stall urinal for stainless steel step	2,957.90	24.90	26.60	87.50	13485
	<i>Each</i>					
13486	Wall urinal bowl complete with outlet grating, trap and concealed brackets or hanger (cistern, spreader, etc., measured separately)	596.50	41.10	36.90	112.50	13486
13487	Division slab between wall urinal bowls complete with concealed hanger	509.00	15.40	18.90	62.50	13487
13488	Automatic flushing cistern (any size) complete with brackets or hanger, pet cock, and flush pipe and spreader for single urinal stall or bowl, or flush and sparge pipe n.e. 1 m long for single section slab urinal	1,108.90	87.40	88.30	312.40	13488
13489	Add to Item 13488 for each additional stall or bowl or 610 mm width of stall urinal served from the same cistern	116.60	13.70	15.40	60.00	13489
13490	Hospital sluice fitting comprising combined bed-pan and wash up sink complete with loose or fixed trap, brackets, urinal bottle and bed-pan jets, high level cistern with brackets and flush pipe, waste fitting, plug and chain, drainer, supply fitting and hand spray with supply fitting	39,845.80	349.60	354.80	1,174.70	13490
13491	Stainless steel sink with single or double bowl including drain board n.e. 1.60 m long overall, complete with drainer, overflow, waste fitting, plug and chain, trap and brackets (taps measured separately)	2,352.50	40.30	31.70	137.50	13491
13492	Slop sink (any size) complete with ditto	4,717.90	103.70	106.30	437.40	13492
13493	Shower tray (any size) complete with waste fitting, plug and chain, and trap including bedding in cement mortar and pointing in white or coloured cement (concrete surround or benching measured separately)	2,041.60	155.10	156.00	512.40	13493
13494	Vitreous enamelled cast iron bath n.e. 2 m long complete with combined overflow and waste fitting, plug and chain, trap and two taps	3,325.50	203.90	207.40	687.40	13494

Item	PARTS OF SANITARY FITTINGS					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	<i>Each</i>					
13495	Shower fitting comprising tap, shower hose, shower tower and shower head	257.20	30.00	31.70	100.00	13495
13496	Ditto but with shower mixer in lieu of tap	678.70	40.30	41.10	137.50	13496
13497	Ditto but with thermo-static shower mixer in lieu of tap	4,174.70	47.10	48.80	200.00	13497
13498	Solid plastic W.C. seat with moulded plastic adjustable hinges	76.40	16.30	15.40	25.00	13498
13499	Ditto but with cover	107.00	18.90	17.10	27.50	13499
13500	Solid W.C. seat with moulded adjustable hinges for disable	488.10	18.90	17.10	27.50	13500
13501	India rubber buffer to W.C. seat	17.90	2.60	2.60	8.80	13501
13502	Pair pillar hinge to W.C. seat	21.50	2.60	2.60	10.00	13502
13503	Pair double pillar hinge to W.C. seat and cover	29.60	3.40	3.40	13.80	13503
13504	Vitreous china low level flushing cistern, 7.50 litre capacity, complete with plastic syphon, ball valve, overflow and chromium plated lever.....	543.00	56.60	54.00	175.00	13504
13505	Vitreous china low level flushing cistern with water saving and efficient valve 7.5(max.)/2.5(min.) litres, complete with plastic syphon, ball valve, overflow and chromium plated lever	1,379.40	56.60	54.00	175.00	13505
13506	White vitreous china low level flushing cistern, 9.00 litres capacity, complete with plastic syphon, ball valve, overflow and chromium plated lever	654.10	62.60	65.10	212.50	13506
13507	White or black plastic low level flushing cistern, 9.00 litres capacity, complete with plastic syphon, ball valve, overflow and chromium plated lever	372.60	62.60	65.10	212.50	13507
13508	White or black plastic high level flushing cistern, 9.00 litres capacity, complete with handle and chain, plastic syphon with screwed outlet and rubber washers including adjusting and re-fixing lever arm	369.00	62.60	65.10	212.50	13508
13509	White or black plastic concealed type low level cistern, 7.5 litres capacity, complete with syphon, syphon, ball valve, chromium plated lever and low profile flush pipe	969.70	62.60	65.10	212.50	13509
13510	White or black plastic concealed type cistern, dual flush 6/3 litres capacity, complete with syphon, ball valve, overflow and chromium plated lever	967.80	62.60	65.10	212.50	13510
13511	Plastic syphon complete with chromium plated outlet connector including adjusting and re-fixing lever arm	182.60	36.00	37.70	102.50	13511
13512	Pair white porcelain enamelled brackets.....	386.90	12.90	15.40	75.00	13512
13513	Chromium plated brass lever handle with linkage to syphon including adjusting	110.00	22.30	24.00	50.00	13513
13514	Plastic lever handle ditto	75.90	22.30	24.00	50.00	13514
13515	Heavy galvanized chain pull to W.C. cistern	33.10	22.30	-	20.00	13515
13516	Nylon cord pull ditto	29.00	22.30	-	20.00	13516
13517	Rod pull and guide for high level cistern	26.30	22.30	-	20.00	13517
13518	Foot operated flushing mechanism	1,138.90	35.10	36.00	118.70	13518
13519	Foot operated duct lever with high level cistern adaptor for wall thickness within 115 mm to 229 mm	1,563.70	40.30	41.10	125.00	13519
13520	White plastic flush pipe for low level cistern including connector	79.00	21.40	24.00	53.80	13520
13521	White plastic adjustable flush pipe for high level cistern	96.30	30.00	31.70	62.50	13521
13522	Universal black plastic flush pipe connector	29.90	10.30	11.10	23.80	13522

Item	PARTS OF SANITARY FITTINGS (CONT'D)					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	<i>Each</i>					
13523	White glazed fire-clay automatic flushing cistern, 4.50 litre capacity	566.60	32.60	33.40	116.20	13523
13524	Ditto but 9.00 litre capacity	578.00	37.70	38.60	130.00	13524
13525	Ditto but 13.50 litre capacity	654.40	42.90	43.70	142.50	13525
13526	Plastic syphon with screwed outlet and rubber washer to suit 4.50 litre capacity automatic flushing cistern	361.70	20.60	21.40	72.50	13526
13527	Ditto but for 9.00 litre capacity automatic flushing cistern	382.80	22.30	24.00	80.00	13527
13528	Ditto but for 13.50 litre capacity automatic flushing cistern	403.90	26.60	27.40	86.20	13528
13529	10 mm Plastic drip cock for automatic cistern	83.00	10.30	11.10	40.00	13529
13530	10 mm Brass drip cock ditto	133.60	12.90	13.70	48.70	13530
13531	P.V.C. flush pipe and spreader for single urinal stall or bowl	153.10	27.40	28.30	85.00	13531
13532	Add to Item 13531 for each additional stall or bowl in a range served from the same cistern	117.90	12.90	13.70	43.70	13532
13533	P.V.C. flush pipe and sparge pipe n.e. 1 m long for single section slab urinal	361.10	36.00	36.90	100.00	13533
13534	Add to Item 13533 for each additional 610 mm width of slab urinal	126.30	10.30	11.10	30.00	13534
13535	Chromium plated copper flush pipe and chromium plated brass spreader for single urinal stall or bowl	323.90	32.60	33.40	87.50	13535
13536	Add to Item 13535 for each additional stall or bowl in a range served from the same cistern	173.70	15.40	16.30	47.50	13536
13537	Chromium plated copper flush pipe and sparge pipe n.e. 1 m long for single section slab urinal	402.70	36.90	37.70	106.20	13537
13538	Add to Item 13537 for each additional 610 mm width of slab urinal	197.60	10.30	11.10	32.50	13538
13539	Grating and waste connection to outlet from urinal channel ditto	119.50	18.00	18.90	60.00	13539
13540	Shower rose comprising galvanized mild steel capped end drilled five times	77.60	10.30	11.10	40.00	13540
13541	75 mm Diameter chromium plated brass shower rose	103.50	11.10	12.90	40.00	13541
13542	150 mm Ditto	134.10	11.10	12.90	40.00	13542
13543	Adjustable swivel pattern chromium plated brass shower rose	150.50	11.10	12.90	40.00	13543
	SUNDRY ITEMS					
	<i>Each</i>					
13544	Plastic hand spray.....	120.10	7.70	7.70	17.50	13544
13545	Chromium plated bracket for hand spray including plugging to wall	74.10	13.70	15.40	32.50	13545
13546	15 mm Diameter chromium plated brass flexible tube, 1.20 m long	144.50	8.60	10.30	23.80	13546
13547	Ditto but 1.50 m long	167.00	8.60	10.30	23.80	13547

Section 14

GLAZING

GLAZING

SPECIAL CONDITIONS

- | | |
|---|--|
| Measurement generally | <p>I. Glazing works shall be measured the net area as glazed. No deduction shall be made for opening not exceeding 0.50 m².</p> <p>Panes of glass of circular or irregular shape shall be measured the smallest rectangular or square out of which such circular or irregular shape can be cut.</p> <p>Special glazing works shall only be paid when specifically ordered by Maintenance Surveyor in writing.</p> <p>Window and door films shall be measured the net area covered.</p> |
| Measurement of cutting | <p>II. All finished works shall include for cutting to the required sizes. No measurement shall be made unless the glass is not supplied by the Contractor themselves.</p> <p>Forming holes through glass shall be measured separately. In the case of forming hole through existing fixed glass. "Take down and set aside for re-use" and "Fix only" shall be measured separately.</p> <p>Forming hole exceeding 0.20 m² through glass shall be measured as straight or circular cutting.</p> |
| Measurement of fire resisting glass block panels | <p>III. Fire resisting glass block panels shall be measured by the net area of the structural opening of the glass block panels as fixed. No deduction shall be made for voids not exceeding 0.50 m².</p> |
| Rates for glazing generally | <p>IV. The rates for glazing shall generally include for : -</p> <ul style="list-style-type: none"> (a) Glazing in any size unless otherwise stated and in any positions. (b) All cutting and waste, breakage and replacing scratched or cracked pane. (c) Painting to wood or steel beads and rebate surfaces with one coat of priming paint before glazing. (d) Providing all putty or glazing compound, plastic setting and location blocks, pointing and sealing junctions between glass and glazing beads or the like with approved sealant materials, or in the case of glazing with beads, for taking off and re-fixing wood beads supplied by the joiner or metal beads supplied with metal windows. (e) Painting cut edges of wired glass with bitumastic paint. (f) Protecting and cleaning. |
| Rates for glazing of louvre blades | <p>V. The rates for glazing of louvre blades shall further include for : -</p> <ul style="list-style-type: none"> (a) Fixing in adjustable metal clips including adjusting and oiling clips. (b) Fixing in fixed metal clips. (c) Making good surfaces disturbed. |

SPECIAL CONDITIONS (CONT'D)

- | | |
|---|--|
| <p>VI. The rates for take out and clear away or take out and set aside for re-use glass or glass blockwork shall further include for : -</p> <p>(a) Hacking out old putty and cleaning glass, blockwork and window bead and frames.</p> <p>(b) Protecting and storing glass or blockwork and metal beads.</p> | <p>Rates for take out glass, glass blocks, etc.</p> |
| <p>VII. The rates for forming holes through glass shall further include for : -</p> <p>(a) Cutting holes in any size and polishing all edges.</p> <p>(b) Forming holes in any size.</p> | <p>Rates for forming holes through glass</p> |
| <p>VIII. The rates for polycarbonate sheeting shall include for : -</p> <p>(a) Polycarbonate sheet in any size unless otherwise stated and in any positions.</p> <p>(b) All cutting and waste, breakage and replacing scratched or cracked pane.</p> <p>(c) All cold or heat bended to shape and fixing to metal or wood frames.</p> <p>(d) Painting to wood or steel beads and rebate surfaces with one coat of priming paint before fixing.</p> <p>(e) Providing all putty or glazing compound, pointing approved and sealing junctions between glass and glazing beads or the like with approved sealant materials, or in the case of glazing with beads, for taking off and re-fixing wood beads supplied by the joiner or metal beads supplied with metal windows.</p> <p>(f) In the case of fixing to metal or wood frames, drilling holes for and providing all drive screws, self-tapping screws, rivets, bolts, hook, bolts, nuts, metal and rubber washers, and plastic caps for fixing to purlins or framing spaced at any interval.</p> <p>(g) Drilling holes to existing or new purlins or framing spaced at any interval the fixing of polycarbonate sheet as required.</p> <p>(h) Fixing in accordance with the manufacturer's instructions.</p> <p>(i) Protecting and cleaning.</p> | <p>Rates for polycarbonate sheet</p> |
| <p>IX. The rates for special glazing shall further include for : -</p> <p>(a) Special glazing sheet in any size unless otherwise stated and in any positions.</p> <p>(b) All cutting and waste, breakage and replacing scratched or cracked pane.</p> <p>(c) Painting to wood or steel beads and rebate surfaces with one coat of priming paint before fixing.</p> <p>(d) Providing all necessary glazing compound, pointing and sealing junctions between special glazing sheet and glazing beads or the like with approved sealant materials, or in the case of glazing with beads, for taking off and re-fixing wood beads supplied by the joiner or metal beads supplied with metal windows.</p> <p>(e) Fixing in accordance with the manufacturer's instructions.</p> <p>(f) Protecting and cleaning.</p> | <p>Rates for special glazing</p> |

SPECIAL CONDITIONS (CONT'D)**Rates for glass
block panels**

- X. The rates for glass block panels shall further include for :-
- (a) Painting all sides of structural opening to receive glass block panels with two coats of bituminous paint.
 - (b) Providing and filling jambs and head of panels with expansion strips, joint filler and sealant.
 - (c) Providing and fixing expanded metal reinforcement, galvanised, weighting not less than 1.6 kg/m² including securing to structure using proprietary fixing components.
 - (d) Bedding and pointing in cement/lime mortar.
 - (e) Supply and installation of glass block panels with panel anchors in accordance with the manufacturer's instructions.

**Rates for fire
resisting glass
block panels**

- XI. The rates for fire resisting glass block panels shall further include for :-
- (a) Supply and installation of glass block panels with panel anchors in accordance with the manufacturer's instructions and in compliance with statutory requirements.
 - (b) Painting all sides of structural opening to receive glass block panels with two coats of bituminous paint, if required.
 - (c) Providing and filling jambs and head of panels with expansion strips, joint filler and sealant of fire resisting type.
 - (d) Providing and fixing reinforcement including securing to structure using proprietary fixing components.
 - (e) Bedding and pointing in proprietary screeds and sealant of fire resisting type.
 - (f) Submission of test certificates and manufacturer's guarantee.

**Glass block
panels**

- XII. G.S. clauses for glass block panels can be found in the Brickwork and Blockwork Section of the General Specification for Building.

Item	GENERAL GLAZING															Item
	Glass glazing sheet :-	Clear float glass				Figure rolled glass	Reeded glass	Rough cast glass		Wired cast glass	Wired polished plate glass	Float plate glass (Polished plate or float)				
		Thickness (mm)	3	4	5	6	3	3	5	6	6	6	5	6	10	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
14001	Glass and glazing to wood with putty or to metal with glazing compound.....	85.00	94.30	101.30	108.40	97.40	108.70	130.40	149.30	257.80	357.70	133.90	149.30	222.00	268.30	14001
14002	Ditto but with wood or metal beads.....	107.90	118.10	128.40	136.80	121.00	132.30	155.00	172.90	313.70	398.10	158.70	172.90	247.50	294.80	14002
14003	Add to either of Items 14001 to 14002 inclusive if glass, when fixed, is in single pane exceeding 5 m ²	11.70	12.90	14.00	15.20	11.30	13.30	16.10	19.00	44.40	57.40	17.00	19.00	30.30	37.80	14003
14004	Take out and clear away serviceable glass glazed to wood with putty or to metal with glazing compound.....	30.00	32.60	35.10	37.70	30.00	30.00	35.10	37.70	37.70	37.70	35.10	37.70	43.70	48.80	14004
14005	Ditto but with wood or metal beads.....	35.10	37.70	40.30	43.70	35.10	35.10	40.30	43.70	43.70	43.70	40.30	43.70	49.70	55.70	14005
14006	Take out and set aside for re-use serviceable glass glazed to wood with putty or to metal with glazing compound.....	36.00	38.60	42.90	44.60	36.00	36.00	42.90	44.60	44.60	44.60	42.90	44.60	52.30	58.30	14006
14007	Ditto but with wood or metal beads.....	46.30	49.70	53.10	57.40	46.30	46.30	53.10	57.40	57.40	57.40	53.10	57.40	66.00	72.80	14007
14008	Glazing only to wood with putty or to metal with glazing compound.....	36.90	39.40	41.80	46.70	36.90	36.90	41.80	46.70	46.70	46.70	41.80	46.70	55.40	61.50	14008
14009	Ditto but with wood or metal beads.....	64.00	67.70	70.10	72.60	64.00	64.00	70.10	72.60	72.60	72.60	70.10	72.60	81.20	88.60	14009
14010	Add to either of Items 14001 to 14009 inclusive if glazing to fixed sash in position behind guard bars.....	19.70	19.70	19.70	19.70	19.70	19.70	19.70	19.70	19.70	19.70	19.70	19.70	19.70	19.70	14010
	Per linear metre															
14011	Straight cutting.....	5.00	5.70	6.40	6.70	4.10	4.10	5.10	5.70	7.10	7.10	5.10	5.70	6.20	6.70	14011
14012	Circular cutting.....	6.00	6.90	7.70	8.60	6.00	6.00	7.70	7.80	12.90	12.90	7.70	8.60	9.30	10.00	14012
	Each															
14013	Cutting hole with straight sides n.e. 0.20 m ² through pane of glass.....	16.00	17.20	18.50	19.70	16.00	16.00	18.50	19.70	29.50	29.50	18.50	19.70	24.60	27.10	14013
14014	Cutting circular or elliptical hole of n.e. 0.20 m ² through pane of glass.....	24.60	25.80	28.30	29.50	24.60	24.60	28.30	29.50	44.30	44.30	28.30	29.50	36.90	27.10	14014

Item	GENERAL GLAZING (CONT'D)										Item	
	Glass glazing sheet :-	Tinted glass in any colour			Reflective glass	Obscure glass		Fully tempered glass				
		Thickness (mm)	6	10	12	6	5	6	6	10	12	
			A	B	C	D	E	F	G	H	I	
	<i>Per square metre</i>		\$	\$	\$	\$	\$	\$	\$	\$	\$	
14015	Glass and glazing to wood with putty or to metal with glazing compound.....		205.70	324.60	393.40	390.90	148.40	171.40	252.60	369.70	438.40	14015
14016	Ditto but with wood or metal beads.....		234.40	357.10	428.80	418.30	175.10	200.50	280.40	399.20	473.50	14016
14017	Add to either of Items 14015 to 14016 inclusive if glass, when fixed, is in single pane exceeding 5 m ²		28.80	48.80	59.00	62.60	17.80	22.30	37.90	55.50	65.70	14017
14018	Take out and clear away serviceable glass glazed to wood with putty or to metal with glazing compound.....		32.60	38.60	42.90	35.10	32.60	34.30	32.60	36.90	43.70	14018
14019	Ditto but with wood or metal beads.....		36.90	45.40	50.60	38.60	32.60	39.40	37.70	43.70	52.30	14019
14020	Take out and set aside for re-use serviceable glass glazed to wood or metal with glazing compound.....		41.10	51.40	58.30	42.90	39.40	42.90	40.30	51.40	56.60	14020
14021	Ditto but with wood or metal beads.....		53.10	64.30	74.60	54.00	51.40	54.80	52.30	66.00	73.70	14021
14022	Glazing only to wood with putty or to metal with glazing compound.....		45.30	55.20	63.00	46.90	44.60	48.10	45.50	55.50	61.40	14022
14023	Ditto but with wood or metal beads.....		72.00	87.70	98.40	74.30	72.80	77.20	73.30	85.00	96.50	14023
14024	Add to either of Items 14015 to 14023 inclusive if glazing to fixed sash in position behind guard bars.....		18.50	18.50	18.50	18.50	18.50	18.50	18.50	18.50	18.50	14024
	<i>Per linear metre</i>											
14025	Straight cutting.....		6.40	7.90	9.10	6.70	6.10	6.60	6.20	8.00	8.90	14025
14026	Circular cutting.....		9.10	11.40	13.40	9.70	9.00	9.70	9.40	11.70	12.90	14026
	<i>Each</i>											
14027	Cutting hole with straight sides n.e. 0.20 m ² through pane of glass.....		17.90	22.20	25.30	18.70	17.00	18.70	18.20	22.90	25.70	14027
14028	Cutting circular or elliptical hole n.e. 0.20 m ² through pane of glass.....		26.00	31.60	36.40	27.40	25.20	27.10	26.30	32.50	34.80	14028

Item	GENERAL GLAZING (CONT'D)	Polycarbonate glazing sheet						Item	
	Polycarbonate glazing sheet : -	Thickness (mm)	2	3	5	6	10	12	
	<i>Per square metre</i>		A	B	C	D	E	F	
			\$	\$	\$	\$	\$	\$	
14029	Polycarbonate glazing sheet glazed to wood with putty or to metal with glazing compound.....		328.90	444.70	704.10	787.50	1,375.50	1,412.10	14029
14030	Ditto but with wood or metal beads.....		348.70	466.90	725.80	811.20	1,403.00	1,440.30	14030
14031	Polycarbonate glazing sheet fixed to wood or metal frames with screws.....		325.60	440.20	697.60	779.60	1,281.70	1,397.90	14031
14032	Extra over Items 14029 to 14031 inclusive for coloured polycarbonate sheet.....		92.10	96.60	106.20	165.60	217.80	609.70	14032
14033	Extra over Items 14029 to 14031 inclusive for polycarbonate sheet, when fixed, is in single pane exceeding 5 m ²		26.70	35.50	61.00	69.50	116.80	117.60	14033
14034	Extra over Items 14029 to 14031 inclusive for polycarbonate with surface hardened treatment sheet.....		165.30	184.90	238.60	257.00	322.60	547.90	14034
14035	Take out and clear away polycarbonate glazing sheet glazed to wood with putty or to metal with glazing compound.....		27.30	28.30	30.80	33.30	38.00	38.70	14035
14036	Ditto but with wood or metal beads.....		31.10	32.70	36.50	39.30	45.50	51.60	14036
14037	Take out and set aside for re-use polycarbonate glazing sheet glazed to wood with putty or to metal with glazing compound.....		33.00	34.80	42.20	42.40	53.10	58.00	14037
14038	Ditto but with wood or metal beads.....		42.70	47.80	53.40	54.40	68.40	70.90	14038
14039	Take down and clear away polycarbonate sheet fixed to wood or metal frames with screws.....		31.10	32.70	36.50	39.30	45.50	51.50	14039
14040	Take out and set aside for re-use polycarbonate sheet fixed to wood or metal frames with screws.....		33.00	34.80	42.20	42.40	53.10	58.00	14040
14041	Glazing only to wood with putty or to metal with glazing compound.....		103.20	104.40	112.30	114.90	121.50	122.40	14041
14042	Ditto but with wood or metal beads.....		72.00	73.90	81.40	81.70	98.70	103.20	14042
14043	Fix only polycarbonate sheet to wood or metal frames with self-tapping screws or hooks.....		42.80	43.60	50.60	51.40	60.80	64.50	14043
	<i>Per linear metre</i>								
14044	Straight cutting.....		5.00	5.80	6.20	6.60	8.60	9.20	14044
14045	Circular cutting.....		7.70	8.70	9.00	9.60	12.00	12.90	14045
	<i>Each</i>								
14046	Cutting hole with straight sides n.e. 0.20 m ² through pane of polycarbonate.....		21.20	22.90	26.20	28.40	36.40	39.60	14046
14047	Cutting circular or elliptical hole n.e. 0.20 m ² through pane of polycarbonate.....		32.80	36.60	38.90	41.40	51.40	55.30	14047
14048	Forming speak hole perforations of diameter n.e. 10 mm through polycarbonate sheet over an area of overall size n.e. 0.20 m ²		32.50	34.30	38.60	43.20	56.10	58.50	14048

Item	GENERAL GLAZING (CONT'D)	A \$	Item
	Clear float heat strengthened glass 19 mm thick : -		
	<i>Per square metre</i>		
14049	Glass and glazing to wood with putty or to metal with glazing compound.....	765.80	14049
14050	Ditto but with wood or metal beads.....	788.90	14050
14051	Add to either of Items 14049 to 14050 inclusive if glass, when fixed, is in single pane exceeding 5 m ²	137.20	14051
14052	Add to either of Items 14049 to 14050 inclusive if glass, when fixed, is in single pane exceeding 5 m ² and not exceeding 30 m ²	128.70	14052
14053	Add to either of Items 14049 to 14050 inclusive if glass, when fixed, is in single pane exceeding 30 m ²	123.00	14053
14054	Take out and clear away serviceable glass glazed to wood with putty or to metal with glazing compound.....	47.60	14054
14055	Ditto but with wood or metal beads.....	55.90	14055
14056	Take out and set aside for re-use serviceable glass glazed to wood with putty or to metal with glazing compound.....	72.80	14056
14057	Ditto but with wood or metal beads.....	85.70	14057
14058	Glazing only to wood with putty or to metal with glazing compound.....	92.90	14058
14059	Ditto but with wood or metal beads.....	120.70	14059
14060	Add to either of Items 14049 to 14059 inclusive if glazing to fixed sash in position behind guard bars.....	18.60	14060
	<i>Per linear metre</i>		
14061	Straight cutting.....	11.50	14061
14062	Circular cutting.....	17.00	14062
	<i>Each</i>		
14063	Cutting holes with straight sides n.e. 0.20 m ² through pane of glass.....	32.90	14063
14064	Cutting circular or elliptical holes n.e. 0.20 m ² through pane of glass.....	47.50	14064

Item	GENERAL GLAZING (CONT'D)							Item							
	Fully tempered glass 19 mm thick with heat soak test processes : -							A							
	<i>Per square metre</i>							\$							
14065	Glass and glazing to wood with putty or to metal with glazing compound.....							765.80	14065						
14066	Ditto but with wood or metal beads.....							788.90	14066						
14067	Add to either of Items 14065 to 14066 inclusive if glass, when fixed, is in single pane exceeding 5 m ²							137.20	14067						
14068	Add to either of Items 14065 to 14066 inclusive if glass, when fixed, is in single pane exceeding 5 m ² and not exceeding 30 m ²							128.70	14068						
14069	Add to either of Items 14065 to 14066 inclusive if glass, when fixed, is in single pane exceeding 30 m ²							123.00	14069						
14070	Take out and clear away serviceable glass glazed to wood with putty or to metal with glazing compound.....							47.60	14070						
14071	Ditto but with wood or metal beads.....							55.90	14071						
14072	Take out and set aside for re-use serviceable glass glazed to wood with putty or to metal with glazing compound.....							72.80	14072						
14073	Ditto but with wood or metal beads.....							85.70	14073						
14074	Glazing only to wood with putty or to metal with glazing compound.....							93.30	14074						
14075	Ditto but with wood or metal beads.....							121.40	14075						
14076	Add to either of Items 14065 to 14075 inclusive if glazing to fixed sash in position behind guard bars.....							18.70	14076						
	<i>Per linear metre</i>														
14077	Straight cutting.....							11.90	14077						
14078	Circular cutting.....							17.20	14078						
	<i>Each</i>														
14079	Cutting holes with straight sides n.e. 0.20 m ² through pane of glass.....							32.90	14079						
14080	Cutting circular or elliptical holes n.e. 0.20 m ² through pane of glass.....							47.50	14080						
	GLASS LOUVRE BLADES														
	Glass louvre blades with ground and arrived edges and fixing to slots in frames or adjustable louvre metal clips (slots or clips measured separately) : -														
	Thickness (mm)			4	5	6	6	6	6	6					
	<i>Per linear metre</i>			A	B	C	D	E	F	G					
				\$	\$	\$	\$	\$	\$	\$					
14081	Blade 75 mm wide.....							19.40	21.30	22.80	25.00	42.50	66.20	25.20	14081
14082	Ditto 100 mm wide.....							21.50	25.00	26.10	28.80	51.20	82.90	29.20	14082
14083	Ditto 150 mm wide.....							27.90	30.50	32.90	37.40	66.40	113.90	37.10	14083
14084	Take out and set aside for re-use blade 75 mm wide including risk and making good breakages.....							2.60	2.60	2.60	2.60	2.60	2.60	2.60	14084
14085	Ditto 100 mm wide.....							2.60	2.60	2.60	2.60	2.60	2.60	2.60	14085
14086	Ditto 150 mm wide.....							2.60	2.60	2.60	2.60	2.60	2.60	2.60	14086

Item	GLASS LOUVRE BLADES (CONT'D)		Item							
	<i>Each</i>	A \$								
14087	Fix only louvre of any length, width or thickness in slot or clip (measured separately).....	1.80	14087							
14088	Take out and clear away broken or serviceable louvre blade of any length, width or thickness in slot or clip.....	0.90	14088							
POLYCARBONATE SHEET										
Double layer "Cellular Type" clear UV protection polycarbonate sheet										
	Thickness (mm) overall	4	4.5	6	8	10	16	20	30	
	Approx. weight g/m ²	800	1000	1300	1500	1700	2700	3100	3500	
	Light transmission %	88	88	88	88	88	82	79	82	
	U-value W/m ² K	3.9	3.9	3.7	3.4	3.2	2.9	2.8	2.6	
	Falling dare Gardiner impact at 23°C Nm	21.3	21.3	>27	>27	>27	>27	>27	>27	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	E \$	F \$	G \$	H \$	
14089	Polycarbonate sheet fixed to wood or metal frames (measured separately) with screws or metal beads.....	177.10	186.70	224.80	259.70	293.00	367.50	433.70	573.20	14089
14090	Take down and clear away polycarbonate sheet fixed to wood or metal frames with screws or metal beads.....	28.30	29.90	31.50	33.70	38.10	47.80	52.10	63.10	14090
14091	Take down and set aside for re-use polycarbonate sheet fixed to wood or metal frames with screws or metal beads.....	28.30	29.90	33.70	36.40	41.00	51.40	60.70	74.50	14091
14092	Fix only polycarbonate sheet fixed to wood or metal frames with screws or metal beads.....	54.90	57.90	62.90	67.50	76.20	84.50	99.80	114.60	14092
Triple layer "Cellular Type" clear UV protection polycarbonate sheet										
	Thickness (mm)	16	20							
	Approx. weight g/m ²	2700	3100							
	Light transmission %	82	79							
	U-value W/m ² K	2.4	2.2							
	Falling dare Gardiner impact at 23°C Nm	>27	>27							
	<i>Per square metre</i>	A \$	B \$							
14093	Polycarbonate sheet fixed to wood or metal frames (measured separately) with screws or metal beads.....		299.20	689.50						14093
14094	Take down and clear away polycarbonate sheet fixed to wood or metal frames with screws or metal beads.....		41.70	45.90						14094
14095	Take down and set aside for re-use polycarbonate sheet fixed to wood or metal frames with screws or metal beads.....		46.30	52.00						14095
14096	Fix only polycarbonate sheet fixed to wood or metal frames with screws or metal beads.....		74.90	84.90						14096
	Add to Items 14089 and 14093 inclusive for bronze and opal white polycarbonate plastic sheet.....			5%						
	Add to Items 14089 and 14093 inclusive for coloured polycarbonate plastic other than bronze or opal white.....			15%						

Item	SUNDRIES	A \$	Item
	<i>Per square metre</i>		
14101	Grind surface of sheet glass (any size).....	113.80	14101
14102	Hack out old broken glass (any type and thickness) from wood or metal sash glazed with putty, glazing compound or beads, set aside beads for re-use if any, clean and prepare rebates for re-glazing (re-glazing measured separately).....	49.00	14102
	<i>Per linear metre</i>		
14103	Grind and round edge of glass (any type and thickness).....	20.50	14103
14104	Bed edge of glass (any type and thickness) in and including strip of wash leather or approved felt or plastic.....	13.60	14104
	<i>Each</i>		
14105	Grind recess of any size in pane of glass (as for sliding doors to hatches).....	20.50	14105
	<i>Per linear metre</i>		
14106	Point and seal joint between glass and beads, window frames and the like with 3 x 3 mm silicon mastic sealant.....	3.40	14106
14107	Ditto but with 3 x 6 mm silicon mastic sealant.....	4.50	14107
	GLASS BLOCK PANELS		
	Hollow glass blocks size: 150 x 150 - 250 x 250 mm square and 80 - 120 mm thick in any pattern and colour and including all special blocks at junctions, corners and the like bedded and jointed in cement/lime mortar and pointed both sides with white cement or white cement/lime mortar : -		
	<i>Per square metre</i>		
14108	Glass block panel.....	1,219.50	14108
14109	Take down and clear away glass block panel.....	36.60	14109
14110	Take down and set aside for re-use glass block panel.....	97.60	14110
14111	Lay only glass block panel.....	158.60	14111
	<i>Each</i>		
14112	Cut out existing defective glass block in isolated patches n.e. 10 glass blocks, fill up, joint in and replace with new glass block and make good (each glass block measured).....	76.70	14112

Item	FIRE RESISTING GLASS BLOCK PANELS				Item	
	Fire resisting hollow glass blocks size: 150 x 150 - 250 x 250 mm square and 80 - 120 mm thick in any pattern and colour and including all special blocks at junctions, corners and the like bedded and jointed : -	Fire rated period				
		½ Hour	1 Hour	1½ Hour		
	<i>Per square metre</i>	A \$	B \$	C \$		
14113	Fire resisting glass block panels.....	5,672.60	7,856.70	11,486.10	14113	
14114	Take down and clear away fire resisting glass block panels including corner glass blocks.....	36.00	36.00	36.00	14114	
14115	Take down and set aside for re-use fire resisting glass block panels including corner glass blocks.....	97.70	97.70	97.70	14115	
14116	Lay only fire resisting glass block panels including corner glass blocks.....	245.10	408.10	408.10	14116	
	MIRRORS					
	Glass mirror silver backed and painted with two coats of shellac varnish after silvering, bevel edged, if required, and fixed with chromium plated clips or screws with chromium plated clip-on heads, including drilling mirror and screwing clips or screws to backing or plugging and screwing the same to wall : -	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
14117	6 mm Silvering quality polished plate glass mirror.....	250.40	8.60	18.40	55.90	14117
				Supply and fix		
	<i>Each</i>			A \$		
14118	600 mm (Minimum) diameter convex mirror including brackets, mounting poles, visors, bolts, screws and the like, and drilling or cutting mortices in concrete or other surfaces, grouting and make good.....				1,147.70	14118
14119	6 mm Thick single side reflective mirror, size 2400 x 1500 mm fixed to wood or metal frames (measured separately) with screws or metal beads.....				573.40	14119

Item	PROPRIETARY WINDOW AND DOOR FILMS	Item																		
		Supply and fix																		
		A \$																		
	<i>Per square metre</i>																			
14120	A proprietary clear polyester window film which removes destructive ultraviolet rays from sunlight complying with the following :																			
	<table border="1"> <tr><td>Total solar energy rejected</td><td>66%</td></tr> <tr><td>Visible light transmitted</td><td>24%</td></tr> <tr><td>Shading coefficient</td><td>0.39</td></tr> <tr><td>Interior reflection</td><td>13%</td></tr> <tr><td>Exterior reflection</td><td>29%</td></tr> <tr><td>Glare reduction</td><td>72%</td></tr> <tr><td>UN blocked</td><td>99%</td></tr> </table>	Total solar energy rejected	66%	Visible light transmitted	24%	Shading coefficient	0.39	Interior reflection	13%	Exterior reflection	29%	Glare reduction	72%	UN blocked	99%					
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Glare reduction	72%																			
UN blocked	99%																			
		304.70																		
14121	Ditto complying with the following :																			
	<table border="1"> <tr><td>Total solar energy rejected</td><td>57%</td></tr> <tr><td>Visible light transmitted</td><td>35%</td></tr> <tr><td>Shading coefficient</td><td>0.49</td></tr> <tr><td>Interior reflection</td><td>12%</td></tr> <tr><td>Exterior reflection</td><td>18%</td></tr> <tr><td>Glare reduction</td><td>60%</td></tr> <tr><td>UN blocked</td><td>99%</td></tr> </table>	Total solar energy rejected	57%	Visible light transmitted	35%	Shading coefficient	0.49	Interior reflection	12%	Exterior reflection	18%	Glare reduction	60%	UN blocked	99%					
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		304.70																		
14122	A proprietary tough, durable, tear- and penetration-resistant film which bonds to the windows for protection complying with the following :																			
	<table border="1"> <tr><td>Shading coefficient</td><td>0.91</td></tr> <tr><td>Visible light reflected</td><td>11%</td></tr> <tr><td>Visible light transmitted</td><td>86%</td></tr> <tr><td>Emissivity</td><td>0.87</td></tr> <tr><td>“U” Value</td><td>1.09</td></tr> <tr><td>Heat gain reduction</td><td>3%</td></tr> <tr><td>Heat loss reduction</td><td>0%</td></tr> <tr><td>Glare reduction</td><td>2%</td></tr> <tr><td>UV blocked</td><td>98%</td></tr> </table>	Shading coefficient	0.91	Visible light reflected	11%	Visible light transmitted	86%	Emissivity	0.87	“U” Value	1.09	Heat gain reduction	3%	Heat loss reduction	0%	Glare reduction	2%	UV blocked	98%	
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	<table border="1"> <tr> <td>Safety and Security</td> <td>Pass the 400ft.lb. (538 Joule) impact level: tested according to the Safety Glazing Standard ANSI Z97.1 and CPSC 16CFR</td> </tr> </table>	Safety and Security	Pass the 400ft.lb. (538 Joule) impact level: tested according to the Safety Glazing Standard ANSI Z97.1 and CPSC 16CFR																	
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		505.90																		
14123	Ditto complying with the following :																			
	<table border="1"> <tr><td>Shading coefficient</td><td>0.92</td></tr> <tr><td>Visible light reflected</td><td>11%</td></tr> <tr><td>Visible light transmitted</td><td>87%</td></tr> <tr><td>Emissivity</td><td>0.87</td></tr> <tr><td>“U” Value</td><td>1.09</td></tr> <tr><td>Heat gain reduction</td><td>2%</td></tr> <tr><td>Heat loss reduction</td><td>0%</td></tr> <tr><td>Glare reduction</td><td>1%</td></tr> <tr><td>UV blocked</td><td>98%</td></tr> </table>	Shading coefficient	0.92	Visible light reflected	11%	Visible light transmitted	87%	Emissivity	0.87	“U” Value	1.09	Heat gain reduction	2%	Heat loss reduction	0%	Glare reduction	1%	UV blocked	98%	
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Item	PROPRIETARY WINDOW AND DOOR FILMS (CONT'D)	Supply and fix	Item																				
	<i>Per square metre</i>	A \$																					
14124	A proprietary transparent, infra-red reflective polyester film which can be bonded to glass surfaces complying with the following :																						
	<table border="1"> <tr><td>Total solar transmission</td><td>17%</td></tr> <tr><td>Total solar absorption</td><td>35%</td></tr> <tr><td>Visible light transmission</td><td>21%</td></tr> <tr><td>Visible light reflectance</td><td>53%</td></tr> <tr><td>Shading coefficient</td><td>0.30</td></tr> <tr><td>Emissivity</td><td>0.68</td></tr> <tr><td>Total solar energy rejection</td><td>74%</td></tr> <tr><td>Glare reduction</td><td>76%</td></tr> <tr><td>Total solar energy rejection</td><td>74%</td></tr> <tr><td>Ultra violet rejection</td><td>99%</td></tr> </table>	Total solar transmission	17%	Total solar absorption	35%	Visible light transmission	21%	Visible light reflectance	53%	Shading coefficient	0.30	Emissivity	0.68	Total solar energy rejection	74%	Glare reduction	76%	Total solar energy rejection	74%	Ultra violet rejection	99%		
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		390.40	14124																				
14125	Ditto complying with the following :																						
	<table border="1"> <tr><td>Total solar transmission</td><td>22.7%</td></tr> <tr><td>Total solar absorption</td><td>59.25%</td></tr> <tr><td>Visible light transmission</td><td>16%</td></tr> <tr><td>Visible light reflectance</td><td>13%</td></tr> <tr><td>Shading coefficient</td><td>0.43</td></tr> <tr><td>Emissivity</td><td>0.71</td></tr> <tr><td>Total solar energy rejection</td><td>63%</td></tr> <tr><td>Glare reduction</td><td>82%</td></tr> <tr><td>Total solar energy rejection</td><td>63%</td></tr> <tr><td>Ultra violet rejection</td><td>99%</td></tr> </table>	Total solar transmission	22.7%	Total solar absorption	59.25%	Visible light transmission	16%	Visible light reflectance	13%	Shading coefficient	0.43	Emissivity	0.71	Total solar energy rejection	63%	Glare reduction	82%	Total solar energy rejection	63%	Ultra violet rejection	99%		
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		390.40	14127																				

Item	PROPRIETARY WINDOW AND DOOR FILMS (CONT'D)	Item																
14128	<p><i>Per square metre</i></p> <p>A proprietary transparent, infra-red reflective polyester film which can be bonded to glass surfaces complying with the following :</p> <table border="1"> <tr> <td>Total solar absorption</td> <td>18%</td> </tr> <tr> <td>Visible light transmission</td> <td>85%</td> </tr> <tr> <td>Visible light reflectance</td> <td>13%</td> </tr> <tr> <td>Shading coefficient</td> <td>0.96</td> </tr> <tr> <td>Emissivity</td> <td>0.88</td> </tr> <tr> <td>Total solar energy rejection</td> <td>17%</td> </tr> <tr> <td>Ultra violet rejection</td> <td>99%</td> </tr> <tr> <td>Safety Standard</td> <td>ANSIZ97-1 Unlimited (Section 5.1) applied to nominal 5/32 inch, 1/8 inch and 1/4 inch annealed glass</td> </tr> </table>	Total solar absorption	18%	Visible light transmission	85%	Visible light reflectance	13%	Shading coefficient	0.96	Emissivity	0.88	Total solar energy rejection	17%	Ultra violet rejection	99%	Safety Standard	ANSIZ97-1 Unlimited (Section 5.1) applied to nominal 5/32 inch, 1/8 inch and 1/4 inch annealed glass	<p>Supply and fix</p> <p>A</p> <p>\$</p> <p>531.30</p> <p>14128</p>
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14129	<p><i>Per square metre</i></p> <p>Take down and clear away window and door films and safety and security films.....</p>	<p>A</p> <p>\$</p> <p>69.30</p> <p>14129</p>																

Section 15

PAINTING

PAINTING

SPECIAL CONDITIONS

New surfaces and redecoration	I.	Painting of any type shall only be measured as on “new surfaces” when a complete wall face, door, frame or other area is of new or previously undecorated materials, or has been completely stripped of existing decoration. Where patches of new plaster occur within an area of existing plaster or portions of paintwork has been stripped off and stopped or portions only of metal or woodwork insert in repairs, the painting to the complete area shall be measured as “redecoration”.																				
Surfaces described as walls and soffits	II.	Surfaces described as “walls and soffits” include all vertical, horizontal, sloping or curved walls, columns, soffits of slabs, beams, cills and the like, of concrete, brick, clay or concrete block, mason, or smooth or rough plastered or rendered, or unplastered or unrendered surface of any type, regardless of texture or porosity.																				
Measurement generally	III.	<p>All paints shall comply with the Air Pollution Control Ordinance (Cap. 311) Air Pollution Control (Volatile Organic Compounds) Regulation and as provided in G.S. Item 21.9 whether the paint is specified as low VOC or not in this Schedule.</p> <p>All works shall be measured the net area as painted. No deduction shall be made for voids not exceeding 0.50m².</p> <p>Surfaces to be painted exceeding 300 mm wide or girth or pipework exceeding 300 mm nominal diameter shall be measured as general surfaces. Surfaces to be painted not exceeding 300 mm wide or girth or pipework not exceeding 300 mm nominal diameter shall be measured as surfaces to the girth/nominal diameter as stated.</p> <p>Articles not exceeding 0.01 m² each where not in conjunction with surrounding painted work shall be measured separately. Articles exceeding 0.01 m² shall be measured as general surfaces.</p> <p>Allowance shall be made for the measurements of walls and soffits for additional area of moulded or carved work and the like.</p>																				
Measurement of certain specific items	IV.	<p>Certain specific items shall be measured as follows : -</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Chinese roof tiling, corrugated or profiled sheeting.</td> <td>Measured flat overall. Girth on rolls, corrugations or profiles and the like shall be held to be included in the items.</td> </tr> <tr> <td>Metal work - glazed windows and doors, grilles, panelled doors and the like.</td> <td>Measured flat overall on both sides.</td> </tr> <tr> <td></td> <td>Opening edges and all surfaces of frames, mullions, transoms, cills and the like shall be held to be included in the items.</td> </tr> <tr> <td>Metal work - mesh covered or ornamental fencing, gates and the like.</td> <td>Measured flat overall on both sides.</td> </tr> <tr> <td></td> <td>All surfaces of frames, posts, braces, rails and the like shall be held to be included in the items.</td> </tr> <tr> <td>Manhole covers and frames, tree grilles, channel covers and the like.</td> <td>Measured flat overall on both sides.</td> </tr> <tr> <td>Wood sashes, glazed wooden doors, windows, partitions, panels, decorating or grilled panels and the like.</td> <td>Measured flat overall on both sides.</td> </tr> <tr> <td></td> <td>Opening edges and all surfaces of frames, mullions, transoms, cills and the like shall be held to be included in the items.</td> </tr> <tr> <td>Wire mesh or mosquito gauge panels.</td> <td>Measured flat on both sides for individual construction.</td> </tr> <tr> <td></td> <td>Painting shall be deemed to be included in the sashes, doors, partitions or panels if it forms part of the construction.</td> </tr> </table>	Chinese roof tiling, corrugated or profiled sheeting.	Measured flat overall. Girth on rolls, corrugations or profiles and the like shall be held to be included in the items.	Metal work - glazed windows and doors, grilles, panelled doors and the like.	Measured flat overall on both sides.		Opening edges and all surfaces of frames, mullions, transoms, cills and the like shall be held to be included in the items.	Metal work - mesh covered or ornamental fencing, gates and the like.	Measured flat overall on both sides.		All surfaces of frames, posts, braces, rails and the like shall be held to be included in the items.	Manhole covers and frames, tree grilles, channel covers and the like.	Measured flat overall on both sides.	Wood sashes, glazed wooden doors, windows, partitions, panels, decorating or grilled panels and the like.	Measured flat overall on both sides.		Opening edges and all surfaces of frames, mullions, transoms, cills and the like shall be held to be included in the items.	Wire mesh or mosquito gauge panels.	Measured flat on both sides for individual construction.		Painting shall be deemed to be included in the sashes, doors, partitions or panels if it forms part of the construction.
Chinese roof tiling, corrugated or profiled sheeting.	Measured flat overall. Girth on rolls, corrugations or profiles and the like shall be held to be included in the items.																					
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Wood sashes, glazed wooden doors, windows, partitions, panels, decorating or grilled panels and the like.	Measured flat overall on both sides.																					
	Opening edges and all surfaces of frames, mullions, transoms, cills and the like shall be held to be included in the items.																					
Wire mesh or mosquito gauge panels.	Measured flat on both sides for individual construction.																					
	Painting shall be deemed to be included in the sashes, doors, partitions or panels if it forms part of the construction.																					

SPECIAL CONDITIONS (CONT'D)

IV.	Jalousies, louvre panels and the like.	Measured flat on both sides for individual construction.	Measurement of certain specific items (Cont'd)
		Painting shall be deemed to be included in the sashes, doors, partitions or panels if it forms part of the construction.	
	Collapsible gates	Measured flat overall on both sides.	
		All surfaces of frames, guide and track shall be held to be included in the item.	
	Nuts, bolts, locks, brackets, staples, knobs, access panels, switch and cover plates and the like less than 0.01 m ² each and isolated lengths of pipe or rod less than 300 mm long	Measured separately if it is isolated from the surrounding work. Painting to nuts and bolts shall be deemed to be carried out after fixing in position.	
	Railings and balustrades with balusters less than 200 mm centres	Measured flat overall on both sides. All surfaces of frames, posts, braces, rails and the like shall be held to be included in the items.	
	All other railings and balustrades	Measured in accordance with aforesaid Clause III.	
V.	Throughout this Section, rates for all types of painting shall include all kinds of preparatory work. No payment will be made for stripping of existing decoration under any circumstances, with the following exceptions : -		Measurement of stripping of existing decorative material
	(a) Stripping of existing decorative material is specifically ordered by the Maintenance Surveyor in writing and there will be no further decorative material applied on the prepared surface.		
	Stripping of existing decoration shall be measured the net area of existing decoration to be stripped. No deduction shall be made for voids not exceeding 0.50 m ² .		
VI.	Paper hanging shall be measured the net area covered. No deduction shall be made for voids not exceeding 0.50 m ² .		Measurement of paper hanging
VII.	Writing of letters, numbers or Chinese characters shall include for all full stops and commas. No separate payment shall be made. All punctuation excluding full stops and commas shall be treated as letters. Logos, features, symbols and the like shall be measured as Chinese characters of the same size.		Measurement of writing
VIII.	The rates for painting shall generally include for : -		Rates for painting generally
	(a) Execution of work either internally or externally and in any position at any height.		
	(b) Working to flat, curved or sloping surfaces.		
	(c) All preparation work to surfaces as G.S. Items 21.45 and 21.48.		
	(d) Mixing and applying as G.S. Item 21.53.		
	(e) Multi-coloured work and cutting to line.		

SPECIAL CONDITIONS (CONT'D)

Rates for painting generally (Cont'd)	VIII.	(f)	Painting on associated beads, hinges and other fittings, brackets, bolts, nuts, lugs and the like (unless isolated from other paintwork which will be measured separately).
		(g)	All identification of pipelines as G.S. Item 21.78.
		(h)	Keeping adjacent surfaces clean and painting surfaces disturbed as G.S. Item 21.44.
		(i)	Removing all articles of ironmongery, hardware and the like before painting and replacing after painting has been completed.
		(j)	Rubbing down smooth with sand paper on hardened coatings before the subsequent coating is applied.
		(k)	Painting sample panels as required.
		(l)	Touching up coated surfaces on completion as required.
		(m)	Protecting and cleaning as G.S. Item 21.43.
		(n)	Removing painted sample panels.
		(o)	Submission of samples, test certificates and manufacturer's guarantee.
		(p)	On-site checking, quality tests and surveillance tests.
		(q)	All necessary tests as specified in the Specification.
Rates for paintwork on new surfaces	IX.		The rates for paintwork on new surfaces shall further include for : -
		(a)	All preparation work to new surfaces as G.S. Item 21.46.
Rates for paintwork on existing surfaces	X.		The rates for paintwork on existing surfaces shall further include for : -
		(a)	All preparation work to existing surfaces as G.S. Items 21.48 and 21.49.
Rates for painting metal windows and doors	XI.		The rates for painting metal windows and doors shall further include for : -
		(a)	Painting opening edges and all surfaces of frames, mullions, transoms, cills, guard bars, glazing beads and the like.
		(b)	Sealing putty with primer and paint as required.
Rates for painting wire mesh, expanded metal mesh, chain link and the like in gates, fencing, etc.	XII.		The rates for painting wire mesh, expanded metal mesh, chain link and the like in gates, fencing, guards, door and partition panels, etc. shall further include for : -
		(a)	Painting edge framing, posts, braces, rails and the like.
Rates for painting wood	XIII.		The rates for painting general surfaces of wood including wood panels and flush doors, wood sashes, wood partitions, etc. shall further includes for : -
		(a)	Painting opening edges, mouldings, glazing beads and the like.
Rates for painting jalousies, louvre panels, etc.	XIV.		The rates for painting jalousies, louvre panels in doors and the like shall further include for : -
		(a)	Painting all frames, stiles, rails, edges, louvre blades and the like.

SPECIAL CONDITIONS (CONT'D)

- | | | |
|-------|---|---|
| XV. | The rates for surface protection to structural steel shall further include for any combination of the following where applicable : - | Rates for surface protection to structural steel |
| | (a) All preparation work to new surfaces as G.S. Item 15.61. | |
| | (b) All preparation work to existing surfaces as G.S. Item 15.62. | |
| | (c) Painting to all joints as G.S. Item 15.64. | |
| | (d) Making good damaged galvanised coating as G.S. Item 15.63. | |
| XVI. | The rates for intumescent paint to structural steel surfaces shall further include for : - | Rates for intumescent paint to structural steel surfaces |
| | (a) All preparation work to existing surfaces as recommended by the manufacturer. | |
| | (b) Painting all surfaces with an approved primer. | |
| | (c) Test certificates and manufacturer's guarantee. | |
| | (d) Application by an approved applicator including submission of technical literatures, method statement etc. including provision of a warranty for the period as required by the Maintenance Surveyor or as stated in the Contract. | |
| | (e) Keeping adjacent surfaces clean. | |
| | (f) Removing all articles of hardware and the like before painting and re-fixing after painting has been completed. | |
| | (g) Providing sample panels as required. | |
| | (h) Touching up coated surfaces on completion as required. | |
| | (i) Protecting and cleaning. | |
| | (j) Removing sample panels. | |
| XVII. | The rates for proprietary paintwork system to existing or new sport hall flooring system shall further include for : - | Rates for proprietary paintwork system to sport hall flooring system |
| | (a) All preparation work to existing surfaces or new surfaces as recommended by the manufacturer where required. | |
| | (b) Removing all articles of hardware and the like before paint and re-fixing after painting has been completed. | |
| | (c) Painting sample panels as required. | |
| | (d) Keeping adjacent surfaces clean and painting surfaces disturbed as G.S. Item 21.44. | |
| | (e) Touching up coated surfaces on completion as required. | |
| | (f) Protecting and cleaning as G.S. Item 21.43. | |
| | (g) Test certificates and manufacturer's guarantee of a minimum of two years. | |
| | (h) Application by an approved applicator including submission of technical literatures, method statement and etc. including provision of a warranty for the period as required by the Maintenance Surveyor or as stated in the Contract. | |
| | (i) Applying and obtaining accreditation / certification from recognized international sports organizations when required. | |

SPECIAL CONDITIONS (CONT'D)

Rates for line marking to sport hall flooring system

- XVIII. The rates for line marking sport hall flooring system shall further include for : -
- (a) All preparation work to existing surfaces or finished surfaces as recommended by the manufacturer.
 - (b) Removing all articles of hardware and the like before paint and re-fixing after painting has been completed.
 - (c) Painting sample panels as required.
 - (d) Keeping adjacent surfaces clean and painting surfaces disturbed as G.S. Item 21.44.
 - (e) Touching up coated surfaces on completion as required.
 - (f) Protecting and cleaning as G.S. Item 21.43.
 - (g) Test certificates and manufacturer's guarantee of a minimum of two years.
 - (h) Application by an approved applicator including submission of technical literatures, method statement etc. including provision of a warranty for the period as required by the Maintenance Surveyor or as stated in the Contract.
 - (i) Applying and obtaining accreditation / certification from recognized international sports organizations when required.

Rates for stripping of existing decoration

- XIX. The rates for stripping of existing decoration shall further include for : -
- (a) Preparing surfaces as G.S. Item 21.48 after stripping the existing decoration.

Rates for road marking materials

- XX. The rates for road marking materials shall further include for : -
- (a) All preparation work to new or existing surfaces as G.S. Item 21.71.
 - (b) Marking out to the required size and styles as ordered by the Maintenance Surveyor.
 - (c) Executing work at specific time to avoid disturbance to public and traffic, and provision of temporary lighting and traffic diversion arrangement when required.
 - (d) Testing of road marking materials, if required.
 - (e) Submission of samples and test certificate as G.S. Item 21.75.

Rates for writing, line marking, etc.

- XXI. The rates for painting lines, letters, characters, numbers, logos, symbols and the like shall further include for : -
- (a) Marking out to the required size and styles.
 - (b) Setting out and paint all line marking to the required standards.

SPECIAL CONDITIONS (CONT'D)

XXII.	The rates for paper hanging shall further include for : -	Rates for paper hanging
	(a) Execution of work internally and in any position at any height.	
	(b) Working to flat, curved or sloping surfaces.	
	(c) Preparing new or existing decorated surfaces.	
	(d) All necessary cleaning and preparation of substrate including applying skim coat prior to hanging wall paper covering.	
	(e) All straight, raking or circular cutting.	
	(f) All cutting and waste and adhesive as required.	
	(g) Fixing in pattern as required.	
	(h) Fixing and fitting around holes and openings, pipes, switches, brackets and the like.	
	(i) Bonding to match existing works.	
	(j) Submission of samples and mock-up if required.	
	(k) Protecting and covering up as required.	
XXIII.	When the Contractor is required to carry out proprietary painting items 15224 to 15244 [Columns (A) and (B)] inclusive for the Complete External Painting works, the rates of these items are deemed to include for the provision of a four-year warranty .	Rates for proprietary paintwork system
XXIV.	When the Contractor is required to carry out painting works with the use of low Volatile Organic Compound (VOC) paint, the rates for all the relevant paint items shall further include for : -	Rates for low Volatile Organic Compound (VOC) paint
	(a) All preparation work to the surfaces as recommended by the paint manufacturer.	
	(b) Painting all surfaces with an approved primer.	
	(c) Test certificate and manufacturer's guarantee.	
XXV.	The rates for re-enamel on bath tub shall include for : -	Rates for re-enamel on bath tub
	(a) Cleaning and touch up existing surfaces of bath tub.	
	(b) Different colour of paint.	
	(c) Each bath tub ordered without any adjustment for minimum order.	
	(d) Protection of adjacent surfaces and make good all works damaged and disturbed.	
	(e) The provision of a one-year warranty.	

Item	LIMEWASH										Item
	Prepare and apply low VOC limewash to the following surfaces :										
	Internal					External					
	New surfaces		Redecoration			New surfaces		Redecoration			
	Two coats	One coat	Two coats	Two coats	Two coats	One coat	Two coats	One coat	Two coats		
	A	B	C	D	E	F					
	\$	\$	\$	\$	\$	\$					
15001	<i>Per square metre</i> Walls and soffits.....										15001
15002	Profiled compressed particle sheeting.....										15002
	23.30 17.20 26.90 25.70 19.00 29.30										
	30.60 22.80 35.40 33.00 24.60 37.90										
Item	EMULSION PAINT										Item
	Prepare and apply low VOC emulsion paint to the following surfaces :										
	Internal				External						
	New surfaces		Redecoration		New surfaces		Redecoration				
	One thinned coat and two full coats	Water based lime resistant primer and two full coats	One full coat	Two full coats	One thinned coat and two full coats	Water based lime resistant primer and two full coats	One full coat	Two full coats			
	A	B	C	D	E	F	G	H			
	\$	\$	\$	\$	\$	\$	\$	\$			
15003	<i>Per square metre</i> Walls and soffits.....										15003
15004	Extra over Item 15003 for moulded enriched surface picked out in one or more different colours from general surface.....										15004
15005	Grille block wall of any thickness including painting into recesses.....										15005
15006	Soft or hard fibre board, insulating board, acoustic tiles and similar surfaces.....										15006
15007	Profiled compressed particle sheeting.....										15007
	57.20 62.20 26.00 46.20 60.30 65.40 27.90 48.70										
	24.60 25.30 9.70 17.50 27.60 28.30 11.50 19.90										
	86.60 90.20 42.20 72.80 89.90 93.50 44.10 75.40										
	60.10 63.10 27.80 48.60 63.20 66.30 29.70 51.10										
	78.60 89.90 37.60 63.10 81.80 91.20 39.50 65.70										
Item	ANTI-MOULD ACRYLIC EMULSION PAINT										Item
	Prepare and apply low VOC anti-mould acrylic emulsion paint to the following surfaces :										
	<i>Per square metre</i>										
15008	Walls and soffits.....										15008
15009	Extra over Item 15008 for moulded enriched surface picked out in one or more different colours from general surface										15009
15010	Grille block wall of any thickness including painting into recesses.....										15010
15011	Soft or hard fibre board, insulating board, acoustic tiles and similar surfaces										15011
15012	Profiled compressed particle sheeting.....										15012
	64.70 71.70 31.20 51.60 67.90 74.90 33.10 54.10										
	19.40 22.60 8.10 14.10 22.40 25.60 9.90 16.50										
	99.40 110.40 46.70 86.70 102.70 113.80 48.60 89.40										
	58.30 66.80 33.30 55.20 61.50 69.40 35.20 57.80										
	80.90 86.20 40.50 75.10 84.10 86.20 42.40 75.10										

Item	TEXTURED EMULSION PAINT								Item	
	Prepare and apply low VOC textured emulsion paint on the following surfaces :	Internal				External				
		New surfaces		Redecoration		New surfaces		Redecoration		
		One thinned coat and two full coats	Water based lime resistant primer and two full coats	One full coat	Two full coats	One thinned coat and two full coats	Water based lime resistant primer and two full coats	One full coat	Two full coats	
	<i>Per square metre</i>	A	B	C	D	E	F	G	H	
		\$	\$	\$	\$	\$	\$	\$	\$	
15013	Walls and soffits.....	52.00	56.40	26.00	43.90	55.10	59.50	27.90	46.40	15013
15014	Grille block wall of any thickness including painting into recesses	79.10	86.00	37.40	65.20	82.30	89.30	39.30	67.80	15014
15015	Profiled compressed particle sheeting.....	68.20	73.40	33.10	57.80	71.40	76.60	35.00	60.40	15015
		CEMENT PAINT								
	Prepare and apply low VOC cement paint on the following surfaces :	Internal			External					
		New surfaces	Redecoration		New surfaces	Redecoration				
		Two coats	One coat	Two coats	Two coats	One coat	Two coats			
	<i>Per square metre</i>	A	B	C	D	E	F			
		\$	\$	\$	\$	\$	\$			
15016	Walls and soffits.....		41.10	26.90	47.10	43.60	28.70	49.60	15016	
15017	Grille block wall of any thickness including painting into recesses.....		69.10	43.40	78.60	71.70	45.30	81.30	15017	
15018	Chinese roof tiling.....		73.20	43.60	80.40	75.80	45.50	83.10	15018	
		EXTERNAL TEXTURED PAINT								
	Prepare and apply low VOC external textured paint to the following surfaces :									
	<i>Per square metre</i>									
15019	Walls and soffits.....	-	-	-	58.50	37.30	67.20	15019		
15020	Grille block wall of any thickness including painting into recesses.....	-	-	-	103.70	63.50	110.70	15020		
15021	Chinese roof tiling.....	-	-	-	106.30	66.20	113.30	15021		
15022	Profiled compressed particle sheeting.....	-	-	-	87.30	55.80	96.30	15022		

Item	MULTI-COLOUR PAINT								Item				
	Prepare and apply low VOC multi-colour paint to the following surfaces by spraying :												
					Internal		External						
	New surfaces		Redeco-ration		New surfaces		Redeco-ration						
	One coat primer, one binder coat and one finishing coat		One binder coat and one finishing coat		One coat primer, one binder coat and one finishing coat		One binder coat and one finishing coat						
	A \$		B \$		C \$		D \$						
15023	Walls and soffits.....				108.10	92.20	111.50	94.90	15023				
	<i>Per square metre</i>												
												
	<i>Per linear metre</i>												
15024	Surfaces n.e. 150 mm girth.....				15.40	12.30	18.40	14.70	15024				
15025	Ditto but 150 - 300 mm girth.....				29.90	25.00	32.90	27.40	15025				
	SYNTHETIC PAINT												
	Prepare and apply low VOC synthetic paint to the following surfaces :												
	Internal				External								
	New surfaces		Redecoration		New surfaces		Redecoration						
	Alkali resisting primer, one undercoat and one finishing coat	Sealer, one undercoat and one finishing coat	One finishing coat	One undercoat and one finishing coat	Alkali resisting primer, one undercoat and one finishing coat	Sealer, one undercoat and one finishing coat	One finishing coat	One undercoat and one finishing coat					
	A \$	B \$	C \$	D \$	E \$	F \$	G \$	H \$					
15026	Walls and soffits.....				75.10	69.30	40.20	56.60	78.30	72.50	42.10	59.20	15026
15027	Soft or hard fibre board, insulating board, acoustic tiles and similar surfaces.....				78.90	72.80	41.20	56.80	82.10	76.00	43.10	59.40	15027
15028	Profiled compressed particle sheeting.....				90.20	89.10	45.80	70.30	93.50	90.40	47.70	72.90	15028
	<i>Per linear metre</i>												
15029	Surfaces n.e. 150 mm girth.....				6.20	5.90	3.00	4.90	9.10	8.80	4.80	7.20	15029
15030	Ditto but 150 - 300 mm girth.....				17.40	16.80	10.10	16.20	20.40	19.80	11.90	18.60	15030

Item	POLYURETHANE PAINT						Item	
	Prepare and apply low VOC polyurethane paint to the following surfaces :							
	Internal			External				
	New Surfaces	Redecoration		New Surfaces	Redecoration			
	One coat primer, one undercoat and one finishing coat	One finishing coat	One undercoat and one finishing coat	One coat primer, one undercoat and one finishing coat	One finishing coat	One undercoat and one finishing coat		
	A	B	C	D	E	F		
	\$	\$	\$	\$	\$	\$		
15031	Walls and soffits.....	92.40	46.60	78.00	95.70	48.50	80.70	15031
15032	Grille block wall of any thickness including painting into recesses.....	138.70	69.80	117.00	142.20	71.80	119.80	15032
15033	Profiled compressed particle sheeting.....	120.20	60.50	101.40	123.60	62.50	104.20	15033
15034	Concrete paving, kerb stones and the like.....	82.00	45.40	76.90	85.20	47.30	79.50	15034
	COLD CURE EPOXY PAINT							
	Prepare and apply low VOC cold cure epoxy paint (coloured) to the following surfaces :							
	Internal			External				
	New surfaces	Redecoration		New surfaces	Redecoration			
	One undercoat and one finishing coat	One finishing coat	One undercoat and one finishing coat	One undercoat and one finishing coat	One finishing coat	One undercoat and one finishing coat		
	A	B	C	D	E	F		
	\$	\$	\$	\$	\$	\$		
15035	Walls and soffits.....	79.50	57.70	86.70	82.20	59.70	89.40	15035
15036	Grille block wall of any thickness including painting into recesses.....	119.30	69.30	130.00	122.10	71.30	132.90	15036
15037	Profiled compressed particle sheeting.....	93.90	60.10	112.70	96.60	62.10	115.50	15037
	<i>Per linear metre</i>							
15038	Surfaces n.e. 150 mm girth.....	5.80	4.60	7.30	6.00	4.80	7.50	15038
15039	Ditto but 150 - 300 mm girth.....	20.30	11.60	21.80	21.40	11.80	23.60	15039
	GRANITE COATING							
	Prepare and apply 2 mm thick low VOC spray granite coating system to the following surfaces :							
	Internal		External					
	New surfaces	Redecor-ration	New surfaces	Redecor-ration				
	A	B	C	D				
	\$	\$	\$	\$				
15040	Walls and soffits.....		311.90	329.80	315.60	333.50	15040	
15041	Grille block wall of any thickness including painting into recesses.....		418.80	441.90	422.90	446.10	15041	
15042	Masonry walls.....		418.80	441.90	422.90	446.10	15042	

Item	WATER-BASED PAINT ON SLOPEWORK				Item	
	Prepare and spray low VOC water-based paint (any colour) to :	New surfaces	Redecoration			
		One undercoat and one finishing coat	One finishing coat	One undercoat and one finishing coat		
	<i>Per square metre</i>	A \$	B \$	C \$		
15043	Sprayed concrete surfaces on slopes.....	115.50	78.50	127.10	15043	
	SYNTHETIC PAINT ON METAL WORK					
	Prepare and apply low VOC synthetic paint to the following metal work :	New surfaces	Redecoration			
		Primer only (No subsequent paint to be applied)	Primer, two under-coats and one finishing coat	One finishing coat	One under-coat and one finishing coat	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
15044	General surfaces.....	22.50	78.00	34.60	53.60	15044
15045	Glazed windows, doors and the like.....	24.00	104.00	48.50	75.10	15045
15046	Wire mesh, expanded metal mesh, chain link, railings, balustrades and the like.....	22.50	80.90	39.90	61.30	15046
15047	Surfaces of corrugated or profiled sheeting	28.90	89.20	40.00	58.30	15047
15048	Surfaces of collapsible gate.....	33.60	146.50	61.20	97.10	15048
15049	Jalousies, louvre panels and the like with fixed or moveable louvres.....	30.90	123.80	51.00	84.10	15049
	<i>Per linear metre</i>					
15050	Surfaces n.e. 150 mm girth.....	3.80	11.10	7.00	9.30	15050
15051	Ditto but 150 - 300 mm girth.....	7.50	24.90	11.60	18.50	15051
15052	Pipe n.e. 55 mm nominal diameter.....	5.30	13.60	7.00	11.10	15052
15053	Ditto but 55 - 110 mm nominal diameter.....	9.90	41.60	17.40	27.80	15053
15054	Ditto but 110 - 300 mm nominal diameter.....	18.90	72.80	28.90	46.20	15054
15055	Eaves gutter of any type, inside and outside n.e. 600 mm total girth, including cleaning out and making good joints in red lead	62.10	109.80	75.10	83.50	15055
	<i>Each</i>					
15056	Small isolated article n.e. 0.01 m ²	2.00	5.10	2.20	4.70	15056
15057	W.C. cistern including brackets.....	15.00	52.00	17.40	27.80	15057
15058	Rainwater or waste head of any size, inside and outside, including cleaning out.....	57.40	95.60	63.10	76.10	15058

Item	METALLIC PAINT ON METAL WORK						Item
Prepare and apply low VOC metallic paint (bright or bronze finish) on the following metal work :		New Surfaces		Redecoration			
		Primer only (No subsequent paint to be applied)	Primer, two under-coats and one finishing coat	One finishing coat	One under-coat and one finishing coat	Two under-coats and one finishing coat	
		A \$	B \$	C \$	D \$	E \$	
	<i>Per square metre</i>						
15059	General surfaces.....	22.50	104.00	46.20	64.70	93.60	15059
15060	Glazed windows, doors and the like.....	26.40	119.60	53.70	85.10	115.60	15060
15061	Wire mesh, expanded metal mesh, chain link, railings, balustrades and the like.....	24.60	92.40	45.70	65.60	84.40	15061
15062	Surfaces of corrugated or profiled sheeting.....	31.60	112.30	55.40	74.40	99.90	15062
15063	Surfaces of collapsible gate.....	33.70	166.40	64.60	103.60	150.30	15063
15064	Jalousies, louvre panels and the like with fixed or moveable louvres.....	31.60	132.90	61.00	89.90	124.80	15064
<i>Per linear metre</i>							
15065	Surfaces n.e. 150 mm girth.....	3.20	11.50	5.80	9.30	10.40	15065
15066	Ditto but 150 - 300 mm girth.....	7.30	26.00	11.60	18.50	22.90	15066
15067	Pipe n.e. 55 mm nominal diameter.....	4.00	15.60	7.00	11.10	14.50	15067
15068	Ditto but 55 - 110 mm nominal diameter.....	9.60	46.80	17.40	27.80	41.60	15068
15069	Ditto but 110 - 300 mm nominal diameter.....	18.70	83.20	34.70	55.50	72.80	15069
15070	Eaves gutter of any type, inside and outside n.e. 600 mm total girth, including cleaning out and making good joints in red lead	55.20	109.20	73.90	90.60	105.60	15070
<i>Each</i>							
15071	Small isolated article n.e. 0.01 m ²	2.00	5.40	2.20	4.90	5.10	15071
15072	W.C. cistern including brackets.....	11.60	52.00	20.20	32.40	41.60	15072
15073	Rainwater or waste head of any size, inside and outside, including cleaning out.....	55.20	101.90	64.90	77.70	94.70	15073

Item	HEAT RESISTING PAINT ON METAL WORK					Item	
	Prepare and apply low VOC heat resisting paint on the following metal work :						
		New Surfaces		Redecoration			
		Primer only (No subsequent paint to be applied)	Primer, two under-coats and one finishing coat	One finishing coat	One under-coat and one finishing coat	Two under-coats and one finishing coat	
		A	B	C	D	E	
		\$	\$	\$	\$	\$	
	<i>Per square metre</i>						
15074	General surfaces.....	29.90	110.80	44.80	71.90	97.60	15074
	<i>Per linear metre</i>						
15075	Surfaces n.e. 150 mm girth.....	3.90	12.50	5.30	8.90	12.00	15075
15076	Ditto but 150 - 300 mm girth.....	8.20	29.80	11.60	18.70	25.50	15076
15077	Pipe n.e. 55 mm nominal diameter.....	5.70	17.10	7.50	12.00	16.50	15077
15078	Ditto but 55 - 110 mm nominal diameter.....	12.00	50.10	19.60	32.40	44.10	15078
15079	Ditto but 110 - 300 mm nominal diameter.....	22.80	87.30	35.20	56.80	76.90	15079
	<i>Each</i>						
15080	Small isolated article n.e. 0.01 m ²	2.30	6.10	2.40	4.00	5.50	15080
	CHEMICAL RESISTING PAINT ON METAL WORK						
	Prepare and apply low VOC chemical resisting paint on the following metal work :						
	<i>Per square metre</i>						
15081	General surfaces.....	32.30	113.40	44.80	71.90	97.60	15081
	<i>Per linear metre</i>						
15082	Surfaces n.e. 150 mm girth.....	4.00	12.60	5.30	8.90	12.00	15082
15083	Ditto but 150 - 300 mm girth.....	8.60	30.30	11.60	18.70	25.50	15083

Item	BLACK ENAMEL PAINT ON METAL WORK				Item
Prepare and apply low VOC black enamel paint on the following metal work :-		New surfaces		Redeco- ration	
		Primer only (No subse- quent paint to be applied)	Primer and one coat	One coat	
<i>Per square metre</i>		A \$	B \$	C \$	
15084	General surfaces.....	22.00	41.70	35.20	15084
<i>Per linear metre</i>					
15085	Surfaces n.e. 150 mm girth.....	3.20	7.90	6.10	15085
15086	Ditto but 150 - 300 mm girth.....	6.40	13.30	10.70	15086
<i>Each</i>					
15087	Small isolated article n.e. 0.01 m ²	1.50	3.10	2.30	15087
NON-TOXIC PAINT ON METAL WORK					
Prepare and apply low VOC non-toxic paint on the following metal work :					
<i>Per square metre</i>					
15088	General surfaces.....	24.20	83.80	75.00	15088
15089	Surfaces of corrugated or profiled sheeting.....	28.10	104.70	91.60	15089
<i>Per linear metre</i>					
15090	Surfaces n.e. 150 mm girth.....	3.40	13.90	9.00	15090
15091	Ditto but 150 - 300 mm girth.....	7.50	23.10	18.90	15091
15092	Eaves gutter of any type, inside and outside n.e. 600 mm total girth, including cleaning out and making good joints in approved non-toxic mastic	60.00	103.60	84.00	15092

Item	POLYURETHANE PAINT ON METAL WORK					Item
Prepare and apply low VOC polyurethane paint (coloured) on the following metal work :						
<i>Per square metre</i>						
<i>Per linear metre</i>						
<i>Each</i>						
COLD CURE EPOXY PAINT ON METAL WORK						
Prepare and apply low VOC cold cure epoxy paint (coloured) on the following metal work :						
<i>Per square metre</i>						
<i>Per linear metre</i>						
<i>Each</i>						
15093	General surfaces.....	22.50	78.60	44.40	68.80	15093
15094	Glazed windows, doors and the like.....	26.30	98.20	63.50	83.60	15094
15095	Wire mesh, expanded metal mesh, chain link, railings, balustrades and the like.....	24.60	80.90	45.00	69.30	15095
15096	Surfaces n.e. 150 mm girth.....	3.30	9.90	6.40	8.40	15096
15097	Ditto but 150 - 300 mm girth.....	8.30	24.70	12.70	19.70	15097
15098	Pipe n.e. 55 mm nominal diameter.....	5.80	15.10	9.60	14.80	15098
15099	Ditto but 55 - 110 mm nominal diameter.....	11.10	44.30	19.10	37.70	15099
15100	Ditto but 110 - 300 mm nominal diameter.....	18.70	69.30	44.50	59.00	15100
15101	Small isolated article n.e. 0.01 m ²	1.50	5.30	2.70	4.50	15101
15102	General surfaces.....	23.10	72.20	40.40	65.10	15102
15103	Glazed windows, doors and the like.....	27.10	83.10	47.00	74.80	15103
15104	Wire mesh, expanded metal mesh, chain link, railing, balustrades and the like.....	25.40	79.50	44.40	63.60	15104
15105	Surfaces n.e. 150 mm girth.....	3.50	11.60	5.80	7.30	15105
15106	Ditto but 150 - 300 mm girth.....	9.30	21.80	11.60	18.20	15106
15107	Pipe n.e. 55 mm nominal diameter.....	5.80	14.50	9.30	11.60	15107
15108	Ditto but 55 - 110 mm nominal diameter.....	11.60	36.20	23.10	30.80	15108
15109	Ditto but 110 - 300 mm nominal diameter.....	17.40	57.80	28.90	49.10	15109
15110	Small isolated article n.e. 0.01 m ²	1.50	5.20	2.60	4.40	15110

Item	SURFACE PROTECTION TO STRUCTURAL STEEL							Item	
	Prepare and apply low VOC surface protection on the following surfaces as G.S. Items 15.61 & 15.62 :								
	Type A	Type B	Type C	Type D	Type E	Type F	Type G		
	A	B	C	D	E	F	G		
	\$	\$	\$	\$	\$	\$	\$		
15111	86.70	101.10	231.00	202.20	288.80	72.20	72.20	15111	
15112	91.00	106.20	238.50	212.30	242.60	70.20	74.70	15112	
<i>Per square metre</i>									
(Note : - The above Items 15111 to 15112 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)									
POWDER COATING ON METAL WORK									
Prepare and apply low VOC epoxy or polyester or polyurethane resin based dry powder coating with dry film thickness 50 ~ 70 microns on metal surface, including surface preparation all in strict accordance with manufacturer's instructions :									
								A	
								\$	
15113	Powder coating on metal surfaces.....							141.50	15113
<i>Per linear metre</i>									
15114	Surfaces n.e. 150 mm girth.....							20.20	15114
15115	Ditto but 150 - 300 mm girth.....							40.40	15115
<i>Each</i>									
15116	Small isolated article n.e. 0.01m ²							2.40	15116
(Note : - The above Items 15113 to 15116 inclusive will only be paid for, if ordered by Maintenance Surveyor in writing.)									
FLUOROCARBON PVF2 COATING ON METAL WORK									
Prepare and apply low VOC fluoropolymer resin based coating with dry film thickness 30 ~ 72 microns on metal surface, including surface preparation all in strict accordance with manufacturer's instructions :									
<i>Per square metre</i>									
15117	2 Coats system (dry film thickness 30 ~ 37 microns) comprising primer coat and top coat on metal surface.....							153.00	15117
15118	3 Coats system (dry film thickness 40 ~ 52 microns) comprising primer coat, top coat and clear coat on metal surface.....							199.00	15118
15119	4 Coats system (dry film thickness 60 ~ 72 microns) comprising primer coat, barrier coat, top coat and clear coat on metal surface.....							275.40	15119
(Note : - The above Items 15117 to 15119 inclusive will only be paid for, if ordered by Maintenance Surveyor in writing.)									
FIRE RETARDANT PAINT									
Prepare and apply low VOC fire retardant paint as G.S. Item 21.14 :									
							New surfaces	Redeco-ration	
							A	B	
							\$	\$	
15120	Fabric surfaces.....						26.00	29.50	15120
15121	Wood surfaces.....						27.80	31.00	15121
15122	Metal surfaces.....						26.10	29.60	15122

Item	INTUMESCENT PAINT	Fire rated period		Item		
		1 hour	2 hours			
		A \$	B \$			
	Prepare and apply low VOC fire rated intumescent paint on structural steel surfaces :					
	<i>Per square metre</i>					
15123	Structural steel general surfaces.....	389.70	577.50	15123		
	<i>Per linear metre</i>					
15124	Structural steel surfaces not exceeding 150 mm girth.....	50.80	86.60	15124		
15125	Ditto but 150 - 300 mm girth.....	101.60	144.30	15125		
	<i>Each</i>					
15126	Structural steel small isolated article n.e. 0.01 m².....	13.60	22.80	15126		
(Note:- The above Items 15123 to 15126 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)						
	BLACK BITUMASTIC PAINT					
	Prepare and apply low VOC black bitumastic paint on the following surfaces :					
	<i>Per square metre</i>					
		New surfaces				
		One coat	Two coats			
		One coat	Two coats			
		A \$	B \$			
		C \$	D \$			
15127	Concrete, brick, stone, plastered or rendered, or similarly finished walls and soffits.....	26.40	41.10	32.90	49.50	15127
15128	General metal surfaces.....	27.70	43.40	34.60	52.00	15128
15129	General surface of concrete and fixing fillets under floor boarding.....	29.30	50.20	36.90	54.90	15129
15130	Glazed metal windows, doors and the like.....	39.00	62.10	43.80	68.10	15130
15131	Wire mesh, expanded metal mesh, chain link, railings, balustrades and the like.....	28.50	44.40	35.80	53.50	15131
15132	Surfaces of corrugated or profiled metal sheeting.....	29.00	45.00	36.50	54.30	15132
15133	Metal manhole covers, channel covers, tree grilles and the like.....	26.00	42.60	35.80	53.50	15133
	<i>Per linear metre</i>					
15134	Surfaces of metal n.e. 150 mm girth.....	2.40	3.70	3.50	4.40	15134
15135	Ditto but 150 - 300 mm girth.....	5.60	11.10	7.00	13.10	15135
15136	Pipe n.e. 55 mm nominal diameter.....	4.90	7.40	5.60	8.70	15136
15137	Ditto but 55 - 110 mm nominal diameter.....	11.10	19.10	13.90	20.80	15137
15138	Ditto but 110 - 300 mm nominal diameter.....	17.40	26.00	20.80	34.70	15138
15139	Eaves gutter of any type, inside and outside n.e. 600 mm total girth, including cleaning out and making good joints in red lead	52.00	65.10	62.40	78.00	15139
	<i>Each</i>					
15140	Small isolated article n.e. 0.01 m².....	7.00	13.10	8.30	13.90	15140
15141	W.C. cistern including brackets.....	11.70	19.60	13.70	21.50	15141
15142	Rainwater or waste head of any size, inside and outside, including cleaning out.....	52.00	65.10	60.70	70.50	15142

Item	WOOD PRESERVATIVE ON WOOD WORK				Item		
	Prepare and apply low VOC wood preservative on the following wood work :						
		New surfaces		Redecoration			
		One coat	Two coats	One coat	Two coats		
		A	B	C	D		
		\$	\$	\$	\$		
15143	General surfaces.....	11.40	21.20	15.10	23.10	15143	
	<i>Per square metre</i>						
	<i>Per linear metre</i>						
15144	Surfaces n.e. 150 mm girth.....	1.40	2.70	1.50	2.80	15144	
15145	Ditto but 150 - 300 mm girth.....	3.70	5.30	3.80	5.60	15145	
	SYNTHETIC PAINT ON WOOD WORK						
	Prepare and apply low VOC synthetic paint on the following wood work :						
		New surfaces		Redecoration			
		Primer only (No subsequent paint to be applied)	Primer, one under-coat and one finishing coat	Primer, two under-coats and one finishing coat	One finishing coat	One under-coat and one finishing coat	
		A	B	C	D	E	
		\$	\$	\$	\$	\$	
15146	General surfaces including doors and sashes.....	15.00	55.50	62.40	34.60	42.90	15146
15147	Jalousies, louvre panels and the like with fixed or moveable louvres.....	24.70	87.30	126.40	48.00	74.30	15147
	<i>Per linear metre</i>						
15148	Surfaces n.e. 150 mm girth.....	3.00	7.40	10.40	4.10	5.30	15148
15149	Ditto but 150 - 300 mm girth.....	4.80	16.70	20.80	8.70	12.00	15149
	<i>Each</i>						
15150	Small isolated article n.e. 0.01 m ²	1.10	4.10	5.40	2.20	3.60	15150

Item	POLYURETHANE PAINT ON WOOD WORK		Item												
	Prepare and apply low VOC polyurethane paint on the following wood work :														
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">New surfaces</th> <th colspan="3">Redecoration</th> </tr> <tr> <td style="text-align: center;">One under-coat and one finishing coat</td> <td style="text-align: center;">One finishing coat</td> <td style="text-align: center;">One under-coat and one finishing coat</td> <td style="text-align: center;">Two finishing coats</td> </tr> <tr> <td style="text-align: center;">A \$</td> <td style="text-align: center;">B \$</td> <td style="text-align: center;">C \$</td> <td style="text-align: center;">D \$</td> </tr> </thead> </table>	New surfaces	Redecoration			One under-coat and one finishing coat	One finishing coat	One under-coat and one finishing coat	Two finishing coats	A \$	B \$	C \$	D \$	
New surfaces	Redecoration														
One under-coat and one finishing coat	One finishing coat	One under-coat and one finishing coat	Two finishing coats												
A \$	B \$	C \$	D \$												
	<i>Per square metre</i>														
15151	General surfaces including doors and sashes.....	60.10 46.20 67.60 75.10	15151												
15152	Jalousies, louvre panels and the like with fixed or moveable louvres.....	92.40 64.70 104.00 115.50	15152												
	<i>Per linear metre</i>														
15153	Surfaces n.e. 150 mm girth.....	6.80 4.60 7.50 9.00	15153												
15154	Ditto but 150 - 300 mm girth.....	15.00 11.60 16.50 18.90	15154												
	<i>Each</i>														
15155	Small isolated article n.e. 0.01 m ²	3.60 2.30 3.70 4.00	15155												
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">New surfaces</th> <th>Redecoration</th> </tr> <tr> <td style="text-align: center;">A \$</td> <td style="text-align: center;">B \$</td> </tr> </thead> </table>	New surfaces	Redecoration	A \$	B \$									
New surfaces	Redecoration														
A \$	B \$														
15156	Wood block, strip or parquet flooring.....	41.40 48.90	15156												
	URETHANE SEALER AND POLISH ON WOOD WORK														
	Prepare and apply low VOC urethane sealer and polish on the following wood work :														
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">New surfaces</th> <th colspan="2">Redecoration</th> </tr> <tr> <td style="text-align: center;">One sealer coat and two finishing coats</td> <td style="text-align: center;">One coat</td> <td style="text-align: center;">Two coats</td> </tr> <tr> <td style="text-align: center;">A \$</td> <td style="text-align: center;">B \$</td> <td style="text-align: center;">C \$</td> </tr> </thead> </table>	New surfaces	Redecoration		One sealer coat and two finishing coats	One coat	Two coats	A \$	B \$	C \$				
New surfaces	Redecoration														
One sealer coat and two finishing coats	One coat	Two coats													
A \$	B \$	C \$													
	<i>Per square metre</i>														
15157	Wood block or wood strip flooring.....	69.90 46.20 63.60	15157												

Item	WAX POLISH ON WOOD WORK					Item
	Prepare and wax low VOC polish to approval on the following wood work :	New surfaces		Redecoration		
		Two coats	Three coats	One coat	Two coats	
	<i>Per square metre</i>	A \$	B \$	C \$	D \$	
15158	General surfaces.....	-	62.60	31.10	47.60	15158
	<i>Per linear metre</i>					
15159	Surfaces n.e. 150 mm girth.....	-	5.10	2.50	4.00	15159
15160	Surfaces 150 - 300 mm girth.....	-	15.20	7.60	11.70	15160
	<i>Per square metre</i>					
15161	Surfaces of wood block or wood strip flooring.....	25.70	-	18.10	28.00	15161
	NATURAL OIL ON LANDSCAPE TIMBER					
	Prepare and apply low VOC natural oil coating on the following wood work : -	New surfaces		Redecoration		
		Three coats		Two coats		
	<i>Per square metre</i>	A \$		B \$		
15162	General surfaces of landscape timber.....		92.40		75.10	15162
	LINSEED OIL ON WOOD WORK					
	Prepare and apply low VOC linseed oil on the following wood work :	New surfaces		Redecoration		
		Three coats		Two coats		
	<i>Per square metre</i>	A \$		B \$		
15163	General surfaces.....		55.50		45.10	15163
	<i>Per linear metre</i>					
15164	Surfaces n.e. 150 mm girth.....		4.60		3.80	15164
15165	Surfaces 150 - 300 mm girth.....		13.90		11.30	15165

Item	STAIN, VARNISH AND LACQUER ON WOOD WORK											Item																																																							
Prepare and apply low VOC stain, low VOC varnish and/or low VOC lacquer on the following wood work :																																																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5">New surfaces</th> <th colspan="6">Redecoration</th> </tr> <tr> <th colspan="2">Stain</th> <th colspan="2">Varnish</th> <th>Cellulose lacquer</th> <th colspan="2">Stain</th> <th colspan="2">Varnish</th> <th colspan="2">Cellulose lacquer</th> </tr> <tr> <th>Two coats</th> <th>Additional one coat</th> <th>Two coats</th> <th>Three coats</th> <th>Three coats</th> <th>Two coats</th> <th>Additional one coat</th> <th>One coat</th> <th>Two coats</th> <th>One coat</th> <th>Two coats</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>H</th> <th>I</th> <th>J</th> <th>K</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>													New surfaces					Redecoration						Stain		Varnish		Cellulose lacquer	Stain		Varnish		Cellulose lacquer		Two coats	Additional one coat	Two coats	Three coats	Three coats	Two coats	Additional one coat	One coat	Two coats	One coat	Two coats	A	B	C	D	E	F	G	H	I	J	K	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
New surfaces					Redecoration																																																														
Stain		Varnish		Cellulose lacquer	Stain		Varnish		Cellulose lacquer																																																										
Two coats	Additional one coat	Two coats	Three coats	Three coats	Two coats	Additional one coat	One coat	Two coats	One coat	Two coats																																																									
A	B	C	D	E	F	G	H	I	J	K																																																									
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$																																																									
15166	General surfaces including doors and sashes	30.00	12.10	39.60	52.00	62.40	36.20	12.10	34.60	40.90	37.50	45.80	15166																																																						
15167	Jalousies, louvre panels and the like with fixed or movable louvres	40.70	15.60	57.90	68.70	80.10	49.60	15.60	41.60	62.40	45.10	66.60	15167																																																						
<i>Per linear metre</i>																																																																			
15168	Surfaces n.e. 150 mm girth	2.40	0.90	3.70	4.60	5.00	3.50	0.90	2.80	4.20	3.00	4.60	15168																																																						
15169	Ditto but 150 - 300 mm girth.....	7.50	3.30	9.40	12.50	15.60	9.00	3.30	7.00	10.40	9.00	12.00	15169																																																						
<i>Each</i>																																																																			
15170	Small isolated article not exceeding 0.01 m ²	2.00	1.80	2.20	2.40	2.60	2.10	2.10	2.00	2.30	2.00	2.30	15170																																																						
PESTICIDAL COATING																																																																			
Prepare and apply low VOC pesticidal coating to the following surfaces :																																																																			
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		\$	\$																																																																
15171	General surfaces of plaster, render, concrete, brick, block, stone or wood.....	37.60	45.10	15171																																																															
<i>Per linear metre</i>																																																																			
15172	Ditto but in band n.e. 150 mm wide at joints, junctions, skirting tops and similar positions.....	5.30	6.00	15172																																																															

Item	MARKING MATERIALS					Item
Prepare and paint the following lines, etc., in white or yellow thermoplastic road marking material (Type A) as BS 3262:1989 on tarmac, concrete or other surfaces for roads, carriageways, car parks, paving and the like :-		Mark out and paint in two coats	Re-paint over existing		Obliterate existing	
			One coat	Two coats		
		A	B	C	D	
		\$	\$	\$	\$	
<i>Per linear metre</i>						
15173	Line n.e. 150 mm wide.....	19.00	10.20	19.70	5.30	15173
15174	Ditto but 150 - 300 mm wide.....	36.50	20.40	38.90	10.30	15174
15175	Line n.e. 150 mm wide and circular on plan n.e. 15.00 m radius.....	20.20	11.50	20.90	5.60	15175
15176	Ditto but 150 - 300 mm wide.....	38.80	21.80	41.10	11.10	15176
<i>Each</i>						
15177	Letter, number, Chinese character, logo, symbol and the like n.e. 75 mm high.....	12.10	8.30	13.20	3.50	15177
15178	Ditto but 75 - 150 mm high.....	25.60	16.50	26.80	7.50	15178
15179	Ditto but 150 - 225 mm high.....	35.20	22.60	37.00	11.60	15179
15180	Ditto but 225 - 300 mm high.....	48.60	31.10	50.90	17.20	15180
15181	Ditto but 300 - 450 mm high.....	69.00	43.10	72.20	27.10	15181
15182	Ditto but 450 - 600 mm high.....	100.60	61.50	104.80	44.20	15182
15183	Ditto but 600 - 1,000 mm high.....	134.60	92.20	157.10	66.20	15183
15184	Ditto but 1,000 - 2,000 mm high.....	201.20	123.00	209.40	88.40	15184
15185	Arrow-head n.e. 150 mm long.....	17.50	11.50	18.60	6.50	15185
15186	Ditto but 150 - 300 mm long.....	26.50	17.10	27.90	10.50	15186
15187	Ditto but 300 - 450 mm long.....	38.00	23.90	39.70	14.30	15187
15188	Ditto but 450 - 900 mm long.....	60.90	37.10	63.60	20.50	15188
15189	Ditto but 900 - 1,350 mm long.....	109.00	63.10	112.20	29.20	15189
15190	Ditto but 1,350 - 2,000 mm long.....	163.50	94.70	168.40	43.60	15190
15191	Ditto but 2,000 - 3,000 mm long.....	217.80	126.20	224.40	58.30	15191
15192	Arrow-head with left/right and straight 1,350 - 2,000 mm long.....	190.60	110.40	196.40	51.00	15192
15193	Ditto but 2,000 - 3,000 mm long.....	245.20	141.90	252.40	65.60	15193

Item	MARKING MATERIALS (CONT'D)					Item
Prepare and paint the following lines, etc., in white or yellow thermoplastic road marking material (Type B) as BS 3262:1989 on tarmac, concrete or other surfaces for roads, carriageways, car parks, paving and the like :-						
<i>Per linear metre</i>						
<i>Each</i>						
15194	Line n.e. 150 mm wide.....	19.60	11.00	20.40	5.30	15194
15195	Ditto but 150 - 300 mm wide.....	37.90	21.00	40.30	10.30	15195
15196	Line n.e. 150 mm wide and circular on plan n.e. 15.00 m.....	20.80	11.80	21.60	5.60	15196
15197	Ditto but 150 - 300 mm wide.....	40.10	22.50	42.50	11.10	15197
<i>Each</i>						
15198	Letter, number, Chinese character, logo, symbol & the like n.e. 75 mm high.....	12.50	8.30	13.20	3.50	15198
15199	Ditto but 75 - 150 mm high.....	25.60	16.50	26.90	7.50	15199
15200	Ditto but 150 - 225 mm high.....	35.40	22.70	37.20	11.60	15200
15201	Ditto but 225 - 300 mm high.....	49.00	31.30	51.30	17.20	15201
15202	Ditto but 300 - 450 mm high.....	69.90	43.60	73.10	27.10	15202
15203	Ditto but 450 - 600 mm high.....	102.30	62.40	106.40	44.20	15203
15204	Ditto but 600 - 1,000 mm high.....	153.50	93.50	159.80	66.20	15204
15205	Ditto but 1,000 - 2,000 mm high.....	204.60	124.60	212.90	88.40	15205
15206	Arrow-head n.e. 150 mm long.....	17.50	11.60	18.60	6.50	15206
15207	Ditto but 150 - 300 mm long.....	26.60	17.20	28.00	10.50	15207
15208	Ditto but 300 - 450 mm long.....	38.30	24.00	40.00	14.30	15208
15209	Ditto but 450 - 900 mm long.....	62.00	37.70	64.50	20.50	15209
15210	Ditto but 900 - 1,350 mm long.....	111.80	64.60	115.40	29.20	15210
15211	Ditto but 1,350 - 2,000 mm long.....	167.80	96.80	173.10	43.60	15211
15212	Ditto but 2,000 - 3,000 mm long.....	223.70	129.00	230.80	58.30	15212
15213	Arrow-head with left/right and straight 1,350 - 2,000 mm long.....	195.80	112.90	202.00	51.00	15213
15214	Ditto but 2,000 - 3,000 mm long.....	251.60	145.20	259.70	65.60	15214

Item	FLUORESCENT PAINT				Item
	Prepare and apply fluorescent paint of any colour ordered on the following surfaces :-	New surfaces	Redecoration		
		Alkali resisting primer, one under-coat of flat synthetic paint and one finishing coat	One finishing coat	One under-coat of white synthetic paint and one finishing coat	
	<i>Per square metre</i>	A \$	B \$	C \$	
15215	Concrete paving, kerb stones and the like.....	71.40	43.90	60.70	15215
15216	Plastered or rendered vertical surfaces.....	75.10	46.20	63.90	15216
15217	Chunam surfacing to banks.....	78.90	48.50	65.20	15217
15218	Natural or trimmed rock face.....	82.60	50.80	67.40	15218
	REFLECTING PAINT				
	Prepare and apply reflecting paint on the following surfaces :-	New surfaces	Redecoration		
		One finishing coat of synthetic paint finished with gloss fine reflective aggregate	One under-coat and one finishing coat of synthetic paint finished with gloss fine reflective aggregate	One coat alkali resisting primer, one under-coat of white synthetic paint and one finishing coat of synthetic paint finished with gloss fine reflective aggregate	
	<i>Per square metre</i>	A \$	B \$	C \$	
15219	Concrete paving, kerb stones and the like.....	45.80	67.10	88.20	15219
15220	Plastered or rendered vertical surfaces.....	46.60	68.80	90.30	15220
15221	Chunam surfacing to banks.....	50.00	72.20	94.30	15221
15222	Natural or trimmed rock face.....	53.00	75.70	98.40	15222

Item	CHALKBOARD PAINT				Item																																									
	Prepare and apply chalkboard paint on the following surfaces :-	<table border="1"> <thead> <tr> <th rowspan="2">New surfaces</th> <th colspan="2">Redecoration</th> </tr> <tr> <th>One coat</th> <th>Two coats</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>37.10</td> <td>22.70</td> <td>38.60</td> </tr> </tbody> </table>			New surfaces	Redecoration		One coat	Two coats	A	B	C	\$	\$	\$	37.10	22.70	38.60																												
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15223	On surfaces of chalkboard.....				15223																																									
	PROPRIETARY PAINTING																																													
	(Note :- The following Items 15224 to 15244 inclusive will only be paid for, if ordered by Maintenance Surveyor in writing.)																																													
	Proprietary hygienic coating system extended with Polytetrafluoroethylene (PTFE) to actively control, inhibit and kill micro-organisms including fungi, mould, mildew, bacteria growth on the surface ; in strict accordance with the manufacturer's recommendation and complying with the following :	<table border="1"> <thead> <tr> <th colspan="2">Prepare and apply</th> </tr> <tr> <th>New surfaces</th> <th>Redecoration</th> </tr> <tr> <th>A</th> <th>B</th> </tr> <tr> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>489.10</td> <td>507.90</td> </tr> <tr> <td>431.00</td> <td>449.80</td> </tr> </tbody> </table>			Prepare and apply		New surfaces	Redecoration	A	B	\$	\$	489.10	507.90	431.00	449.80																														
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15224	Proprietary hygienic coating system to tiled wall surfaces including tile filler.....	489.10	507.90		15224																																									
15225	Ditto to plastered walls and soffits.....	431.00	449.80		15225																																									
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15226	Proprietary hygienic coating system to tiled wall surfaces including tile filler.....	181.60	192.10		15226																																									

Item	PROPRIETARY PAINTING (CONT'D)	Prepare and apply		Item																																						
	Proprietary acrylic coating system complying with the following test results and standards :	New surfaces	Redeco-ration																																							
	A single pack acrylic emulsion resin sealer which provides good alkali resistant, sealing and adhesion on different substrates prior to application of texture compound and/or acrylic and PU topcoats.	A	B																																							
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Accelerated weathering	Passed	The degree of change in color is not so large when compared it with the standard products.																																								
Resistance to fungal growth (BS3900)	G6	Rating 0, no fungal growth																																								
Quantifying dirt collection (ASTM D3719-87)	Total dirt : 96.99%																																									
	Imbedded dirt : 94.48%																																									
	<i>Per square metre</i>																																									
15227	Proprietary acrylic coating system to tiled wall surface including tile filler.....	230.40	237.20	15227																																						
15228	Ditto to plastered walls and soffits.....	164.50	171.50	15228																																						

Item	PROPRIETARY PAINTING (CONT'D)	Prepare and apply		Item																											
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	<p>Proprietary vinyicide insecticide functional coating system complying with the following test results and standards :</p> <table border="1"> <tr> <td colspan="2">The paint on drying forms a layer of "contact insecticide" crystals which disable the natural movements of insects leading to eventual death. The paint that kills cockroaches, houseflies, housedust mites and mosquitoes and uses on interior and exterior surfaces such as concrete, void deck, woodwork, plaster, stucco, softboards, hardboards and asbestos by rush, roller, conventional or airless spray. The paint is touch dry after one hour and the painted surface remains effective for 1 year under normal condition. If the painted surface is covered with dirt or dust, it is recommended to wash with water to restore full insecticidal action.</td> </tr> <tr> <td>Type</td> <td>Matt acrylic for interior</td> </tr> <tr> <td>Uses</td> <td>Various uses decoration for interior</td> </tr> <tr> <td>Properties</td> <td>Insecticide action of contact, permanent for several years. Destruction by contact : mosquitoes, spiders, flies, cockroaches, ants, mites, bugs, etc. Toxicity null (IFT report)</td> </tr> <tr> <td rowspan="9">Technical characteristics</td> <td>Composition</td> <td>Water dispersion, versatical terpolymere</td> </tr> <tr> <td>Aspect</td> <td>Decorative matt</td> </tr> <tr> <td>Application</td> <td>Brush, conventional roller, usual or airless spray gun</td> </tr> <tr> <td>Dilution</td> <td>With water. Cannot stand the frost</td> </tr> <tr> <td>Tint</td> <td>White (Universal tints [5% maxi])</td> </tr> <tr> <td>Spreading rate</td> <td>4 - 7 m²/kg</td> </tr> <tr> <td>Drying time</td> <td>Rapid</td> </tr> <tr> <td>Density</td> <td>1.51</td> </tr> <tr> <td>French association of standardization</td> <td>(T 30 003) Family 1. Class 7B 2</td> </tr> </table> <p><i>Per square metre</i></p>	The paint on drying forms a layer of "contact insecticide" crystals which disable the natural movements of insects leading to eventual death. The paint that kills cockroaches, houseflies, housedust mites and mosquitoes and uses on interior and exterior surfaces such as concrete, void deck, woodwork, plaster, stucco, softboards, hardboards and asbestos by rush, roller, conventional or airless spray. The paint is touch dry after one hour and the painted surface remains effective for 1 year under normal condition. If the painted surface is covered with dirt or dust, it is recommended to wash with water to restore full insecticidal action.		Type	Matt acrylic for interior	Uses	Various uses decoration for interior	Properties	Insecticide action of contact, permanent for several years. Destruction by contact : mosquitoes, spiders, flies, cockroaches, ants, mites, bugs, etc. Toxicity null (IFT report)	Technical characteristics	Composition	Water dispersion, versatical terpolymere	Aspect	Decorative matt	Application	Brush, conventional roller, usual or airless spray gun	Dilution	With water. Cannot stand the frost	Tint	White (Universal tints [5% maxi])	Spreading rate	4 - 7 m ² /kg	Drying time	Rapid	Density	1.51	French association of standardization	(T 30 003) Family 1. Class 7B 2	A \$	B \$	
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15229	Proprietary vinyicide insecticide functional coating system to plastered walls and soffits.....	69.30	71.70	15229																											

Item	PROPRIETARY PAINTING (CONT'D)			Item																																																																																
	A proprietary polyurethane enamel textured coating system complying with the following test results and criteria :																																																																																			
	<p>On the well-prepared wall and ceiling surface, apply the tile filler (special cationic latex cement based filler) by brush and second coat by trowel to get a smooth surface, if necessary. Apply one coat of sealer (specified modified resin water based primer) by roller, one coat of texture coating (acrylic urethane resin water based texture coat) by roller / spray, two coats of polyurethane coloured top coat (durable acrylic urethane resin water based coating) by roller. The chemical reactive curing type polyurethane resin coating which possesses unique water-based cross-linking technology to provide multifunction and excellent weather resistance on concrete, cement mortar, PC panel, ALC panel, GRC panel, asbestos slate, siding boards, concrete blocks and various types of old film.</p> <p>The acrylic urethane resin possesses cross-linked film to achieve superb resistance to various weather conditions and keeps building in original condition for a long time. The network of inner cross-linking resin forms the anti-pollution film. The contains specific anti-microbial agent to prevent the growth of microbes and maintains hygienic environment. No mixing is required and the water based resin contains no harmful organic solvent prevent the risk of fire and the release of odour.</p> <table border="1"> <thead> <tr> <th>Test item</th> <th>Tested to</th> <th>Result</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>VOC content</td> <td></td> <td>46 g/litre</td> <td>According to EPD requirement</td> </tr> <tr> <td>Condition in container</td> <td>JIS 5660</td> <td>Passed</td> <td>Uniform condition without hard lumps when mixed.</td> </tr> <tr> <td>Low temperature stability</td> <td>JIS 5660</td> <td>Passed</td> <td>No deterioration</td> </tr> <tr> <td>Application properties</td> <td>JIS 5660</td> <td>Passed</td> <td>No application difficulties when applied twice.</td> </tr> <tr> <td>Drying time</td> <td>JIS 5660</td> <td>Passed</td> <td>2 hours or less at 20°C</td> </tr> <tr> <td></td> <td>JIS 5660</td> <td>Passed</td> <td>4 hours or less at 5°C</td> </tr> <tr> <td>Appearance of film</td> <td>JIS 5660</td> <td>Passed</td> <td>Film has normal appearance</td> </tr> <tr> <td>Opacity (white and tint)</td> <td>JIS 5660</td> <td>0.98</td> <td>0.95 or more</td> </tr> <tr> <td>Gloss</td> <td>JIS 5660</td> <td>82</td> <td>70 or more</td> </tr> <tr> <td>Water resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>More than 80% gloss retention after 96 hours immersion ; no abnormalities on the film surface.</td> </tr> <tr> <td>Alkali resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>More than 65% gloss retention after 7 days immersion ; no abnormalities on the film surface.</td> </tr> <tr> <td>Salt water resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>168 hours immersed in 3% sodium chloride solution</td> </tr> <tr> <td>Wet scrub resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>Must pass 1,000 cycles</td> </tr> <tr> <td>Humidity and cool-heat cycling resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>More than 80% gloss retention; no abnormalities on the film surface.</td> </tr> <tr> <td>Fungus and mould resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>Based on JIS Z 2911</td> </tr> <tr> <td>Accelerated weather resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>More than 60% gloss retention after 480 hours test ; degree of chalking is 8 points or more ; negligible change in colour when compared to sample.</td> </tr> <tr> <td>Weather resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>Degree of chalking is 6 points or more under 12 months test ; no cracking, swelling, holes, blistering ; negligible change in colour and gloss when compared to sample.</td> </tr> </tbody> </table>			Test item	Tested to	Result	Criterion	VOC content		46 g/litre	According to EPD requirement	Condition in container	JIS 5660	Passed	Uniform condition without hard lumps when mixed.	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Item	PROPRIETARY PAINTING (CONT'D)	Prepare and apply		Item																																																						
	Proprietary vermiculite acoustic spray coating system complying with the following test results and regulations :	New surfaces	Redeco-ration																																																							
	<p>On the well-prepared wall and ceiling surface, apply one coat of water-based sealer (specified modified resin water based primer) by roller / spray, two-three coats of ceiling coating (vermiculite-type ceiling spray coating, acrylic resin emulsion and lightweight aggregates, water borne inorganic polymer bonding material) by spray in thickness approximately 2.5 -3 mm. The vermiculite-type ceiling acoustic spray coating based on specific acrylic resin emulsion as vehicle combined with lightweight aggregates, water borne inorganic polymer bonding material on concrete, mortar, bricks, PC boards, ALC boards, gypsum plaster boards and asbestos boards. The coating provides sound absorption ; alkali, fire & heat resistance ; non-combustible and performs humidity control with the following technical data :</p> <table border="1"> <tr> <td>Finish</td> <td>Matt</td> </tr> <tr> <td>Specific gravity</td> <td>1.22 ± 0.05</td> </tr> <tr> <td>Drying time (at 30°C)</td> <td>Surface dry 6 hours Hard dry 24 hours</td> </tr> <tr> <td>Shelf life</td> <td>Up to 6 months if stored I tightly sealed containers</td> </tr> <tr> <td>Film thickness</td> <td>Depending on the thickness of texture desired</td> </tr> <tr> <td>Solid content</td> <td>44 ± 3%</td> </tr> <tr> <td>Viscosity</td> <td>55 ± 5 ps / 30°C</td> </tr> <tr> <th>Test item</th> <th>Tested to</th> <th colspan="2">Result</th> <th>Regulations</th> </tr> <tr> <td></td> <td></td> <th>Clear type</th> <th>Coloured type</th> <td></td> </tr> <tr> <td>Alkali resistance Method C</td> <td>JIS A 6906</td> <td>Passed</td> <td>Passed</td> <td>There shall be free from cracking, blister and peeling</td> </tr> <tr> <td>Anti-condensation</td> <td>JIS A 6906</td> <td>0.34 g</td> <td>0.36 g</td> <td>0.25 g minimum</td> </tr> <tr> <td>Humidity resistance Method B</td> <td>JIS A 6906</td> <td>Passed</td> <td>Passed</td> <td>There shall be free from cracking, blister and peeling.</td> </tr> <tr> <td>Adhesive strength</td> <td>JIS A 6906</td> <td>0.1 N/mm² {1.0 kgf/cm²}</td> <td>0.1 N/mm² {1.0 kgf/cm²}</td> <td>0.1 N/mm² {1.0 kgf/cm²} min. or no interfacial peeling (result : inside of substrate damaged)</td> </tr> <tr> <td>Bonding property of aggregate</td> <td>JIS A 6906</td> <td>Passed</td> <td>Passed</td> <td>Aggregate shall be free from peeling and scattering.</td> </tr> <tr> <td>Incombustibility</td> <td>JIS A 6906</td> <td>Passed</td> <td>Passed</td> <td>It shall the first grade in incombustibility of surface test.</td> </tr> </table> <p><i>Per square metre</i></p>	Finish	Matt	Specific gravity	1.22 ± 0.05	Drying time (at 30°C)	Surface dry 6 hours Hard dry 24 hours	Shelf life	Up to 6 months if stored I tightly sealed containers	Film thickness	Depending on the thickness of texture desired	Solid content	44 ± 3%	Viscosity	55 ± 5 ps / 30°C	Test item	Tested to	Result		Regulations			Clear type	Coloured type		Alkali resistance Method C	JIS A 6906	Passed	Passed	There shall be free from cracking, blister and peeling	Anti-condensation	JIS A 6906	0.34 g	0.36 g	0.25 g minimum	Humidity resistance Method B	JIS A 6906	Passed	Passed	There shall be free from cracking, blister and peeling.	Adhesive strength	JIS A 6906	0.1 N/mm ² {1.0 kgf/cm ² }	0.1 N/mm ² {1.0 kgf/cm ² }	0.1 N/mm ² {1.0 kgf/cm ² } min. or no interfacial peeling (result : inside of substrate damaged)	Bonding property of aggregate	JIS A 6906	Passed	Passed	Aggregate shall be free from peeling and scattering.	Incombustibility	JIS A 6906	Passed	Passed	It shall the first grade in incombustibility of surface test.	A \$	B \$	
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Elongation	JIS A 6909	At 20°C 392%	Over 120%																																																																					
	JIS A 6909	At -10°C 25%	Over 20%																																																																					
	JIS A 6909	After immersion in water 314%	Over 100%																																																																					
	JIS A 6909	After heating 2.68	Over 100%																																																																					
Fungus and mould resistance		Passed	Based on JIS Z 2911																																																																					
Algae resistance		Passed	Using agar, there shall be no alga appearing. Based on JIS Z 2911, immerse specimen into algae solution instead of fungus solution for 4 weeks																																																																					
Vapour permeability (g/m ² 24hrs)		123.00	Based on JIS Z 0208																																																																					
Following cracks		0.6 mm	Based on spantation. Apply material on srate board which has V cut on back side. After 1 week interval under normal condition, pull specimen from both (specific speed shall be : 1 mm/minute) until it will have pin hole. Records shall be taken in auto-graph.																																																																					
		\$	\$																																																																					
	<i>Per square metre</i>																																																																							
15233	Proprietary elastic acrylic silicon resin colour coating system to tiled wall surfaces including tile filler.....	145.00	150.80	15233																																																																				
15234	Ditto to plastered walls and soffits.....	90.90	99.00	15234																																																																				

Item	PROPRIETARY PAINTING (CONT'D)			Item																																																																																				
<p>Proprietary polyurethane coating system complying with the following test results and criteria :</p> <table border="1"> <tr> <td colspan="4"> On the well-prepared wall and ceiling surface, apply the tile filler (special cationic latex cement based filler) by brush and second coat by trowel to get a smooth surface, if necessary. Apply one coat of sealer (specified modified resin water based primer), one coat of texture coating (acrylic urethane resin water based texture coat), two coats of polyurethane coloured top coat (durable acrylic urethane resin water based coating) by roller. The chemical reactive curing type polyurethane resin coating which possesses unique water-based cross-linking technology to provide multifunction and excellent weather, fungus, mould and algae resistance on concrete, cement mortar, PC panel, ALC panel, GRC panel, asbestos slate, siding boards, concrete blocks and various types of old film. </td> </tr> <tr> <th>Test Item</th> <th>Tested to</th> <th>Result</th> <th>Criterion</th> </tr> <tr> <td>VOC content</td> <td></td> <td>46 g/litre</td> <td>According to EPD requirement</td> </tr> <tr> <td>Condition in container</td> <td>JIS 5660</td> <td>Passed</td> <td>Uniform condition without hard lumps when mixed.</td> </tr> <tr> <td>Low temperature stability (-5°C)</td> <td>JIS 5660</td> <td>Passed</td> <td>No deterioration</td> </tr> <tr> <td>Application properties</td> <td>JIS 5660</td> <td>Passed</td> <td>No application difficulties when applied twice.</td> </tr> <tr> <td rowspan="3">Drying time</td> <td>JIS 5660</td> <td>Passed</td> <td>2 hours or less at 20°C</td> </tr> <tr> <td>JIS 5660</td> <td>Passed</td> <td>4 hours or less at 5°C</td> </tr> <tr> <td>JIS 5660</td> <td>Passed</td> <td>Film has normal appearance</td> </tr> <tr> <td>Appearance of film</td> <td>JIS 5660</td> <td>Passed</td> <td>Film has normal appearance</td> </tr> <tr> <td>Opacity (white and tint)</td> <td>JIS 5660</td> <td>0.98</td> <td>0.95 or more</td> </tr> <tr> <td>Gloss</td> <td>JIS 5660</td> <td>82</td> <td>70 or more</td> </tr> <tr> <td>Water resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>More than 80% gloss retention after 96 hours immersion ; no abnormalities on the film surface.</td> </tr> <tr> <td>Alkali resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>More than 65% gloss retention after 7 days immersion ; no abnormalities on the film surface.</td> </tr> <tr> <td>Salt water resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>168 hours immersed in 3% sodium chloride solution</td> </tr> <tr> <td>Wet scrub resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>Must pass 1,000 cycles</td> </tr> <tr> <td>Humidity and cool-heat cycling resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>More than 80% gloss retention ; no abnormalities on the film surface.</td> </tr> <tr> <td>Accelerated weather resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>More than 60% gloss retention after 480 hours test ; degree of chalking is 8 points or more ; negligible change in colour when compared to sample.</td> </tr> <tr> <td>Weather resistance</td> <td>JIS 5660</td> <td>Passed</td> <td>Degree of chalking is 6 points or more under 12 months test ; no cracking, swelling, holes, blistering ; negligible change in colour and gloss when compared to sample.</td> </tr> </table>	On the well-prepared wall and ceiling surface, apply the tile filler (special cationic latex cement based filler) by brush and second coat by trowel to get a smooth surface, if necessary. 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Drying time	JIS 5660	Passed	2 hours or less at 20°C	JIS 5660	Passed	4 hours or less at 5°C	JIS 5660	Passed	Film has normal appearance	Appearance of film	JIS 5660	Passed	Film has normal appearance	Opacity (white and tint)	JIS 5660	0.98	0.95 or more	Gloss	JIS 5660	82	70 or more	Water resistance	JIS 5660	Passed	More than 80% gloss retention after 96 hours immersion ; no abnormalities on the film surface.	Alkali resistance	JIS 5660	Passed	More than 65% gloss retention after 7 days immersion ; no abnormalities on the film surface.	Salt water resistance	JIS 5660	Passed	168 hours immersed in 3% sodium chloride solution	Wet scrub resistance	JIS 5660	Passed	Must pass 1,000 cycles	Humidity and cool-heat cycling resistance	JIS 5660	Passed	More than 80% gloss retention ; no abnormalities on the film surface.	Accelerated weather resistance	JIS 5660	Passed	More than 60% gloss retention after 480 hours test ; degree of chalking is 8 points or more ; negligible change in colour when compared to sample.	Weather resistance	JIS 5660	Passed	Degree of chalking is 6 points or more under 12 months test ; no cracking, swelling, holes, blistering ; negligible change in colour and gloss when compared to sample.	<table border="1"> <thead> <tr> <th colspan="2">Prepare and apply</th> </tr> <tr> <th>New surfaces</th> <th>Redeco-ration</th> </tr> <tr> <td>A</td> <td>B</td> </tr> <tr> <td>\$</td> <td>\$</td> </tr> </thead> <tbody> <tr> <td>173.50</td> <td>179.30</td> </tr> <tr> <td>121.20</td> <td>129.30</td> </tr> </tbody> </table>	Prepare and apply		New surfaces	Redeco-ration	A	B	\$	\$	173.50	179.30	121.20	129.30	<p>15235</p> <p>15236</p>
On the well-prepared wall and ceiling surface, apply the tile filler (special cationic latex cement based filler) by brush and second coat by trowel to get a smooth surface, if necessary. Apply one coat of sealer (specified modified resin water based primer), one coat of texture coating (acrylic urethane resin water based texture coat), two coats of polyurethane coloured top coat (durable acrylic urethane resin water based coating) by roller. The chemical reactive curing type polyurethane resin coating which possesses unique water-based cross-linking technology to provide multifunction and excellent weather, fungus, mould and algae resistance on concrete, cement mortar, PC panel, ALC panel, GRC panel, asbestos slate, siding boards, concrete blocks and various types of old film.																																																																																								
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15235	Proprietary polyurethane orange peel coating system to tiled wall surfaces including tile filler.....	173.50	179.30	15235																																																																																				
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Item	PROPRIETARY PAINTING (CONT'D)	Prepare and apply		Item																																								
	Proprietary spray-on granite coating system complying with the following test results and criteria :	New surfaces	Redeco-ration																																									
	<p>On the well-prepared wall and ceiling surface, apply the tile filler (special cationic latex cement based filler) by brush and second coat by trowel to get a smooth surface, if necessary. Apply one coat of sealer (specified modified resin water based primer) by roller, one coat of spray on granite coating (high build water based acrylic resin granite-like coating) by roller / spray, two coats of transparent protective coating (high build durable silicon resin water based transparent protective top coat) by roller/spray. The acrylic resin water based texture coating incorporating artificial stone chips / colours to form granite-like finishing on concrete, mortar, masonry, surfaces, soft and hard boards, wood, gypsum plaster board and metal surfaces to provide hard texture to resist abrasion and scratch and with excellent weather resistance and prevent discoloration.</p> <table border="1"> <thead> <tr> <th>Test item</th> <th>Tested to</th> <th>Result</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>VOC content</td> <td></td> <td>73 g/litre</td> <td>According to EPD requirement</td> </tr> <tr> <td>Finish</td> <td></td> <td></td> <td>Matt / semi-gloss</td> </tr> <tr> <td>Condition in container</td> <td>JIS K 5660</td> <td>Passed</td> <td>The material shall be uniform without any lump when stirred.</td> </tr> <tr> <td>Work ability</td> <td>JIS K 5660</td> <td>Passed</td> <td>There shall be no problem in application</td> </tr> <tr> <td>Drying time</td> <td>JIS K 5660</td> <td>Passed</td> <td>Within 24 hours</td> </tr> <tr> <td>Water resistance</td> <td>JIS K 5660</td> <td>Passed</td> <td>There shall be no abnormality after immersion in water for 96 hours.</td> </tr> <tr> <td>Alkali resistance</td> <td>JIS K 5660</td> <td>Passed</td> <td>There shall be no abnormality after immersion in water for 48 hours.</td> </tr> <tr> <td>Wet scrub resistance</td> <td>JIS K 5660</td> <td>Passed</td> <td>There shall be no damage after scrubbing the surface 300 times.</td> </tr> <tr> <td>Weather resistance</td> <td>JIS K 5660</td> <td>Passed</td> <td>After 12 month test degree of whitening is 4 points or more and there shall be no peeling and degree of cracking and colour change shall be not more than sample.</td> </tr> </tbody> </table>	Test item	Tested to	Result	Criterion	VOC content		73 g/litre	According to EPD requirement	Finish			Matt / semi-gloss	Condition in container	JIS K 5660	Passed	The material shall be uniform without any lump when stirred.	Work ability	JIS K 5660	Passed	There shall be no problem in application	Drying time	JIS K 5660	Passed	Within 24 hours	Water resistance	JIS K 5660	Passed	There shall be no abnormality after immersion in water for 96 hours.	Alkali resistance	JIS K 5660	Passed	There shall be no abnormality after immersion in water for 48 hours.	Wet scrub resistance	JIS K 5660	Passed	There shall be no damage after scrubbing the surface 300 times.	Weather resistance	JIS K 5660	Passed	After 12 month test degree of whitening is 4 points or more and there shall be no peeling and degree of cracking and colour change shall be not more than sample.	A	B	
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15237	Proprietary spray-on granite coating system to tiled wall surfaces including tile filler.....	419.60	425.40	15237																																								
15238	Ditto to plastered walls and soffits.....	365.20	373.40	15238																																								

Item	PROPRIETARY PAINTING (CONT'D)	Prepare and apply		Item																																																																																
	Proprietary fluorine-contained resin coating system complying with the following test results and criteria :	New surfaces	Redeco-ration																																																																																	
	On the well-prepared wall and ceiling surface, apply the tile filler (special cationic latex cement based filler) by brush and second coat by trowel to get a smooth surface, if necessary. Apply one coat of sealer (specified modified resin water based primer) by roller, one coat of texture coating (acrylic resin water based texture coat) by spray / M-9 roller to form the texture, one coat of mid coat (strong bond strength, spiral & '3F' fluoro-carbon molecular structure undercoat) by roller, and one coat of coloured top-coat (strong bond strength, spiral & '3F' fluoro-carbon molecular structure Top-coat) by roller. The strong bond strength, spiral structure and the '3F' fluoro-carbon molecules allow the coating system to stand against the attack of UV (ultraviolet ray) and weathering. The coating system provides easy-clean function; weather, heat, salt and antimicrobial resistance; resists ultraviolet ray to prevent discolouration.	A	B																																																																																	
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The gloss retention ratio is over 80% and there is no change in the paint film.</td> </tr> <tr> <td>Alkali resistance</td> <td>JIS K 5660</td> <td>Passed</td> <td>Immersion in alkali for 7 days. Gloss retention ratio is over 65% and there is no change in the paint film.</td> </tr> <tr> <td>Wash ability</td> <td>JIS K 5660</td> <td>Passed</td> <td>Possible to resist washing for 1,000 times.</td> </tr> <tr> <td>Salt resistance</td> <td>JIS K 5660</td> <td>Passed</td> <td>JIS K 5400 8.23 for 3,000 hours. No damage observed on the dense film.</td> </tr> <tr> <td>Heat resistance</td> <td>JIS K 5660</td> <td>Passed</td> <td>The gloss retention is over 80% and possible to resist the repetition of heat and cold.</td> </tr> <tr> <td>Dirt resistance</td> <td>JIS K 5660</td> <td>5.00</td> <td>Value of grey scale after outdoor exposure test for 1 year. 5 (max. value) 1 (min. value)</td> </tr> <tr> <td>Accelerated weather test</td> <td>JIS K 5660</td> <td>Passed</td> <td>Tested by sunshine carbon arc type weather-o-meter for 2,000h and gloss retention ratio is over 80%.</td> </tr> <tr> <td>Condition in container</td> <td></td> <td>Passed</td> <td>When being stirred, it makes uniform condition without any hard lumps. Based on JIS L0805 for grey scale pollution level test with JIS K5660 6.16 methods. Compare test specimen with model sample after 12 month outside exposure.</td> </tr> <tr> <td>Application properties</td> <td>JIS A 6909</td> <td>Passed</td> <td>When making twice coating, no impediment for brushing work.</td> </tr> <tr> <td>Humidity and cool-heat cycling resistance</td> <td>JIS K 5660</td> <td>Passed</td> <td>Gloss retention of 80% or more and endurable for humidity and cool-heat cycling test.</td> </tr> <tr> <td>Water permeability (Test method B) (ml)</td> <td></td> <td>0.0</td> <td>(Shall be less than 0.5) JIS A 6909. Measure the amount of water permeated through the paint film of unit area per definite time by using a water permeating tester. In this testing method, measure the permeated water amount in 24 hours by using a water-permeating tester, and take the value of permeated water amount converted to per 1m² of paint film as the water permeability of the paint film.</td> </tr> </table>	Test Items	Tested to	Result	Test method	VOC content		67 g/litre	According to EPD requirement	Storage stability	JIS K 5660	Passed	When the material is mixed, no lumps are found.	Stability at lower temperature (-5°C)	JIS K 5660	Passed	There is no change in quality.	Work ability	JIS K 5660	Passed	There is no obstacle to apply materials twice by brush.	Drying time	JIS K 5660	Passed	Less than 2 hours at 20°C	Appearance	JIS K 5660	Passed	There is no change in the appearance of paint film.	Hiding ability	JIS K 5660	0.98	Over 0.96	Specular gloss	JIS K 5660	80.00	Over 70	Water resistance	JIS K 5660	Passed	Immersion in water for 96 hours. The gloss retention ratio is over 80% and there is no change in the paint film.	Alkali resistance	JIS K 5660	Passed	Immersion in alkali for 7 days. Gloss retention ratio is over 65% and there is no change in the paint film.	Wash ability	JIS K 5660	Passed	Possible to resist washing for 1,000 times.	Salt resistance	JIS K 5660	Passed	JIS K 5400 8.23 for 3,000 hours. No damage observed on the dense film.	Heat resistance	JIS K 5660	Passed	The gloss retention is over 80% and possible to resist the repetition of heat and cold.	Dirt resistance	JIS K 5660	5.00	Value of grey scale after outdoor exposure test for 1 year. 5 (max. value) 1 (min. value)	Accelerated weather test	JIS K 5660	Passed	Tested by sunshine carbon arc type weather-o-meter for 2,000h and gloss retention ratio is over 80%.	Condition in container		Passed	When being stirred, it makes uniform condition without any hard lumps. Based on JIS L0805 for grey scale pollution level test with JIS K5660 6.16 methods. Compare test specimen with model sample after 12 month outside exposure.	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Stability at lower temperature (-5°C)	JIS K 5660	Passed	There is no change in quality.																																																																																	
Work ability	JIS K 5660	Passed	There is no obstacle to apply materials twice by brush.																																																																																	
Drying time	JIS K 5660	Passed	Less than 2 hours at 20°C																																																																																	
Appearance	JIS K 5660	Passed	There is no change in the appearance of paint film.																																																																																	
Hiding ability	JIS K 5660	0.98	Over 0.96																																																																																	
Specular gloss	JIS K 5660	80.00	Over 70																																																																																	
Water resistance	JIS K 5660	Passed	Immersion in water for 96 hours. The gloss retention ratio is over 80% and there is no change in the paint film.																																																																																	
Alkali resistance	JIS K 5660	Passed	Immersion in alkali for 7 days. Gloss retention ratio is over 65% and there is no change in the paint film.																																																																																	
Wash ability	JIS K 5660	Passed	Possible to resist washing for 1,000 times.																																																																																	
Salt resistance	JIS K 5660	Passed	JIS K 5400 8.23 for 3,000 hours. No damage observed on the dense film.																																																																																	
Heat resistance	JIS K 5660	Passed	The gloss retention is over 80% and possible to resist the repetition of heat and cold.																																																																																	
Dirt resistance	JIS K 5660	5.00	Value of grey scale after outdoor exposure test for 1 year. 5 (max. value) 1 (min. value)																																																																																	
Accelerated weather test	JIS K 5660	Passed	Tested by sunshine carbon arc type weather-o-meter for 2,000h and gloss retention ratio is over 80%.																																																																																	
Condition in container		Passed	When being stirred, it makes uniform condition without any hard lumps. Based on JIS L0805 for grey scale pollution level test with JIS K5660 6.16 methods. Compare test specimen with model sample after 12 month outside exposure.																																																																																	
Application properties	JIS A 6909	Passed	When making twice coating, no impediment for brushing work.																																																																																	
Humidity and cool-heat cycling resistance	JIS K 5660	Passed	Gloss retention of 80% or more and endurable for humidity and cool-heat cycling test.																																																																																	
Water permeability (Test method B) (ml)		0.0	(Shall be less than 0.5) JIS A 6909. Measure the amount of water permeated through the paint film of unit area per definite time by using a water permeating tester. In this testing method, measure the permeated water amount in 24 hours by using a water-permeating tester, and take the value of permeated water amount converted to per 1m ² of paint film as the water permeability of the paint film.																																																																																	
	<i>Per square metre</i>																																																																																			
15239	Proprietary fluorine-contained resin coating system to tiled wall surfaces including tile filler.....	397.30	385.10	15239																																																																																
15240	Ditto to plastered walls and soffits.....	319.10	327.30	15240																																																																																

Item	PROPRIETARY PAINTING (CONT'D)	Prepare and apply		Item																								
		New surfaces	Redeco-ration																									
	Proprietary elastomeric waterproofing coating system comprising of 0-3 coats tile filler + 1 coat primer + 2 coats topcoats as follows :																											
	<table border="1"> <tr> <td>Tile filler</td> <td>Elastomeric primer / filler consists of silicate, curing agent, fillers and additives and complies with the R type of the national putty standard JG/T157-2004. It has good anti-cracking property, strong and long lasting adhesion to the substrate and good resistance to water and alkali.</td> <td>A \$</td> <td>B \$</td> </tr> <tr> <td>Primer (Type 1)</td> <td>Physically drying solvent borne acrylic based sealer with good resistance to water and alkali. It has good adhesion to the substrate and excellent layer adhesion when solvent-borne or water borne decorative finishes is used as a subsequent coating.</td> <td></td> <td></td> </tr> <tr> <td>Primer (Type 2)</td> <td>It consists of acrylic copolymer emulsion, pigments, fillers and additives. It has strong and constant penetration to the structure and excellent water and alkali resistance.</td> <td></td> <td></td> </tr> <tr> <td>Topcoat (Type 1)</td> <td>It consists of acrylic copolymer emulsion, pigments, fillers and additives. It has good hiding power and good light fastness. It forms an elastomeric waterproofing protective membrane finish on the wall with good resistance to fungus and algae growth when dried.</td> <td></td> <td></td> </tr> <tr> <td>Topcoat (Type 2)</td> <td>It consists of acrylic copolymer emulsion, pigments, fillers and additives. It has elastic property that can cover existing and future hairline cracks; excellent water-proofing property; excellent washability; and resistance to fungus and algae growth.</td> <td></td> <td></td> </tr> <tr> <td>Topcoat (Type 3)</td> <td>It consists of acrylic copolymer emulsion, pigments, fillers and additives. It has high elasticity that can cover existing and future hairline cracks; excellent water-proofing property; excellent washability; and resistance to fungus and algae growth.</td> <td></td> <td></td> </tr> </table>	Tile filler	Elastomeric primer / filler consists of silicate, curing agent, fillers and additives and complies with the R type of the national putty standard JG/T157-2004. It has good anti-cracking property, strong and long lasting adhesion to the substrate and good resistance to water and alkali.	A \$	B \$	Primer (Type 1)	Physically drying solvent borne acrylic based sealer with good resistance to water and alkali. It has good adhesion to the substrate and excellent layer adhesion when solvent-borne or water borne decorative finishes is used as a subsequent coating.			Primer (Type 2)	It consists of acrylic copolymer emulsion, pigments, fillers and additives. It has strong and constant penetration to the structure and excellent water and alkali resistance.			Topcoat (Type 1)	It consists of acrylic copolymer emulsion, pigments, fillers and additives. It has good hiding power and good light fastness. It forms an elastomeric waterproofing protective membrane finish on the wall with good resistance to fungus and algae growth when dried.			Topcoat (Type 2)	It consists of acrylic copolymer emulsion, pigments, fillers and additives. It has elastic property that can cover existing and future hairline cracks; excellent water-proofing property; excellent washability; and resistance to fungus and algae growth.			Topcoat (Type 3)	It consists of acrylic copolymer emulsion, pigments, fillers and additives. It has high elasticity that can cover existing and future hairline cracks; excellent water-proofing property; excellent washability; and resistance to fungus and algae growth.					
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	<i>Per square metre</i>																											
15241	Proprietary elastomeric waterproofing coating system to tiled wall surfaces including tile filler.....	232.40	237.30	15241																								
15242	Ditto to plastered walls and soffits.....	184.80	190.40	15242																								
	Proprietary waterproofing coating system complying with the following :																											
	<table border="1"> <tr> <td colspan="2">The coating system is a single component , water based, acrylic co-polymer waterproof membrane coating with exceptional resistance to weathering and CO₂. The top coat provide high opacity, durable protective, decorative coating, incorporating high quality pigmentation.</td> </tr> <tr> <td>Carbon dioxide transmission (Klopfer criterion R > 50 m)</td> <td>266 m</td> </tr> <tr> <td>Water vapour diffusion resistance (Klopfer criterion SD < 4 m)</td> <td>1.65 m</td> </tr> <tr> <td>Water permeability ASTM E514-7A</td> <td>Class E (Highest resistance to water penetration)</td> </tr> <tr> <td>Acoustic dampening : 500 micron sample on Lysaght "Custom Orb" 26 gauge thickness corrugated steel sheet</td> <td>Effective noise reduction : 2-7 dB</td> </tr> <tr> <td>Chemical resistance</td> <td>Unaffected by a range of mild acids, alkalis, and is resistant to bio-deterioration</td> </tr> </table>	The coating system is a single component , water based, acrylic co-polymer waterproof membrane coating with exceptional resistance to weathering and CO ₂ . The top coat provide high opacity, durable protective, decorative coating, incorporating high quality pigmentation.		Carbon dioxide transmission (Klopfer criterion R > 50 m)	266 m	Water vapour diffusion resistance (Klopfer criterion SD < 4 m)	1.65 m	Water permeability ASTM E514-7A	Class E (Highest resistance to water penetration)	Acoustic dampening : 500 micron sample on Lysaght "Custom Orb" 26 gauge thickness corrugated steel sheet	Effective noise reduction : 2-7 dB	Chemical resistance	Unaffected by a range of mild acids, alkalis, and is resistant to bio-deterioration															
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Chemical resistance	Unaffected by a range of mild acids, alkalis, and is resistant to bio-deterioration																											
	<i>Per square metre</i>																											
15243	Proprietary waterproofing coating system to tiled wall surfaces including tile filler.....	263.20	270.40	15243																								
15244	Ditto to plastered walls and soffits.....	198.10	205.90	15244																								

Item	PROPRIETARY PAINTING (CONT'D)		Item						
	Sundries : -								
	<i>Per square metre</i>	A \$							
15245	Supply and apply 2 coats proprietary tile filler to tiled surface including cleaning all dirt, dust and efflorescence on existing surface.....	75.10	15245						
	<i>Per linear metre</i>								
15246	Supply and apply proprietary pattern sticker in any width to the designated pattern as stipulated by Maintenance Surveyor, including setting out, fixing and removal.....	52.00	15246						
(Note:- The above Items 15245 to 15246 inclusive will only be paid for, if ordered by Maintenance Surveyor in writing.)									
PROPRIETARY PAINTWORK TO SPORT HALL FLOORING SYSTEM									
	Proprietary paintwork to sport hall flooring system all in accordance with the manufacturer's recommendations :	<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">Prepare and apply</th> </tr> <tr> <th>New surface</th> <th>Redecoration</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A \$</td> <td style="text-align: center;">B \$</td> </tr> </tbody> </table>		Prepare and apply		New surface	Redecoration	A \$	B \$
Prepare and apply									
New surface	Redecoration								
A \$	B \$								
	<i>Per square metre</i>								
15247	General surface.....	60.10 75.10	15247						
	Proprietary line marking to sport hall flooring system all in accordance with the manufacturer's recommendations :								
	<i>Per linear metre</i>								
15248	Line not exceeding 25 mm wide.....	34.50 43.10	15248						
15249	Ditto but 25 - 50 mm wide.....	40.50 50.60	15249						
15250	Ditto but 50 - 75 mm wide.....	45.10 56.40	15250						

Item	RE-ENAMEL PAINT ON SURFACE OF BATH TUB	Item																														
	Prepare and apply re-enamel paint on the following:-	A \$																														
	<i>Per number</i>																															
15251	Exposed surfaces of bath tub of any sizes and any type.....	881.40																														
	WRITING																															
	Mark out and paint the following letters, etc., in one or more thick coats of synthetic paint as necessary to obtain bold and solid result, free from brush marks or obliterate existing including scraping or stripping off letter and touching up paint to match general surface (in the case of repaint over or obliterate existing writing, not measurable if surrounding surface being re-painted) :-																															
	<i>Each</i>																															
15252	Letter, number, Chinese character, logo, symbol and the like, n.e. 25 mm high.....	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">Paint new</th> <th style="width: 33%;">Re-paint over existing</th> <th style="width: 33%;">Obliterate existing</th> </tr> <tr> <td>A \$</td> <td>B \$</td> <td>C \$</td> </tr> </thead> <tbody> <tr> <td>8.80</td> <td>10.00</td> <td>5.80</td> </tr> <tr> <td>7.20</td> <td>8.60</td> <td>9.30</td> </tr> <tr> <td>10.50</td> <td>12.10</td> <td>12.80</td> </tr> <tr> <td>14.50</td> <td>20.10</td> <td>14.00</td> </tr> <tr> <td>18.80</td> <td>21.30</td> <td>23.30</td> </tr> <tr> <td>13.50</td> <td>16.10</td> <td>15.10</td> </tr> <tr> <td>27.10</td> <td>32.20</td> <td>30.20</td> </tr> <tr> <td>40.60</td> <td>48.20</td> <td>58.20</td> </tr> </tbody> </table>	Paint new	Re-paint over existing	Obliterate existing	A \$	B \$	C \$	8.80	10.00	5.80	7.20	8.60	9.30	10.50	12.10	12.80	14.50	20.10	14.00	18.80	21.30	23.30	13.50	16.10	15.10	27.10	32.20	30.20	40.60	48.20	58.20
Paint new	Re-paint over existing	Obliterate existing																														
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14.50	20.10	14.00																														
18.80	21.30	23.30																														
13.50	16.10	15.10																														
27.10	32.20	30.20																														
40.60	48.20	58.20																														
15253	Ditto but 25 - 75 mm high.....	7.20																														
15254	Ditto but 75 - 150 mm high.....	10.50																														
15255	Ditto but 150 - 225 mm high.....	14.50																														
15256	Ditto but 225 - 300 mm high.....	18.80																														
15257	Index hand or arrow n.e. 300 mm long.....	13.50																														
15258	Ditto but 300 - 600 mm long.....	27.10																														
15259	Ditto but 600 - 900 mm long.....	40.60																														
	<i>Per linear metre</i>																															
15260	Line n.e. 25 mm wide.....	13.60																														
15261	Ditto but 25 - 50 mm wide.....	20.40																														
15262	Ditto but 50 - 75 mm wide.....	27.20																														
	Add to either of Items 15252 to 15262 inclusive for gold gilding in lieu of synthetic paint.....	300%																														

Item	PAPER HANGING				Item	
	Supply and fix approved wall paper : -	Plain fabric backed vinyl cloth	Textured vinyl cloth	Vinyl with paper backed		
	<i>Per square metre</i>	A \$	B \$	C \$		
15263	Wall paper to plastered surfaces.....	68.70	92.40	45.10	15263	
15264	Ditto but to gypsum plasterboard surfaces.....	68.00	92.40	40.60	15264	
15265	Ditto but to plywood surfaces.....	65.90	87.80	40.60	15265	
15266	Wall paper of self-adhesive type to plastered surfaces.....	72.80	110.90	40.60	15266	
15267	Ditto but to gypsum plasterboard surfaces.....	69.30	106.30	38.40	15267	
15268	Ditto but to plywood surfaces.....	69.30	106.30	38.40	15268	
15269	Hang only to plastered surfaces.....	29.10	29.10	29.10	15269	
15270	Ditto but to gypsum plasterboard surfaces.....	29.10	29.10	29.10	15270	
15271	Ditto but to plywood surfaces.....	26.80	26.80	26.80	15271	
15272	Hang only wall paper of self-adhesive type to plastered surfaces.....	23.30	23.30	23.30	15272	
15273	Ditto but to gypsum plasterboard surfaces.....	18.60	18.60	18.60	15273	
15274	Ditto but to plywood surfaces.....	18.60	18.60	18.60	15274	
	MISCELLANEOUS ITEMS					
	<i>Per square metre</i>				A \$	
15275	Completely strip off existing washable distemper, anti-mould washable distemper, plastic emulsion paint, anti-mould acrylic emulsion paint, textured emulsion paint, cement paint, textured cement paint, cold cure epoxy paint and polyurethane paint by scraping or other approved means				19.80	15275
15276	Completely strip off existing synthetic, metallic, heat resisting, polyurethane or similar type of paint or varnish (any number of coats) or lacquer on any surface by scraping combined with burning off, or using chemical solvents if necessary, and leaving surface bare and clean, including washing down with neutralising solution if chemical solvents have been used				23.30	15276
15277	Completely strip off existing wall paper by scraping or other approved means (not measurable if backing being removed in the same operation).....				11.60	15277
15278	Extra over painting of any description for applying first or any subsequent coat by means of electrical or petrol driven compressed spraying plant, including all masking, etc., when specifically ordered in writing				2.30	15278
	(This item will not be paid for, if requested by the Contractor and is permitted, to execute painting by spraying.)					
15279	Stipple last coat of paint of any description on any surface when specifically ordered in writing.....				16.30	15279
15280	Frost glass with one coat of paint to imitate ground glass (glazing bars not deducted).....				23.30	15280
15281	Wash down new or existing surface with anti-mould liquid before decorating or re-decorating.....				8.10	15281
15282	Prepare new or existing wall or ceiling surface and apply one liberal coat of silicone water repellent liquid.....				38.30	15282
15283	Ditto but two coats ditto.....				58.10	15283

Item	SUNDRY CLEANING AND SEALING ITEMS		Item
	(Note : - The following Items 15284 to 15301 inclusive shall only be paid for, if ordered by the Maintenance Surveyor in writing. Normal cleaning up and removal of paint stains, etc., after execution of decoration or any other work, have been allowed for in the rates throughout this Schedule.)	A \$	
	<i>Per square metre</i>		
15284	Thoroughly scrub and wash down surfaces of Shanghai plaster in any position with stiff hard bristle brushes and detergent in hot or cold water, and rinse down with fresh water and leave clean and free from dirt, stains and the like	9.30	15284
15285	Scrub clean existing terrazzo or rubbed granolithic paving, covering, skirting, etc., in any position with non-caustic fine scouring powder and water, and rinse down with fresh water	16.30	15285
15286	Add to Item 15285 for rubbing with carborundum blocks.....	58.20	15286
15287	Apply one coat of wax emulsion to surfaces of terrazzo or rubbed granolithic after cleaning.....	11.60	15287
15288	Clean surfaces of thermo-plastic, vinyl, cork and similar flooring with detergent in water including scrubbing with soft bristle brushes if necessary, and mopping over surface with damp mop afterwards	4.70	15288
15289	Apply one coat of wax emulsion to surfaces of thermo-plastic, vinyl, cork and similar flooring after cleaning, and buff up.....	3.50	15289
15290	Sweep surface of cork flooring clean and apply two coats of approved sealer.....	9.30	15290
15291	Scrub and clean surfaces of glazed or mosaic wall or floor tiling with solution of warm water and 10% hydrochloric or oxalic acid, and rinse with fresh water.....	5.80	15291
15292	Scrub and clean surfaces of vitreous or glass mosaic tiles in any position with approved cleaning solution and rinse down with fresh water.....	7.00	15292
15293	Clean down synthetic painted or varnished surfaces with soft soap or suitable detergent and water, with admixture of disinfectant if required, and dry off with wash leather.....	7.00	15293
15294	Clean down external painted surface with high pressure water jets.....	9.30	15294
15295	Clean stonework or Shanghai plaster in any position with approved chemical stone cleaning solution and thoroughly wash off with fresh water applied by high pressure water jets.....	11.60	15295
15296	Seal cleaned stonework or Shanghai plaster with approved chemical stone sealer and thoroughly wash off surplus with fresh water applied by high pressure water jets.....	15.10	15296
15297	Clean off letters, Chinese characters, etc., painted on stone, plastered or similar surfaces in synthetic paint, marking paint, tar and the like with approved chemical cleaner including scrubbing and scraping as necessary, and thoroughly washing off with fresh water applied by high pressure water jets.....	58.20	15297
	<i>Each</i>		
15298	Thoroughly scrub and clean existing W.C. pan and cistern, urinal stall, lavatory basin, sink and the like with spirits of salts and hot water.....	23.30	15298
15299	Empty galvanized steel, concrete water cistern, cylinder or tank or fibreglass tanks n.e. 1.00 m ³ internal volume, scrape or brush off internally and remove all growth, rust, scale, etc., from bottom, sides and top, scrub out and clean with chloride of lime solution (less than 1 kg chloride of lime to 6,000 litre of water) and thoroughly flush and wash through with fresh water	46.50	15299
15300	Ditto but 1.00 - 2.00 m ³	58.20	15300
15301	Add to Item 15300 for each additional 1.00 m ³	38.40	15301

Item	SUPPLY ONLY OF MATERIALS		Item
	<i>Per litre</i>	A \$	
15302	Emulsion paint.....	50.20	15302
15303	Textured emulsion paint.....	52.80	15303
15304	Cold cured epoxy paint (coloured) (Two pack type).....	85.90	15304
15305	External textured paint.....	50.20	15305
15306	Anti-mould acrylic emulsion paint.....	63.30	15306
15307	Multi-colour paint - Primer.....	74.30	15307
15308	Ditto - binder.....	82.10	15308
15309	Ditto - Finishing coat.....	169.00	15309
15310	Synthetic paint - Undercoat.....	46.50	15310
15311	Ditto - Gloss finishing coat.....	51.10	15311
15312	Metallic paint - Aluminium bright finish.....	97.90	15312
15313	Ditto - Copper alloy bronze finish.....	97.90	15313
15314	Non-toxic paint.....	117.90	15314
15315	Polyurethane paint (coloured) (Two pack type).....	109.30	15315
15316	Polyurethane paint (clear) (Ditto).....	109.30	15316
	<i>Per square metre</i>		
15317	Wall paper - Plain fabric backed vinyl cloth.....	46.20	15317
15318	Ditto - Plain fabric backed vinyl cloth of self-adhesive type.....	52.00	15318
15319	Ditto - Textured vinyl cloth.....	57.80	15319
15320	Ditto - Textured vinyl cloth of self-adhesive type.....	115.50	15320
15321	Ditto - Vinyl with paper backed.....	20.20	15321
15322	Ditto - Vinyl with paper backed of self-adhesive type.....	23.10	15322

Section 16

DRAINAGE AND CABLE DUCT

DRAINAGE AND CABLE DUCT

SPECIAL CONDITIONS

Measurement of excavation	I.	Unless specifically included in the items under this Section, all excavation will be measured separately and paid for at the appropriate rates under Section 01 - Excavation of this Schedule.
Measurement of granular bedding for drain pipes	II.	The measurement shall be the compacted thickness as specified by the Maintenance Surveyor, whether laid in one or more layers. No deduction shall be made for voids not exceeding 1.00 m ³ .
Measurement of concrete filling	III.	Unless specifically included in the items under this Section, all concrete filling will be measured separately and paid for at the appropriate rates under Section 02 - Concrete Work of this Schedule.
Measurement of reinforcement	IV.	Unless specifically included in the items under this Section, all steel reinforcement and joist will be measured separately and paid for at the appropriate rates under Section 02 - Concrete Work and Section 10 - Steel and Metal Work of this Schedule.
Measurement of formwork	V.	Formwork shall be measured as the actual surface in contact with concrete. No deduction shall be made for openings not exceeding 1.00 m ² . Boxing for opening exceeding 1.00 m ² shall be measured as edges. Wrot formwork shall be measured only when a fair finished face to the concrete is specifically ordered by the Maintenance Surveyor in writing.
Measurement of pipes	VI.	All drain pipes and cable duct pipes shall be measured net as laid or fixed over all fittings.
Measurement of fittings	VII.	Fittings shall be measured as "Extra over" the pipe runs. Taper bends and junctions with diminishing branches shall be measured as the size of the largest end. Fittings shall be identified the largest diameter.
Measurement of cut into pipes	VIII.	Measurement of "Cut into pipes" shall only be measured when forming new junctions at existing drains.
Measurement of manholes, cesspits, etc.	IX.	Manholes, cesspits, etc. shall be measured net as cast. No deduction shall be made for : - (a) Voids not exceeding 0.05 m ³ . (b) The volume of reinforcement, steel joist and the like. (c) Openings in walls, cover slabs and the like not exceeding 0.10 m ² .
Measurement of precast concrete	X.	Precast concrete shall be measured the actual size of the item casted. Any plasterwork shall be excluded in the measurement and it will be measured separately and paid for at the appropriate rates under applicable Work Sections of this Schedule.

SPECIAL CONDITIONS (CONT'D)

- | | | |
|-------|--|--|
| XI. | Internal lining to leaking buried water-carrying services shall be measured the number of the net length of pipes over all fittings and joints not exceeding 2500 mm long. Length exceeding 2500 mm shall be measured the net length of pipes over all fittings and joints. The material and length of internal lining shall be submitted for the Maintenance Surveyor's approval before formal application. | Measurement of internal lining to leaking buried water-carrying services |
| XII. | Measurement of utilities survey of the buried/exposed existing underground utilities/services shall be the plan area within boundary as directed by the Maintenance Surveyor inclusive of all terrains and irregularities, etc. and measured flat. Measurement shall either be taken at the date of commencement or at the date of completion or both. | Measurement of utilities survey of the buried/exposed existing underground utilities/services |
| XIII. | Measurement of acoustic test for detection of leaking buried water pipes shall be the plan length within boundary as directed by the Maintenance Surveyor inclusive of all terrains and irregularities, etc. and measured flat. Measurement shall either be taken at the date of commencement or at the date of completion or both. | Measurement of acoustic test for detection of leaking buried water pipes |
| XIV. | The rates for concrete beds, haunchings and surrounds to pipes shall include for : -

(a) Providing and laying a layer of polythene sheeting or concrete blinding on the bottom of trenches before concreting.

(b) All necessary formwork and falsework.

(c) Forming flexible joints including joint filler.

(d) All necessary precast concrete wedges, blocks or cradles or other approved pipe supports including compressible sheeting.

(e) Keeping concrete and pipes damp until backfilling placed. | Rates for concrete beds, haunchings and surrounds to pipes |
| XV. | The rates for granular beds shall include for : -

(a) Recycled or non-recycled granular bedding material to be clean, hard, durable, crushed rock or crushed concrete, broken stone, hard brick, concrete or other comparable hard insert approved by the Maintenance Surveyor.

(b) Compacting and trimming granular beds to correct gradient and shape under barrel and pipe sockets.

(c) Handling from temporary spoil heaps.

(d) Additional bulk of material required to allow for compaction and consolidation.

(e) Re-compacting and laying granular around pipes after testing. | Rates for granular beds |

SPECIAL CONDITIONS (CONT'D)

Rates for drain pipes

- XVI. The rates for all types of drain pipes shall include for : -
- (a) All short lengths and all cutting and waste including fitting with flanged ends for jointing.
 - (b) All jointing including provision of loose collars, loose sockets, connectors, flanged socket ends, flanged spigot ends and the like and jointing materials.
 - (c) Provision and fixing of all holderbats required for pipes fixed to manhole sides and the like and making good.
 - (d) Building in ends of pipes to manhole sides and the like, jointing to channels and making good.
 - (e) Temporary sealing of pipes during the progress of the work.
 - (f) Testing as specified, remedying any defects and re-testing as necessary until the Maintenance Surveyor satisfies the test results.
 - (g) Cleaning out as G.S. Item 23.57.
 - (h) Provision of all information required by the Maintenance Surveyor for preparation of record drawings.

Rates for plastic pipes

- XVII. The rates for plastic pipes shall further include for all made bends.

Rates for pipe fittings

- XVIII. The rates for all types of pipe fittings shall include for : -
- (a) Additional cutting and waste on pipes and all extra joints.
 - (b) In the case of bends, bends of any angle.
 - (c) In the case of single and double junctions or branches, square or oblique connections with straight or curved offsets and all ends either equal or reducing.

Rates for traps and gullies of any type

- XIX. The rates for traps and gullies of any type shall include for : -
- (a) All necessary concrete bedding, cover and surrounds including formwork.
 - (b) Excavation, backfilling with suitable materials, compaction and removal of surplus excavated materials from Site.
 - (c) Building in ends of pipes to gully sides and the like.
 - (d) Connecting and jointing to drainage system.

SPECIAL CONDITIONS (CONT'D)

XX.	The rates for surface water channels or step channels shall include for : -	Rates for surface water channels or step channels
	(a) Excavation, backfilling with suitable filling materials, compaction and removal of surplus excavated materials from Site.	
	(b) All necessary formwork.	
	(c) Forming and including movement joints, angles, ends, intersections, junctions, outlets, rebates to receive channel covers and the like.	
	(d) Rendering all exposed surfaces with minimum 13 mm thick cement and sand (1:3) mortar.	
	(e) Providing and forming PVC weepholes, if required.	
	(f) Connecting and jointing to drainage system.	
XXI.	The rates for benching shall include for : -	Rates for benching
	(a) All necessary formwork.	
	(b) Forming main and branch channels as required including finishing to falls.	
	(c) Finishing smooth and marrying into structural sides with cement mortar (1:3).	
XXII.	The rates for sub-soil drain pipes shall further include for : -	Rates for sub-soil drain pipes
	(a) All pipe fittings, such as junctions, reducers, bends, plugs and the like.	
	(b) Forming holes in pipeline for junction if required.	
XXIII.	The rates for cable duct pipes shall include for : -	Rates for cable duct pipes
	(a) All short lengths and all cutting and waste.	
	(b) All jointing and jointing materials as required.	
	(c) Provision of nylon draw cord in each length of duct.	
	(d) Provision of all information required by the Maintenance Surveyor for preparation of record drawings.	
XXIV.	The rates for cut into pipes shall include for : -	Rates for cut into pipes
	(a) Making good to any length of pipe damaged in addition to the net length which has actually been removed, including providing new pipes and forming and including new joints.	
	(b) Maintaining the soil or waste flow by means of temporary channels or pipes whilst the work is in progress, including additional excavation or other related works.	
	(c) Making good ends of existing pipe including fitting flanged ends, if any.	
XXV.	The rates for clayware pipes shall further include for : -	Rates for clayware pipes
	(a) Providing extra strength "o" ring flexible spigot and socket joints.	

SPECIAL CONDITIONS (CONT'D)

Rates for cast iron channel covers

XXVI. The rates for cast iron channel covers shall include for : -

- (a) Multi-handling and placing in position.
- (b) All necessary cutting and waste.
- (c) Adjusting to suit channel alignment.

Rates for precast concrete channel covers

XXVII. The rates for precast concrete channel covers shall include for : -

- (a) Forming slots to channel covers.
- (b) Multi-handling and placing in position.
- (c) All necessary formwork.
- (d) All necessary cutting and waste.
- (e) Adjusting to suit channel alignment.

Rates for manholes, cesspits, etc.

XXVIII. The rates for manholes, cesspits, etc. shall include for : -

- (a) Tamping around reinforcement.
- (b) Rendering all internal surfaces with minimum 13 mm thick cement and sand (1:3) mortar.
- (c) Fair-faced finish internally as G.S. Item 6.72.
- (d) Testing of water tightness as G.S. Item 23.53.

Rates for formwork

XXIX. The rates for formwork shall include for : -

- (a) Submission of design on formwork and falsework, if any, including supports and foundations by a Registered Structural Engineer.
- (b) Erecting, maintaining and striking formwork and falsework.
- (c) Preventing loss of grout between joints.
- (d) Fixing inserts and chases.
- (e) Box out to form holes not exceeding 1.00 m².
- (f) Preparing and applying surface retarders and release agents as required.
- (g) Multi-handling of removing formwork and falsework when striking without overloading the finished concrete work.
- (h) Preparing and applying wood preservatives to all surfaces of left-in timber formwork.
- (i) Forming cambers and falls.
- (j) Individual fillets, chambers, splays, drips, rebates, recesses, grooves and the like, not exceeding 100 mm total girth measured on the faces in contact with the concrete.
- (k) Strutting to soffits at any height.
- (l) Soffits of solid slabs in any thickness.
- (m) Sides and soffits of beams in any depth.
- (n) In case of formwork materials proposed by the contractor, all necessary preparation work other than spatterdash.

SPECIAL CONDITIONS (CONT'D)

XXX.	The rates for manhole or gully sump cover and frame shall include for : -	Rates for manhole or gully sump cover and frame
	(a) Bedding frame in cement and sand (1:3) mortar.	
	(b) Sealing cover in heavy grease.	
	(c) Providing two keys for each pattern of cover.	
XXXI.	The rates for alterations to existing manholes shall include for any one of the following as applicable : -	Rates for alterations to existing manholes
	(a) All preparation work that are required for the alteration.	
	(b) Forming main and branch channels as required in re-formed benching including finishing to falls.	
	(c) Provision of temporary channels or drain pipes and/or other temporary measure necessary to maintain the existing soil or waste flow whilst the work is in progress.	
	(d) All other related works that are required for the alteration.	
	(e) Clearing away debris arising from alteration work.	
	(f) Making good areas disturbed to match existing.	
XXXII.	The rates for cleaning out manholes, cesspits, septic tanks, catch pits, grease pits and other drainage chambers shall include for any one of the following as applicable : -	Rate for cleaning out manholes, cesspits, septic tanks, catch pits, grease pits, and other drainage chambers
	(a) Removing covers and re-fixing including re-sealing with heavy grease after cleaning out works.	
	(b) Removing all sludge, silts, solid matters, etc. and the like by labour or pumping out from drainage chamber.	
	(c) Clearing away and disposal of sludge, deposits, solid matters, etc. to the dumping site approved by Environmental Protection Department.	
	(d) Cleaning out drainage chamber with high pressure jets including removing all water arising.	
	(e) Obtaining a disposal permit from Environmental Protection Department and submitting a copy to the Maintenance Surveyor.	
	(f) Keeping surrounding and affected area clean and tidy including sanitizing, cleaning, removing all matter arising.	
XXXIII.	The rates for testing existing drains shall include for : -	Rates for testing existing drains
	(a) Cleaning out all pipeline and drainage structure with high pressure water jets before testing.	
	(b) Temporary sealing ends of drains and connections.	
	(c) Provision of all water, material and equipment.	
	(d) Provision of test record.	

SPECIAL CONDITIONS (CONT'D)

Rate for CCTV inspection survey to existing manholes, cesspits, septic tanks, catch pits, grease pits, and other drainage chambers	<p>XXXIV. The rates for CCTV inspection survey to existing drains, manholes, cesspits, septic tanks, catch pits, grease pits and other drainage chambers shall include for :-</p> <p>(a) Clearing all pipeline and drainage structures with high pressure water jets before survey.</p> <p>(b) Providing two copies of CCTV inspection survey reports and two sets of 3R-size digital colour photographs of all identified defects.</p> <p>(c) Providing two sets of CD-rom recordings of all drains, manholes, cesspits, septic tanks, catch pits, grease pits and other drainage chambers inspected.</p>
Rate for internal lining to leaking buried water-carrying services	<p>XXXV. The rate for internal lining to leaking buried water-carrying services shall include for :</p> <p>(a) Removing covers of manholes and other drainage chambers and re-fixing including heavy grease after cleaning out works.</p> <p>(b) Cleaning out all pipeline and drainage structures with high pressure water jets before application of internal lining including removing all water arising and drying up the pipelines and drainage structures before execution of works.</p> <p>(c) Temporary diversion of drainage flow.</p> <p>(d) Establishment, maintaining and removal of all necessary plant, tools and equipment.</p> <p>(e) Testing as specified, remedying any defects and re-testing as necessary until the Maintenance Surveyor satisfies the test results.</p> <p>(f) Providing two sets of CD-rom recordings of the repaired pipeline certified by the Contractor's Leakage Test Team Leader and Contract Manager.</p>
Rates for utilities survey of the buried/exposed existing underground utilities/services	<p>XXXVI. The rates for utilities survey of the buried/exposed existing underground utilities/services shall include for :-</p> <p>(a) Carrying out the utilities survey of the buried/exposed existing underground utilities/services by the qualified personnel of an approved independent firm using their own equipment and providing such labour and assistance as may be required.</p> <p>(b) Preparation and submission of survey report in 2 copies with record drawings, photo records, text reports and layout plans and 2 sets of CD-rom containing all such information.</p> <p>(c) Compliance with the requirements of the current Code of Practice on Monitoring and Maintenance of Water Carrying Services Affecting Slopes.</p>
Rates for acoustic test for detection of leaking buried water pipes	<p>XXXVII. The rates for acoustic test for detection of leaking buried water pipes shall include for :-</p> <p>(a) Carrying out the acoustic test by the qualified personnel of an approved independent firm using their own equipment and providing such labour and assistance as may be required.</p> <p>(b) Preparation and submission of survey report in 2 copies with record drawings, photo records, text reports and layout plans and 2 sets of CD-rom containing all such information.</p> <p>(c) Compliance with the requirements of the current Code of Practice on Monitoring and Maintenance of Water Carrying Services Affecting Slopes.</p>
G.S. clauses for formwork	<p>XXXVIII. G.S. clauses for formwork can be found in the Concrete Work Section of the General Specification for Building.</p>
G.S. clauses for cable ducting	<p>XXXIX. G.S. clauses for cable duct pipes and draw-in-pits can be found in the External Work Section of the General Specification for Building.</p>

Item	GRANULAR BEDS FOR DRAIN PIPES								Item									
	Granular bedding as G.S. Items 23.10, 23.30, 23.47 and Particular Specification Items :-								A									
	<i>Per cubic metre</i>								\$									
16001	Beds, haunching or surrounds to pipe.....								231.00	16001								
	CONCRETE BEDS FOR DRAIN PIPES																	
	Concrete Grade 10S, Grade 10D or 10MPa in :-																	
	<i>Per linear metre</i>																	
	Pipe bore (mm)																	
	50	75	80	100	110	150	160	200										
	A	B	C	D	E	F	G	H										
	\$	\$	\$	\$	\$	\$	\$	\$										
16002	Bed 300 mm wider than external diameter of pipe and 100 mm thick under pipe including haunching up after drain is tested from outside edge of bed to meet pipe barrel tangentially.....								43.20	48.90	54.90	62.80	65.10	69.90	-	-	16002	
16003	Ditto but 150 mm thick under pipe including filling up after the drain is tested to mid point of pipe barrel.....								75.10	83.10	86.60	95.70	98.90	104.00	109.70	121.30	16003	
16004	Add to Item 16003 if pipe is completely surrounded after testing with similar concrete not less than 150 mm thick all round.....								69.30	75.10	78.20	80.90	86.60	92.30	98.20	115.50	16004	
	<i>Per linear metre</i>																	
	Pipe bore (mm)																	
	225	250	300	315	350	375	400	450										
	A	B	C	D	E	F	G	H										
	\$	\$	\$	\$	\$	\$	\$	\$										
16005	Bed 300 mm wider than external diameter of pipe and 150 mm thick under pipe including filling up after the drain is tested to mid point of pipe barrel.....								132.80	138.60	150.20	155.90	167.30	173.30	179.00	196.40	16005	
16006	Add to Item 16005 if pipe is completely surrounded after testing with similar concrete not less than 150 mm thick all round.....								115.50	121.30	138.60	144.40	150.20	161.70	167.50	184.80	16006	
	<i>Per linear metre</i>																	
	Pipe bore (mm)																	
	500	525	600	630	675	700	750	800	825									
	A	B	C	D	E	F	G	H	I									
	\$	\$	\$	\$	\$	\$	\$	\$	\$									
16007	Bed 300 mm wider than external diameter of pipe and 150 mm thick under pipe including filling up after the drain is tested to mid point of pipe barrel.....								207.90	213.70	231.00	242.60	254.10	265.70	283.00	300.30	311.90	16007
16008	Add to Item 16007 if pipe is completely surrounded after testing with similar concrete not less than 150 mm thick all round.....								202.10	213.70	236.80	248.30	265.70	277.20	300.30	335.00	362.50	16008

Item	CONCRETE BEDS FOR DRAIN PIPES (CONT'D)	Item																																				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="9" style="text-align: center;">Pipe bore (mm)</th> </tr> <tr> <th style="width: 10%;">900</th> <th style="width: 10%;">1000</th> <th style="width: 10%;">1050</th> <th style="width: 10%;">1100</th> <th style="width: 10%;">1200</th> <th style="width: 10%;">1350</th> <th style="width: 10%;">1500</th> <th style="width: 10%;">1650</th> <th style="width: 10%;">1800</th> </tr> <tr> <th style="text-align: center;">A</th> <th style="text-align: center;">B</th> <th style="text-align: center;">C</th> <th style="text-align: center;">D</th> <th style="text-align: center;">E</th> <th style="text-align: center;">F</th> <th style="text-align: center;">G</th> <th style="text-align: center;">H</th> <th style="text-align: center;">I</th> </tr> <tr> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> </tr> </thead> </table>	Pipe bore (mm)									900	1000	1050	1100	1200	1350	1500	1650	1800	A	B	C	D	E	F	G	H	I	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Pipe bore (mm)																																						
900	1000	1050	1100	1200	1350	1500	1650	1800																														
A	B	C	D	E	F	G	H	I																														
\$	\$	\$	\$	\$	\$	\$	\$	\$																														
	<i>Per linear metre</i>																																					
16009	Bed 300 mm wider than external diameter of pipe and 150 mm thick under pipe including filling up after the drain is tested to mid point of pipe barrel.....	16009																																				
16010	Add to Item 16009 if pipe is completely surrounded after testing with similar concrete not less than 150 mm thick all round.....	16010																																				
	Extra over Items 16002 to 16010 inclusive for concrete Grade 20S, Grade 20D or 20MPa	13%																																				
	CLAYWARE PIPES AND FITTINGS																																					
	<i>Per linear metre</i>																																					
16011	Pipe laid in trench.....	16011																																				
	Extra over pipe work for :-																																					
	<i>Each</i>																																					
16012	Taper pipe.....	16012																																				
16013	Bend.....	16013																																				
16014	Single junction.....	16014																																				
16015	Double junction.....	16015																																				
16016	Pipe stopper bedded in cement or lime mortar.....	16016																																				
	<i>Per linear metre</i>																																					
16017	Take up and clear away pipe laid in trench complete with all fittings (trench excavation measured separately).....	16017																																				
16018	Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (ditto).....	16018																																				
	<i>Each</i>																																					
16019	Remove stopper from pipe and clear away, clean socket and joint new pipe to the same.....	16019																																				
16020	Cut into and remove short length of pipe in position, prepare and make good pipe ends to receive new fittings (measured separately) including cutting into and making good concrete bed or surround afterwards as necessary.....	16020																																				

Item	CLAYWARE TRAPS AND GULLIES					Item
Traps and gullies with concrete Grade 20S, Grade 20D or 20MPa bed and surround minimum 100 mm thick all round : - (Note : - All Items 16021 to 16038 (Columns (A) to (D)) inclusive include for concrete bed and surround or breaking up the same as applicable.)		Supply and fix	Take up and clear away	Take up and set aside for re-use	Fix only	
<i>Each</i>		A	B	C	D	
		\$	\$	\$	\$	
16021	Trap with 100 mm bore outlet.....	292.60	22.30	31.70	143.60	16021
16022	Ditto with 150 mm ditto.....	393.80	27.40	40.30	167.90	16022
16023	Ditto with 225 mm ditto.....	781.70	38.60	54.80	217.90	16023
16024	Ditto with 300 mm bore outlet.....	1,373.20	57.40	72.80	269.30	16024
16025	Gully with 100 mm bore trapped outlet and 150 mm diameter circular or 150 x 150 mm square top rebated for grating (measured separately).....	508.20	37.70	65.10	217.90	16025
16026	Ditto but with 150 mm bore trapped outlet and 225 mm diameter circular or 225 x 225 mm square top ditto (ditto).....	950.80	44.60	72.80	255.80	16026
16027	Add to either of Items 16025 to 16026 inclusive for side or back inlet of any bore.....	292.40	6.00	10.30	13.90	16027
16028	Grit or grease gully with 100 mm bore trapped outlet and 225 mm diameter circular or 225 x 225 mm square top rebated for grating (measured separately) complete with removable galvanized steel strainer and handle.....	1,171.10	43.70	72.80	205.80	16028
16029	Road gully, 300 mm diameter and 600 mm deep, with plain top and 100 mm or 150 mm bore outlet.....	1,447.80	86.60	137.10	393.60	16029
16030	Ditto but 300 mm diameter and 750 mm deep ditto.....	1,590.20	91.70	151.70	443.60	16030
16031	Ditto but 375 mm diameter and 900 mm deep ditto.....	1,873.30	107.10	168.80	530.10	16031
16032	Add to either of Items 16029 to 16031 inclusive for cleaning eye with sealing plate or stopper.....	57.50	-	-	-	16032
16033	Intercepting trap with 100 mm bore outlet and square or oblique inspection arm fitted with clayware stopper in plain or screw pattern joint.....	624.40	26.60	40.30	138.20	16033
16034	Ditto but with 150 mm bore outlet ditto.....	862.80	31.70	48.80	161.20	16034
16035	Ditto but with 225 mm bore outlet ditto.....	1,353.40	45.40	68.60	200.40	16035
16036	Ditto but with 300 mm bore outlet ditto.....	2,086.00	66.00	84.80	243.60	16036
16037	Ditto but with 375 mm bore outlet ditto.....	2,586.00	78.80	101.10	280.10	16037
16038	Add to either of Items 16033 to 16037 inclusive if fitted with galvanized iron stopper and lever handle, 1.80 m long galvanized chain, hook and ring.....	46.20	-	-	-	16038

Item	PLASTIC PIPES AND FITTINGS	Pipe bore (mm)								Item
		110	160	200	250	315	400	500	630	
		A	B	C	D	E	F	G	H	
	<i>Per linear metre</i>	\$	\$	\$	\$	\$	\$	\$	\$	
16039	Pipe laid in trench.....	48.60	87.30	129.90	195.00	356.70	784.50	947.40	1,182.80	16039
	Extra over pipe work for : -									
	<i>Each</i>									
16040	Cap end.....	40.30	79.60	114.90	-	-	-	-	-	16040
16041	Elbow or bend.....	48.40	105.80	160.70	233.90	830.20	1,651.50	2,601.20	3,783.20	16041
16042	Single junction.....	62.40	112.90	213.30	289.60	910.90	1,806.20	2,875.80	4,180.10	16042
16043	Reducer.....	-	100.00	163.40	499.70	638.90	-	-	-	16043
	<i>Per linear metre</i>									
16044	Take up and clear away pipe laid in trench complete with all fittings (trench excavation measured separately).....	7.70	11.10	15.40	19.70	26.60	33.40	46.30	68.60	16044
16045	Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (ditto).....	35.10	50.60	62.60	75.40	93.40	125.10	137.10	222.80	16045
	<i>Each</i>									
16046	Cut into and remove short length of pipe in position, prepare and make good pipe ends to receive new fittings (measured separately) including cutting into and making good concrete bed or surround afterwards as necessary.....	120.30	147.30	168.90	266.20	291.90	418.90	550.00	700.00	16046

Item	CONCRETE PIPES									Item	
	Pipe bore (mm)										
	150	225	300	375	450	525	600	675	750		
	A	B	C	D	E	F	G	H	I		
	\$	\$	\$	\$	\$	\$	\$	\$	\$		
16047	Pipe, Class L, unreinforced, laid in trench.....	150.20	207.90	300.30	433.10	635.30	745.00	924.00	1,001.90	1,143.50	16047
16048	Pipe, Class L, reinforced, laid in trench.....	-	-	-	-	658.40	779.60	970.20	1,028.00	1,201.20	16048
	Extra over pipework for :-										
	Each										
16049	Elbow or bend including cutting pipe ends to profile, making good and grouting joints smooth with cement and sand (1:3) mortar or cast around elbow or bend with concrete surround as required.....	127.10	179.00	242.60	317.60	392.70	473.60	554.40	612.20	693.00	16049
16050	Single junction including cutting through pipe and pipe end to profile, making good and grouting junction smooth with cement and sand (1:3) mortar or cast around junction with concrete surround as required.....	132.80	184.80	242.60	335.00	438.90	531.30	669.90	739.20	866.30	16050
16051	Double junction, ditto.....	265.70	358.10	485.10	669.90	889.40	1,074.20	1,328.30	1,472.60	1,744.10	16051
	Pipe bore (mm)										
	825	900	1050	1200	1350	1500	1650	1800			
	A	B	C	D	E	F	G	H			
	\$	\$	\$	\$	\$	\$	\$	\$			
16052	Pipe, Class L, reinforced, laid in trench.....	1,386.00	1,565.00	2,102.10	2,483.30	3,153.20	3,955.90	4,851.00	5,613.30	16052	
	Extra over pipework for :-										
	Each										
16053	Elbow or bend including cutting pipe ends to profile, making good and grouting joints smooth with cement and sand (1:3) mortar or cast around elbow or bend with concrete surround as required.....	825.80	924.00	1,155.00	1,362.90	1,640.10	1,952.00	2,310.00	2,598.80	16053	
16054	Single junction including cutting through pipe and pipe end to profile, making good and grouting junction smooth with cement and sand (1:3) mortar or cast around junction with concrete surround as required.....	1,126.10	1,299.40	1,807.60	2,240.70	2,945.30	3,823.10	4,862.60	5,844.30	16054	
16055	Double junction, ditto.....	2,240.70	2,598.80	3,615.20	4,481.40	5,890.50	7,646.10	9,736.70	11,688.60	16055	

Item	CONCRETE PIPES (CONT'D)		Item							
		Pipe bore (mm)								
		300	375	450	525	600	675	750		
		A	B	C	D	E	F	G		
		\$	\$	\$	\$	\$	\$	\$		
	<i>Per linear metre</i>									
16056	Pipe, Class M, unreinforced, laid in trench.....	311.90	450.50	658.40	785.40	970.20	1,033.70	1,201.20	16056	
16057	Pipe, Class M, reinforced, laid in trench.....	-	-	698.80	831.60	1,028.00	1,097.30	1,270.50	16057	
	Extra over pipework for :-									
	<i>Each</i>									
16058	Elbow or bend including cutting pipe ends to profile, making good and grouting joints smooth with cement and sand (1:3) mortar or cast around elbow or bend with concrete surround as required.....	242.60	323.40	404.30	467.80	566.00	623.70	710.30	16058	
16059	Single junction including cutting through pipe and pipe end to profile, making good and grouting junction smooth with cement and sand (1:3) mortar or cast around junction with concrete surround as required.....	311.90	404.30	525.50	623.70	773.90	843.20	993.30	16059	
16060	Double junction, ditto.....	612.20	820.10	1,051.10	1,253.20	1,536.20	1,692.10	1,986.60	16060	
		Pipe bore (mm)								
		825	900	1050	1200	1350	1500	1650	1800	
		A	B	C	D	E	F	G	H	
		\$	\$	\$	\$	\$	\$	\$	\$	
	<i>Per linear metre</i>									
16061	Pipe, Class M, reinforced, laid in trench.....	1,443.80	1,640.10	2,206.10	2,610.30	3,314.90	4,146.50	5,093.60	5,890.50	16061
	Extra over pipework for :-									
	<i>Each</i>									
16062	Elbow or bend including cutting pipe ends to profile, making good and grouting joints smooth with cement and sand (1:3) mortar or cast around elbow or bend with concrete surround as required.....	843.20	941.30	1,189.70	1,386.00	1,674.80	1,998.20	2,356.20	2,668.10	16062
16063	Single junction including cutting through pipe and pipe end to profile, making good and grouting junction smooth with cement and sand (1:3) mortar or cast around junction with concrete surround as required.....	1,270.50	1,455.30	1,998.20	2,469.40	3,222.50	4,169.60	5,278.40	6,329.40	16063
16064	Double junction, ditto.....	2,529.50	2,910.60	4,002.10	4,937.60	6,450.70	8,339.10	10,574.00	12,670.40	16064

Item	CONCRETE PIPES (CONT'D)						Item			
	Pipe bore (mm)									
	375	450	525	600	675	750				
	A	B	C	D	E	F				
	\$	\$	\$	\$	\$	\$				
	<i>Per linear metre</i>									
16065	Pipe, Class H, unreinforced, laid in trench.....	462.00	681.50	808.50	1,004.90	1,062.60	1,235.90	16065		
16066	Pipe, Class H, reinforced, laid in trench.....	-	750.80	843.20	1,062.60	1,149.20	1,235.90	16066		
	Extra over pipework for :-									
	<i>Each</i>									
16067	Elbow or bend including cutting pipe ends to profile, making good and grouting joints smooth with cement and sand (1:3) mortar or cast around elbow or bend with concrete surround as required.....	335.00	410.00	462.00	554.40	635.30	727.70	16067		
16068	Single junction including cutting through pipe and pipe end to profile, making good and grouting junction smooth with cement and sand (1:3) mortar or cast around junction with concrete surround as required.....	450.50	577.50	658.40	762.30	900.90	1,074.20	16068		
16069	Double junction, ditto.....	900.90	1,155.00	1,316.70	1,530.40	1,801.80	2,136.80	16069		
	Pipe bore (mm)									
	825	900	1050	1200	1350	1500	1650	1800		
	A	B	C	D	E	F	G	H		
	\$	\$	\$	\$	\$	\$	\$	\$		
	<i>Per linear metre</i>									
16070	Pipe, Class H, reinforced, laid in trench.....	1,490.00	1,686.30	2,275.40	2,691.20	3,407.30	4,267.70	5,232.20	6,052.20	16070
	Extra over pipework for :-									
	<i>Each</i>									
16071	Elbow or bend including cutting pipe ends to profile, making good and grouting joints smooth with cement and sand (1:3) mortar or cast around elbow or bend with concrete surround as required.....	860.50	958.70	1,212.80	1,420.70	1,721.00	2,050.10	2,408.20	2,737.40	16071
16072	Single junction including cutting through pipe and pipe end to profile, making good and grouting junction smooth with cement and sand (1:3) mortar or cast around junction with concrete surround as required.....	1,362.90	1,559.30	2,136.80	2,633.40	3,430.40	4,423.70	5,601.80	6,710.60	16072
16073	Double junction, ditto.....	2,720.00	3,118.50	4,273.50	5,266.80	6,860.70	8,858.90	11,203.50	13,432.70	16073

Item	CONCRETE PIPES (CONT'D)								Item
	Pipe bore (mm)								
	150	225	300	375	450	525	600	675	
	A	B	C	D	E	F	G	H	
	\$	\$	\$	\$	\$	\$	\$	\$	
16074	<i>Per linear metre</i> Take up and clear away pipe laid in trench complete with all fittings (trench excavation measured separately).....								16074
	13.70	21.40	31.70	37.70	43.70	56.60	68.60	87.40	
16075	Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (ditto).....								16075
	43.70	68.60	93.40	118.30	150.00	174.80	212.50	249.40	
	<i>Each</i>								
16076	Cut into and remove short length of pipe in position, prepare and make good pipe ends to receive new pipes including cutting into and making good concrete bed or surround afterwards as necessary.....								16076
	162.20	331.10	450.00	620.30	824.30	1,074.30	1,374.30	1,812.20	
	Pipe bore (mm)								
	750	825	900	1050	1200	1350	1500	1650	1800
	A	B	C	D	E	F	G	H	I
	\$	\$	\$	\$	\$	\$	\$	\$	\$
16077	<i>Per linear metre</i> Take up and clear away pipe laid in trench complete with all fittings (trench excavation measured separately).....								16077
	93.40	112.30	125.10	162.80	200.50	249.40	299.90	349.60	412.20
16078	Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (ditto).....								16078
	312.80	362.50	399.30	512.40	624.70	749.80	937.40	1,062.60	1,249.40
	<i>Each</i>								
16079	Cut into and remove short length of pipe in position, prepare and make good pipe ends to receive new pipes including cutting into and making good concrete bed or surround afterwards as necessary.....								16079
	2,150.00	2,624.30	3,124.30	4,748.70	5,998.60	7,748.60	10,247.30	12,747.30	16,245.90

Item	CAST IRON PIPES AND FITTINGS	Pipe bore (mm)					Item
		50	75	100	150	225	
		A	B	C	D	E	
	<i>Per linear metre</i>	\$	\$	\$	\$	\$	
16080	Pipe laid in trench	104.00	184.80	263.30	242.60	531.30	16080
16081	Drop pipe.....	181.30	196.40	283.60	331.00	681.50	16081
	Extra over pipework for : -						
	<i>Each</i>						
16082	Plug to socket end.....	80.90	92.40	104.00	132.80	207.90	16082
16083	Cap to spigot end.....	75.10	92.40	104.00	150.20	207.90	16083
16084	Bend.....	63.00	80.90	104.00	186.90	254.10	16084
16085	Single junction.....	69.30	86.60	115.50	196.40	311.90	16085
16086	Double junction.....	143.60	150.20	179.00	369.60	-	16086
16087	Add to either of Items 16084 to 16086 inclusive if fitted with bolted access door.....	11.60	11.60	17.30	17.30	-	16087
	<i>Per linear metre</i>						
16088	Take up and clear away pipe laid in trench complete with all fittings (trench excavation measured separately).....	6.00	8.60	11.10	13.70	21.40	16088
16089	Take up and set aside for re-use ditto.....	11.10	15.40	17.10	21.40	28.30	16089
16090	Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (trench excavation measured separately).....	27.40	30.00	33.40	42.00	68.60	16090
16091	Take down and clear away drop pipe complete with fittings and brackets	5.60	6.90	8.10	12.90	18.90	16091
16092	Take down and set aside for re-use ditto.....	16.30	21.40	24.90	32.60	41.10	16092
16093	Lay only pipe in trench complete with all fittings.....	14.30	19.70	22.40	26.10	28.70	16093
16094	Fix only drop pipe complete with fittings and brackets.....	53.10	69.30	80.10	111.60	156.20	16094
	<i>Each</i>						
16095	Cut or burn out existing joint, clean spigot and socket ends and re-make joint.....	91.90	120.30	146.00	200.00	274.30	16095
16096	Cut or burn out existing joint, remove cap or plug and clear away, clean spigot and socket ends and joint new pipe to the same.....	100.00	120.30	158.10	206.80	274.30	16096
16097	Cut into and remove short length of pipe in position, prepare and make good pipe ends to receive new fittings (measured separately) including cutting into and making good concrete beds or surrounds afterwards as necessary.....	98.70	116.20	123.00	163.50	213.50	16097

Item	CAST IRON TRAPS AND GULLIES					Item
Traps and gullies with concrete Grade 20S, Grade 20D or 20MPa bed and surround minimum 100 mm thick all round :-						
(Note :- All Items 16098 to 16113 (Columns (A) to (D)) inclusive include for concrete bed and surround or breaking up the same as applicable.)						
<i>Each</i>						
16098	Trap with 50 mm bore outlet.....	242.60	22.30	31.70	130.10	16098
16099	Ditto 75 mm ditto.....	340.70	27.40	38.60	147.70	16099
16100	Ditto 100 mm ditto.....	392.70	34.30	48.00	200.40	16100
16101	Ditto 150 mm ditto.....	693.00	44.60	62.60	243.60	16101
16102	Ditto 225 mm ditto.....	1,270.50	72.00	100.30	355.80	16102
16103	Gully with 100 mm bore trapped outlet and 150 mm diameter circular or 150 x 150 mm square top rebated for grating (measured separately).....	658.40	46.30	64.30	249.00	16103
16104	Ditto but with 150 mm bore trapped outlet and 225 mm diameter circular or 225 x 225 mm square top ditto (ditto).....	1,003.90	52.30	73.70	293.60	16104
16105	Add to either of Items 16103 to 16104 inclusive for side or back inlet.....	265.70	28.30	39.40	117.90	16105
16106	Grit or grease gully with 100 mm bore trapped outlet and 225 mm diameter circular or 225 x 225 mm square top rebated for grating (measured separately) complete with removable galvanized steel strainer and handle.....	1,259.00	44.60	62.60	280.10	16106
16107	Intercepting trap with 100 mm bore outlet and square or oblique inspection arm fitted with galvanized stopper in plain or screw pattern joint.....	542.90	37.70	52.30	130.10	16107
16108	Ditto but with 150 mm bore outlet ditto.....	750.80	46.30	64.30	167.90	16108
16109	Ditto but with 225 mm bore outlet ditto.....	1,259.00	62.60	87.40	212.50	16109
16110	Ditto but with 300 mm bore outlet ditto.....	1,617.00	92.60	129.40	249.00	16110
16111	Ditto but with 375 mm bore outlet ditto.....	4,227.30	138.00	193.70	297.70	16111
16112	Ditto but with 600 mm bore outlet ditto.....	6,779.90	208.20	291.40	486.90	16112
16113	Add to either of Items 16107 to 16112 inclusive if fitted with cast iron stopper and lever handle, 1.80 m long galvanized chain, hook and ring.....	69.30	-	-	-	16113

Item	DUCTILE IRON PIPES AND FITTINGS									Item	
	Ductile iron pipes and fittings with flexible joint as G.S. Items 23.07 and 23.38 : -	Pipe bore (mm)									
		80	100	150	200	250	300	350	400	450	
		A	B	C	D	E	F	G	H	I	
	<i>Per linear metre</i>	\$	\$	\$	\$	\$	\$	\$	\$	\$	
16114	Pipe laid in trench.....	231.70	245.70	349.20	391.30	535.90	703.10	844.00	960.30	1,141.10	16114
16115	Drop pipe.....	350.70	367.90	501.30	545.00	753.50	915.80	1,073.40	1,187.50	1,398.00	16115
	Extra over pipework for : -										
	<i>Each</i>										
16116	Cover plate for end.....	60.00	76.50	120.00	136.50	209.20	292.20	380.70	474.10	625.00	16116
16117	Socket end (for repair work only).....	119.70	147.00	227.20	253.30	378.20	495.00	544.60	594.30	838.20	16117
16118	Spigot end (for repair work only).....	127.70	152.80	240.30	265.60	398.70	544.10	568.50	619.10	858.00	16118
16119	Connector with screwed end.....	141.70	171.20	263.90	293.00	440.60	586.60	612.20	666.20	931.70	16119
16120	Bend.....	116.60	128.40	181.20	238.90	509.50	621.40	689.80	804.40	884.00	16120
16121	Single junction.....	196.00	222.20	354.70	510.60	982.10	1,184.20	1,424.00	1,601.70	1,957.00	16121
16122	Double junction.....	196.90	299.90	507.50	578.20	1,011.80	1,499.40	1,723.30	2,040.10	2,594.20	16122
16123	Add to either of Items 16120 to 16122 inclusive if fitted with bolted access door.....	17.80	32.30	49.50	67.30	137.30	210.30	214.50	264.40	337.30	16123
	<i>Per linear metre</i>										
16124	Take up and clear away pipe laid in trench complete with all fittings (trench excavation measured separately).....	10.30	11.10	15.40	18.90	24.90	31.70	37.70	43.70	49.70	16124
16125	Take up and set aside for re-use ditto.....	17.10	20.60	26.60	32.60	37.70	43.70	47.10	52.30	56.60	16125
16126	Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (trench excavation measured separately).....	31.70	35.10	43.70	62.60	75.40	87.40	100.30	118.30	137.10	16126
16127	Take down and clear away drop pipe complete with all fittings and brackets.....	13.70	15.40	21.40	27.40	32.60	40.30	43.70	49.70	56.60	16127
16128	Take down and set aside for re-use ditto.....	30.00	33.40	45.40	53.10	58.30	66.00	70.30	73.70	76.30	16128
16129	Lay only pipe in trench complete with all fittings and gaskets.....	20.60	22.00	26.80	29.50	30.90	34.90	39.00	41.70	45.70	16129
16130	Fix only drop pipe complete with all fittings, brackets and gaskets.....	135.90	142.60	154.80	163.90	176.00	188.20	207.10	225.80	243.00	16130
	<i>Each</i>										
16131	Remove gasket to existing joint and clear away and re-joint with new gasket.....	66.20	75.70	81.10	87.80	93.30	100.00	112.20	118.90	131.10	16131
16132	Remove cover plate and clear away, provide new gasket and cover plate and joint new pipe to the same.....	62.20	68.90	75.70	81.10	87.80	93.30	100.00	112.20	125.70	16132
16133	Cut into and remove short length of pipe in position, provide and joint in pipe ends with new socket/spigot end to receive new fittings (measured separately) including cutting into and making good concrete bed or surround afterwards as necessary.....	412.20	474.30	700.00	874.30	1,250.00	1,624.30	1,750.00	2,000.00	2,750.00	16133

Item	DUCTILE IRON PIPES AND FITTINGS (CONT'D)	Pipe bore (mm)								Item
		500	600	700	800	900	1000	1100	1200	
		A	B	C	D	E	F	G	H	
	Ductile iron pipes and fittings with flexible joint as G.S. Items 23.07 and 23.38 : - (cont'd)									
	<i>Per linear metre</i>	\$	\$	\$	\$	\$	\$	\$	\$	
16134	Pipe laid in trench.....	1,464.30	1,845.00	2,891.30	3,880.80	4,811.50	5,861.20	6,790.70	7,957.80	16134
16135	Drop pipe.....	1,844.50	2,252.00	3,103.10	4,115.90	5,251.00	6,257.10	7,507.70	8,398.20	16135
	Extra over pipework for : -									
	<i>Each</i>									
16136	Cover plate for end.....	857.00	1,371.00	1,511.30	2,003.90	2,543.30	3,030.70	3,517.00	4,006.70	16136
16137	Socket end (for repair work only).....	1,218.50	1,715.80	1,863.00	2,251.10	2,753.50	3,138.10	3,642.90	4,076.60	16137
16138	Spigot end (for repair work only).....	1,255.50	1,764.30	2,273.00	2,386.80	2,856.30	3,268.70	3,827.70	4,228.50	16138
16139	Connector with screwed end.....	1,391.80	1,973.90	2,544.50	2,590.70	3,115.00	3,651.00	4,221.50	4,622.30	16139
16140	Bend.....	940.60	1,438.00	1,815.70	2,707.90	3,442.60	4,036.30	4,631.90	5,254.60	16140
16141	Single junction.....	2,768.10	4,009.20	4,658.70	5,077.40	6,906.60	8,494.50	10,161.70	11,893.00	16141
16142	Double junction.....	3,380.90	5,019.20	6,184.10	6,772.00	8,997.20	11,228.80	13,098.50	14,828.90	16142
16143	Add to either of Items 16140 to 16142 inclusive if fitted with bolted access door.....	440.90	631.90	836.00	976.60	-	-	-	-	16143
	<i>Per linear metre</i>									
16144	Take up and clear away pipe laid in trench complete with all fittings (trench excavation measured separately).....	56.60	75.40	93.40	106.30	131.10	150.00	174.80	206.50	16144
16145	Take up and set aside for re-use ditto.....	62.60	70.30	75.40	81.40	87.40	93.40	102.80	109.70	16145
16146	Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (trench excavation measured separately).....	168.80	212.50	262.20	312.80	400.20	449.90	524.40	624.70	16146
16147	Take down and clear away drop pipe complete with all fittings and brackets.....	65.10	81.40	102.80	118.30	137.10	162.80	187.70	212.50	16147
16148	Take down and set aside for re-use ditto.....	81.40	87.40	100.30	112.30	118.30	127.70	137.10	150.00	16148
16149	Lay only pipe in trench complete with all fittings and gaskets.....	49.40	54.80	61.60	67.00	73.70	82.80	88.20	98.00	16149
16150	Fix only drop pipe complete with all fittings, brackets and gaskets.....	267.90	311.60	342.60	376.00	413.90	441.70	479.50	503.80	16150
	<i>Each</i>									
16151	Remove gasket to existing joint and clear away and re-joint with new gasket.....	150.00	162.20	175.70	187.80	200.00	225.70	237.80	250.00	16151
16152	Remove cover plate and clear away, provide new gasket and cover plate and joint new pipe to the same.....	137.80	150.00	162.20	175.70	187.80	200.00	225.70	237.80	16152
16153	Cut into and remove short length of pipe in position, provide and joint in pipe ends with new socket/spigot end to receive new fittings (measured separately) including cutting into and making good concrete bed or surround afterwards as necessary.....	3,374.30	4,624.30	5,498.70	6,248.60	7,498.70	8,748.60	10,373.00	11,873.00	16153

Item	SURFACE WATER CHANNELS					Item
	<i>Per cubic metre</i>	A				
		\$				
16154	Concrete Grade 20S, Grade 20D or 20MPa in surface water channel n.e. 0.10 m ² cross sectional area (void of waterway not deducted) with 75mm (minimum) thick sides and base, level or slope.....	1,386.00				16154
16155	Ditto 0.10 - 0.20 m ² cross sectional area.....	1,212.80				16155
16156	Ditto 0.20 - 0.40 m ² cross sectional area.....	1,039.50				16156
	Add to either of Items 16154 to 16156 inclusive if cast to curve n.e. 3.00 m radius to centre line of waterway.....	25%				
16157	Add to either of Items 16154 to 16156 inclusive for breaking up and carting away existing concrete surface water channel and step surface water channel including clearing away channel cover and any silting in channel, if required.....	184.80				16157
16158	Add to either of Items 16154 to 16156 inclusive for forming step surface water channel including ditto.....	46.20				16158
CAST IRON CHANNEL COVERS						
		Supply and fix	Take up and clear away	Take up and set aside for re-use	Fix only	
	<i>Per kg</i>	A	B	C	D	
		\$	\$	\$	\$	
16159	Cast iron surface channel cover with slots, weight n.e. 24 kg each.....	8.30	1.50	1.00	1.40	16159
16160	Ditto, weight exceeding 24 kg each.....	8.00	1.20	0.80	1.30	16160
PRECAST CONCRETE CHANNEL COVERS						
	<i>Per square metre</i>					
16161	Precast concrete Grade 20S, Grade 20D or 20MPa channel cover with slots, 25 mm thick including reinforcement.....	415.80	43.70	54.00	80.10	16161
16162	Ditto but 50 mm thick.....	485.10	57.40	68.60	126.10	16162
GULLY KERBS, HOPPERS AND GRATINGS						
		Size of gully top (mm)				
		75 diameter	150 x 150 or 150 diameter	225 x 225 or 225 diameter		
	<i>Each</i>	A	B	C		
		\$	\$	\$		
16163	Kerb 75 mm thick and n.e. 150 mm high, around two or three sides of gully top, of concrete Grade 10S, Grade 10D or 10MPa or bricks-on-edge in cement mortar, rendered in 15 mm thick cement and sand (1:3) trowelled smooth on all exposed surfaces and dished to gully, including all necessary formwork.....		34.70	57.80	86.60	16163
16164	Extra for raising concrete surround to trap or gully to a height n.e. 300 mm above top to form hopper (or alternatively providing and fixing glazed clayware or cast iron raising piece surrounded with and including 100 mm thick concrete) including forming rebate around top if required for grouting (measured separately), trowelling all surfaces smooth with cement and sand (1:2), forming all back inlets, and all additional excavation, disposal and formwork.....	80.90	138.60	196.40		16164

Item	GULLY KERBS, HOPPERS AND GRATINGS (CONT'D)	Size of gully top (mm)			Item	
		75 diameter	150 x 150 or 150 diameter	225 x 225 or 225 diameter		
		A \$	B \$	C \$		
16165	Add to Item 16164 for each additional 150 mm or part thereof in height.....	34.70	69.30	92.40	16165	
16166	Galvanized steel or coated cast iron flat or dished grating and set in gully top or concrete surround to trap or gully.....	57.80	80.90	92.40	16166	
16167	Take up and clear away galvanized steel or coated cast iron flat or dished grating set in gully top or concrete surround to trap or gully.....	3.40	4.30	5.10	16167	
16168	Take up and set aside for re-use ditto.....	6.00	7.70	8.60	16168	
16169	Fix only ditto.....	5.00	6.40	7.70	16169	
16170	Galvanized steel or coated cast iron flat or dished hinged grating and frame and set frame in gully top or concrete surround to trap or gully.....	138.60	161.70	173.30	16170	
16171	Take up and clear away galvanized steel or coated cast iron flat or dished hinged grating and frame set in gully top or concrete surround to trap or gully.....	4.30	5.10	6.00	16171	
16172	Take up and set aside for re-use ditto.....	7.70	8.60	10.30	16172	
16173	Fix only ditto.....	10.40	13.10	15.80	16173	
PRECAST CONCRETE GULLIES						
Traps and gullies with concrete Grade 20S, Grade 20D or 20MPa bed and surround minimum 100 mm thick all round :- (Note :- All Items 16174 to 16175 (Columns (A) to (D)) inclusive include for concrete bed and surround or breaking up the same as applicable.)		Supply and fix	Take up and clear away	Take up and set aside for re-use	Fix only	
<i>Each</i>		A \$	B \$	C \$	D \$	
16174	Road gully, 225 mm diameter and 600 mm deep internally with plain top and 100 or 150 mm bore outlet.....	1,016.40	137.10	100.30	630.10	16174
16175	Ditto but size 450mm diameter and 900mm deep internally.....	1,871.10	237.40	181.70	1,005.80	16175
MANHOLES, CESSPITS, SEPTIC TANKS, CATCHPITS, GREASE PITS AND OTHER DRAINAGE CHAMBERS						
Plain and/or reinforced concrete Grade 20S, Grade 20D or 20MPa (reinforcement and formwork measured separately) :-			Plain concrete	Reinforced concrete		
<i>Per cubic metre</i>			A \$	B \$		
16176	Base slabs.....		745.00	762.30	16176	
16177	Walls.....		761.60	773.90	16177	
16178	Suspended slabs.....		745.00	762.30	16178	
Extra over Items 16176 to 16178 inclusive for plain and/or reinforced concrete Grade 25S, Grade 25D or 25Mpa.....					8%	
Extra over Items 16176 to 16178 inclusive for plain and/or reinforced concrete Grade 30S, Grade 30D or 30Mpa.....					10%	
Extra over Items 16176 to 16178 inclusive for plain and/or reinforced concrete Grade 40S, Grade 40D or 40Mpa.....					19%	

Item	MANHOLES, CESSPITS, SEPTIC TANKS, CATCHPITS, GREASE PITS AND OTHER DRAINAGE CHAMBERS (CONT'D)					Item
			Sawn formwork	Wrot formwork		
			A	B		
			\$	\$		
	<i>Per square metre</i>					
16179	Formwork to base slabs.....		80.90	104.00	16179	
16180	Formwork to walls.....		115.50	138.60	16180	
16181	Formwork to soffit of suspended slabs.....		127.10	150.20	16181	
	<i>Per linear metre</i>					
16182	Formwork to edges n.e. 75 mm wide.....		30.70	40.90	16182	
16183	Ditto but 75 - 150 mm wide.....		33.50	43.20	16183	
16184	Ditto but 150 - 225 mm wide.....		34.70	46.20	16184	
	<i>Per square metre</i>			A		
				\$		
16185	Concrete Grade 20S, Grade 20D or 20MPa benching and channels in any thickness.....			138.60	16185	
	CAST IRON MANHOLE COVERS AND FRAMES					
		Supply and fix	Take up and clear away	Take up and set aside for re-use	Fix only	
	<i>Each</i>	A	B	C	D	
		\$	\$	\$	\$	
16186	Manhole cover and frame, approximately 37kg.....	290.10	56.60	35.10	54.40	16186
16187	Ditto, approximately 52kg.....	405.00	77.10	49.70	70.60	16187
16188	Ditto, approximately 143kg.....	1,090.00	100.30	137.10	180.10	16188
16189	Ditto, approximately 178kg.....	1,440.00	125.10	174.80	219.30	16189
16190	Ditto, approximately 192kg.....	1,465.00	137.10	187.70	230.10	16190
16191	Ditto, approximately 308kg.....	2,340.00	212.50	287.10	369.30	16191
16192	Circular manhole cover and manhole frame, approximately 95kg.....	730.00	66.00	91.70	124.70	16192
16193	Double triangular manhole cover and frame approximately 140kg.....	1,070.00	100.30	137.10	180.10	16193
16194	Gully sump cover and frame, approximately 69kg.....	530.00	49.70	65.10	93.60	16194
16195	Ditto, approximately 83kg.....	640.00	56.60	77.10	105.80	16195
	Deduct from any of Items 16186 to 16195 inclusive for work of manhole cover only or gully sump cover only.....	-	-	(30%)	(30%)	
	STEP IRONS					
	<i>Each</i>				A	
					\$	
16196	Manhole step irons as G.S. Item 23.49 built into concrete or grouted into existing mortice.....				70.40	16196
16197	Cut out and clear away existing step iron including making good side or cutting mortice ready to receive new step iron (measured separately).....				13.50	16197

Item	ALTERATION TO EXISTING MANHOLES	Item																																			
	Per square metre	A \$																																			
16198	Hack up existing defective benching of any thickness and re-form with concrete Grade 20S, Grade 20D or 20MPa rendered smooth in 20 mm thick cement and sand (1:3) including forming channels.....	174.30 16198																																			
	<table border="1"> <thead> <tr> <th colspan="5">Pipe bore (mm)</th> </tr> <tr> <th>50</th> <th>75</th> <th>100</th> <th>150</th> <th>225</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>33.50</td> <td>34.70</td> <td>46.20</td> <td>52.00</td> <td>69.30</td> </tr> <tr> <td>23.10</td> <td>46.20</td> <td>52.00</td> <td>63.50</td> <td>98.20</td> </tr> <tr> <td>236.80</td> <td>254.10</td> <td>288.80</td> <td>300.30</td> <td>381.20</td> </tr> </tbody> </table>		Pipe bore (mm)					50	75	100	150	225	A	B	C	D	E	\$	\$	\$	\$	\$	33.50	34.70	46.20	52.00	69.30	23.10	46.20	52.00	63.50	98.20	236.80	254.10	288.80	300.30	381.20
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	Each																																				
16199	Block up pipe entering manhole for a length of 300 mm with concrete Grade 10S, Grade 10D or 10MPa and make good face of manhole wall.....	16199																																			
16200	Cut hole through manhole wall for new pipe entering above manhole invert level, build in pipe end and made good (new drop pipe or bend to discharge into existing channel).....	16200																																			
16201	Ditto but for new pipe entering at manhole invert level including cutting out and re-forming benching as necessary, and forming new channel and making good.....	16201																																			
	Per cubic metre	A \$																																			
16202	Break up existing manhole and fill in void with graded aggregates or approved hardcore well rammed.....	161.70 16202																																			
	UTILITIES SURVEY																																				
	(Note : - The following item 16203 will only be paid for, if ordered by the Maintenance Surveyor in writing)																																				
	Per square metre																																				
16203	Carry out utilities survey by an approved specialist to ascertain the alignment of the buried/exposed existing underground utilities/services and related surface features, including power cables, gas pipes, telecommunication lines, cable TV, water mains, drainage, fuel tank and pipes, fire hydrants, valve chambers/pits, manholes, combined services ducts, etc., within and in the vicinity of the site; determine the sizes and the horizontal and vertical alignments of these utilities by means of electromagnetic induction method including submission of survey report in 2 copies, record drawings, photo records, text reports and layout plan and 2 sets of CD-roms.....	111.60 16203																																			
	DETECTION OF LEAKING BURIED WATER PIPES																																				
	(Note : - The following item 16204 will only be paid for, if ordered by the Maintenance Surveyor in writing)																																				
	Per linear metre																																				
16204	Carry out acoustic water leakage detection works by an approved specialist including leak noise correlation survey, ground microphone survey for identification of the location of any possible leakage along the pressurized fresh water and flush water supply pipes within the hatched areas, including submission of survey report in 2 copies, record drawings, photo records, text reports and layout plan and 2 sets of CD-roms.....	122.20 16204																																			

Item	REPAIRS TO LEAKING BURIED WATER-CARRYING SERVICES	Pipe bore n.e. 300 mm	Pipe bore 300 - 600 mm	Item
	(Note : - The following items 16205 to 16208 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)			
	<i>Each</i>	A \$	B \$	
16205	Prepare and apply approved internal lining of continuous length not exceeding 2500 mm to leaking clayware pipes and fittings laid in trench.....	5,068.60	7,602.90	16205
16206	Ditto to leaking concrete pipes and fittings.....	5,068.60	7,602.90	16206
	<i>Per linear metre</i>			
16207	Extra over Item 16205 for prepare and apply approved internal lining of continuous length exceeding 2500 mm to leaking clayware pipes and fittings laid in trench.....	1,824.70	2,737.00	16207
16208	Extra over Item 16206 for ditto to leaking concrete pipes and fittings.....	1,824.70	2,737.00	16208
	CLEANING OUT EXISTING MANHOLES INCLUDING BRANCHES AND DRAINS BETWEEN MANHOLES, CESSPITS, SEPTIC TANKS, CATCHPITS, GREASE PITS AND OTHER DRAINAGE CHAMBERS		Pipe bore n.e. 300 mm	
	<i>Per item</i>		A \$	
16209	Cleaning out manholes, cesspits, septic tanks, catch pits, grease pits, and other drainage chambers including branches and connections by using high pressure water jet up to 2200 PSI and 262 litre/min. by an approved specialist for a period not exceeding 8 hours.....		3,451.10	16209
	(Note : - Item 16209 will only be paid for, if ordered by the Maintenance Surveyor in writing.)			
	<i>Each</i>			
16210	Cleaning out manholes, cesspits, septic tanks, catch pits, grease pits, and other drainage chambers n.e. 2.0 m ³ including branches and connections by using methods other than using high pressure water jet or vacuum pump/sucker.....		405.40	16210
16211	Add to Item 16210 for each additional 2.0 m ³		54.10	16211
16212	Cleaning out manholes, cesspits, septic tanks, catch pits, grease pits, and other drainage chambers n.e. 6.0 m ³ including branches and connections by sludge and sewage vacuum pump/sucker with branch up to 204mm diameter including hoses n.e. 100 metre long.....		1,081.10	16212
16213	Add to Item 16212 for each additional 6.0 m ³		810.80	16213
	(Note : - Items 16212 and 16213 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)			
	CCTV INSPECTION SURVEY TO EXISTING DRAINS, MANHOLES, CESSPITS, SEPTIC TANKS, CATCH PITS, GREASE PITS AND OTHER DRAINAGE CHAMBERS			
	<i>Per item</i>			
16214	Carrying out CCTV inspection survey to existing drains, manholes, cesspits, septic tanks, catch pits, grease pits and other drainage chambers by an approved specialist for a period not exceeding 8 hours.....		5,585.60	16214
	(Note : - Item 16214 will only be paid for, if ordered by the Maintenance Surveyor in writing.)			

Item	TESTING EXISTING DRAINS		Item																																																																																
	<i>Each</i>		A																																																																																
		\$																																																																																	
16215	Water test as described to existing branch or drain between manholes, up to 150 mm diameter.....	277.20	16215																																																																																
16216	Ditto but for 150 - 300 mm diameter.....	346.50	16216																																																																																
SUB-SOIL DRAIN PIPES AND DRAINAGE LAYER																																																																																			
Supply and lay :-																																																																																			
<i>Per square metre</i>																																																																																			
16217	Proprietary non-woven geotextile filter.....	18.50	16217																																																																																
Supply and lay :-																																																																																			
<i>Per linear metre</i>																																																																																			
16218	Perforated plastic pipe laid in trench.....		16218																																																																																
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WEEPHOLES THROUGH RETAINING WALLS																																																																																			
Supply and lay :-																																																																																			
<i>Per linear metre</i>																																																																																			
16219	Form weepholes through concrete walls with and including P.V.C. pipe cast in on rake.....	23.10	16219																																																																																
16220	Ditto but through brick or stone wall ditto.....	23.10	16220																																																																																
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CABLE DUCT PIPES																																																																																			
Supply and lay :-																																																																																			
<i>Per linear metre</i>																																																																																			
16221	Pipe laid in trench as cable duct.....	20.60	16221																																																																																
16222	Take up and clear away ditto.....	3.40	16222																																																																																
16223	Take up and set aside for re-use ditto.....	5.10	16223																																																																																
16224	Add to either of Items 16222 to 16223 inclusive for breaking out and clearing away concrete bed and surround if any.....	9.50	16224																																																																																
16225	Lay only pipe in trench as cable duct.....	5.00	16225																																																																																
<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="8">Type and bore of pipe (mm)</th> </tr> <tr> <th colspan="4">U.P.V.C.</th> <th colspan="4">Galvanized mild steel</th> </tr> <tr> <th>50</th> <th>75</th> <th>100</th> <th>150</th> <th>50</th> <th>80</th> <th>100</th> <th>150</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>H</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>20.60</td> <td>37.10</td> <td>50.90</td> <td>97.50</td> <td>66.40</td> <td>91.50</td> <td>119.40</td> <td>182.70</td> </tr> <tr> <td>3.40</td> <td>5.10</td> <td>6.00</td> <td>8.60</td> <td>6.00</td> <td>8.60</td> <td>10.30</td> <td>12.90</td> </tr> <tr> <td>5.10</td> <td>6.00</td> <td>6.90</td> <td>8.60</td> <td>10.30</td> <td>11.10</td> <td>12.90</td> <td>15.40</td> </tr> <tr> <td>9.50</td> <td>12.20</td> <td>16.20</td> <td>23.00</td> <td>9.50</td> <td>10.80</td> <td>16.20</td> <td>23.00</td> </tr> <tr> <td>5.00</td> <td>6.40</td> <td>7.70</td> <td>9.10</td> <td>25.30</td> <td>32.00</td> <td>36.10</td> <td>40.20</td> </tr> </tbody> </table>				Type and bore of pipe (mm)								U.P.V.C.				Galvanized mild steel				50	75	100	150	50	80	100	150	A	B	C	D	E	F	G	H	\$	\$	\$	\$	\$	\$	\$	\$	20.60	37.10	50.90	97.50	66.40	91.50	119.40	182.70	3.40	5.10	6.00	8.60	6.00	8.60	10.30	12.90	5.10	6.00	6.90	8.60	10.30	11.10	12.90	15.40	9.50	12.20	16.20	23.00	9.50	10.80	16.20	23.00	5.00	6.40	7.70	9.10	25.30	32.00	36.10	40.20
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Item	CONCRETE BEDS FOR CABLE DUCT PIPES		Item
		Width of concrete bed and pipe bore (mm)	
		400 Wide under 100 pipe	450 Wide under 150 pipe
		600 Wide under two 100 pipes	700 Wide under two 150 pipes
		800 Wide under three 100 pipes	950 Wide under three 150 pipes
		A \$	B \$
		C \$	D \$
		E \$	F \$
16226	Concrete Grade 10S, Grade 10D or 10MPa in :- <i>Per linear metre</i> Bed 100 mm thick under pipe or pipes laid side-by-side including haunching up from outside edge of bed to meet pipe barrel tangentially after pipes are laid.....	63.50	69.30
16227	Add to Item 16226 if pipe or pipes completely surrounded with similar concrete not less than 100 mm thick all round.....	69.30	84.30
		104.00	138.60
		150.20	184.80
		92.40	104.00
		115.50	138.60
		Width of concrete bed and pipe bore (mm)	
		400 Wide under 100 pipe	450 Wide under 150 pipe
		600 Wide under two 100 pipes	700 Wide under two 150 pipes
		800 Wide under three 100 pipes	950 Wide under three 150 pipes
		A \$	B \$
		C \$	D \$
		E \$	F \$
16228	Granular bedding as G.S. Items 23.10, 23.30 and 23.47 and Particular Specification :- <i>Per cubic metre</i> Beds, haunching or surrounds to pipe or pipes laid side-by-side.....		A \$ 231.00
		Width of concrete bed and pipe bore (mm)	
		400 Wide under 100 pipe	450 Wide under 150 pipe
		600 Wide under two 100 pipes	700 Wide under two 150 pipes
		800 Wide under three 100 pipes	950 Wide under three 150 pipes
		A \$	B \$
		C \$	D \$
		E \$	F \$
16229	DRAW-IN PITS <i>Each</i> Excavate temporary cable draw-in pit n.e. 450 mm deep, deposit surplus material on Site or cart away to dump, maintain sides and backfill with clean sand after cable being laid.....	28.80	34.70
16230	Ditto but 450 - 600 mm deep.....	34.70	46.20
16231	Ditto but 600 - 750 mm deep.....	46.20	57.80
16232	Permanent draw-in pit n.e. 450 mm deep internally (from top of base slab to top of cover slab) constructed of concrete Grade 20S, Grade 20D or 20MPa with 200 mm base slab, 150 mm thick walls and 100 mm thick precast concrete Grade 20S, Grade 20D or 20MPa cover slab extending to outer face of walls and reinforced with and including 10 mm diameter steel rods at 150 mm centres both ways, and set flush with surrounding paving and jointed against the same with mastic, including all necessary excavation, disposal of surplus material on Site or cart away to dump, formwork, leaving 50 mm diameter hole through base slab, forming 450 x 450 x 300 mm deep soakaway sump under and filling the same with 50 mm gauge broken stone, and filling pit with dry sand after cable being laid if ordered.....	473.60	566.00
16233	Ditto but 450 - 600 mm deep internally.....	739.20	866.30
16234	Ditto but 600 - 750 mm deep internally.....	889.40	1,028.00
		57.80	92.40
		92.40	127.10
		704.60	877.80
		1,085.70	1,316.70
		1,270.50	1,547.70

Item	MARKER SLABS	Item
	<i>Each</i>	
16235	Precast concrete Grade 20S, Grade 20D or 20MPa marker slab, size 225 x 200 mm and 100 mm thick trowelled smooth with letters or numbers formed in top surface as ordered, and with two 6 mm diameter steel rods cast in and left projecting 225 mm as anchor rods including setting in position flush with ground level over temporary draw-in pit or cable trench.....	16235
		34.70

A
\$

34.70

Section 17

LABOUR

LABOUR

SPECIAL CONDITIONS

- | | |
|--|--|
| Payment for labour | I. Wherever possible, work executed under the Contract shall be measured and paid for as trade items. Payment for labour on an hourly basis will not be made except in special circumstances where specifically ordered in writing by the Maintenance Surveyor. |
| Measurement generally | <p>II. The measurement of labour shall be the aggregate time employed on the item of labour to the nearest hour for any time in a 24-hour day (from 00:00 hour to 24:00 hour on the same day) including all Sundays and General Holidays. No measurement shall be made for meal breaks, rest period and travelling time. The Contractor will be paid for those labours who are actually at work and ordered by the Maintenance Surveyor in writing.</p> <p>Allowance for overtime work and any cost/expenses incurred therein is deemed to be included in the contract percentage(s) applied to the Contract. Reference shall also be made to General Regulations Clauses IV and XI.</p> |
| Rates generally | <p>III. The rates for labour shall include for : -</p> <ul style="list-style-type: none"> (a) Work being in any district. (b) Use and maintenance of hand tools and appliances, non-mechanical plant and equipment (such as ladders, trestles, stages, temporary track, wagons, skips and similar items). (c) Protective clothing and safety equipment. (d) Contractor's site supervision and employee insurance. (e) Meal breaks and rest periods. (f) Contractor's profit, establishment charges and overheads. (g) Allowance for travelling expenses and time to and from the Site. (h) Pager and mobile phone including payment of all charges incurred. (i) Contributions to Mandatory Provident Fund. (j) Paid leave. (k) Lodging allowance or living accommodation. (l) Any other allowances as required. |
| Measurement of special attendance on Building Works and on Building Services Installation | IV. The measurement of special attendance on Building Works and on Building Services Installation shall be the time required for the labour or electrician to stand-by and to provide any attendance or services as directed by the Maintenance Surveyor in the Works Order. |

Item	LABOUR	A S	Item
BUILDING WORKS			
<i>Per hour</i>			
17001	Male labour.....	68.60	17001
17002	Female labour.....	63.30	17002
17003	Concretor, bricklayer and drainlayer.....	108.10	17003
17004	Mason.....	82.00	17004
17005	Bamboo worker and scaffolder.....	124.30	17005
17006	Carpenter and joiner.....	117.10	17006
17007	Blacksmith.....	94.60	17007
17008	Steel bender.....	131.10	17008
17009	Structural steel erector.....	110.60	17009
17010	Plasterer.....	101.50	17010
17011	Terrazzo and granolithic worker.....	117.80	17011
17012	Plumber.....	100.00	17012
17013	Fitter.....	87.60	17013
17014	Glazier.....	98.00	17014
17015	Painter.....	93.10	17015
17016	Plant operator (Excavator driver, bulldozer driver, etc.).....	85.90	17016
17017	Heavy load coolie.....	70.00	17017
17018	Pneumatic driller.....	89.90	17018
BUILDING SERVICES INSTALLATION			
<i>Per hour</i>			
17019	Electrician.....	85.50	17019
17020	MVAC and E/M mechanic (MVAC, Catering and Genset).....	92.60	17020
17021	Lift mechanic.....	92.60	17021
17022	Fire Services mechanic.....	88.10	17022
17023	Medical Gas mechanic.....	98.00	17023
17024	Town Gas/LP Gas mechanic.....	98.00	17024
17025	Electronic technician (Burglar Alarm and Security, Public Address and Broadcast Reception).....	88.00	17025
GENERAL			
<i>Per hour</i>			
17026	Security guard.....	33.50	17026

Item	LABOUR (CONT'D)	Item
SPECIAL ATTENDANCE ON BUILDING WORKS AND ON BUILDING SERVICES INSTALLATION		
<i>Per hour</i>		
17027	Labour for attending Building Works.....	17027
17028	Electrician for attending Building Services Installation.....	17028

A
\$
68.60
85.50

Section 18

PLANT HIRE AND SERVICES

PLANT HIRE AND SERVICES

SPECIAL CONDITIONS

PLANT HIRE**Measurement
of plant hire**

- I. Wherever possible, work executed under the Contract shall be measured and paid for at the rates of the appropriate Section in this Schedule. No measurement shall be made for plant hire unless specifically ordered by the Maintenance Surveyor in writing.

The measurement of hired plant shall be the aggregate time hired on the item of plant to the nearest hour for any time in a 24-hour day (from 00:00 hour to 24:00 hour on the same day) including all Sundays and General Holidays. No measurement shall be made for standing time, mobilization and demobilization time. The minimum order for plant hire shall be calculated based on a minimum period of 8 hours in any one works order which is to be confirmed by the Maintenance Surveyor in writing. The hiring of plant shall be measured and valued based on the actual time of deployment of the plant or based on a period of 8 hours, whichever is the higher.

Allowance for overtime work and any cost/expenses incurred therein is deemed to be included in the contract percentage(s) applied to the Contract. Reference shall also be made to General Regulations Clauses IV and XI.

All hired plant brought onto the Site shall be in good condition and remain in good condition. Should the plant hired to Government break down or be found unserviceable, no payment shall be made for replacement of the same.

**Rates
generally**

- II. The rates shall generally include for : -
- (a) Mobilization and demobilization of all hired plants to and from the Site.
 - (b) Plant operator (for crane, excavator, skid steer loader, roller, concrete pump and access platform), driver and attendant.
 - (c) Fuel, lubricants, consumable stores, maintenance and repair.
 - (d) Contractor's profit, establishment charges and overheads.
 - (e) Insurances, license fees, patent rights and royalties where applicable.

SERVICES**Measurement
of services**

- III. Throughout this Schedule, rates for all trades shall include for providing temporary offices, drinking water and latrines as in G.S. Item 1.28 for the period of uses throughout the Works Order period. No payment will be made for providing and maintenance of container office and portable toilets under any circumstances, except for the following ordered by the Maintenance Surveyor specifically in writing : -
- (a) Container office and portable toilets for the exclusive use of the Employer other than site supervisory staff.

**Rates for
temporary
container
office**

- IV. The rates for temporary container office shall include for : -
- (a) Mobilization and demobilization of temporary container office.
 - (b) Fitting out with internal finishes complete with door, windows, lighting, power socket and room cooler (power supply measured separately).
- Internal finishes shall be as follows : -
- (i) Walls - painted or plastic veneered plywood including insulation.
 - (ii) Ceiling - painted or acoustic tiles with insulation.
 - (iii) Floors - PVC floor tiles or sheeting.

SPECIAL CONDITIONS (CONT'D)SERVICES (CONT'D)

- | | | |
|-----|--|--|
| IV. | (c) Provision of adequate lighting, air-conditioning and ventilation including payment of all charges. | Rates for temporary container office (cont'd) |
| | (d) Forming and levelling ground for resting of container office. | |
| | (e) Providing MCB board for electricity supply connection. | |
| V. | The rates for portable toilet shall include for : - | Rates for portable toilet |
| | (a) Mobilization and demobilization of portable toilet. | |
| | (b) Regularly pumping, desludging and clearing away soil and waste. | |
| | (c) Cleaning and sanitizing the interior and exterior of the portable toilet to ensure that the portable toilet is always kept clean, tidy and hygienic including cleaning and sanitizing as directed by the Maintenance Surveyor. | |
| | (d) Filling and regularly re-filling flushing water, fresh water and toilet paper and maintaining water and toilet paper available at all times. | |
| | (e) Re-charging deodorizer when required. | |
| | (f) Replacement of portable toilet which is not serviceable. | |
| | (g) Forming and levelling ground for resting of portable toilets. | |
| | (h) Reinstatement and making good surfaces disturbed at demobilization. | |
| | (i) Government dumping charges. | |

Item	PLANT HIRE	Hire Charge	Item
	<i>Per hour</i>	A \$	
18001	Air compressor, silenced machine (3.0 m ³ /min. at 7 kg/cm ²) with two 15 m hoses and two breakers including one operator for compressor.....	74.90	18001
18002	Ditto, (6.0 m ³ /min. at 7 kg/cm ²) with four 15 m hoses and four breakers including one operator for compressor.....	117.00	18002
18003	Van, pick up or similar utility vehicle, capacity 1.30 tonnes.....	110.60	18003
18004	Ditto, up to 2.60 tonnes.....	127.90	18004
18005	Lorry (highway use) n.e. 6.5 tonnes.....	126.70	18005
18006	Ditto, 12.0 tonnes.....	145.80	18006
18007	Ditto, 24.5 tonnes.....	218.00	18007
18008	Lorry with tipper (highway use) n.e. 11.0 tonnes.....	126.70	18008
18009	Ditto, 25 tonnes.....	205.30	18009
18010	Extra over either of Items 18005 to 18007 inclusive for lorry fitted with crane attachment, maximum load n.e. 3.5 tonnes.....	10.40	18010
18011	Ditto exceeding 3.5 tonnes.....	14.60	18011
18012	Excavator, full circle slew crawler or wheel mounted with backacter, 6 tonnes.....	213.30	18012
18013	Ditto, 11 tonnes.....	259.60	18013
18014	Ditto, 21 tonnes.....	391.80	18014
18015	Ditto, 30 tonnes.....	431.90	18015
18016	Extra over Items 18012 to 18015 inclusive for machine mounted percussion breaker up to 500 kg.....	46.80	18016
18017	Ditto up to 1000 kg.....	84.30	18017
18018	Ditto up to 2000 kg.....	127.60	18018
18019	Skid steer loader, rated operating capacity up to 620 kg.....	130.70	18019
18020	Crane, lorry mounted or all terrain, 12 tonnes.....	333.80	18020
18021	Ditto, 20 tonnes.....	389.70	18021
18022	Ditto, 45 tonnes.....	558.90	18022
18023	Ditto, 90 tonnes.....	1,084.40	18023
18024	Ditto, 135 tonnes.....	1,689.10	18024
18025	Ditto, 200 tonnes.....	1,819.60	18025
18026	Ditto, 300 tonnes.....	2,979.80	18026

Item	PLANT HIRE (CONT'D)	Hire Charge	Item
	<i>Per hour</i>	A \$	
18027	Access platform, scissor lift self propelled, yard travel, capacity up to 400 kg.....	129.50	18027
18028	Ditto, up to 800 kg.....	161.90	18028
18029	Ditto, exceeding 800 kg.....	187.30	18029
18030	Access platform, telescopic self propelled, yard travel, capacity up to 400 kg and platform height up to 10.0 metre.....	140.30	18030
18031	Ditto, capacity up to 400 kg and platform height exceeding 10.0 metre.....	200.50	18031
18032	Access platform, vehicle mounted, telescopic/articulated in any capacity and platform height up to 20.0 metre.....	180.20	18032
18033	Ditto, platform height up to 30.0 metre.....	362.50	18033
18034	Ditto, platform height exceeding 30.0 metre.....	1,011.70	18034
18035	Generator set, 330.0 kVA.....	219.80	18035
18036	Concrete mixer (tilting drum type), wet capacity 100 litres.....	17.20	18036
18037	Ditto, wet capacity 200 litres.....	29.90	18037
18038	Concrete pump, lorry mounted including boom, cleaning equipment and piping in any diameter n.e. 200 metre long.....	1,182.60	18038
18039	Pumps, portable, double diaphragm, discharge branch up to 51 mm diameter including hoses n.e. 100 metre long.....	38.80	18039
18040	Ditto, up to 102 mm diameter.....	52.80	18040
18041	Pumps, portable, sludge and sewage, discharge branch up to 102 mm diameter including hoses n.e. 100 metre long.....	55.10	18041
18042	Ditto, up to 204 mm diameter.....	124.60	18042
18043	Pumps, portable, electric submersible, discharge branch up to 51 mm diameter including hoses n.e. 100 metre long.....	36.20	18043
18044	Ditto, up to 102 mm diameter.....	49.80	18044
18045	Concrete vibrator poker, diesel driven.....	13.30	18045
18046	Vibrating plate compactor weight up to 200 kg.....	15.90	18046
18047	Ditto, weight up to 300 kg.....	20.30	18047
18048	Ditto, weight up to 500 kg.....	36.90	18048
18049	Jumping rammer including trolley weight up to 100 kg.....	10.80	18049
18050	Roller, road deadweight (steel 3 wheel/3 roll, diesel), unballasted weight/tonnes up to 6.10.....	167.00	18050
18051	Ditto, unballasted weight/tonnes up to 10.50.....	175.20	18051
18052	Ditto, unballasted weight/tonnes up to 13.00.....	192.40	18052

Item	PLANT HIRE (CONT'D)	Hire Charge	Item
	<i>Per hour</i>	A \$	
18053	Roller, self propelled vibratory tandem (seated control), maker's weight up to 2.5 tonnes.....	146.00	18053
18054	Ditto, up to 5.0 tonnes.....	182.20	18054
18055	Ditto, up to 9.0 tonnes.....	239.40	18055
18056	Ditto, up to 12.0 tonnes.....	273.00	18056
18057	Welding set (diesel), 300 Amp., single operator complete with electrodes cables, welding shields and torches.....	31.10	18057
18058	Oxy-acetylene welding and cutting set complete with face shields, torches, hoses, gloves, oxygen and acetylene.....	22.90	18058
	SERVICES		
	Temporary container office : -		
	<i>Per month</i>		
18059	Container office, 20 feet long.....	1,097.30	18059
	Portable toilet : -		
	<i>Per month</i>		
18060	Portable toilet equipped with open waste tank.....	1,468.90	18060
18061	Ditto but of handicapped type.....	1,849.50	18061
18062	Portable toilet equipped with flushing system.....	2,183.00	18062
18063	Portable toilet equipped with flushing system and wash hand basin.....	2,433.90	18063

Section 19

CONVEYANCE

CONVEYANCE

SPECIAL CONDITIONS

Measurement of conveyance of articles or materials by land vehicle

- I. Conveyance of articles or materials by land vehicle shall only be measured where such conveyance is not included under any items in other Sections of this Schedule and is specifically ordered in writing by the Maintenance Surveyor.

One trip is defined as the door-to-door conveyance of articles or materials from the starting place to last designated location which may include one or more designated stops irrespective of the numbers of individual sections of transport in between.

In the case of conveyance of articles or materials within the Site, measurement shall be made in accordance with the appropriate items in Section 17 - Labour and/or Section 18 - Plant Hire and Services of this Schedule.

Rates for conveyance of articles or materials by land vehicle

- II. The rates for conveyance by land vehicle shall generally include for :-
- (a) Moving from the designated location to new position as directed by the Maintenance Surveyor.
 - (b) Lowering and hoisting including taking from or to any floor or roof of an existing building or structure.
 - (c) Loading and unloading.
 - (d) Transporting to and return journey of packing and personnel as required.
 - (e) Neatly stacking, storing or leaving in the required new position.
 - (f) Provision of driver and all labour, tools and plant necessary including levers, ropes, planks, rollers, wheelbarrows, trucks, lorries and the like.
 - (g) Provision of any necessary temporary packing, securing ropes and the like, and properly securing and keeping the articles or materials secured during transit.
 - (h) Repairing and making good or replacing at the Maintenance Surveyor's discretion any articles or materials damaged during moving, loading, transit, unloading, and moving to new position, store or stack.
 - (i) All tunnel or bridge tolls.
 - (j) All costs in respect of loading, unloading and delivery of articles or materials from and to remote area where no vehicular access is available.
 - (k) Dismantling and reassembling composite articles, if required.
 - (l) Obtaining access licenses and permits.
 - (m) Insurance of all materials or articles being conveyed and supervising staff on board.

SPECIAL CONDITIONS (CONT'D)

- III. Conveyance of articles or materials by helicopter shall only be measured where such conveyance is not included under any items in other Sections of this Schedule and is specifically ordered in writing by the Maintenance Surveyor.

**Measurement
of conveyance
of articles or
materials by
helicopter**

One trip is defined as the conveyance of articles and materials from the time when the helicopter leaves the flying base to the time when it lands at the flying base. The helicopter shall be fuelled adequately for any flights over 90 minutes before it flies. No measurement shall be made for any time required for first fuelling. However, when a flight exceeds 90 minutes and where no access can be provided for the re-fuelling vehicle to the designated locations for loading or unloading, the time for re-fuelling to and from the flying base shall also be measured.

Conveyance by helicopter for the first 30 minutes shall be measured per trip. Conveyance after the first 30 minutes shall be measured to the nearest five minutes.

In the case of conveyance of articles or materials within the Site, measurement shall be made in accordance with the appropriate items in Section 17 - Labour and/or Section 18 - Plant Hire and Services of this Schedule.

- IV. The rates for conveyance by helicopter shall include for :-

**Rates for
conveyance
of articles or
materials by
helicopter**

- (a) Lowering to and hoisting from the designated locations for loading or unloading.
- (b) Provision of pilot and lifting equipment certified by an independent specialist.
- (c) Provision of any necessary temporary packing, securing ropes and the like, and properly securing and keeping the articles or materials secured during transit.
- (d) Insurance of all materials or articles being conveyed and supervising staff on board.
- (e) Training course at the flying base for the Employer's ground crew for loading and unloading.
- (f) A loadmaster at the designated location for loading where the helicopter can land nearby.
- (g) Radio communication between the loadmaster and the pilot where load master is provided.
- (h) Any advance payment made to the specialist helicopter conveyance company.

Item	CONVEYANCE	Conveyance of articles or materials		Item
		Inside Contract area	Outside Contract area	
		A \$	B \$	
	BY LAND VEHICLE			
	<i>Per trip</i>			
19001	Van, pick up or similar utility vehicle, carrying capacity up to 1.30 tonnes.....	179.90	268.60	19001
19002	Ditto but up to 2.60 tonnes.....	196.40	294.60	19002
19003	Lorry, plated gross vehicle weight up to 6.50 tonnes.....	195.30	292.90	19003
19004	Ditto but up to 7.50 tonnes.....	269.60	404.40	19004
19005	Ditto but up to 12.00 tonnes.....	282.90	424.30	19005
19006	Ditto but up to 14.00 tonnes.....	293.30	439.90	19006
19007	Ditto but up to 17.00 tonnes.....	384.40	576.50	19007
19008	Ditto but up to 24.50 tonnes.....	492.20	738.20	19008
19009	Ditto but up to 30.00 tonnes.....	517.00	689.40	19009
19010	Ditto, articulated up to 33.00 tonnes.....	574.00	861.00	19010
19011	Ditto, articulated up to 39.00 tonnes.....	597.10	895.60	19011
19012	Extra over Items 19003 to 19011 inclusive for lorry fitted with crane attachment maximum load up to 3.50 tonnes.....	62.30	74.60	19012
19013	Extra over Items 19003 to 19011 inclusive for lorry fitted with crane attachment maximum load exceeding 3.50 tonnes.....	86.40	105.30	19013
	BY HELICOPTER			
	<i>Per trip</i>			
19014	Helicopter, carrying capacity up to 800 kilogrammes, for the first 30 minutes.....		14,437.50	19014
	<i>Each</i>			
19015	Add to Item 19014 for each subsequent 5 minutes (measured to the nearest 5 minutes).....		2,406.30	19015

Section 20

CARPETING

CARPETING

SPECIAL CONDITIONS

Measurement of carpeting	I.	All works shall be measured over the net area covered to horizontal, sloping or vertical surfaces including additional girth of upstands, curbs, channels and the like. No deduction shall be measured for voids not exceeding 0.50 m ² .
Rates for carpeting or carpeting with underlays generally	II.	<p>The rates for carpeting or carpeting with underlays shall generally include for : -</p> <ul style="list-style-type: none"> (a) Working to narrow widths and small areas. (b) Working to flat or sloping surfaces. (c) New and existing surfaces. (d) All necessary cleaning and preparation of substrate prior to the laying of carpet, carpet tiles or underlays. (e) Tapes, adhesive, carpet grippers and seaming cement where necessary. (f) Laying of carpets including straight, raking or circular cutting and waste, seaming and jointing as G.S. Item 18.145, sewing and fixing all smooth edges and carpet trims. (g) Fixing and trimming, cutting and fitting carpets to floor mounted services outlets including electric power point, telephone box, recessed removable covers and the like including binding edges as required. (h) Bonding to match existing works. (i) Protection and cleaning. (j) Provision of samples, literature, test certificates, manufacturer's guarantee and the like for carpet and underlays.
Rates for carpet tiles	III.	<p>The rates for carpet tiles shall further include for : -</p> <ul style="list-style-type: none"> (a) Release agent where necessary. (b) Treating surfaces with approved protective treatment.
Rates for "Take up and clear away existing carpet or carpet tiles" generally	IV.	<p>The rates for "Take up and clear away existing carpet or carpet tiles" shall generally include for : -</p> <ul style="list-style-type: none"> (a) Taking up and clearing away existing carpet by hand or power tools or both. (b) Removal of associated adhesive and release agent. (c) Removal of associated underlays and carpet grippers. (d) Making good affected surfaces.
Measurement of entrance matting	V.	Entrance matting shall be measured the net area fixed. Forming matt well shall be measured elsewhere in this Schedule.

SPECIAL CONDITIONS (CONT'D)

VI.	The rates for entrance matting shall include for : -	Rates for entrance matting
(a)	Working to narrow widths and small areas.	
(b)	Working to flat or sloping surfaces.	
(c)	New and existing surfaces.	
(d)	All necessary framing and fixing accessories.	
(e)	All necessary cleaning and preparation of substrate prior to the fixing of entrance matting.	
(f)	Protection and cleaning.	
(g)	Provision of samples, literature, test certificates and manufacturer's guarantee	

SPECIFICATION FOR CARPETS AND CARPET TILES

VII.	G.S. clauses for carpeting can be found in the Finishes Section of the General Specification for Building.	G.S. clauses
VIII.	Specification for Environmentally Friendly Carpet shall refer to the Particular Specification for Carpeting in the Contract.	Specification for Environmental Friendly Carpet

Item	HEAVY CONTRACT QUALITY CARPET	Item
	CARPET; FULLY ADHERING METHOD	
	Supply and lay carpet as G.S. and Particular Specification with all types of backing and in any series and colour finish required : -	
	<i>Per square metre</i>	
20001	Carpet laid with adhesive.....	20001
20002	Carpet laid with adhesive and release bond agent.....	20002
	Supply and lay carpet including backing as "Environmentally Friendly Carpet" as G.S. and Particular Specification in any series and colour finish required : -	
	<i>Per square metre</i>	
20003	Carpet laid with adhesive.....	20003
20004	Carpet laid with adhesive and release bond agent.....	20004
	Supply and lay carpet including backing as "Environmentally Friendly Carpet" as G.S. and Particular Specification in any series and colour finish required : -	
	<i>Per square metre</i>	
20005	Carpet laid with adhesive.....	20005
20006	Carpet laid with adhesive and release bond agent.....	20006
	Alterations and repairs : -	
	<i>Per square metre</i>	
20007	Take up and clear away existing carpet of any type.....	20007
20008	Take up existing carpet of any type and set aside for re-use.....	20008
20009	Lay or fix only carpet of any type with adhesive.....	20009
20010	Lay or fix only carpet of any type with adhesive and release bond agent.....	20010
	CARPET; GRIPPER METHOD	
	Supply and lay carpet as G.S. and Particular Specification with all type of backing and in any series and colour finish required : -	
	<i>Per square metre</i>	
20011	Carpet laid with grippers.....	20011
20012	Ditto with underlays.....	20012

Carpet					
Pile weight (kg/m ²)					
n.e. 1.50			exc. 1.50		
to floor	to stairs	to wall	to floor	to stairs	to wall
A	B	C	D	E	F
\$	\$	\$	\$	\$	\$
169.80	192.90	221.70	259.30	270.30	299.10
177.90	201.00	229.80	253.50	276.60	305.50

Carpet					
Pile weight (kg/m ²)					
n.e. 1.00			exc. 1.00		
to floor	to stairs	to wall	to floor	to stairs	to wall
A	B	C	D	E	F
\$	\$	\$	\$	\$	\$
250.60	273.70	302.60	299.10	322.20	351.10
257.50	280.60	309.50	319.90	343.00	371.90

Carpet		
Pile density (fibre/m ²)		
exc. 75 million		
to floor	to stairs	to wall
A	B	C
\$	\$	\$
325.70	348.80	377.70
345.30	368.40	397.30

Carpet		
to floor	to stairs	to wall
A	B	C
\$	\$	\$
7.70	9.30	10.00
18.90	22.60	24.50
26.00	39.30	42.50
38.80	46.20	53.10

Carpet			
Pile weight (kg/m ²)			
n.e. 1.50		exc. 1.50	
to floor	to stairs	to floor	to stairs
A	B	C	D
\$	\$	\$	\$
175.00	225.80	252.30	303.20
210.20	261.00	287.60	338.40

Item	HEAVY CONTRACT QUALITY CARPET (CONT'D)	Item																								
	CARPET; GRIPPER METHOD (CONT'D)																									
	Supply and lay carpet including backing as "Environmentally Friendly Carpet" as G.S. and Particular Specifications in any series and colour finish required : -																									
	<i>Per square metre</i>																									
		<table border="1"> <thead> <tr> <th colspan="4">Carpet</th> </tr> <tr> <th colspan="4">Pile weight (kg/m²)</th> </tr> <tr> <th colspan="2">n.e. 1.00</th> <th colspan="2">exc. 1.00</th> </tr> <tr> <th>to floor</th> <th>to stairs</th> <th>to floor</th> <th>to stairs</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>	Carpet				Pile weight (kg/m ²)				n.e. 1.00		exc. 1.00		to floor	to stairs	to floor	to stairs	A	B	C	D	\$	\$	\$	\$
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to floor	to stairs	to floor	to stairs																							
A	B	C	D																							
\$	\$	\$	\$																							
20013	Carpet laid with grippers.....	20013																								
20014	Ditto with underlays.....	20014																								
	Alterations and repairs : -																									
	<i>Per square metre</i>																									
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Carpet																										
to floor	to stairs																									
A	B																									
\$	\$																									
20015	Take up and clear away existing carpet of any type with or without underlay.....	20015																								
20016	Take up existing carpet of any type and set aside for re-use.....	20016																								
20017	Ditto but including underlays.....	20017																								
20018	Lay only carpet of any type with and including grippers.....	20018																								
20019	Ditto with underlays ditto.....	20019																								
20020	Lay only carpet of any type including provision of new underlays and clear away old underlays ditto.....	20020																								
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	<i>Per square metre</i>																									
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Carpet																										
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n.e. 2.05		exc. 2.05																								
to floor	to stairs	to floor	to stairs																							
A	B	C	D																							
\$	\$	\$	\$																							
20021	Carpet 'machine tufted' laid with grippers.....	20021																								
20022	Ditto with underlays.....	20022																								
20023	Carpet 'hand made' laid with grippers.....	20023																								
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20030	Lay only carpet of any type including provision of new underlays and clear away old underlays ditto.....	20030																								

Item	HEAVY CONTRACT QUALITY CARPET TILE	Item																																				
	<p>CARPET TILE; FULLY ADHERING METHOD</p> <p>Supply and lay carpet tiles module size n.e. 0.40 m² in all type of backing and in all series and colour finish required : -</p> <p><i>Per square metre</i></p>																																					
		<table border="1"> <thead> <tr> <th colspan="6">Carpet tiles</th> </tr> <tr> <th colspan="6">Pile weight (kg/m²)</th> </tr> <tr> <th colspan="3">n.e. 1.00</th> <th colspan="3">exc. 1.00</th> </tr> <tr> <th>to floor</th> <th>to stairs</th> <th>to wall</th> <th>to floor</th> <th>to stairs</th> <th>to wall</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>	Carpet tiles						Pile weight (kg/m ²)						n.e. 1.00			exc. 1.00			to floor	to stairs	to wall	to floor	to stairs	to wall	A	B	C	D	E	F	\$	\$	\$	\$	\$	\$
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20031	Carpet tiles laid with adhesive.....	20031																																				
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20033	Carpet tiles laid with adhesive.....	20033																																				
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\$	\$	\$																																				
20037	Take up and clear away existing carpet tiles of any type.....	20037																																				
20038	Take up existing carpet tiles of any type and set aside for re-use.....	20038																																				
20039	Lay only carpet tiles of any type with adhesive.....	20039																																				
20040	Lay only carpet tiles of any type with adhesive and release bond agent.....	20040																																				

Item	ENTRANCE MATTING					Item	
	Supply and install entrance matting comprises aluminium rolling mat strips and frames and aluminium/rubber/carpet scraper strip in any colour, profile spacing and finish :-	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only		
	<i>Per square metre</i>	A \$	B \$	C \$	D \$		
20041	Heavy duty entrance matting, ribbed carpet/grooved rubber/brush/aluminium scraper finished strip, n.e. 17 mm height.....	3,788.10	48.00	72.80	146.40	20041	
20042	Ditto, 17 - 22 mm height.....	4,253.30	48.00	72.80	146.40	20042	
20043	Ditto, 22- 27 mm height.....	4,678.60	48.00	72.80	146.40	20043	
	SUPPLY ONLY OF MATERIALS						
	<i>Per square metre</i>					A \$	
20044	Fully adhered or loosely laid carpet, pile weight n.e. 1.50 kg/m ² delivered to Site.....					92.40	20044
20045	Fully adhered or loosely laid carpet, pile weight exceeding 1.50 kg/m ² delivered to Site.....					109.20	20045
20046	Fully adhered or loosely laid "Environmental Friendly" carpet, pile weight n.e. 1.00 kg/m ² delivered to Site.....					173.30	20046
20047	Fully adhered or loosely laid "Environmental Friendly" carpet, pile weight exc. 1.00 kg/m ² delivered to Site.....					277.20	20047
20048	Carpet tile module size n.e. 0.40 m ² , pile weight n.e. 1.00 kg/m ² delivered to Site.....					138.60	20048
20049	Carpet tile module size n.e. 0.40 m ² , pile weight exc. 1.00 kg/m ² delivered to Site.....					173.30	20049
20050	"Environmental Friendly" Carpet tiles size n.e. 1.00 m ² , pile weight n.e. 1.00 kg/m ² delivered to Site.....					173.30	20050
20051	"Environmental Friendly" Carpet tiles size n.e. 1.00 m ² , pile weight exc. 1.00 kg/m ² delivered to Site.....					231.00	20051
20052	"Environmental Friendly" Carpet tiles, pile density (fibre/m ²) exceeding 75 million in any series, delivered to Site.....					335.00	20052
20053	100% pure wool, pile weight n.e. 2.05 kg/m ² "machine tufted" carpet delivered to Site.....					352.30	20053
20054	100% pure wool, pile weight exceeding 2.05 kg/m ² "machine tufted" carpet delivered to Site.....					444.70	20054
20055	100% pure wool, pile weight n.e. 2.05 kg/m ² "hand made" carpet delivered to Site.....					768.10	20055
20056	100% pure wool, pile weight exceeding 2.05 kg/m ² "hand made" carpet delivered to Site.....					814.30	20056
20057	Carpet underlay delivered to Site.....					46.20	20057

Section 21

SUNBLINDS, CURTAINS AND AWNINGS

SUNBLINDS, CURTAINS AND AWNINGS

SPECIAL CONDITIONS

Measurement generally

- I. Sunblinds shall generally be measured to the exact dimensions of the windows to be blinded.
- Curtains shall generally be measured the area to be curtained.
- Awnings shall be measured to the net plan areas as fixed. Portion operating individually is considered as one individual size.
- Canvas shall be measured to the net area as finished with no allowance made for seams and pleats.
- Take down existing fixtures and power supply installation will be measured separately.

Rates for venetian blinds

- II. The rates for venetian blinds shall include for : -
- (a) Supplying and fixing of single or multi-coloured slats, rise and fall control mechanism, locking cord control mechanism, tilt control mechanism, ladder tape and all necessary accessories all in accordance with the manufacturer's instructions.
 - (b) Supplying and fixing of enamel coated galvanised steel or enamel coated, powder coated or anodised aluminium head and bottom rails.
 - (c) Plugging and fixing to plastered surfaces or screwing to wooden pelmet.
 - (d) Making good area disturbed, touching up plasterwork and paintwork where required.
 - (e) Submission of technical pamphlets and samples of venetian blinds.
 - (f) Moving and replacing in position all movable furniture as necessary at the time of execution of works.

Rates for vertical blinds

- III. The rates for vertical blinds shall include for : -
- (a) Supplying and fixing of single or multi-coloured blades, base weights, drag and base connector cords, glider rail, open and close control, and stop control at any position and all necessary accessories all in accordance with the manufacturer's instructions.
 - (b) Supplying and fixing of enamel coated galvanised steel or anodised aluminium head rail.
 - (c) Plugging and fixing to plastered surfaces or screwing to wooden pelmet.
 - (d) Preparing and applying flame-proof finish to all surfaces of the fabric covering.
 - (e) Making good area disturbed, touching up plasterwork and paintwork where required.
 - (f) Submission of technical pamphlets and samples of vertical blinds.
 - (g) Moving and replacing in position all movable furniture as necessary at the time of execution of works.

SPECIAL CONDITIONS (CONT'D)

- IV. The rates for chic sunblinds shall include for : - **Rates for chic sunblinds**
- (a) Supplying and fixing of single or multi-coloured split bamboo laths, well laced with best quality waterproof line at 125 mm centres, fixing cord, pulley cleats, screw hanging eyes and all necessary accessories.
 - (b) Supplying and fixing 65 mm wide stout fabric bands at both edges.
 - (c) Supplying and fixing of stout whole bamboo top and bottom.
 - (d) Plugging and fixing to plastered surfaces or screwing to wooden pelmet.
 - (e) Spraying fire retardant paint on blinds.
 - (f) Making good area disturbed, touching up plasterwork and paintwork where required.
 - (g) Submission of a sample of chic sunblinds.
 - (h) Moving and replacing in position all movable furniture as necessary at the time of execution of works.
- V. The rates for roller blinds shall include for : - **Rates for roller blinds**
- (a) Supplying and fixing of single or multi-coloured curtains with or without linings.
 - (b) Supplying and installation of switch control, motor and all necessary accessories for electrically operated roller blinds.
 - (c) Supply and installation of rise, fall and stop control mechanism including all necessary accessories.
 - (d) Provision of all requisite ladders, scaffolding, cradles, staging and working platforms when required for working at any height and locations.
 - (e) Provision of fixing framings or brackets to existing building or structure.
 - (f) Preparing and applying flame-proof finish to all surfaces of the fabric covering.
 - (g) Making good areas disturbed, touching up plasterwork and paintwork where required.
 - (h) Moving and replacing in position all movable furniture as necessary at the time of execution of works.
 - (i) Submission of technical pamphlets and samples of roller blinds.
- VI. The rates for alteration and repairs items shall generally include for : - **Rates for alteration and repairs generally**
- (a) Taking down and clearing away of old/defective articles or fittings.
 - (b) Preparing to receive replacement articles or fittings.
 - (c) Supplying and fixing new articles or fittings.
 - (d) All matching screws, spacers, tape, rails and the like.
 - (e) All labour and material in mortising, fitting, plugging, cutting and pinning.
 - (f) Making good areas disturbed, touching up plasterwork and paintwork where required.

SPECIAL CONDITIONS (CONT'D)

Rates for awnings	VII. The rates for awnings shall include for : - <ul style="list-style-type: none">(a) Supplying and fixing of single or multi-coloured awnings manually or electrically operated.(b) Supplying and installation of switch control, motor and all necessary accessories as required.(c) Provision of all requisite ladders, scaffolding, cradles, staging and working platforms when required for working at any height and locations.(d) Provision of fixing framings or brackets to existing building or structure.(e) Preparing and applying flame-proof finish to all surfaces of the fabric covering.(f) Making good areas disturbed, touching up plasterwork and paintwork where required.(g) Submission of technical pamphlets and samples of awnings.
Rates for blackout curtains and stage curtains	VIII. The rates for blackout curtains and stage curtains shall include for : - <ul style="list-style-type: none">(a) Supplying and fixing of single or multi-coloured curtains with or without linings.(b) Provision of all requisite ladders, scaffolding, cradles, staging and working platforms when required for working at any height and locations.(c) All pleats and foldings.(d) Hooks and hangers.(e) Moving and replacing in position all movable furniture as necessary at the time of execution of works.(f) Preparing and applying flame-proof finish to all surfaces of the fabric covering.(g) Making good areas disturbed, touching up plasterwork and paintwork where required.(h) Submission of samples of curtains and linings.
Ironmongery for curtains	IX. Ironmongery for curtains can be found in Section 09 - Ironmongery of this Schedule.
G.S. clauses	X. G.S. clauses for venetian blinds can be found in the Internal Fittings and Fixtures Section of the General Specification for Building.

Item	VENETIAN BLINDS (CONT'D)		Item		
	Alteration and repairs : - (cont'd)	A			
	Take down and clear away the following old or defective articles or fittings, and supply and fix new articles or fittings : - (cont'd)	\$			
	<i>Each</i>				
21017	750 mm Long solid core wand with hook.....	46.90	21017		
21018	1,000 mm Long ditto.....	65.50	21018		
21019	1,300 mm Long ditto.....	81.10	21019		
21020	1,500 mm Long ditto.....	96.00	21020		
21021	2,300 mm Long ditto.....	162.80	21021		
21022	End cap to head or bottom rails.....	9.00	21022		
21023	Slat clip.....	8.20	21023		
		Area of blinds (m ²)			
		N.e. 3.0	Exc. 3.0		
	<i>Each</i>	A	B		
		\$	\$		
21024	Take down venetian blinds and fittings, reduce to smaller size (any area), ease, adjust and re-fix in original or other position, including replacement of parts (take down area measured).....	204.20	233.50	21024	
	<i>Each</i>				
21025	Take down existing venetian blinds and set aside for re-fix.....	29.30	33.70	21025	
21026	Ditto but clear away from Site.....	34.70	41.60	21026	
21027	Fix only venetian blinds.....	73.20	87.90	21027	
	VERTICAL BLINDS				
		Area of blinds (m ²)			
		N.e. 1.0	1.0 - 1.5	Exc. 1.5	
	<i>Per square metre</i>	A	B	C	
		\$	\$	\$	
21028	Blinds in individual size.....	222.70	193.80	170.60	21028
	<i>Each</i>				
21029	Extra over for forming opening n.e. 0.50 m ²			86.60	21029
21030	Ditto exceeding 0.50 m ²			86.60	21030

Item	VERTICAL BLINDS (CONT'D)			Item
	Alteration and repairs :-		A	
	Take down and clear away the following old or defective articles or fittings, and supply and fix new articles or fittings :-		\$	
	<i>Per linear metre</i>			
21031	Fabric louvre.....	15.20		21031
21032	Drawing cord.....	43.50		21032
21033	Bead chain.....	26.20		21033
	<i>Each</i>			
21034	Base weight.....	23.30		21034
21035	End cap.....	10.80		21035
21036	Hanger.....	17.50		21036
21037	Set of Runner.....	105.90		21037
21038	Spacer.....	13.70		21038
			Area of blinds (m ²)	
			N.e. 3.0	Exc. 3.0
			A	B
			\$	\$
21039	Take down vertical blinds and fittings, reduce to smaller size (any size), ease, adjust and re-fix in original or other position, including replacement of parts (take down area measured).....	181.10	210.40	21039
	<i>Each</i>			
21040	Take down existing vertical blinds and set aside for re-fix.....	16.10	19.00	21040
21041	Ditto but clear away from Site.....	25.40	30.00	21041
21042	Fix only vertical blinds.....	73.20	87.90	21042
	CHIC SUNBLINDS			
			Area of blinds (m ²)	
			N.e. 1.0	1.0 - 1.5
			1.5 - 2.0	Exc. 2.0
			A	B
			\$	\$
21043	Chic sunblinds in individual size.....	331.20	324.90	318.70
			202.60	21043

Item	CHIC SUNBLINDS (CONT'D)			Item	
	<i>Each</i>		A \$		
21044	Extra over for forming opening n.e. 0.50 m ²	62.40		21044	
21045	Ditto exceeding 0.50 m ²	62.40		21045	
	Alteration and repairs :-				
	<i>Each</i>				
			Area of blinds (m ²)		
			N.e. 3.0	Exc. 3.0	
			A \$	B \$	
21046	Take down, set aside for re-use chic sunblinds and associated cord and fittings.....	28.20	32.60	21046	
21047	Ditto but clear away from Site.....	31.20	42.90	21047	
21048	Fix only chic sunblinds completed with cord and fittings.....	74.90	84.30	21048	
	ROLLER BLINDS				
	<i>Per square metre</i>				
			Height (m)		
			N.e 1.0	1.0-2.0	Exc. 2.0
			A \$	B \$	C \$
21049	Blinds in individual size, manually operated.....	442.10	401.90	376.80	21049
21050	Blinds in individual size, electrically operated.....	802.20	744.90	572.10	21050
21051	Extra over Items 21049 to 21050 inclusive for additional blackout blinds.....	119.00	119.00	119.00	21051
	<i>Each</i>				
21052	Extra over for forming opening n.e. 0.50 m ²			86.60	21052
21053	Ditto exceeding 0.50 m ²			86.60	21053
	Alteration and repairs :-				
	<i>Each</i>				
21054	Take down roller blinds and fitting, reduce to smaller size (any area), ease, adjust and re-fix in original or other position, including replacement of parts (take down area measured).....			217.70	21054
21055	Take down existing roller blinds and set aside for re-fix.....			11.70	21055
21056	Ditto but clear away from Site.....			18.50	21056
21057	Fix only roller blinds.....			98.10	21057

Item	AWNINGS	Projection of awning on plan (m ²)		Item		
	Supply and fix awnings, complete with all necessary accessories, etc : -	N.e. 14.50	14.50 - 29.00			
	<i>Per square metre</i>	A \$	B \$			
21058	Awnings in individual size, manually operated.....	616.00	554.40	21058		
21059	Ditto, electrically operated.....	761.50	654.90	21059		
21060	Awning fabric to existing awning frame.....	333.10	299.60	21060		
	Alteration and repairs : -					
	<i>Per square metre</i>		A \$			
21061	Take down existing manually operated awnings and set aside for re-fix.....		20.90	21061		
21062	Ditto but clear away from Site.....		25.60	21062		
21063	Take down existing electrically operated awnings and set aside for re-fix.....		30.40	21063		
21064	Ditto but clear away from Site.....		34.10	21064		
21065	Fix only manually operated awnings, including plugging, cutting and pinning etc., and making good and leaving in good order.....		199.70	21065		
21066	Ditto, but electrically operated.....		212.20	21066		
	CANVAS					
	<i>Per square metre</i>	Supply and fix A \$	Take down and clear away B \$	Take down and set aside for re-use C \$	Fix only D \$	
21067	Best stripped drill canvas made up, including all seaming, scalloped edges and similar labours, providing and fixing any tying tape or cord, and fixing complete in sunshades and similar positions (rollers and framework measured separately).....	72.70	8.50	9.40	13.90	21067
	BLACKOUT CURTAINS					
	<i>Per square metre</i>		Blackout curtains with linings A \$		without linings B \$	
21068	Blackout curtains fixed to curtain rails and tracks (measured separately).....		204.60	144.80	21068	

Item	BLACKOUT CURTAINS (CONT'D)			Item
	<i>Each</i>	A \$		
21069	Extra over for forming opening n.e. 0.50 m ²	71.60		21069
21070	Ditto 0.50 - 1.00 m ²	71.60		21070
	Alteration and repairs : -			
	<i>Per square metre</i>			
21071	Take down and clear away blackout curtains and associated cord and fittings.....	9.60		21071
21072	Take down, set aside for re-use blackout curtains and associated cord and fittings.....	10.50		21072
21073	Fix only blackout curtains completed with cord and fittings.....	22.00		21073
	STAGE CURTAINS	Stage curtains		
		with linings	without linings	
	<i>Per square metre</i>	A \$	B \$	
21074	Cotton velveteen stage curtain with valance fixed on curtain rails and tracks (measured separately).....	254.60	215.50	21074
	Alteration and repairs : -			
	<i>Per square metre</i>			
21075	Take down and clear away stage curtains and associated cord and fittings.....	11.90	10.80	21075
21076	Take down, set aside for re-use stage curtains and associated cord and fittings.....	11.60	10.50	21076
21077	Fix only stage curtains completed with cord and fittings.....	27.10	24.80	21077

Section 22

**DEMOUNTABLE PARTITIONS,
DRY WALL AND CUBICLE SYSTEM**

DEMOUNTABLE PARTITION, DRY WALL AND CUBICLE SYSTEM

SPECIAL CONDITIONS

Measurement of demountable partitions and dry walls

- I. Measurement of all demountable partitions or dry walls : -
- (a) The measurement of security type and fire resisting type partitions shall be the plane area of panels excluding sound insulation.
 - (b) The measurement of demountable partitions shall be the plane area of panels excluding sound insulation.
 - (c) The measurement of dry walls shall be the plane area of panels excluding sound insulation.

All works shall be measured the net area as specified. No deduction shall be made for voids or openings not exceeding 0.50 m². Doors shall be measured separately.

The sound insulation shall be measured the net area where sound insulation applied.

Rates for demountable partitions and dry walls generally

- II. The rates for demountable partitions and dry walls shall generally include for : -
- (a) All framing units and components, full or part length panels to complete length ordered and standard covering materials.
 - (b) Treating all exposed wood or veneer surfaces with fire retardant paint.
 - (c) Treating all fabric surfaces with flame proof treatment.
 - (d) Aluminium skirting including all types of finishes or black mild steel skirting.
 - (e) Factory finished painting, laminated plastic or timber veneered, fabric or vinyl cloth finish.
 - (f) Providing manufacturer's guarantee.
 - (g) All base, ceiling and abutment fixing.
 - (h) Forming wants including trimming edges.
 - (i) Design, fabricate, assemble and erect of the complete system including all necessary riveting, drilling, welding etc. either on site or off site as required.
 - (j) All necessary framing and suspension system from structural soffits to suspended ceiling level (above the exposed heights for demountable partitions and dry walls) for holding the demountable partitions and dry walls in place including all necessary stiffening and fixings.
 - (k) Submission of design drawings, working details and shop drawings for the Maintenance Surveyor's approval prior to commencement of installation.

Rates for full height demountable partitions

- III. The rates for full height demountable partitions shall further include for : -
- (a) All framings and edging trims to intermediate, end or adjoining partitions and around door frames, openings and the like.
 - (b) In the case of panel stopped at door height include additional capping to exposed upper edge of partition.

Rates for lower level partitions

- IV. The rates for lower level partitions shall further include for : -
- (a) All upper cappings and intermediate stabilizers as required.
 - (b) Providing and fixing to concrete structures, walls or fixtures with anchor bolts, brackets and the like.

SPECIAL CONDITIONS (CONT'D)

- V. The rates for dry walls shall further include for : - **Rates for dry walls**
- (a) All mouldings at edges, skirtings and fixings complete.
 - (b) Providing and fixing to concrete structures, walls or fixtures with anchor bolts, brackets and the like.
- VI. The rates for alterations shall further include for : - **Rates for alterations**
- (a) Taking down and re-fix existing covering materials, if required.
 - (b) Replacement and additional accessories as necessary.
 - (c) Modifying existing materials or covering to suit actual site conditions.
 - (d) Making good surfaces disturbed.
 - (e) Delivery to the designated locations as directed.
 - (f) Protecting all materials required for re-use.
 - (g) Additional framing, if required.
- VII. The rates for reception counter and drawer units shall include for : - **Rates for reception counter and drawer units**
- (a) All additional bracings and components to ensure the rigidity and stability of the finished work.
 - (b) All surface finishes are factory applied before delivery to Site.
 - (c) Treating all fabric surfaces with flame proof treatment.
- VIII. The rates for security partitions shall further include for : - **Rates for security partitions**
- (a) All galvanised mild steel framings, bracings, supports and the like rigidly and stably constructed for security purposes.
 - (b) Sandwiched mild steel plate security panel.
 - (c) Providing and fixing all steel or stainless steel anchors or bolts.
 - (d) Guard bar panel at top when required.
 - (e) Providing and fixing wood battens or steel brackets for the face coverings.

SPECIAL CONDITIONS (CONT'D)

Rates for fire resisting partitions

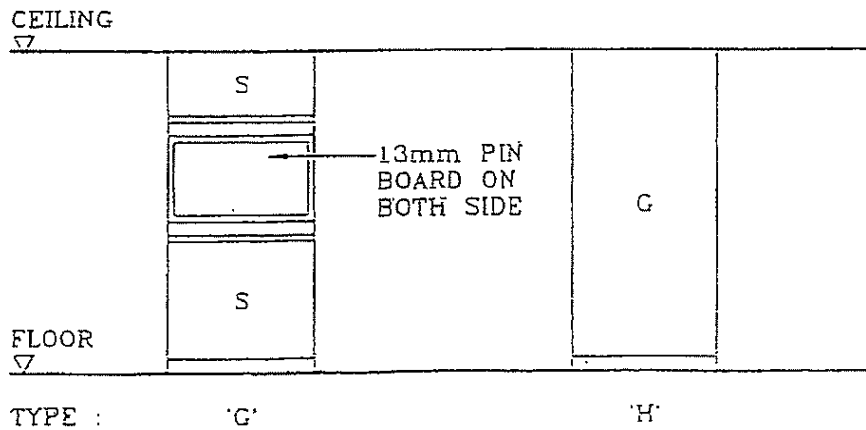
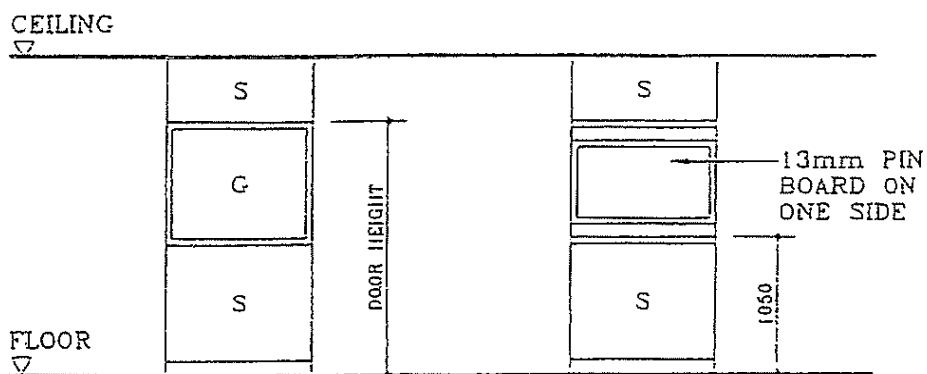
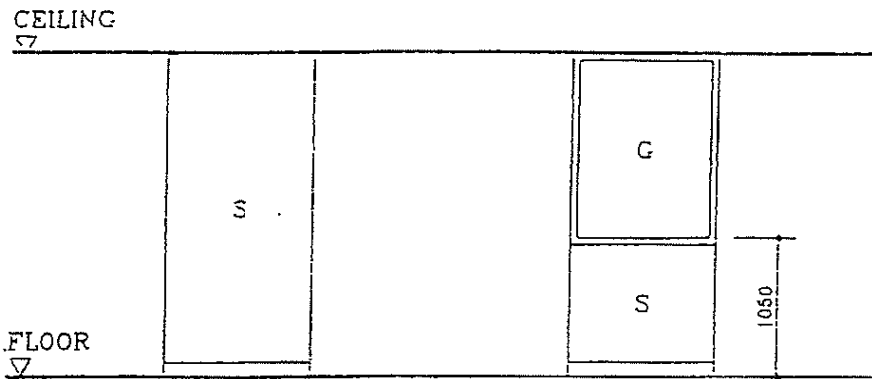
- IX. The rates for fire resisting partitions shall further include for : -
- (a) Supply and installation in accordance with the manufacturer's instructions.
 - (b) All galvanised mild steel or stainless steel framings, bracings, supports and the like rigidly and stably constructed for fire resisting purposes.
 - (c) Providing and fixing all steel or stainless steel anchors or bolts.
 - (d) All additional fire resisting panel, components and materials.
 - (e) Providing and fixing wood battens or steel brackets for the face coverings.
 - (f) Submission of technical literature, shop drawings, test certificate and guarantees as required.

Rates for proprietary cubicle system

- X. The rates for proprietary cubicle system, unless otherwise stated, shall include for : -
- (a) Supply and installation in accordance with the manufacturer's instructions.
 - (b) Complete systems with 13 mm thick \pm 1 mm solid phenolic panel (in conformity to EN 438 standard), doors, partition, pilaster, divisions, etc. and the like.
 - (c) All frames in aluminium (in conformity to EN 6060 standard) coated with corrosion resistant nylon.
 - (d) All necessary corrosion resistant nylon-aluminium accessories like hook, toilet roll holder, and the like, and ironmongeries including adjustable feet, automatic hinges, snib indicators; coat hooks with door stops and angle brackets.
 - (e) All types of surface finishes and colours.
 - (f) All computerized fabrication to ensure excellent edge finish, with no sharp and corners for safety.
 - (g) Submission of catalogues, technical literature, shop drawings and manufacturer's guarantee.

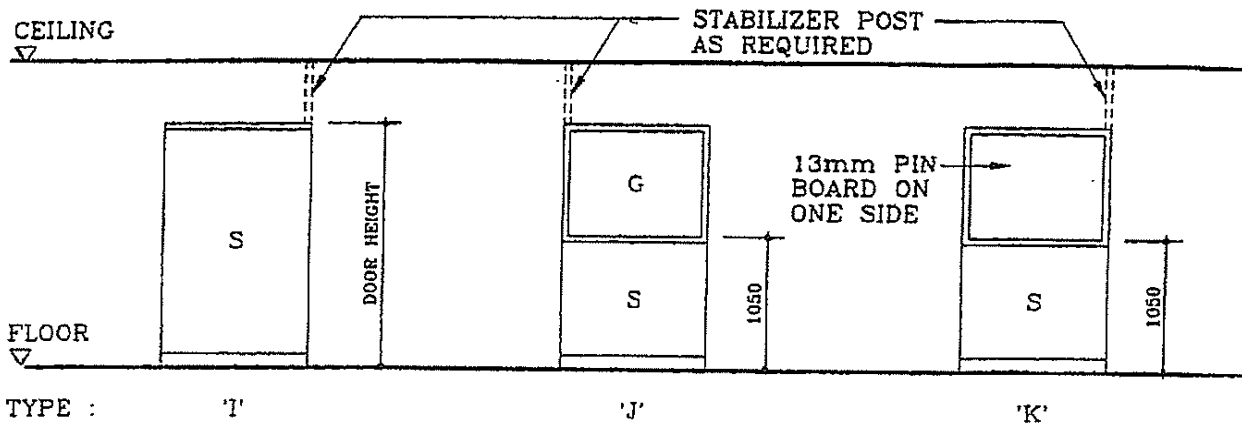
G.S. clauses

- XI. G.S. clauses for demountable partitions can be found in the Internal Fittings and Fixtures Section of the General Specification for Building.



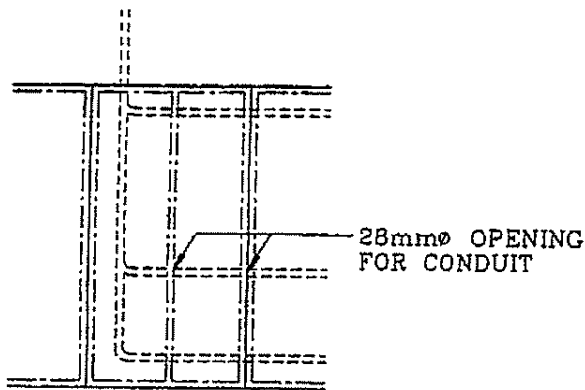
LEGEND: S = SOLID PANEL
G = GLASS PANEL

PARTITION CODE SHEET 1 - FULL HEIGHT PARTITION TYPES A - H

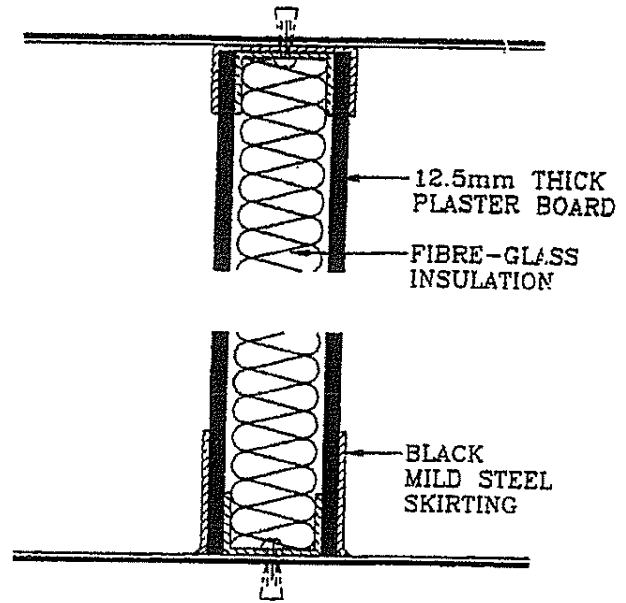


LEGEND: S = SOLID PANEL
G = GLASS PANEL

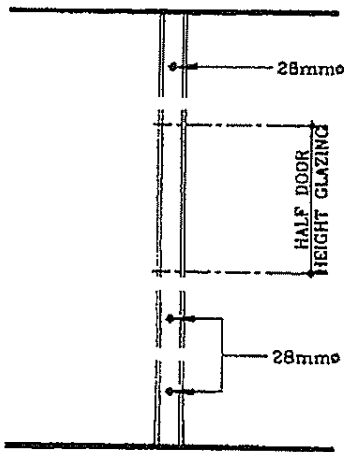
PARTITION CODE SHEET 2 - FULL HEIGHT PARTITION TYPES I - K



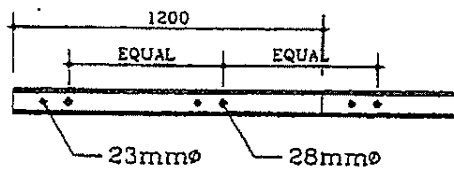
ELEVATION



DETAIL



VERTICAL

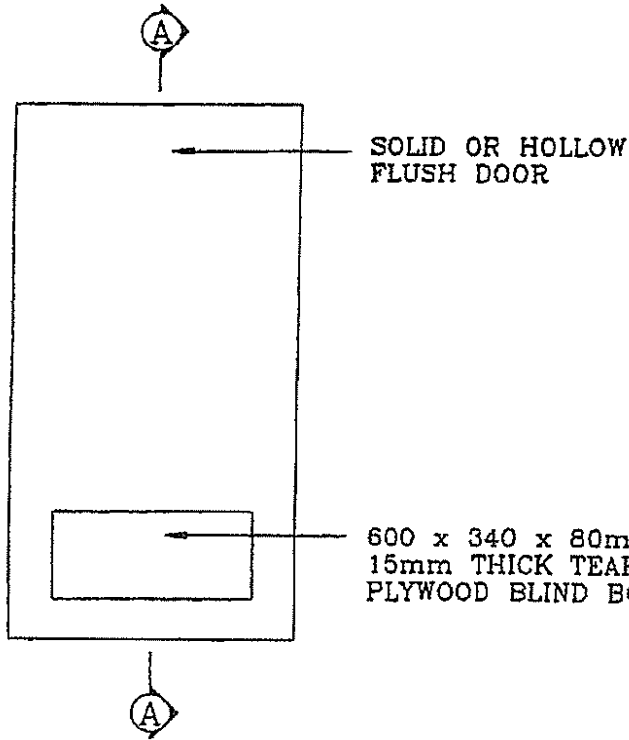


HORIZONTAL

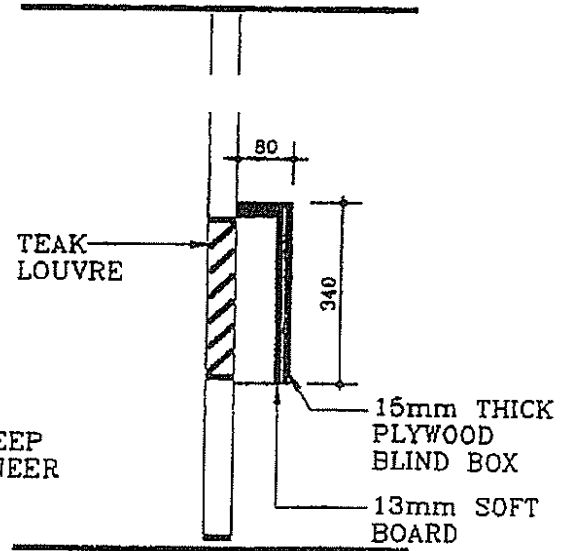
NOTE: ALL ALUMINIUM FURRING CHANNELS AND STUBS, VERTICAL AND HORIZONTAL TO HAVE PERFERATED HOLES

DRY WALL CONSTRUCTION

PARTITION CODE SHEET 3 - DRY WALL CONSTRUCTION



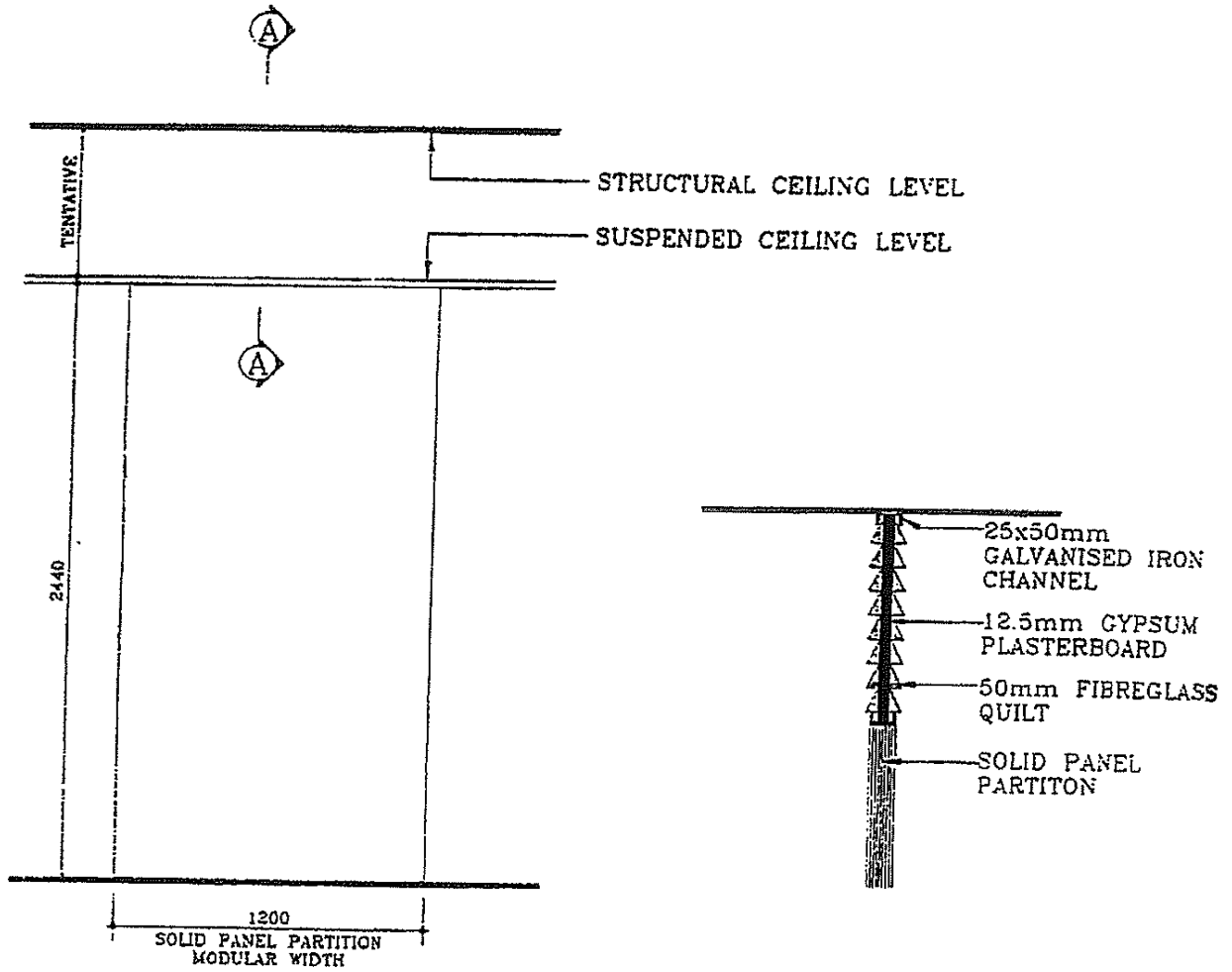
ELEVATION



SECTION A-A

DETAIL OF BLIND BOX

PARTITION CODE SHEET 4 - BLIND BOX

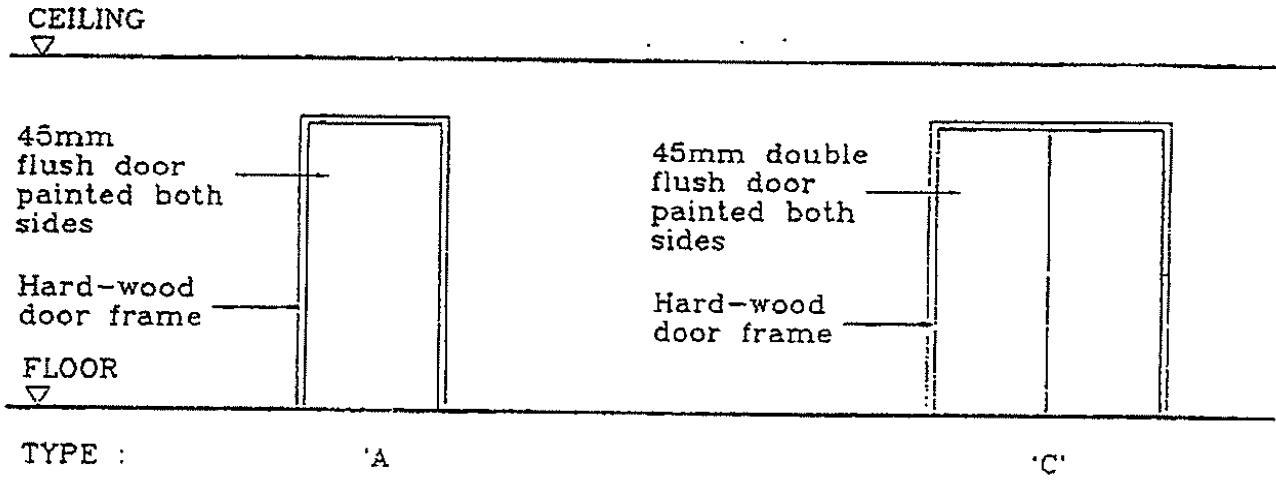


ELEVATION

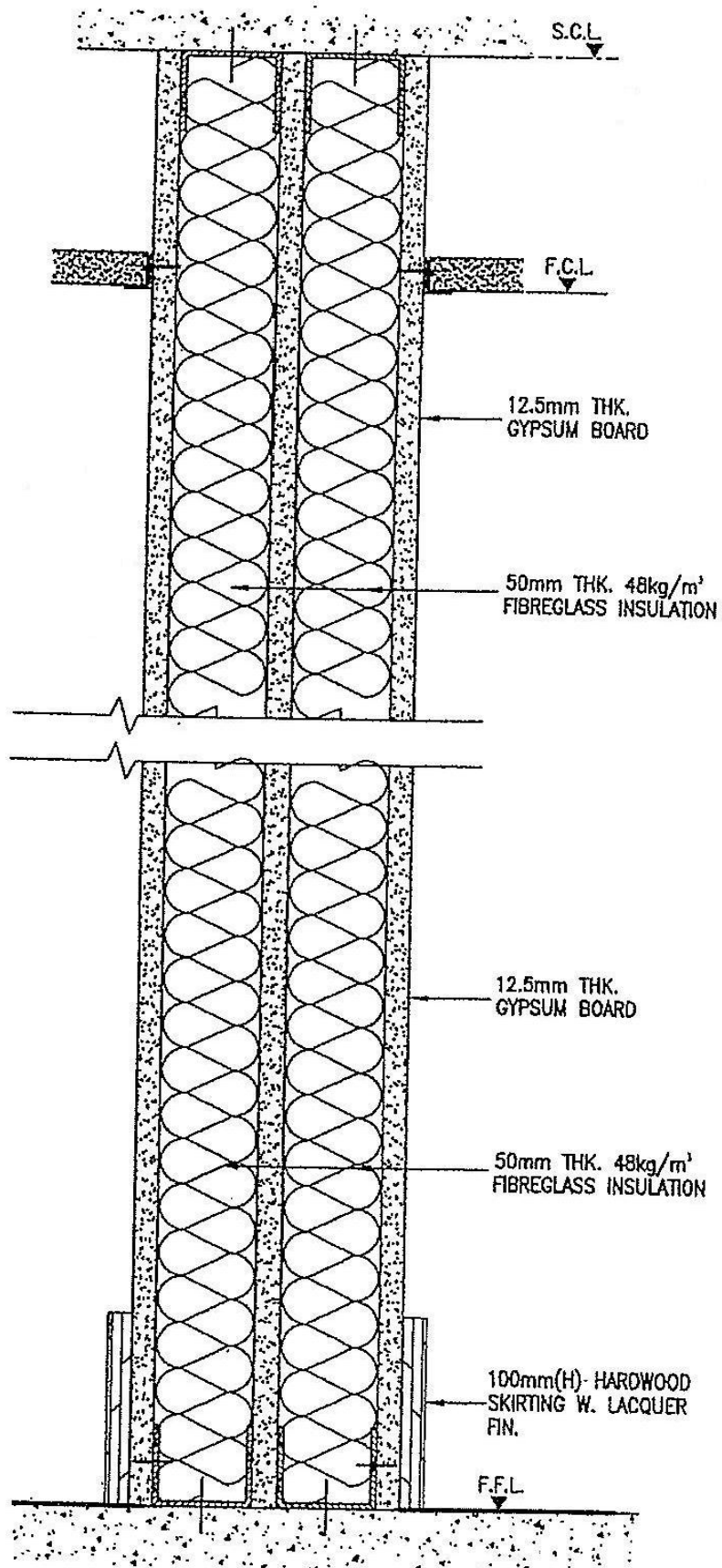
SECTION A-A

DETAIL OF CEILING BAFFLE

PARTITION CODE SHEET 5 - CEILING BAFFLE



PARTITION CODE SHEET 6 - FLUSH DOOR TYPE 'A' & 'C'



DOUBLE LAYER DRYWALL

Item	DEMOUNTABLE PARTITIONS							Item
		Plaster boards panel with covering on both sides with		Plywood or chipboard panel with covering on both sides with				
		fabric vinyl cloth	Hessian fabric	fabric vinyl cloth	laminated plastic sheet	3.2 mm veneer of any type	Hessian fabric	
	Proprietary partition system (sound insulation measured separately) :-							
	<i>Per square metre</i>	A	B	C	D	E	F	
		\$	\$	\$	\$	\$	\$	
22001	Type A, full solid panel.....	308.50	419.00	378.70	421.00	444.70	489.50	22001
22002	Type C, solid panel up to 1.05 m high, top panel glazed in clear glass of any thickness.....	471.50	523.60	542.80	583.00	535.80	557.40	22002
22003	Ditto but glazed in obscure glass of any thickness.....	456.80	506.70	528.00	569.20	518.30	539.20	22003
22004	Ditto but glazed in wired glass of any thickness.....	527.00	574.40	557.40	575.50	585.50	605.40	22004
22005	Type E, solid panel up to 1.05 m high and portion above door height, mid panel glazed in clear glass of any thickness.....	416.70	488.40	462.70	489.60	505.20	535.00	22005
22006	Ditto but glazed in obscure glass of any thickness.....	414.40	485.10	459.70	486.20	501.40	530.60	22006
22007	Ditto but glazed in wired glass of any thickness.....	464.50	532.90	508.60	534.20	548.90	577.40	22007
22008	Type F, solid panel up to 1.05 m high and portion above door height, mid panel complete with pin board facing one side.....	333.10	439.40	400.90	440.20	462.80	506.40	22008
22009	Type G, solid panel up to 1.05 m high and portion above door height, mid panel complete with pin board facing both sides.....	356.80	457.90	421.80	459.60	481.40	523.30	22009
22010	Type H, fully glazed panel in clear glass of any thickness.....	573.30	573.30	573.30	573.30	573.30	573.30	22010
22011	Ditto but glazed in obscure glass of any thickness.....	567.90	567.90	567.90	567.90	567.90	567.90	22011
22012	Ditto but glazed in wired glass of any thickness.....	690.90	690.90	690.90	690.90	690.90	690.90	22012
22013	Type I, full solid panel, stopped at door height.....	376.60	505.30	459.50	507.40	535.10	588.20	22013
22014	Type J, solid panel up to 1.05 m high, top panel glazed in clear glass, of any thickness stopped at door height.....	478.30	534.80	514.70	535.90	548.00	571.20	22014
22015	Ditto but glazed in obscure glass of any thickness.....	476.10	532.60	512.50	533.70	545.80	569.10	22015
22016	Ditto but glazed in wired glass of any thickness.....	526.40	582.90	562.80	583.90	596.10	619.30	22016
22017	Type K, solid panel up to 1.05 m high, mid panel complete with pin board facing one side, stopped at door height.....	463.40	592.10	546.40	594.20	621.90	675.00	22017
22018	Type K, solid panel up to 1.05 m high mid panel complete with pin board facing both sides, stopped at door height.....	489.60	618.30	572.60	595.90	648.10	701.20	22018

Item	DEMOUNTABLE PARTITIONS (CONT'D)		Item
	Proprietary partition system (sound insulation measured separately) : - (cont'd)	A	
		\$	
	<i>Per square metre</i>		
22019	Add to either of Items 22001 to 22009 inclusive and 22013 to 22018 inclusive for additional sound insulation, 50 mm thick fibreglass insulation (density 16 kg/m ³) in one to two layers as G.S. Item 22.20.....	13.80	22019
22020	Add to either of Items 22001 to 22009 inclusive and 22013 to 22018 inclusive for additional sound insulation, 50 mm thick fibreglass insulation (density 48 kg/m ³) in one to two layers as G.S. Item 22.20	41.50	22020
	(Note : - The above Items 22019 to 22020 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing)		
22021	Add to either of Items 22001, 22008 and 22009 inclusive for security partitions for Level I security including lined with 1 mm thick steel plate on both sides, all additional and enhanced framing, fixing, panelling and accessories, in compliance with sound seal requirement.....	293.90	22021
22022	Add to either of Items 22001, 22008 and 22009 inclusive for security partitions for Level II security including lined with 2 mm thick steel plate on both sides, all additional and enhanced framing, fixing, panelling and accessories, in compliance with sound seal requirement.....	572.40	22022
22023	Add to either of Items 22001, 22008 and 22009 inclusive for security partitions for Level III security including lined with 5 mm thick steel plate on both sides, all additional and enhanced framing, fixing, panelling and accessories, in compliance with sound seal requirement.....	951.00	22023
22024	Add to either of Items 22001, 22008 and 22009 inclusive for fire resisting partitions including all additional and enhanced framing, fixing, panelling and accessories, in compliance with 1 hour fire resisting requirements.....	193.40	22024
22025	Add to either of Items 22001, 22008 and 22009 inclusive for fire resisting security partitions for Level I security including lined with 1 mm thick steel plate on both sides, all additional framing, fixing, panelling and accessories, in compliance with 1 hour fire resisting requirements, sound seal requirements.....	487.40	22025
22026	Add to either of Items 22001, 22008 and 22009 inclusive for fire resisting security partitions for Level II security including lined with 2 mm thick steel plate on both sides, all additional framing, fixing, panelling and accessories, in compliance with 1 hour fire resisting requirements, sound seal requirements.....	765.90	22026
22027	Add to either of Items 22001, 22008 and 22009 inclusive for fire resisting security partitions for Level III security including lined with 5 mm thick steel plate on both sides, all additional framing, fixing, panelling and accessories, in compliance with 1 hour fire resisting requirements, sound seal requirements.....	1,044.40	22027
22028	Add to either of Items 22001 to 22009 inclusive and 22013 to 22018 inclusive for timber louvre consisting of 45 x 20 mm thick timber framing all round, 10 mm thick timber blades and 25 x 5 mm thick timber architrave (louvre area measured).....	1,814.00	22028
22029	Construct ceiling baffle from structural soffit to suspended ceiling level, consisting of 50 mm thick fibreglass insulation (density 48 kg/m ³) on both sides of 12.50 mm thick gypsum plaster board framed with metal channel including forming opening of any size for pipes or ducts and providing all necessary bolts, screws and the like	353.50	22029

Item	DEMOUNTABLE PARTITIONS (CONT'D)	A \$	Item
	Proprietary partition system (sound insulation measured separately) :- (cont'd)		
	<i>Each</i>		
22030	Add to either of Items 22001 to 22009 inclusive and 22013 to 22018 inclusive for glazed sliding hatch, size 1200 x 450 mm high, consisting of 125 x 25 mm thick timber framing all round, 6 mm thick clear sheet glass with polished edges and finger holes, P.V.C. tracks housed into framing at head and cill including forming opening in new partition, providing and fixing of all necessary additional framing components.....	922.50	22030
22031	L-shaped reception counter unit, girth (3000 mm + 1800 mm) x 700 mm wide overall, comprising of screen partition 1070 mm high with quadrant panel at corner and return panel at bottom ends, all covered with fabric on both sides, together with cantilevered work top and counter top along the girth, both tops having pressure laminated surfaces trimmed with T moulding and complete with support brackets.....	7,362.80	22031
22032	Drawer unit attached underneath cantilevered work top, approximate size 450 mm wide x 150 mm high x 500 mm deep, complete with drawer lock and stainless steel pull handle.....	272.10	22032
	Proprietary partition system, lower level (open plan) type, screen panel covered with Hessian fabric on both sides :-		
	<i>Per linear metre</i>		
22033	0.9 - 1.2 m Screen panel height.....	556.30	22033
22034	1.2 - 1.5 m Ditto.....	587.20	22034
22035	1.5 - 1.8 m Ditto.....	618.10	22035

Item	DRY WALL (Cont'd)	A \$	Item
	<i>Per square metre</i>		
22044	Add to either Items 22036 to 22037 inclusive for additional sound insulation to single layer dry wall, 50 mm thick fibreglass insulation (density 16 kg/m³) in one to two layers as G.S. Item 22.20.....	13.80	22044
22045	Add to either Items 22036 to 22037 inclusive for additional sound insulation to single layer dry wall, 50 mm thick fibreglass insulation (density 48 kg/m³) in one to two layers as G.S. Item 22.20.....	41.50	22045
	(Note : - The above Items 22044 to 22045 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing)		
22046	Add to Item 22038 for additional sound insulation to double layer dry wall, two layers each 50 mm thick fibreglass insulation (density 16 kg/m³) in one to two layers as G.S. Item 22.20.....	27.60	22046
22047	Add to Item 22038 for additional sound insulation to double layer dry wall, two layers each 50 mm thick fibreglass insulation (density 48 kg/m³) in one to two layers as G.S. Item 22.20.....	83.00	22047
	(Note : - The above Items 22046 to 22047 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing)		
22048	Add to either Items 22037 and 22038 inclusive for security partitions for Level I security including lined with 1 mm thick steel plate on both sides, all additional and enhanced framing, fixing, panelling and accessories, in compliance with sound seal requirement	298.20	22048
22049	Add to either Items 22037 and 22038 inclusive for security partitions for Level II security including lined with 2 mm thick steel plate on both sides, all additional and enhanced framing, fixing, panelling and accessories, in compliance with sound seal requirement	576.70	22049
22050	Add to either Items 22037 and 22038 inclusive for security partitions for Level III security including lined with 5 mm thick steel plate on both sides, all additional and enhanced framing, fixing, panelling and accessories, in compliance with sound seal requirement	855.20	22050
22051	Add to Item 22037 for single layer fire resisting partitions including all additional and enhanced framing, fixing, panelling and accessories, in compliance with 1 hour fire resisting requirements	192.40	22051
22052	Add to Item 22038 for double layer fire resisting partitions including all additional and enhanced framing, fixing, panelling and accessories, in compliance with 1 hour fire resisting requirements	240.50	22052
22053	Add to either of Items 22037 to 22038 inclusive for fire resisting security partitions for Level I security including lined with 1 mm thick steel plate on both sides, all additional and enhanced framing, fixing, panelling and accessories, in compliance with 1 hour fire resisting requirements, sound seal requirement.....	490.60	22053
22054	Add to either of Items 22037 to 22038 inclusive and 22038 inclusive for fire resisting security partitions for Level II security including lined with 2 mm thick steel plate on both sides, all additional framing, fixing, panelling and accessories, in compliance with 1 hour fire resisting requirements, sound seal requirement.....	769.10	22054
22055	Add to either of Items 22037 to 22038 inclusive and 22038 inclusive for fire resisting security partitions for Level III security including lined with 5 mm thick steel plate on both sides, all additional framing, fixing, panelling and accessories, in compliance with 1 hour fire resisting requirements, sound seal requirement.....	1,047.60	22055
22056	Add to Item 22037 for timber louvre consisting of 45 x 20 mm thick timber framing all round, 10 mm thick timber blades and 25 x 5 mm thick timber architrave (louvre area measured).....	1,269.80	22056
	<i>Each</i>		
22057	Add to Item 22037 for glazed sliding hatch, size 1200 x 450 mm high, consisting of 125 x 25 mm thick timber framing all round, 6 mm thick clear sheet glass with polished edges and finger holes, P.V.C. tracks housed into framing at head and cill including forming opening in new partition, providing and fixing of all necessary additional framing components.....	922.50	22057

Item	HOLLOW CORE FLUSH DOORS FOR DEMOUNTABLE PARTITION AND DRY WALL				Item																
	Partition door, leaf size 600 - 900 x 2 100 mm high :- (ironmongery measured separately)																				
	<i>Each</i>																				
	<table border="1"> <thead> <tr> <th colspan="4">Door type with or without frame</th> </tr> <tr> <th>Teak door and frame</th> <th>Hardwood door and frame</th> <th>Hardwood door and aluminium frame</th> <th>Teak door and aluminium frame</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>				Door type with or without frame				Teak door and frame	Hardwood door and frame	Hardwood door and aluminium frame	Teak door and aluminium frame	A	B	C	D	\$	\$	\$	\$	
Door type with or without frame																					
Teak door and frame	Hardwood door and frame	Hardwood door and aluminium frame	Teak door and aluminium frame																		
A	B	C	D																		
\$	\$	\$	\$																		
22058	Type A partition door, single leaf, without door frames.....	1,383.90	1,191.30	1,196.50	1,383.90	22058															
22059	Type A partition door, single leaf, with door frames.....	2,222.40	1,645.20	2,006.00	2,193.50	22059															
22060	Type A partition sliding door, single leaf, without door frames.....	1,383.90	1,196.50	1,196.50	1,383.90	22060															
22061	Type A partition sliding door, single leaf, with door frames.....	2,373.40	1,726.00	2,151.70	2,339.20	22061															
22062	Type C partition door, double leaf, without door frames.....	2,476.60	2,041.00	2,041.00	2,476.60	22062															
22063	Type C partition door, double leaf, with door frames.....	3,452.80	2,563.40	2,983.40	3,419.00	22063															
22064	Type C partition sliding door, double leaf, without door frames.....	2,476.60	2,041.00	2,041.00	2,476.60	22064															
22065	Type C partition sliding door, double leaf, with door frames.....	3,706.60	2,699.30	3,228.50	3,664.10	22065															
	SOLID CORE FLUSH DOORS FOR DEMOUNTABLE PARTITION AND DRY WALL																				
	Partition door, leaf size 600 - 900 x 2 100 mm high :- (ironmongery measured separately)																				
	<i>Each</i>																				
	<table border="1"> <thead> <tr> <th colspan="4">Door type with or without frame</th> </tr> <tr> <th>Teak door and frame</th> <th>Hardwood door and frame</th> <th>Hardwood door and aluminium frame</th> <th>Teak door and aluminium frame</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>				Door type with or without frame				Teak door and frame	Hardwood door and frame	Hardwood door and aluminium frame	Teak door and aluminium frame	A	B	C	D	\$	\$	\$	\$	
Door type with or without frame																					
Teak door and frame	Hardwood door and frame	Hardwood door and aluminium frame	Teak door and aluminium frame																		
A	B	C	D																		
\$	\$	\$	\$																		
22066	Type A partition door, single leaf, without door frames.....	1,423.80	1,225.60	1,230.90	1,423.80	22066															
22067	Type A partition door, single leaf, with door frames.....	2,085.90	1,585.30	1,870.10	2,063.00	22067															
22068	Type A partition sliding door, single leaf, without door frames.....	1,423.80	1,230.90	1,230.90	1,423.80	22068															
22069	Type A partition sliding door, single leaf, with door frames.....	2,205.10	1,649.10	1,985.20	2,177.90	22069															
22070	Type C partition door, double leaf, without door frames.....	2,547.90	2,099.90	2,099.90	2,547.90	22070															
22071	Type C partition door, double leaf, with door frames.....	2,363.00	2,512.30	2,844.00	3,292.00	22071															
22072	Type C partition sliding door, double leaf, without door frames.....	2,547.90	2,099.90	2,099.90	2,547.90	22072															
22073	Type C partition sliding door, double leaf, with door frames.....	3,519.10	2,619.50	3,037.40	3,485.50	22073															

Item	HOLLOW OR SOLID CORE FLUSH DOORS FOR DEMOUNTABLE PARTITION AND DRY WALL						Item																		
	<i>Each</i>						A \$																		
22074	Extra over either of Items 22058 to 22073 inclusive for upper portion of door fitted with 6 mm thick clear glass of any size including forming opening through door, providing all necessary timber framing, timber fillers, glazing compound and the like (single leaf measured).....						196.50	22074																	
22075	Ditto but fitted with 6 mm thick obscure glass panel (ditto).....						189.10	22075																	
22076	Ditto but fitted with 6 mm thick wired glass panel (ditto).....						283.20	22076																	
22077	Extra over either of Items (B) to (C) of 22058 to 22073 inclusive for door faced both sides with laminated plastic sheeting in lieu of veneer (single leaf measured).....						64.90	22077																	
22078	Extra over ditto for door with 15 mm thick plywood blind box, overall size 600 x 340 x 80 mm deep, and lined with 13 mm thick soft board						344.30	22078																	
22079	Extra over ditto for door with timber louvre size 600 x 340 x 80 mm consisting of 45 x 20 mm thick timber framing all round, 10 mm thick timber blades and 25 x 5 mm thick timber architrave						266.40	22079																	
REPAIRS TO BUILDING BOARDS AND SUNDRY ITEMS																									
	<i>Per square metre</i>						<table border="1"> <tr> <td>Take down and clear away</td> <td>Take down and set aside for re-use</td> <td>Fix only</td> </tr> <tr> <td>A \$</td> <td>B \$</td> <td>C \$</td> </tr> </table>	Take down and clear away	Take down and set aside for re-use	Fix only	A \$	B \$	C \$												
Take down and clear away	Take down and set aside for re-use	Fix only																							
A \$	B \$	C \$																							
22080	Gypsum plasterboard of any type or thickness, and in any position.....						<table border="1"> <tr> <td>10.00</td> <td>10.10</td> <td>40.20</td> </tr> </table>	10.00	10.10	40.20	22080														
10.00	10.10	40.20																							
ALTERATION WORKS TO EXISTING PARTITIONS / DRY WALLS																									
	<i>Per square metre</i>						<table border="1"> <tr> <th colspan="2">Plaster boards panel with covering on one side of existing partition / drywall</th> <th colspan="4">Plywood or chipboard panel with covering on one side of existing partition / drywall</th> </tr> <tr> <td>fabric vinyl cloth</td> <td>Hessian fabric</td> <td>fabric vinyl cloth</td> <td>laminated plastic sheet</td> <td>3.2 mm veneer of any type</td> <td>Hessian fabric</td> </tr> <tr> <td>A \$</td> <td>B \$</td> <td>C \$</td> <td>D \$</td> <td>E \$</td> <td>F \$</td> </tr> </table>	Plaster boards panel with covering on one side of existing partition / drywall		Plywood or chipboard panel with covering on one side of existing partition / drywall				fabric vinyl cloth	Hessian fabric	fabric vinyl cloth	laminated plastic sheet	3.2 mm veneer of any type	Hessian fabric	A \$	B \$	C \$	D \$	E \$	F \$
Plaster boards panel with covering on one side of existing partition / drywall		Plywood or chipboard panel with covering on one side of existing partition / drywall																							
fabric vinyl cloth	Hessian fabric	fabric vinyl cloth	laminated plastic sheet	3.2 mm veneer of any type	Hessian fabric																				
A \$	B \$	C \$	D \$	E \$	F \$																				
22081	Replace the surface covering on one side of existing proprietary demountable partitions and dry walls.....						<table border="1"> <tr> <td>92.60</td> <td>125.60</td> <td>113.60</td> <td>126.30</td> <td>133.40</td> <td>146.90</td> </tr> </table>	92.60	125.60	113.60	126.30	133.40	146.90	22081											
92.60	125.60	113.60	126.30	133.40	146.90																				
							A \$																		
22082	Alter existing glazed partitions to double glazed partition with 6 mm thick clear glass.....						526.00	22082																	
22083	Ditto but with 6 mm thick obscure glass.....						508.90	22083																	
22084	Ditto but with 6 mm thick wired glass.....						698.20	22084																	
22085	Alter existing partitions / drywalls to insert 50 mm thick fibreglass insulation layer (density 16 kg/m ³).....						16.90	22085																	
22086	Ditto but with 50 mm thick fibreglass insulation (density 48 kg/m ³).....						50.60	22086																	
22087	Construct timber louvre consisting of 45 x 20 mm thick timber framing all round, 10 mm thick timber blades and 25 x 5 mm thick timber architrave including forming opening through existing hollow or solid core flush door and providing all necessary framing.....						2,197.10	22087																	
22088	Forming opening of any size through solid panel partition / drywall including all necessary partition components.....						153.40	22088																	

Item	IRONMONGERY			Item		
	Supply and fix :-	Single leaf door	Double leaf door			
	<i>Per set</i>	A \$	B \$			
22103	Set of ironmongery comprising cylinder lock, 75 x 100 mm stainless steel hinges, bolts and rubber door stop	520.00	615.00	22103		
22104	Set of ironmongery for sliding door comprising mortice locks, flush bolts, sliding door track, channel guide, hanger, handles, door stop, etc.....	1,918.60	2,798.60	22104		
BRONZE ANODISED ALUMINIUM EXTRUDED SECTIONS						
	<i>Per linear metre</i>			A \$		
22105	Extra over demountable partition and dry wall for bronze anodised aluminium T section.....			4.30	22105	
22106	Ditto ceiling mould.....			8.10	22106	
22107	Ditto half angle.....			2.60	22107	
22108	Ditto glazing bead.....			5.80	22108	
22109	Ditto reveal batten.....			13.30	22109	
22110	Ditto glazing mould.....			10.50	22110	
22111	Ditto door frame.....			17.60	22111	
CUBICLE SYSTEM						
	Proprietary cubicle system comprising :- Panel conforming to EN 438 : 13 mm thick ± 1 mm solid phenolic panels doors, pilaster and division. Solid colour on both sides of the panels and in any colour. Hardware : Aluminium EN 6060 components fully coated with corrosion resistant nylon. Aluminium adjustable legs and brackets fully coated with corrosion resistant nylon. Ironmongery and accessories : Aluminium fully coated with corrosion resistant nylon automatic hinges, snib indicator, coat hook with door stop and the like.	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
	<i>Per set</i>	A \$	B \$	C \$	D \$	
22112	Set of one cubicle unit comprising one front panel with one door included, n.e. 2.50 m high.....	2,085.20	72.60	144.80	336.50	22112
22113	Set of one corner cubicle unit comprising one front panel with one door included and one open-end panel n.e. 1.80 m deep and n.e. 2.50 m high	3,534.30	97.00	206.30	421.20	22113
22114	Set of one cubicle unit for disabled comprising one front panel with one door included, n.e. 2.50 m high.....	2,398.00	86.90	187.60	368.00	22114
22115	Set of one corner cubicle unit for disabled comprising one front panel with one door included and one open-end panel n.e. 1.80 m deep and n.e. 2.50 m high.....	4,064.50	102.80	220.40	449.10	22115
	Add to either of Items 22112 to 22115 inclusive for each additional 0.25 m or part thereof in height.....	8%	-	-	8%	
	<i>Each</i>					
22116	Extra over Items 22112 to 22115 inclusive for division panel	1,936.00	55.00	118.90	122.30	22116

Item	CUBICLE SYSTEM (CONT'D)					Item
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	
		A \$	B \$	C \$	D \$	
	Replacement parts for proprietary cubicle system : -					
	<i>Pair</i>					
22117	Hinge (L/H or R/H)	132.40	2.00	4.40	11.20	22117
	<i>Each</i>					
22118	Adjustable leg	177.80	2.00	4.40	11.20	22118
22119	Rail fixing rose.....	28.80	2.00	4.40	11.20	22119
22120	Angle bracket	49.30	2.00	4.40	11.20	22120
22121	Headrail 3000mm (L)	238.40	2.00	4.40	11.20	22121
22122	Rail bracket	68.20	2.00	4.40	11.20	22122
22123	Rail elbow	30.30	2.00	4.40	11.20	22123
22124	Coat hook	26.50	2.00	4.40	11.20	22124
22125	Indicator snib (L/H or R/H)	155.10	2.00	4.40	11.20	22125
22126	Rail T connector	58.70	2.00	4.40	11.20	22126

Item	CUBICLE SYSTEM (CONT'D)	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	Item												
	Proprietary cubicle system complying with the following :																	
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Panels, doors, pilasters and divisions</td> <td>12 mm Thick solid grade decorative phenolic</td> </tr> <tr> <td></td> <td>Conforming to EN438</td> </tr> <tr> <td></td> <td>Homogeneously reinforced with cellulose fibre and based on thermosetting resins</td> </tr> <tr> <td></td> <td>Resistance to impact, chemicals, scratch and wear</td> </tr> <tr> <td>Hardware</td> <td>Powder coated headrail and nylon adjustable legs and fixing brackets</td> </tr> <tr> <td>Ironmongery and accessories</td> <td>A pair of nylon door hinges, a knob pair with buffer, a privacy thumbturn and a coat hook for each cubicle.</td> </tr> </table>	Panels, doors, pilasters and divisions	12 mm Thick solid grade decorative phenolic		Conforming to EN438		Homogeneously reinforced with cellulose fibre and based on thermosetting resins		Resistance to impact, chemicals, scratch and wear	Hardware	Powder coated headrail and nylon adjustable legs and fixing brackets	Ironmongery and accessories	A pair of nylon door hinges, a knob pair with buffer, a privacy thumbturn and a coat hook for each cubicle.					
Panels, doors, pilasters and divisions	12 mm Thick solid grade decorative phenolic																	
	Conforming to EN438																	
	Homogeneously reinforced with cellulose fibre and based on thermosetting resins																	
	Resistance to impact, chemicals, scratch and wear																	
Hardware	Powder coated headrail and nylon adjustable legs and fixing brackets																	
Ironmongery and accessories	A pair of nylon door hinges, a knob pair with buffer, a privacy thumbturn and a coat hook for each cubicle.																	
	Per set																	
22127	Set of one cubicle unit comprising one front panel with one door included, n.e. 2.50 m high	3,197.40	85.70	171.40	439.30	22127												
22128	Set of one corner unit comprising one front panel with one door included and one open-end panel n.e. 1.80 m deep and n.e. 2.50 m high	5,328.90	102.80	205.70	527.20	22128												
22129	Set of one cubicle unit for disabled comprising one front panel with one door included, n.e. 2.50 m high	3,411.40	98.60	197.10	505.20	22129												
22130	Set of one corner cubicle unit for disabled comprising one front panel with one door included and one open-end panel n.e. 1.80 m deep and n.e. 2.50 m high	5,618.60	107.10	214.20	549.10	22130												
	Add to either of Items 22127 to 22130 inclusive for each additional 0.25 m or part thereof in height.....	8%	-	-	8%													
	Each																	
22131	Extra over Items 22127 to 22130 inclusive for division panel	1,808.70	64.30	128.50	144.20	22131												
	Replacement parts : -																	
	Pair																	
22132	Nylon hinge (L/H or R/H)	218.90	2.60	6.00	14.60	22132												
	Each																	
22133	Nylon adjustable leg	334.80	2.60	6.00	14.60	22133												
22134	Powder coated headrail fixing rose.....	45.10	2.60	6.00	14.60	22134												
22135	Nylon fixing bracket	72.60	2.60	6.00	14.60	22135												
22136	Powder coated headrail 3000 mm (L)	338.70	2.60	6.00	14.60	22136												
22137	Powder coated headrail bracket	80.40	2.60	6.00	14.60	22137												
22138	Powder coated headrail elbow	45.10	2.60	6.00	14.60	22138												
22139	Coat hook	54.40	2.60	6.00	14.60	22139												
22140	Knob pair with buffer and privacy thumbturn (L/H or R/H)	233.90	2.60	6.00	14.60	22140												
22141	Powder coated headrail T connector	72.60	2.60	6.00	14.60	22141												

Item	CUBICLE SYSTEM (CONT'D)	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	Item																		
		A \$	B \$	C \$	D \$																			
	Proprietary cubicle system complying with the following :																							
	<table border="1"> <tr> <td rowspan="4">Panels, doors, pilasters and divisions</td> <td>12 mm Thick black solid compact laminated core</td> </tr> <tr> <td>Conforming to EN 438 and BS 476</td> </tr> <tr> <td>Decorative papers on both sides of the panel impregnated with melamine resin and pressed over phenolic-impregnated kraft papers at pressures exceeding 1000 psi and temperature above 250°F</td> </tr> <tr> <td>Non-flush doors with 15 mm over-lapping with panels</td> </tr> <tr> <td></td> <td>Doors and all exposed edges of the panels bull-nosed</td> </tr> <tr> <td rowspan="7">Hardware</td> <td>Through-fixed pilasters</td> </tr> <tr> <td>150 mm high zinc alloy adjustable legs with nylon covers</td> </tr> <tr> <td>T grooves for supporting panels and pilasters</td> </tr> <tr> <td>Powder coated aluminium round headrails, rail brackets and rail fixing roses</td> </tr> <tr> <td>Nylon coated angle brackets reinforced with steel plates</td> </tr> <tr> <td>Nylon headrail elbows</td> </tr> <tr> <td>Concealed and capped screws</td> </tr> <tr> <td>All necessary accessories</td> </tr> <tr> <td>Ironmongery and accessories</td> <td>Two zinc alloy self-closing/self-opening gravity hinges, a zinc alloy indicator snib with external emergency opening, a nylon coat hook and concealed and capped screws for each cubicle</td> </tr> </table>	Panels, doors, pilasters and divisions	12 mm Thick black solid compact laminated core	Conforming to EN 438 and BS 476	Decorative papers on both sides of the panel impregnated with melamine resin and pressed over phenolic-impregnated kraft papers at pressures exceeding 1000 psi and temperature above 250°F	Non-flush doors with 15 mm over-lapping with panels		Doors and all exposed edges of the panels bull-nosed	Hardware	Through-fixed pilasters	150 mm high zinc alloy adjustable legs with nylon covers	T grooves for supporting panels and pilasters	Powder coated aluminium round headrails, rail brackets and rail fixing roses	Nylon coated angle brackets reinforced with steel plates	Nylon headrail elbows	Concealed and capped screws	All necessary accessories	Ironmongery and accessories	Two zinc alloy self-closing/self-opening gravity hinges, a zinc alloy indicator snib with external emergency opening, a nylon coat hook and concealed and capped screws for each cubicle					
Panels, doors, pilasters and divisions	12 mm Thick black solid compact laminated core																							
	Conforming to EN 438 and BS 476																							
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Hardware	Through-fixed pilasters																							
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	Nylon coated angle brackets reinforced with steel plates																							
	Nylon headrail elbows																							
	Concealed and capped screws																							
All necessary accessories																								
Ironmongery and accessories	Two zinc alloy self-closing/self-opening gravity hinges, a zinc alloy indicator snib with external emergency opening, a nylon coat hook and concealed and capped screws for each cubicle																							
	Per set																							
22142	Set of one cubicle unit comprising one front panel with one door included, n.e. 2.50 m high	2,780.30	85.70	171.40	439.30	22142																		
22143	Set of one corner unit comprising one front panel with one door included and one open-end panel n.e. 1.80 m deep and n.e. 2.50 m high	4,633.90	102.80	205.70	527.20	22143																		
22144	Set of one cubicle unit for disabled comprising one front panel with one door included, n.e. 2.50 m high	2,896.40	98.60	197.10	505.20	22144																		
22145	Set of one corner cubicle unit for disabled comprising one front panel with one door included and one open-end panel n.e. 1.80 m deep and n.e. 2.50 m high	4,827.30	107.10	214.20	549.10	22145																		
	Add to either of Items 22142 to 22145 inclusive for each additional 0.25 m or part thereof in height.....	8%	-	-	8%																			
	Each																							
22146	Extra over Items 22142 to 22145 inclusive for division panel	1,372.50	64.30	128.50	146.40	22146																		
	Replacement parts : -																							
	Pair																							
22147	Zinc alloy self-closing/self-opening gravity hinge (L/H or R/H).....	219.10	2.60	6.00	14.60	22147																		
	Each																							
22148	150 mm High zinc alloy adjustable leg with a nylon cover.....	243.20	2.60	6.00	14.60	22148																		
22149	Powder coated aluminium headrail fixing rose.....	45.10	2.60	6.00	14.60	22149																		
22150	Nylon coated angle bracket.....	72.60	2.60	6.00	14.60	22150																		
22151	Powder coated aluminium round headrail 3000 mm (L).....	338.70	2.60	6.00	14.60	22151																		
22152	Powder coated aluminium headrail bracket.....	80.40	2.60	6.00	14.60	22152																		
22153	Nylon headrail elbow.....	45.10	2.60	6.00	14.60	22153																		
22154	Nylon coat hook.....	54.40	2.60	6.00	14.60	22154																		
22155	Zinc alloy indicator snib with external emergency opening (L/H or R/H).....	382.30	2.60	6.00	14.60	22155																		
22156	Nylon headrail T connector.....	72.60	2.60	6.00	14.60	22156																		

Item	CUBICLE SYSTEM (CONT'D)	Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	Item															
	Proprietary cubicle system complying with the following :	A	B	C	D																
		\$	\$	\$	\$																
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Panels, doors, pilasters and divisions	12 mm Thick black solid compact laminated core																				
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	Nylon headrail elbows																				
	Concealed and capped screws																				
	All necessary accessories																				
Ironmongery and accessories	Two zinc alloy self-closing/self-opening gravity hinges, a zinc alloy indicator snib with external emergency opening, a nylon coat hook and concealed and capped screws for each cubicle																				
	<i>Set</i>																				
22157	Set of one cubicle unit comprising one front panel with one door included, n.e. 2.50 m high	2,710.80	85.70	171.40	439.30	22157															
22158	Set of one corner cubicle unit comprising one front panel with one door included and one open-end panel n.e. 1.80 m deep and n.e. 2.50 m high	4,518.00	102.80	205.70	527.20	22158															
22159	Set of one cubicle unit for disabled comprising one front panel with one door included, n.e. 2.50 m high	2,919.30	98.60	197.10	505.20	22159															
22160	Set of one corner cubicle unit for disabled comprising one front panel with one door included and one open-end panel n.e. 1.80 m deep and n.e. 2.50 m high	4,865.80	107.10	214.20	549.10	22160															
	Add to either of Items 22157 to 22160 inclusive for each additional 0.25 m or part thereof in height.....	8%	-	-	8%																
	<i>Each</i>																				
22161	Extra over Items 22157 to 22160 inclusive for division panel	1,853.50	64.30	128.50	146.40	22161															
	Replacement parts : -																				
	<i>Each</i>																				
22162	Powder coated aluminium alloy saddle bracket.....	68.70	2.60	6.00	14.60	22162															
22163	Powder coated aluminium alloy angle bracket.....	58.00	2.60	6.00	14.60	22163															
22164	150 mm High zinc alloy adjustable leg with a nylon cover.....	260.50	2.60	6.00	14.60	22164															
22165	Nylon coat hook.....	54.40	2.60	6.00	14.60	22165															
22166	Powder coated aluminium radiused headrail 2000 mm (L).....	234.20	2.60	6.00	14.60	22166															
	<i>Set</i>																				
22167	Zinc alloy indicator snib with external emergency opening (L/H or R/H).....	368.50	2.60	6.00	14.60	22167															
	<i>Pair</i>																				
22168	Zinc alloy self-closing/self-opening gravity hinge (L/H or R/H).....	219.10	2.60	6.00	14.60	22168															

Section 23

DEMOLITION

DEMOLITION

SPECIAL CONDITIONS

Measurement
generally

- I. All demolition works in this Section shall mean the demolition of the whole building or part of concrete or other structures irrespective of storey height including all partitions, fittings, finishes, services, etc. within the building.

Alteration and repairs other than demolition in this Section shall be measured and paid for at the appropriate rates under applicable Work Sections of this Schedule including but not limited to : -

- | | | |
|-----|---|--------------------------------------|
| (a) | Taking down concrete for alteration | Section 02 - Concrete Work |
| (b) | Taking down brickwork or blockwork walling for alteration | Section 03 - Brickwork and Blockwork |
| (c) | Taking down rubble walling for alteration | Section 04 - Masonry |
| (d) | Taking down structural steel for alteration | Section 10 - Steel and Metal Work |

Measurement
of demolition of
whole building or
part of structures

- II. Demolition of whole building shall be measured net on the covered floor area of the building to be demolished.

Covered floor area is measured from the outer face of the external walls of a fully covered structure and measured over all walls, partitions, columns, stair wells, lift wells, escalator openings, bay windows, covered balconies, pipe/drain/cable ducts, and the like. It excludes all projections beyond the outer face of external wall and uncovered trafficable areas such as external playground, landscaped areas and the like.

Demolition of roof shall be measured the overall flat plan area of the roof to be demolished and will be measured as either one of the following categories : -

- (i) Roof in concrete construction (including all structure above roof slab) of building or structure;
- (ii) Roof other than concrete construction (including all structure above roof slab) of building or structure.

Roof other than concrete construction refers to structure of timber, steel or others construction. Measurement of such demolition work shall not apply to structure built on top of concrete roof structure of which shall hold to be included under demolition of roof in concrete construction.

When measuring "Demolish and clear away whole building at Ground Floor", cockloft and the like where access is within the floor shall be measured separately. Break up and clear away existing ground floor paving slabs, footings, foundations and the like and backfilling voids will be measured and paid for at the appropriate rates in Section 01 - Excavation of this Schedule.

When measuring "Demolish and clear away cockloft and the like", it shall include area of staircase or any part of the access.

Removal of asbestos containing materials shall be measured separately.

Measurement
of single
storey shed

- III. Demolition of single storey sheds other than concrete or structural steel encased with concrete structures shall be measured separately. The covered floor area of the single storey structure to be demolished shall be measured. The rate shall be inclusive of the whole structure including roof, all internal structures, fixtures and the like but excluding slab on ground which shall be measured in accordance with Clause II of this Section.

SPECIAL CONDITIONS (CONT'D)

- | | | |
|------|---|---|
| IV. | Asbestos containing corrugated sheeting shall be measured flat (not girth on corrugations) over the net area covered. No deduction shall be made for openings not exceeding 1.00 m ² . Ridges, hips and the like shall be measured the net length times the average height as fixed. Sheeting of curved, sloped, circular on plan or vertical shall be measured flat. Taking down and clearing away existing metal or wooden framings shall be measured separately. In case where the whole building will be demolished, no separate measurements for framing shall be made. | Measurement of asbestos containing corrugated sheeting |
| V. | Asbestos containing plaster shall be measured the net area. An allowance shall be made for walls and ceilings for additional area of moulded or carved work. No deduction shall be made for openings not exceeding 1.00 m ² . | Measurement of asbestos containing plaster |
| VI. | Asbestos containing plaster boards, ceiling tiles, particle boards, etc. and the like shall be measured over the area covered. No deduction shall be made for openings not exceeding 1.00 m ² . Taking down and clearing away existing metal or wooden framings shall be measured separately. In case where the whole building will be demolished, no separate measurements for framing shall be made. | Measurement of asbestos containing plaster boards, etc. |
| VII. | The rates for demolition of whole building or part of structures shall include for : - | Rates for demolition of whole building or part of structures |
| | (a) Carrying out survey of building or structures prior to demolition and preparation of record drawings and survey reports where required including taking photographic records and measurements. | |
| | (b) Submission of demolition proposals, method statement, sequence of demolition, all necessary design and calculations for all temporary works, including certification and endorsement by Registered Structural Engineer for Maintenance Surveyor's approval before commencing demolition work. | |
| | (c) Providing all precautionary and protective measures, scaffolding, canopy, netting, covering, dust-proof screens, heavy duty protective nettings, warning signs, and all other measures proposed by the Contractor in the method statement that are required for the execution of the demolition works. | |
| | (d) In addition to Clause IX(n) of Section 00 - General Regulations of this Schedule, providing all enhanced and heavy duty precautionary protective measures including propping, shoring, strutting, special covered walkways, scaffolding, catch fans and platforms, dust-proof screens, heavy duty protective netting and all other measures proposed by the Contractor in the method statement that are required for the execution of the demolition work. | |
| | (e) Provision of all necessary safety measures and taking all necessary measures to minimize nuisance caused by the demolition works to adjoining properties and occupants, the public in general, passing vehicles and workmen. | |
| | (f) Giving notice to relevant utility undertaker(s) or Government departments and identify utilities that will be affected by the proposed demolition and arranging utilities undertaker(s) or Government department for disconnection of services. Disconnecting and sealing utilities, and marking and recording position of sealed utilities, including liaising with relevant utility undertaker(s) and Government department. | |
| | (g) Taking down and clearing away all structures, finishes, fittings and the like from the structural floor level. | |
| | (h) Watering debris as necessary to reduce dust nuisance to a minimum. | |
| | (i) Removing off site all materials, debris and other arisings which shall become the property of the Contractor, and complying with all relevant regulations and requirements relating to the sorting and removal etc. of all demolition materials. | |

SPECIAL CONDITIONS (CONT'D)

Rates for demolition of whole building or part of structures (cont'd)	VII.	(j)	Protecting areas adjacent to demolition works from damages resulting from such demolition.
		(k)	Making good to buildings, structures, pavings, etc. and the like caused by the demolition of adjacent building or structure.
		(l)	Provision of settlement monitoring points and reports as required.
		(m)	Provision of full time safety officer and/or registered professional engineer when required for the demolition work.
		(n)	Executing works to comply with statutory requirements.
Rates for demolition of roof	VIII.		The rates for demolition of concrete structural roof shall, in addition to the requirements of Clause VII, include for : -
		(a)	All parapets and rails.
		(b)	All upper stairs, water tanks and all structures and fittings above roof slab.
Rates for demolition of roof other than concrete structural roof	IX.		The rates for demolition of roof other than concrete structural roof shall, in addition to the requirements of Clause VII, include for : -
		(a)	Cladding, roof covering and all supporting framings, flashings, gutters and the like.
		(b)	All associated features to the roof.
Rates for removal of asbestos containing materials	X.		The rates for removal of asbestos containing materials shall include for : -
		(a)	Works carrying out by an approved Environmental Protection Department (EPD) Registered Asbestos Contractor in compliance with statutory requirements.
		(b)	All preparation work, air monitoring by approved EPD Registered Asbestos Laboratory, safety precaution, giving statutory notices, disposal of waste and other works as required by the Asbestos Abatement Plan or relevant legislation and codes of practice issued under the Air Pollution Control Ordinance and Waste Disposal Ordinance.
		(c)	Provision of respirator and protective clothing for use by Maintenance Surveyor's Representative for inspection of the removal work.
		(d)	Where there is no Asbestos Abatement Plan, preparing and submission of a method statement of the removal works before commencement of the removal works.
			The rates for removal of asbestos containing materials do not include for:
		(i)	The opening up of pipe duct, etc., to gain access to asbestos containing material, and the subsequent reinstatement, the making good of disturbed surface and the application of non-asbestos substitute material.
		(ii)	The setting up, maintaining and taking down of containment and segregation.
		(iii)	The employment of an approved EPD Registered Asbestos Consultant to supervise the asbestos removal work.

SPECIAL CONDITIONS (CONT'D)

- | | | |
|-------|--|--|
| XI. | The rates for asbestos survey and Asbestos Investigation Report shall include for designing, and directing bulk sampling and analysis work but the work itself by an approved EPD Registered Asbestos Laboratory is measured separately. The rate shall also include for labelling asbestos containing materials and obtaining endorsement from Environmental Protection Department on the Report. | Rates for
asbestos
survey |
| XII. | The rate for Asbestos Management Plan shall include preparing an Asbestos Abatement Plan for materials to be removed and an Operation and Maintenance Plan for asbestos containing materials to be retained. The rate shall also include for obtaining endorsement from Environmental Protection Department on the Plan. | Rate for
Asbestos Management
Plan |
| XIII. | G.S. clauses for demolition can be found in Demolition, Site Clearance and Alterations Section of the General Specification for Building. | G.S. clauses |

Item	DEMOLITION OF WHOLE BUILDING OR PART OF STRUCTURE		Item
	Demolish whole building or part of structures in any height including clearing away all materials arising from Site :- (Note :- The demolition of a whole building or part of structure shall be paid for on a floor-by-floor basis at the rates of the following Items 23001 to 23011 inclusive) <i>Per square metre</i>	A \$	
23001	Ground floor storey of building or structure (does not include slab on ground).....	835.50	23001
23002	Suspended ground slab or cockloft of building or structure including staircase.....	342.80	23002
23003	Mezzanine floor of building or structure.....	840.40	23003
23004	First floor of building or structure.....	844.30	23004
23005	Second floor of building or structure.....	848.20	23005
23006	Third floor of building or structure.....	853.10	23006
23007	Fourth floor of building or structure.....	857.10	23007
23008	Additional floor from fifth floor onwards (except roof) of building or structure.....	861.00	23008
23009	Roof (including all structure above roof slab) of building or structure.....	865.90	23009
23010	Ditto but other than concrete (steel, timber or others construction).....	64.80	23010
23011	Single storey shed, building, structure, etc. (other than concrete).....	128.60	23011
	TAKING DOWN AND REMOVAL OF ASBESTOS CONTAINING MATERIALS <i>Each</i>		
23012	Set up total containment with 3-chamber decontamination unit, maintaining negative air pressure by using HEPA-filtered appliance throughout the course of asbestos abatement work, and taking down the containment on completion..... (The work shall be carried out in accordance with the Asbestos Abatement Plan and the Code of Practice on Asbestos Control - Asbestos Work Using Full Containment and Mini-containment.)	9,240.00	23012
23013	Set up segregation between asbestos work area and external area using plastic sheets, and decontamination unit and debris port where specified, taking down the segregation on completion..... (The work shall be carried out in accordance with the Code of Practice on Asbestos Control- Safe Handling of Low Risk Asbestos Containing Material.)	6,930.00	23013
23014	Carry out bulk sampling of suspected asbestos containing material and conduct examination using polarized light microscopy method on the presence, content and type of asbestos by an approved EPD Registered Asbestos Laboratory.....	404.30	23014
23015	Carry out further analysis (where the content of asbestos in a bulk sample cannot be determined by polarized light microscopy method) using point counting method by an approved EPD Registered Asbestos Laboratory.....	1,732.50	23015
23016	Carry out environmental air sampling and analysis to measure the fibre concentration by an approved EPD Registered Asbestos Laboratory.....	346.50	23016
23017	Dispose a collection of loose items with asbestos containing materials like fire blankets and bench mats, from one site (The work shall be carried out in accordance with the Code of Practice on Handling, Transportation and Disposal of Asbestos Waste.)	1,212.80	23017
23018	Take down and clear away asbestos containing fire-stopping material around electric cable running through wall and floor.....	1,617.00	23018
23019	Take down and clear away asbestos containing gasket and flexible joint in air duct of any size.....	1,848.00	23019
23020	Take down and clear away asbestos containing arc chute in electric switch box, including attendance by a qualified electrician.....	462.00	23020

Item	TAKING DOWN AND REMOVAL OF ASBESTOS CONTAINING MATERIALS (CONT'D)		Item
		A \$	
	<i>Per square metre</i>		
23021	Take down and clear away from Site asbestos containing roof insulation tiles.....	341.80	23021
23022	Ditto but asbestos containing corrugated or flat cement sheets fixed to a metal or timber frame.....	256.10	23022
23023	Ditto but asbestos containing plaster.....	384.60	23023
23024	Ditto but asbestos containing plaster boards, chalkboards, particle boards, etc. and the like fixed to wall or other structure.....	341.80	23024
23025	Take down and clear away from site asbestos containing vinyl tile and tile adhesive by low VOC mastic remover, including degreasing agent if any as recommended by manufacturer.....	384.60	23025
23026	Take down and clear away from site asbestos containing vinyl tile and adhesive including existing cement sand screeding.....	320.30	23026
23027	Ditto but asbestos containing cement grille block wall and cement panel wall.....	406.00	23027
23028	Ditto but asbestos containing insulation on calorifier or other surfaces.....	662.90	23028
	<i>Per linear metre</i>		
23029	Ditto but asbestos containing refuse chutes of any sizes.....	1,732.50	23029
23030	Ditto but asbestos containing lagging or in-situ and pre-moulded insulation to pipework of any sizes.....	1,386.00	23030
23031	Ditto but asbestos containing pipe or drain of any size.....	831.60	23031
	<i>Per item</i>		
23032	Carry out asbestos survey in a flat or a room of total floor area not exceeding 200 m ² of a building or structure and prepare an Asbestos Investigation Report by an approved EPD Registered Asbestos Consultant (The work shall be carried out in accordance with the Code of Practice on Asbestos Control – Preparation of Asbestos Investigation Report, Asbestos Management Plan and Asbestos Abatement Plan.)	2,547.90	23032
23033	Ditto but in any areas of total floor area 200 - 1,200 m ² of a building or structure.....	10,191.50	23033
23034	Prepare an Asbestos Management Plan by an approved EPD Registered Asbestos Consultant on premises where an Asbestos Investigation Report is already available (The work shall be carried out in accordance with the Code of Practice on Asbestos Control – Preparation of Asbestos Investigation Report, Asbestos Management Plan and Asbestos Abatement Plan.)	1,611.20	23034
23035	Employ an approved EPD Registered Asbestos Consultant to manage the implementation of an Asbestos Abatement Plan. The service shall include for the supervising of the work of the Asbestos Contractor, revising the abatement method, if necessary and liaising with Environmental Protection Department (Note: This item will only be paid for, if ordered by the Maintenance Surveyor in writing.)	7,150.00	23035

Section 24

RECREATION GROUND SURFACES AND PROTECTIVE PADDING

RECREATION GROUND SURFACES AND PROTECTIVE PADDING

SPECIAL CONDITIONS

Measurement	I.	All items of surfacing/flooring systems shall be measured over the net area covered including additional girth of curbs, channels and the like. No deduction shall be made for voids not exceeding 0.5 m ² . Rubber protective padding shall be measured the net covered area as fixed.
Rates generally	II.	Unless otherwise stated, the rates shall generally include for supply and installation complete including all necessary fixing accessories all in accordance with manufacturer's instructions.
Rates for surfacing/flooring systems, etc.	III.	The rates for athletic track/floor surfacing, impact absorbing surfaces shall further include for : - <ul style="list-style-type: none"> (a) All works to flat or sloping surfaces. (b) Laying to falls and currents. (c) All works to curve, circular and any shape required by the Maintenance Surveyor. (d) All necessary cleaning and preparation of new or existing substrate as recommended by manufacturers prior to laying including application of sealer. (e) Working along perimeter or around obstructions. (f) Laying to pattern if required. (g) Provision of literature, test certificates, reports, maintenance manuals and manufacturer's guarantee. (h) Provision of samples. (i) Providing all shop drawings associated with builder work requirements. (j) Providing deed of warranty when required. (k) Providing International Association of Athletics Federation's (IAAF) Certificates for the athletic track surfacing material/sports floor surfacing including certificates on certified Athletics Facilities when required by the Maintenance Surveyor.
Rate for recreational surfaces coating system	IV.	The rates for recreational surfaces coating system shall further include for :- <ul style="list-style-type: none"> (a) All preparation work to existing surfaces as recommended by the manufacturer. (b) Repairing minor cracks and voids to the substrate with approved proprietary materials. (c) Multi-coloured work and cutting to line. (d) Keeping adjacent surfaces clean as G.S. Item 21.44 and painting surfaces disturbed. (e) Removing all articles of hardware and the like before painting and re-fixing after painting has been completed. (f) Painting sample panels as required. (g) Touching up coated surfaces on completion as required. (h) Protecting and cleaning as G.S. Item 21.43. (i) Removing painted sample panels. (j) Submission of samples, test certificates and manufacturer's guarantee.

SPECIAL CONDITIONS (CONT'D)

- | | | |
|-----|---|---|
| V. | The rates for line marking on recreational surfaces coating system shall further include for :- | Rate for line marking on recreational surfaces coating system |
| | (a) All preparation work to existing surfaces as recommended by the manufacturer. | |
| | (b) Keeping adjacent surfaces clean as G.S. Item 21.44 and painting surfaces disturbed. | |
| | (c) Removing all articles of hardware and the like before painting and re-fixing after painting has been completed. | |
| | (d) Painting samples as required. | |
| | (e) Setting out and paint all courts to the required standards. | |
| | (f) Touching up coated surfaces on completion as required. | |
| | (g) Protecting and cleaning as G.S. Item 21.43. | |
| | (h) Submission of samples, test certificates and manufacturer's guarantee. | |
| VI. | The rates for provision of "IAAF Certificate and report of measurement" shall further include for : - | Rate for "Provision of IAAF Certificate and report of measurement" |
| | (a) Carrying out examination and survey by an approved independent specialist including labour, supervisory staff and equipment required. | |
| | (b) Provision of examination certificate and IAAF Certification System - Report of Measurement. | |

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	<p>Proprietary all weather athletic track/sports floor surfacing system on level or slope including applying by any means on flexible sub-surfacing (measured separately), any preparation and protection works, fixing components and accessories, making good and cleaning of affected areas on completion, all in accordance with manufacturer's instructions :</p> <p>Cast in-situ proprietary all weather sports floor surfacing system of high quality, stable and environmental friendly materials suitable for playgrounds and ball games and complying with the following :</p> <p><i>Per square metre</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Construction</td> <td colspan="2">Seamless Cast in-situ all in accordance with manufacturer's instructions</td> </tr> <tr> <td>System</td> <td colspan="2">Single layer permeable system comprising of Proprietary materials mixed with EPDM granules of 1 mm to 3 mm grain size using proprietary binder to give a textured finish</td> </tr> <tr> <td>Surface colour</td> <td colspan="2">Uniform and oxide-red in colour</td> </tr> <tr> <td>Textured surface</td> <td colspan="2">Flat texture, porous</td> </tr> <tr> <td>Joints</td> <td colspan="2">Shall not occur at points of intense wear</td> </tr> <tr> <td>Joints between bays</td> <td colspan="2">Shall be carefully set out to coincide with subsequent line making</td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Conditions</th> <th>Requirements</th> </tr> </thead> <tbody> <tr> <td>Force reduction</td> <td>Between 10 °C and 40 °C</td> <td>35% to 50%</td> </tr> <tr> <td>Modified vertical deformation</td> <td>Between 10 °C and 40 °C</td> <td>0.6 mm to 2.2 mm</td> </tr> <tr> <td rowspan="2">Friction (Sliding coefficient)</td> <td rowspan="2">Wet, leather test sole</td> <td>≥ 0.5 (DIN method)</td> </tr> <tr> <td>≥ 47 (TRRL method)</td> </tr> <tr> <td rowspan="2">Tensile properties</td> <td>Tensile strength</td> <td>≥ 0.4 N/mm²</td> </tr> <tr> <td>Elongation at break</td> <td>≥ 40 %</td> </tr> <tr> <td>Standard deformation</td> <td>Between 0 °C and 40 °C</td> <td>0.6 mm to 1.8 mm</td> </tr> <tr> <td>Relative abrasion</td> <td></td> <td>> 1.0</td> </tr> <tr> <td>Spike resistance</td> <td></td> <td>Class 1 to DIN V 18035-6</td> </tr> <tr> <td>Remaining indentation</td> <td></td> <td>≤ 1.0 mm</td> </tr> <tr> <td rowspan="4">Ageing</td> <td>Standard climate</td> <td>to DIN 50014</td> </tr> <tr> <td>Constant climate with condensation</td> <td>to DIN 50017</td> </tr> <tr> <td>Combined climate of heat, humidity and light</td> <td>to DIN 53387</td> </tr> <tr> <td>Change of colour and brightness in all of the above tested climate conditions</td> <td>≥ Class 4 to DIN 54001</td> </tr> <tr> <td>Environmental compatibility</td> <td></td> <td>to DIN V 18035-6</td> </tr> <tr> <td>Chemical resistance</td> <td></td> <td>Good</td> </tr> <tr> <td>Flammability</td> <td></td> <td>Very low to ASTM F 2157-02</td> </tr> </tbody> </table>	Construction	Seamless Cast in-situ all in accordance with manufacturer's instructions		System	Single layer permeable system comprising of Proprietary materials mixed with EPDM granules of 1 mm to 3 mm grain size using proprietary binder to give a textured finish		Surface colour	Uniform and oxide-red in colour		Textured surface	Flat texture, porous		Joints	Shall not occur at points of intense wear		Joints between bays	Shall be carefully set out to coincide with subsequent line making			Conditions	Requirements	Force reduction	Between 10 °C and 40 °C	35% to 50%	Modified vertical deformation	Between 10 °C and 40 °C	0.6 mm to 2.2 mm	Friction (Sliding coefficient)	Wet, leather test sole	≥ 0.5 (DIN method)	≥ 47 (TRRL method)	Tensile properties	Tensile strength	≥ 0.4 N/mm ²	Elongation at break	≥ 40 %	Standard deformation	Between 0 °C and 40 °C	0.6 mm to 1.8 mm	Relative abrasion		> 1.0	Spike resistance		Class 1 to DIN V 18035-6	Remaining indentation		≤ 1.0 mm	Ageing	Standard climate	to DIN 50014	Constant climate with condensation	to DIN 50017	Combined climate of heat, humidity and light	to DIN 53387	Change of colour and brightness in all of the above tested climate conditions	≥ Class 4 to DIN 54001	Environmental compatibility		to DIN V 18035-6	Chemical resistance		Good	Flammability		Very low to ASTM F 2157-02	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Supply and fix</td> <td style="width: 50%; text-align: center;">Take down and clear away</td> </tr> <tr> <td style="text-align: center;">A \$</td> <td style="text-align: center;">B \$</td> </tr> </table>	Supply and fix	Take down and clear away	A \$	B \$	
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Modified vertical deformation	Between 10 °C and 40 °C	0.6 mm to 2.2 mm																																																																												
Friction (Sliding coefficient)	Wet, leather test sole	≥ 0.5 (DIN method)																																																																												
		≥ 47 (TRRL method)																																																																												
Tensile properties	Tensile strength	≥ 0.5 N/mm ²																																																																												
	Elongation at break	≥ 40 %																																																																												
Standard deformation	Between 0 °C and 40 °C	0.6 mm to 1.8 mm																																																																												
Relative abrasion		> 1.0																																																																												
Spike resistance		Class 1 at DIN V 18035-6																																																																												
Remaining indentation		≤ 1.0 mm																																																																												
Ageing	Standard climate	to DIN 50014																																																																												
	Constant climate with condensation	to DIN 50017																																																																												
	Combined climate of heat, humidity and light	to DIN 53387																																																																												
	Change of colour and brightness in all of the above tested climate conditions	\geq Class 4 to DIN 54001																																																																												
Environmental compatibility		to DIN V 18035-6																																																																												
Chemical resistance		Good																																																																												
Flammability		Very low to ASTM F 2157-02																																																																												
24005	Proprietary all weather athletic track surfacing system, overall finished thickness 10 mm to 15 mm.....		485.10	70.30	24005																																																																									
24006	Ditto but 5 mm to 10 mm thick.....		306.10	63.40	24006																																																																									
	<p>Prepare and apply proprietary athletic track/sports floor surfacing line marking paint of any colour and thickness including marking out, preparing surface, cleaning and making good in accordance with the manufacturer's recommendations :</p> <p>Per linear metre</p>			A \$																																																																										
24007	Line n.e. 100 mm wide			26.60	24007																																																																									
	Each																																																																													
24008	Hurdle and relay position			70.50	24008																																																																									
24009	Letters, characters, logos, signs, etc. and the like n.e. 300 mm high			83.20	24009																																																																									

Item	ATHLETIC TRACK/SPORTS FLOOR SURFACING (CONT'D)		Item						
	Proprietary all weather athletic track/sports floor surfacing system on level or slope including applying by any means on flexible sub-surfacing (measured separately), any preparation and protection works, fixing components and accessories, making good and cleaning of affected areas on completion, all in accordance with manufacturer's instructions : (Cont'd)								
	<i>Each</i>	A \$							
24010	Apply and obtain International Amateur Athletic Federation (IAAF) Certificate (except Class 1 Certificate) including examination certificate and report of measurement for Certified Athletics Facilities.....	45,045.00	24010						
24011	Apply and obtain IAAF Class 1 Certificate including examination certificate and report of measurement for Certified Athletics Facilities..... (The actual rate should be : \$291,637.50 for item A of 24011A)	29,163.75	24011						
	(Note : - The above Items 24001 to 24011 inclusive will only be paid for if ordered in writing by the Maintenance Surveyor.)								
	MULTI-SPORT SURFACING								
	Proprietary multi-sport surfacings on level or slope and comply relevant standards including applying by any means on concrete or flexible sub-surfacing (measured separately), any preparation and protection works, fixing components and accessories, making good and cleaning of affected areas on completion, all in accordance with manufacturer's instructions :								
	Proprietary all weather synthetic pre-fabricated roll sheet sports surfaces composed of two separate layers with butt-joint system between rolled joints complying with the following :								
	<i>Per square metre</i>								
	<table border="1" style="width: 100%;"> <tr> <td style="width: 10%;">Top layer</td> <td>2-component UV resistant polyurethane resin bound colour Ethylene Propylene Diene Poly Methylene granules in 4 mm thick in pre-fabricated roll sheet form</td> </tr> <tr> <td>Bottom layer</td> <td>Resin bound black rubber-shred in prefabricated roll sheet form</td> </tr> <tr> <td>Both layers</td> <td>Tested and complied with BS 7044 including testing at the following : - Netball Rebound under both wet and dry conditions - Basketball Rebound under both wet and dry conditions - Abrasion Resistance to abrasive wheels - Fatigue Resistance - Resistance to Indentation - Slip Resistance - Peel Strength</td> </tr> </table>	Top layer	2-component UV resistant polyurethane resin bound colour Ethylene Propylene Diene Poly Methylene granules in 4 mm thick in pre-fabricated roll sheet form	Bottom layer	Resin bound black rubber-shred in prefabricated roll sheet form	Both layers	Tested and complied with BS 7044 including testing at the following : - Netball Rebound under both wet and dry conditions - Basketball Rebound under both wet and dry conditions - Abrasion Resistance to abrasive wheels - Fatigue Resistance - Resistance to Indentation - Slip Resistance - Peel Strength		
Top layer	2-component UV resistant polyurethane resin bound colour Ethylene Propylene Diene Poly Methylene granules in 4 mm thick in pre-fabricated roll sheet form								
Bottom layer	Resin bound black rubber-shred in prefabricated roll sheet form								
Both layers	Tested and complied with BS 7044 including testing at the following : - Netball Rebound under both wet and dry conditions - Basketball Rebound under both wet and dry conditions - Abrasion Resistance to abrasive wheels - Fatigue Resistance - Resistance to Indentation - Slip Resistance - Peel Strength								
		Overall thickness of system (mm)							
		4 6 8 10 12 15							
		A B C D E F							
		\$ \$ \$ \$ \$ \$							
24012	Supply and fix proprietary all weather synthetic pre-fabricated roll sheet sports surfacing to floor or wall	555.60 658.40 709.20 740.40 771.50 822.40	24012						
24013	Take down and clear away proprietary all weather synthetic pre-fabricated roll sheet sports surfacing	18.90 27.40 36.90 47.10 55.70 66.00	24013						
			Supply and fix						
	<i>Per linear metre</i>		A \$						
24014	In-laid line marking on proprietary all weather synthetic pre-fabricated roll sheet sports surfacing, n.e. 100 mm wide	143.20	24014						
	<i>Each</i>								
24015	In-laid number on proprietary all weather synthetic pre-fabricated roll sheet sports surfacing, size : 800 x 800 mm	921.70	24015						
24016	Ditto logo, size : 1200 x 1200 mm	7,464.80	24016						

Item	IMPACT ABSORBING SURFACES (SAFETY MATTING)	Item
	Proprietary impact absorbing surfaces on level or slope and comply relevant British Standards including any preparation and protection works, fixing components and accessories, making good and cleaning of affected areas on completion, all in accordance with manufacturer's instructions, fixing by any means on tarmacadam or concrete sub-base and the like :-	
	(Note :- All impact absorbing surfaces have weight in dry not less than 10 kg/m ² and should submit the relevant Laboratory report to the Maintenance Surveyor in respect of the impact absorbing surfaces.)	
	<i>Per square metre</i>	A \$
24017	Impact absorbing surfaces of any colour and size with surface impact attenuation of critical fall height 1.00 m maximum and including any approved adhesive	445.80 24017
24018	Ditto but with critical fall height 1.30 m maximum	474.70 24018
24019	Ditto but with critical fall height 1.50 m maximum	612.20 24019
24020	Ditto but with critical fall height 2.00 m maximum	740.40 24020
24021	Ditto but with critical fall height 3.00 m maximum	997.90 24021
24022	Take down and clear away impact absorbing surface for either of Items 24017 to 24021 inclusive	19.00 24022
24023	Take down and set aside for reuse impact absorbing surface ditto	60.90 24023
24024	Fix only impact absorbing surface ditto	82.50 24024
	<i>Per linear metre</i>	
24025	Triangular kerb margin for critical fall height 1.00 m maximum	183.70 24025
24026	Ditto but with critical fall height 1.30 m maximum	197.50 24026
24027	Ditto but with critical fall height 1.50 m maximum	265.70 24027
24028	Ditto but with critical fall height 2.00 m maximum	345.40 24028
24029	Ditto but with critical fall height 3.00 m maximum	503.60 24029
24030	Take down and clear away triangular kerb margin surface for either of Items 24025 to 24029 inclusive	8.60 24030
24031	Take down and set aside for reuse triangular kerb margin ditto	21.40 24031
24032	Fix only triangular kerb margin ditto	32.70 24032
	<i>Per set</i>	
24033	Extra over impact absorbing surfaces for stepping block 300 x 300 x 600 mm high	1,097.30 24033

Item	PROTECTIVE PADDING						Item																						
	Proprietary protective padding and comply relevant British Standards or DIN Standards all in accordance with manufacturer's instructions, bonding by any means to walls, columns, posts and the like :																												
	Proprietary rubber protective padding with anti-ozonant additive complying with the following :	Net Protection Height																											
		1.50 m	1.80 m	2.10 m	2.40 m	2.70 m																							
		A	B	C	D	E																							
		\$	\$	\$	\$	\$																							
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Colour</td><td>Black</td></tr> <tr><td>Polymer type</td><td>≥ 95% natural rubber</td></tr> <tr><td>Hardness/Durometer</td><td>38 IRHD</td></tr> <tr><td>Tensile strength</td><td>≥ 26.7 MPa or 3870 psi</td></tr> <tr><td>Elongation at break</td><td>≥ 760%</td></tr> <tr><td>Tension set</td><td>≥ 10%</td></tr> <tr><td>Tear strength</td><td>≥ 40 N/mm</td></tr> <tr><td>Resilience</td><td>≥ 83%</td></tr> <tr><td>Specific gravity</td><td>≤ 0.98</td></tr> <tr><td>Temperature range</td><td>-40°C to +75°C (-40°F to +167°F)</td></tr> <tr><td>Abrasion resistant index</td><td>105 at DIN 53516</td></tr> </table>	Colour	Black	Polymer type	≥ 95% natural rubber	Hardness/Durometer	38 IRHD	Tensile strength	≥ 26.7 MPa or 3870 psi	Elongation at break	≥ 760%	Tension set	≥ 10%	Tear strength	≥ 40 N/mm	Resilience	≥ 83%	Specific gravity	≤ 0.98	Temperature range	-40°C to +75°C (-40°F to +167°F)	Abrasion resistant index	105 at DIN 53516						
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Abrasion resistant index	105 at DIN 53516																												
	<i>Each</i>																												
24034	Padding to post, 6 mm thick, circumference of post, n.e. 360 mm girth	2,390.90	2,752.40	3,113.90	3,475.40	3,838.10	24034																						
24035	Padding to post, double layers, 6 mm thick each, ditto	4,377.50	5,065.80	5,754.20	6,442.60	7,133.20	24035																						
24036	Padding to post, 6 mm thick, circumference of post, 360 - 570 mm girth	3,268.70	3,756.10	4,243.50	4,730.00	5,220.60	24036																						
24037	Padding to post, double layers, 6 mm thick each, ditto	6,133.10	7,023.20	8,013.40	8,953.60	9,898.40	24037																						
24038	Padding to post, 6 mm thick, circumference of post, 570 - 780 mm girth	4,389.00	5,117.80	5,846.60	6,575.40	7,305.40	24038																						
24039	Padding to post, double layers, 6 mm thick each, ditto	8,373.80	9,796.70	11,219.70	12,642.60	14,067.90	24039																						
24040	Padding to post, 6 mm thick, circumference of post, 780 - 1150 mm girth	6,237.00	7,234.90	8,232.80	9,230.80	10,227.50	24040																						
24041	Padding to post, double layers, 6 mm thick each, ditto	12,069.80	-	-	-	-	24041																						
	<i>Each</i>						A \$																						
24042	Take down and clear away rubber protective padding for either of Items 24034 to 24041 inclusive						28.90	24042																					
24043	Take down and set aside for reuse protective padding ditto						46.20	24043																					
24044	Fix only protective padding ditto						161.70	24044																					
	Proprietary rubber protective padding with anti-ozonant additive complying with the following :	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Supply and fix</td><td>Take down and clear away</td><td>Take down and set aside for re-use</td><td>Fix only</td></tr> <tr><td>A</td><td>B</td><td>C</td><td>D</td></tr> <tr><td>\$</td><td>\$</td><td>\$</td><td>\$</td></tr> </table>				Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only	A	B	C	D	\$	\$	\$	\$												
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Abrasion resistant index	105 at DIN 53516																												
	<i>Per square metre</i>																												
24045	Rubber protective padding to wall or column, 6 mm thick	2,390.90	33.40	34.30	113.70	24045																							
24046	Ditto but 12 mm thick	3,851.90	33.40	34.30	113.70	24046																							

Item	PROTECTIVE PADDING (CONT'D)					Item											
	<p>Proprietary protective padding and comply relevant British Standards or DIN Standards all in accordance with manufacturer's instructions, bonding by any means to walls, columns, posts and the like : - (Cont'd)</p> <p>Proprietary protective padding comprises PVC coated fabric vinyl cover in any colour and 30 mm thick foam complying with the following (for outdoor use):</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Vinyl</td> <td>Matt finish</td> </tr> <tr> <td>PVC coated fabric</td> <td>Flame retardant to NFPA 701 and ULC S-109 large-scale test requirement</td> </tr> <tr> <td rowspan="4">Foam</td> <td>Closed cell polyethylene</td> </tr> <tr> <td>Water vapour diffusion-resistance factor to DIN 52615</td> </tr> <tr> <td>Chemical and water resistance to ASTM 543-56T</td> </tr> <tr> <td>Zone resistance to ASTM D1171</td> </tr> <tr> <td></td> <td>Self-extinguished fire rating to BS 476 Part 7 Class 1-2</td> </tr> </table> <p><i>Per square metre</i></p>	Vinyl	Matt finish	PVC coated fabric	Flame retardant to NFPA 701 and ULC S-109 large-scale test requirement	Foam	Closed cell polyethylene	Water vapour diffusion-resistance factor to DIN 52615	Chemical and water resistance to ASTM 543-56T	Zone resistance to ASTM D1171		Self-extinguished fire rating to BS 476 Part 7 Class 1-2					
Vinyl	Matt finish																
PVC coated fabric	Flame retardant to NFPA 701 and ULC S-109 large-scale test requirement																
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	Water vapour diffusion-resistance factor to DIN 52615																
	Chemical and water resistance to ASTM 543-56T																
	Zone resistance to ASTM D1171																
	Self-extinguished fire rating to BS 476 Part 7 Class 1-2																
		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only												
		A \$	B \$	C \$	D \$												
24047	Wall padding with 12 mm thick 100% recycled plastic backing board.....	4,117.60	33.40	34.30	113.70	24047											
24048	Column padding ditto.....	4,816.40	33.40	34.30	113.70	24048											
24049	Post padding (without backing).....	3,892.40	33.40	34.30	113.70	24049											
	<p>Proprietary protective padding comprises PVC coated fabric vinyl cover in any colour and 30 mm thick foam complying with the following (for indoor use) :</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Vinyl</td> <td>Matt finish</td> </tr> <tr> <td>PVC coated fabric</td> <td>Flame retardant to NFPA 701 and ULC S-109 large-scale test requirement</td> </tr> <tr> <td rowspan="2">Foam</td> <td>Meet fire test B.S. 5852</td> </tr> <tr> <td>Part 2 and contains no Class I or II ozone depleting Chemicals (OPC)</td> </tr> </table> <p><i>Per square metre</i></p>	Vinyl	Matt finish	PVC coated fabric	Flame retardant to NFPA 701 and ULC S-109 large-scale test requirement	Foam	Meet fire test B.S. 5852	Part 2 and contains no Class I or II ozone depleting Chemicals (OPC)									
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		Supply and fix	Take down and clear away	Take down and set aside for re-use	Fix only												
		A \$	B \$	C \$	D \$												
24050	Wall padding with 12 mm thick 100% recycled plastic backing board.....	2,310.00	33.40	34.30	113.70	24050											
24051	Column padding ditto.....	3,026.10	33.40	34.30	113.70	24051											
24052	Post padding (without backing).....	2,171.40	33.40	34.30	113.70	24052											

Item	RECREATIONAL SURFACE COATING SYSTEM		Item																																																
	Proprietary surface coating system suitable for ball courts, soccer pitches and recreational grounds and complying with the following :	Supply and apply																																																	
	<i>Per square metre</i>	A \$																																																	
	<table border="1"> <tr> <td>Formation</td> <td colspan="2">100% Acrylic resin formulation</td> </tr> <tr> <td>Materials and application certified by</td> <td colspan="2">American Sports Builders Association</td> </tr> <tr> <td>Materials approved and classification by</td> <td colspan="2">International Tennis Federation</td> </tr> <tr> <td>Pace rating</td> <td colspan="2">Average 39.5</td> </tr> <tr> <td>Texture surface</td> <td colspan="2">Mat surface with silica sand topping</td> </tr> <tr> <td>Surface tolerance</td> <td colspan="2">≤ 1.5 mm</td> </tr> <tr> <td>Surface colour</td> <td colspan="2">Uniform and in standard colour</td> </tr> <tr> <td>Coefficient of friction</td> <td>≥ 0.7</td> <td>Standard test by ITF accredited laboratory</td> </tr> <tr> <td>Coefficient of restitution</td> <td>Average 0.82</td> <td>according to test report ITFCS/01/01-05-129</td> </tr> <tr> <td>Accelerated weather resistance</td> <td colspan="2">No cracking, no swelling and no peeling off for 5 years</td> </tr> <tr> <td>Coefficient of abrasion resistance</td> <td>Between 0.06-0.1</td> <td>Taber's test 1000</td> </tr> <tr> <td>Density of liquid coating</td> <td>Average 9 lb/gallon</td> <td>Standard test method for inks and related products to D1475-98(2003)</td> </tr> <tr> <td>Viscosity at 77°F</td> <td>Average 100-120</td> <td>Standard test method for pigment content of water emulsion paints by low-temperature ashing to D562-01</td> </tr> <tr> <td>Flammability</td> <td>Non-flammable</td> <td>Standard test method for determining limits of flammability of chemicals elevated temperature and pressure to E918-83(1999)</td> </tr> <tr> <td>Flash point</td> <td>None</td> <td>Standard test method for flash point and fire point of liquids by tag open-cup apparatus to D1310-01</td> </tr> <tr> <td>Incombustibility</td> <td colspan="2">No smoke</td> </tr> </table>	Formation	100% Acrylic resin formulation		Materials and application certified by	American Sports Builders Association		Materials approved and classification by	International Tennis Federation		Pace rating	Average 39.5		Texture surface	Mat surface with silica sand topping		Surface tolerance	≤ 1.5 mm		Surface colour	Uniform and in standard colour		Coefficient of friction	≥ 0.7	Standard test by ITF accredited laboratory	Coefficient of restitution	Average 0.82	according to test report ITFCS/01/01-05-129	Accelerated weather resistance	No cracking, no swelling and no peeling off for 5 years		Coefficient of abrasion resistance	Between 0.06-0.1	Taber's test 1000	Density of liquid coating	Average 9 lb/gallon	Standard test method for inks and related products to D1475-98(2003)	Viscosity at 77°F	Average 100-120	Standard test method for pigment content of water emulsion paints by low-temperature ashing to D562-01	Flammability	Non-flammable	Standard test method for determining limits of flammability of chemicals elevated temperature and pressure to E918-83(1999)	Flash point	None	Standard test method for flash point and fire point of liquids by tag open-cup apparatus to D1310-01	Incombustibility	No smoke			
Formation	100% Acrylic resin formulation																																																		
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Flash point	None	Standard test method for flash point and fire point of liquids by tag open-cup apparatus to D1310-01																																																	
Incombustibility	No smoke																																																		
24053	Proprietary recreational surface coating system comprising two coats of asphaltic emulsion mixed with silica sand as underlayer and filler coat, four coats of cushion resilient layer as texturizing layer and two coats of acrylic colour coating as finishing coat (overall thickness ≥ 1.5 mm) on asphaltic or tarmacadam surfaces	196.40	24053																																																
24054	Proprietary recreational surface coating system comprising two coats of proprietary asphaltic emulsion mixed with silica sand as underlayer and filler coat, four coats of proprietary acrylic resurfacer mixed with silica sand as texturizing layer and two coats of proprietary acrylic colour coating as finishing coat (overall thickness ≥ 1.0 mm) on asphaltic or tarmacadam surfaces	154.80	24054																																																
24055	Proprietary recreational surface coating system comprising two coats of proprietary acrylic patch binder mixed with cement and silica sand as underlayer, two coats of proprietary concrete primer as adhesion promotor, two coats of acrylic resurfacer mixed with cement and silica sand as texturizing layer and two coats of proprietary acrylic colour coating as finishing coat (overall thickness ≥ 1.0 mm) on concrete or coated surfaces	169.80	24055																																																
24056	Add to Items 24053 to 24055 inclusive for laying one layer of fibreglass membrane	39.30	24056																																																
24057	One coat of proprietary asphaltic emulsion mixed with silica sand as underlayer and filler coat	17.30	24057																																																
24058	One coat of proprietary concrete primer as adhesion promotor	16.20	24058																																																
24059	One coat of proprietary acrylic resurfacer mixed with silica sand as texturizing layer	23.10	24059																																																
24060	One coat of proprietary acrylic patch binder mixed with cement and silica sand as underlayer	26.60	24060																																																
24061	One coat of proprietary cushion resilient layer as texturing layer	27.70	24061																																																
24062	One coat of proprietary acrylic colour coating as finishing coat	27.70	24062																																																
	<i>Per linear metre</i>																																																		
24063	Two coats of proprietary line marking on proprietary recreational surface coating system n.e. 50 mm wide	17.30	24063																																																
24064	Ditto but circular-on-plan n.e. 10.0 m radius	20.80	24064																																																

Item	RECREATIONAL SURFACE COATING SYSTEM (CONT'D)	Supply and apply	Item																																																
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Section 25

GEOTECHNICAL WORKS

GEOTECHNICAL WORKS

SPECIAL CONDITIONS

Measurement generally	<p>I. Inspection scaffolding shall be measured the area of the face to be covered by the scaffolding and no allowance shall be made for surface irregularities or other local peculiarities.</p> <p>The rates for inspection scaffolding will only be paid for, if :-</p> <p>(i) No other works will be executed by the Contractor and it is ordered in writing by the Maintenance Surveyor; and</p> <p>(ii) The scaffolding will be taken down and clear away after the use for inspection or uses by other Government departments or other contractor employed by Government.</p> <p>Preliminary stripping to existing slopes shall be measured the surface area of the area or face cleared and no allowance shall be made for surface irregularities or other local peculiarities.</p> <p>Rock scaling shall be measured the surface area of the face to be scaled and no allowance shall be made for surface irregularities or other local peculiarities.</p> <p>Mesh protection to rock slopes shall be measured the surface area of the face to be protected and no allowance shall be made for surface irregularities or other local peculiarities. No deduction shall be made for openings each not exceeding 1.00 m².</p> <p>All geotechnical works items other than those items specifically included in this Section shall be measured and paid for at the appropriate rates under applicable Work Sections in this Schedule.</p> <p>For avoidance of doubt, all rates in this Section and other appropriate rates under applicable Works Sections measured in relation to all geotechnical works shall deem to apply to works executed by the Approved Suppliers of Material and Specialist Contractors for Public Works : Landslip Preventive/Remedial Works to Slopes/Retaining Walls.</p>
Measurement of mats for erosion control	<p>II. Mats for erosion control shall be measured net to the area fixed or laid. No deduction shall be made for an area not exceeding 1.00 m².</p>
Measurement of surface protection	<p>III. Different types of surface protection shall be measured as the surface area of the face to be covered and no allowance shall be made for surface irregularities or other local peculiarities. No deduction shall be made for an area not exceeding 1.00 m².</p>
Measurement of topographic survey	<p>IV. Measurement of topographic survey shall be the plan area within the boundary as directed by the Maintenance Surveyor inclusive of all terrains and irregularities, etc. and measured flat. Measurement shall either be taken at the date of commencement or at the completion or both.</p> <p>The rate for topographic survey will only be paid for if order in writing by the Maintenance Surveyor.</p>
Rates generally	<p>V. The rates for all items shall generally include for : -</p> <p>(a) Conveying, lowering, hoisting, placing in any position at any height on slopes.</p> <p>(b) All multi-handling between excavation and final position.</p> <p>(c) All multi-handling between temporary deposition in spoil heaps and removal from site.</p> <p>(d) All scaffolding and temporary works.</p> <p>(e) Submission of survey records before and upon the completion of the geotechnical works.</p>

SPECIAL CONDITIONS (CONT'D)**PART I - EARTHWORK ON EXISTING SLOPES**

- | | | |
|-------|--|---|
| VI. | The rates for excavation on existing slopes shall further include for : - | Rates for excavation on existing slopes |
| | (a) Mobilization, maintenance and demobilization of excavator, roller, compaction plant, moving plant and the like. | |
| | (b) Allowance for increase in bulk of all materials arising from excavation. | |
| | (c) Excavating in any type of ground including earth, clay, sand, gravel, loose boulders each not exceeding 0.20 m ³ , any hard surface and the like. | |
| | (d) Setting out the work and all profiles, rods, etc. and work straight or circular on plan. | |
| | (e) Excavating to form buttress. | |
| | (f) Cutting down shrubs, under-growths, etc. including trees not exceeding 150 mm girth, grubbing up roots and clearing away. | |
| | (g) Removing old drains, channels, stepped channels, catch pits, etc. and sealing off connections. | |
| | (h) Provision of temporary drainage to the area affected and clearing away after completion. | |
| | (i) Getting out excavated materials by any means necessary and deposit excavated material in heaps. | |
| | (j) Cutting and trimming banks and slopes. | |
| | (k) Protecting the exposed surfaces of excavation by any necessary means. | |
| | (l) Preparation and submission of survey record when ordered by the Maintenance Surveyor. | |
| | (m) Depositing in temporary spoil heaps. | |
| VII. | The rates for earth filling to existing slopes shall further include for : - | Rates for earth filling to existing slopes |
| | (a) Additional bulk of filling required to allow for compaction. | |
| | (b) Forming and trimming banks and slopes and compaction. | |
| | (c) Temporary retaining boards to edges and slopes. | |
| | (d) Removing, replacing or making good placed or compacted filling material as required where filling material subsequently becomes damaged or unsuitable. | |
| | (e) Protecting the exposed surfaces of filling by any necessary means. | |
| | (f) Apart from probe tests measured separately, all soil tests including in-situ density tests, maximum dry density tests and etc. as required. | |
| VIII. | The rates for soil-cement filling shall further include for : - | Rates for soil-cement filling |
| | (a) Preliminary mix trials. | |
| | (b) Preliminary trial panels. | |
| | (c) Preparation of surface to be filled. | |
| | (d) Compacting and finishing surfaces. | |
| | (e) Recording and submitting records. | |

SPECIAL CONDITIONS (CONT'D)

PART II - SLOPE TREATMENTSPreliminary Stripping

Rates for preliminary stripping of top soil

- IX. The rates for preliminary stripping of top soil shall further include for : -
- (a) Excavation and disposal of topsoil including loose soil, clearance of vegetations and undergrowths.
 - (b) Taking up and clearing away vegetation, topsoil, disused drains, stepped channels and the like.
 - (c) Temporary protection of stripped area.
 - (d) Clearing of the slope surface and the area so affected after stripping work by means of compressed air or other approved means.
 - (e) Clearing, trimming, scarifying and regulating the surface for slope treatment works.
 - (f) Taking readings, measurements and observations, recording and submitting survey records.
 - (g) Reinstatement of over-stripped area with approved materials.
 - (h) Removing surplus soil and debris.

Rates for preliminary stripping of impermeable surfaces

- X. The rates for preliminary stripping of impermeable surfaces shall further include for : -
- (a) Excavation and disposal of existing chunam, sprayed concrete and other impermeable surfaces in any thickness including vegetations and under-growths.
 - (b) Cutting of reinforcement.
 - (c) Taking up and clearing away vegetation, topsoil, disused drains, stepped channels and the like.
 - (d) Temporary protection of stripped areas.
 - (e) Clearing of the slope surface and the area so affected after stripping work by means of compressed air.
 - (f) Clearing, trimming, scarifying and regulating the surface for slope treatment works.
 - (g) Taking readings, measurements and observations, recording and submitting survey records.
 - (h) Reinstatement of over-stripped area.
 - (i) Removing surplus soil and debris.

Inspection Scaffolding

Rates for inspection scaffolding

- XI. The rates for inspection scaffolding shall further include for : -
- (a) Provision, maintenance, inspection, replacement (if required) and subsequent removal.
 - (b) Safety ropes, fall-arresting system, harnesses hand and foot holds.
 - (c) Platforms, ramps, access, protection fences and barriers.

SPECIAL CONDITIONS (CONT'D)Inspection Scaffolding (cont'd)

- | | | |
|-----|---|--|
| XI. | (d) Provision of drawings, calculations in relation to the design of Temporary Works including endorsement by a Registered Structural Engineer. | Rates for
inspection
scaffolding
(cont'd) |
| | (e) Allowance in the works programme for inspection carried out by the Maintenance Surveyor. | |
| | (f) Re-erect or repair the inspection scaffolding to allow the re-inspection, if required. | |
| | (g) Obtaining permission from the Maintenance Surveyor for any dismantle works. | |
| | (h) Compliance with the requirements of the current Code of Practice for Bamboo Scaffolding Safety and Code of Practice for Metal Scaffolding Safety. | |

Probe test

- | | | |
|------|--|-------------------------------------|
| XII. | The rates for GEO probe test shall include for : - | Rates for GEO
probe test |
| | (a) Carrying out all test and soil samples by the personnel of a Hong Kong Laboratories Accreditation Scheme (HOKLAS) accredited laboratory using their own equipment and providing such labour and assistance as may be required. | |
| | (b) Collect samples selected by the Maintenance Surveyor. | |
| | (c) Report work. | |
| | (d) Payment of all charges incurred. | |
| | (e) All apparatus and calibration, and associated equipment. | |
| | (f) Filling up holes. | |
| | (g) In the case of testing the works carried out by the Contractor, re-testing up to the satisfaction of the Maintenance Surveyor. | |

Surface Protection

- | | | |
|-------|---|-----------------------------|
| XIII. | The rates for chunam shall further include for : - | Rates for
chunam |
| | (a) Cleaning, trimming and regulating the surface to be covered. | |
| | (b) Preliminary trial panels. | |
| | (c) Dowels (if required). | |
| | (d) Weepholes and filter materials. | |
| | (e) Finishing and curing. | |
| | (f) Fixing anchorage. | |
| | (g) Protection of trees, structures, street furniture and the like. | |
| | (h) Recording and submitting records. | |

SPECIAL CONDITIONS (CONT'D)

Surface Protection (cont'd)

Rates for sprayed concrete	XIV. The rates for sprayed concrete shall further include for : -
	(a) Providing, setting up, maintenance and removal of concrete spraying plant, equipment and all necessary ancillary equipment.
	(b) Preliminary mix trials.
	(c) Preliminary trial panels.
	(d) Test specimens and test panels.
	(e) Preparation of surface to be covered.
	(f) Formwork.
	(g) Weepholes and filter materials.
	(h) Forming and including construction joint and expansion joint.
	(i) Finishing and curing.
	(j) Coloured concrete.
	(k) Inspection, sounding, and removal and replacement of sub-standard or hollow areas.
	(l) Coring samples, testing and making good core holes to match existing.
	(m) Protection of trees, structures, street furniture and the like.
	(n) Recording and submitting records.
Rate for slope registration sign plate	XV. The rate for supply and installation of sign plate shall include for excavation in any material and disposal of surplus material; backfilling and compaction; waterproof membrane or blinding layer; formwork; reinforcement and concrete, supply and protective treatment of all metal/alloy or other components of the sign plate; painting; welding; qualification tests for welders and welding tests.

Rock Scaling, Removal of Boulders, Mesh Protections, and Sealing and Infilling Rock Joints

Rates for scaling and trimming of rock slopes	XVI. The rates for scaling and trimming of rock slopes shall further include for : -
	(a) Soil cushions and subsequent removal.
	(b) Washing down.
	(c) Scaling and trimming using hand-held tools.
	(d) Disposal of scale, debris and boulders using hand-held tools.
	(e) Temporary protective measures and subsequent removal.
Rates for mesh protection to rock slopes	XVII. The rates for mesh protection to rock slopes shall further include for : -
	(a) Preparation of surface.
	(b) Bolts and anchorages.
	(c) Lapping, binding and jointing.
	(d) Removing.

SPECIAL CONDITIONS (CONT'D)

Rock Scaling, Removal of Boulders, Mesh Protections, and Sealing and Infilling Rock Joints (cont'd)

- | | |
|---|---|
| <p>XVIII. The rates for rock or boulder splitting and removal shall further include for : -</p> <ul style="list-style-type: none"> (a) Mobilization, maintenance and demobilization of plant, tools and ancillary equipment necessary for the works. (b) Moving the plant, tools and ancillary equipment at various locations. (c) Temporary supports for plant, tools and ancillary. (d) Temporary protective measures and subsequent removal. (e) Disposal of boulders and debris. | <p>Rates for rock or boulder splitting and removal</p> |
| <p>XIX. The rates for sealing and infilling rock joints shall further include for : -</p> <ul style="list-style-type: none"> (a) Clearing unsuitable infill. (b) Excavating in rock joints to the depth required. (c) Concrete, cement mortar and/or epoxy mortar. (d) Formwork. (e) Reinforcement. (f) Masonry infilling. | <p>Rates for sealing and infilling rock joints</p> |
| <p>XX. The rates for concrete buttress shall further include for : -</p> <ul style="list-style-type: none"> (a) Preliminary mix trials. (b) Slump and other tests as required. (c) Preparation of surface to be buttressed. (d) Compacting and finishing surfaces. (e) Formwork, fair face, if required. (f) Reinforcement, if required. (g) PVC outlets connected to relief drainage system. (h) Recording and submitting records. | <p>Rates for concrete buttress</p> |

Rock Dowels

- | | |
|---|-------------------------------------|
| <p>XXI. The rates for rock dowels shall further include for : -</p> <ul style="list-style-type: none"> (a) Providing, setting up, maintenance and removal of sufficient number of drill rigs and ancillary equipment. (b) Moving the drill rigs, plant and ancillary equipment between rock dowel positions. (c) Drilling in any material. (d) Water, compressed air and drilling fluids. (e) Washing out holes. | <p>Rates for rock dowels</p> |
|---|-------------------------------------|

SPECIAL CONDITIONS (CONT'D)

Rock Dowels (cont'd)

Rates for
rock dowels
(cont'd)

- XXI. (f) Grouting.
(g) Protective treatment to stud components.
(h) Recording and submitting records.

Soil Nails

Rates for
soil nails

- XXII. The rates for soil nails shall further include for : -
- (a) Providing, setting up, maintenance and removal of sufficient number of drill rigs, plant and ancillary equipment.
(b) Moving the drill rigs, plant and ancillary equipment between soil nail positions.
(c) Drilling in any material.
(d) Temporary support to drill holes.
(e) Water, compressed air and drilling fluids.
(f) Washing out holes.
(g) Pre-grouting and reaming.
(h) Provision and installation of steel bars.
(i) Grouting.
(j) Protective treatment to steel components.
(k) Couplers and centralisers.
(l) Head assembly, concrete, reinforcement and formwork.
(m) Excavation for soil nail head and disposal of surplus materials.
(n) Supporting device including wire, ties and the like.
(o) Recording and submitting records.
(p) Reinstatement to affected areas.
(q) Protective treatment to steel components, including provision of heat-shrinkable sleeve, if ordered by the Maintenance Surveyor.

Rates for pull
out tests and
performance
tests on soil
nails

- XXIII. The rates for pull out tests and performance tests on soil nails shall further include for : -
- (a) Setting up, operating, calibrating and maintaining load jacks.
(b) Provisions of temporary supports to spread the applied loads.
(c) Applying and re-applying the test loads and releasing.
(d) Pulling out of soil nail for inspection and grouting the drillhole.
(e) Cutting off any protrusion from the drillhole and grout the remaining part of drillhole.
(f) Taking readings, measurements and observations of the test and recording and submitting results of test.

SPECIAL CONDITIONS (CONT'D)

Soil Nails (cont'd)

- | | | |
|--------|---|--|
| XXIII. | (g) Submission of remedial proposal and replacement of all soil nails failing the test. | Rates for pull out tests and performance tests on soil nails (cont'd) |
| | (h) Reinstatement of affected areas. | |

Drainage and Erosion Control

- | | | |
|-------|--|--------------------------------|
| XXIV. | The rates for relief drains shall further include for :- | Rates for relief drains |
| | (a) Nails, bolts and nuts for fixing and jointing. | |
| | (b) Excavation and disposal of material from joints, faults and discontinuities. | |
| | (c) Connecting to outlets including junction boxes. | |
| | (d) Weep holes. | |
| | (e) Trial length. | |
| | (f) Sealing up impermeable layers. | |
| | (g) Submission of method statement. | |
| | (h) P.V.C. flange and end cap. | |
| XXV. | The rates for raking drains shall further include for :- | Rates for raking drains |
| | (a) Providing, setting up, maintenance and removal of sufficient number of drill rigs and plant together with all ancillary equipment. | |
| | (b) Moving the drill rigs, plant and ancillary equipment between drain hole positions. | |
| | (c) Drilling in any material. | |
| | (d) Temporary support to drill holes. | |
| | (e) Water, compressed air and drilling fluids. | |
| | (f) Taking soil samples and rock cores. | |
| | (g) Recording and submitting records. | |
| | (h) Disposal of material. | |
| | (i) Temporary sealing for holes. | |
| | (j) Pipes, tubes, drain liners, drain screens and the like, including slots and perforations. | |
| | (k) Filter sheaths and fabric. | |
| | (l) Jointing and socketing. | |
| | (m) Bentonite plugs and mortar seals. | |
| | (n) Marking. | |
| | (o) Reinstatement of affected areas. | |

SPECIAL CONDITIONS (CONT'D)

Drainage and Erosion Control (cont'd)**Rates for maintenance of raking drains**

- XXVI. The rates for maintenance of raking drains shall include for : -
- (a) All the equipments and labours, including supply and pumping of water, required for carrying out the maintenance of raking drains as per paragraphs 16 & 17 of WBTC No. 10/91 and agreed by the Maintenance surveyor.
 - (b) Provision of new removable inner liner as per ArchSD Standard Drawing No C2403 if required by the Maintenance surveyor.
 - (c) Disposal of the old inner liner in an environmentally acceptable way as agreed by the Maintenance Surveyor.

Rates for mats for erosion control

- XXVII. The rates for mats for erosion control shall further include for : -
- (a) Preparation of surfaces to receive mats including filling irregularities with suitable materials.
 - (b) Pins, anchorages and the like for fixing mats.
 - (c) Allowance for laps between joints.

Geotechnical Instrumentation and Sundries**Rates for tree rings and planter holes**

- XXXVIII. The rates for tree rings and planter holes in sprayed concrete shall, in addition to the requirements of Clause XIV, include for : -
- (a) Thickened concrete, reinforcement and anchor bars, if required.
 - (b) Removal of any excessive sprayed concrete inside tree ring and planter hole.
 - (c) Filling hole with topsoil mix.

Rates for supply and installation of survey monitoring point

- XXXIX. The rates for supply and installation of survey monitoring point shall further include for : -
- (a) Installation of stainless steel bolts of minimum 12mm diameter or other similar and approved with tapered lower end firmly embedded in stone or concrete and protected hemispherical upper end with 1mm diameter drilled hole at apex.
 - (b) Provision of concrete bedding as directed by the Maintenance Surveyor.

Rates for monitoring operation at each survey monitoring point

- XXX. The rates for monitoring operation at each survey monitoring point shall include for : -
- (a) Labour, supervisory staff and equipment necessary for the recording of measurements to the frequency as required by the Maintenance Surveyor.
 - (b) Preparation and submission of daily records.

Rates for topographic survey

- XXXI. The rates for topographic survey shall include for : -
- (a) Carrying out the topographic survey by the qualified personnel of an approved independent firm using their own equipment and providing such labour and assistance as may be required.
 - (b) Preparation and submission of survey plans and reports duly signed by an authorised surveyor and approved by the Maintenance Surveyor.
 - (c) Payment of all charges incurred.

SPECIAL CONDITIONS (CONT'D)Geotechnical Instrumentation and Sundries (cont'd)

XXXII.	The rate shall include for provision of labour / supervisory staff and dipmeter for measuring of groundwater level.	Rates for monitoring of piezometer
XXXIII.	The rates for safety fence shall include for :- (a) Provision, erection, maintenance, alteration as required. (b) Dismantle and clear away to left-in position, as required. (c) Providing all materials including posts, strut, plates, wire meshes, rock dowel, anchor bolts, nuts and washers, cable wire, tarpaulin sheets and the like. (d) Designs for the temporary works including calculations and drawings endorsed by a Registered Structural Engineer when required. (e) All associated footings including all necessary excavation, disposal, concrete, reinforcement, base plates as required. (f) Adequate lightings and warning lights and associated power supply and electrical works and payment of all charges incurred. (g) Reinstatement and making good surface disturbed.	Rates for safety fence

Specification for Geotechnical Works

XXXIV.	The specification clauses for geotechnical works can be found in :- (a) The Particular Specification for Geotechnical Works on Soil and Rock Slopes in the Contract. (b) The General Specification for Building. (c) The General Specification for Civil Engineering Works (Hong Kong Government).	Specification clauses
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The Particular Specification shall prevail over other specifications and the General Specification for Building shall prevail over the General Specification for Civil Engineering Works.

Geotechnical Works found in other Sections of this Schedule

The following works items are for information only and should not constitute as an exhaustive list. Items included under other Sections shall be measured and paid for if applicable.

XXXV.	Turfing and grassing to slopes can be found in Section 01 - Excavation of this Schedule.	Turfing and grassing to slopes
XXXVI.	Drainage system to slopes can be found in Section 16 - Drainage and Cable Duct of this Schedule.	Drainage system to slopes
XXXVII.	Concrete staircase to slopes and reinforcement to buttress can be found in Section 02 - Concrete Work of this Schedule.	Concrete works to slopes
XXXVIII.	Steel railing and staircase to slopes can be found in Section 10 - Steel and Metal Work of this Schedule.	Steel railing and staircase to slopes
XXXIX.	Paintwork to slopes can be found in Section 15 - Painting of this Schedule.	Paintwork to slopes

Item	PART I - EARTHWORK ON EXISTING SLOPES	A \$	Item
	EARTHWORK ON EXISTING SLOPES		
	<i>Per cubic metre</i>		
25001	Excavate on slopes to reduce levels.....	76.60	25001
25002	Load surplus excavated materials and remove from Site.....	148.20	25002
25003	Spread and level or patching up excavated material on slopes in layers n.e. 250 mm including compacting and handling from spoil heaps.....	53.10	25003
25004	Approved soil brought to Site from Contractor's own source and wheeled, spread, levelled, patching up, watered if necessary and compacted in layers as filling..... (Note : - This item will only be paid for, if ordered by the Maintenance Surveyor in writing)	94.20	25004
	SOIL - CEMENT FILLING		
	<i>Per cubic metre</i>		
25005	Soil-cement filling including compacting and finishing surfaces as required.....	119.70	25005
	REMEDIAL WORK TO BANKS, LANDSLIPS, ETC.		
	<i>Per cubic metre</i>		
25006	Excavate as necessary to trim and cut back eroded, fissured or overhanging banks, slopes and sides of slips at any height to revised profile, throw or lower earth, boulders, shrubs and other debris arising to bottom of slope and break or cut up these arisings together with any former material and debris which had been washed down, into a suitable size for handling, and load and remove from Site and erection, use and clearing away of any ladders, gang planks, shoring, etc., required (Total volume of material actually loaded and removed measured)	152.50	25006

Item	PART II - SLOPE TREATMENTS		Item																																						
	PRELIMINARY STRIPPING	A																																							
	<i>Per square metre</i>	\$																																							
25007	Preliminary stripping of top soil in any depth.....	27.40	25007																																						
25008	Preliminary stripping of impermeable surfaces in any thickness.....	45.40	25008																																						
	INSPECTION SCAFFOLDING																																								
	<i>Per square metre</i>																																								
25009	Inspection scaffolding.....	62.10	25009																																						
	PROBE TEST																																								
	<i>Each</i>																																								
25010	GEO probe test n.e. 3.00 m deep.....	2,056.60	25010																																						
25011	Ditto 3.00 - 6.00 m deep.....	3,427.60	25011																																						
	SURFACE PROTECTION																																								
	<i>Per square metre</i>																																								
25012	Chunam, 50 mm thick.....	85.80	25012																																						
25013	Ditto, 75 mm thick.....	115.80	25013																																						
	Grade 20 or 20MPa sprayed concrete with A252 galvanised welded mesh to BS4483, and with 50 mm diameter weepholes at 1.50 m staggered centres in each direction	<table border="1"> <thead> <tr> <th colspan="6">Sprayed concrete with mesh</th> </tr> <tr> <th colspan="5">Single layer mesh</th> <th>Double layer mesh</th> </tr> <tr> <th>Thickness (mm)</th> <th>75</th> <th>100</th> <th>125</th> <th>150</th> <th>200</th> </tr> <tr> <td></td> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> </tr> <tr> <td></td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </thead> <tbody> <tr> <td>25014</td> <td>Sprayed concrete to slopes.....</td> <td>188.70</td> <td>212.30</td> <td>247.70</td> <td>276.00</td> <td>415.80</td> <td>25014</td> </tr> </tbody> </table>		Sprayed concrete with mesh						Single layer mesh					Double layer mesh	Thickness (mm)	75	100	125	150	200		A	B	C	D	E		\$	\$	\$	\$	\$	25014	Sprayed concrete to slopes.....	188.70	212.30	247.70	276.00	415.80	25014
Sprayed concrete with mesh																																									
Single layer mesh					Double layer mesh																																				
Thickness (mm)	75	100	125	150	200																																				
	A	B	C	D	E																																				
	\$	\$	\$	\$	\$																																				
25014	Sprayed concrete to slopes.....	188.70	212.30	247.70	276.00	415.80	25014																																		
	<i>Per square metre</i>																																								
	Grade 20 or 20MPa sprayed concrete, with single layer of 50 x 50 x 2.7 mm wire diameter galvanised welded mesh, and with 50 mm diameter weepholes at 1.50 m staggered centres in each direction	<table border="1"> <thead> <tr> <th colspan="4">Sprayed concrete with mesh</th> </tr> <tr> <th>Thickness (mm)</th> <th>50</th> <th>75</th> <th>100</th> </tr> <tr> <td></td> <td>A</td> <td>B</td> <td>C</td> </tr> <tr> <td></td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </thead> <tbody> <tr> <td>25015</td> <td>Sprayed concrete to slopes.....</td> <td>116.30</td> <td>147.60</td> <td>179.60</td> <td>25015</td> </tr> </tbody> </table>			Sprayed concrete with mesh				Thickness (mm)	50	75	100		A	B	C		\$	\$	\$	25015	Sprayed concrete to slopes.....	116.30	147.60	179.60	25015															
Sprayed concrete with mesh																																									
Thickness (mm)	50	75	100																																						
	A	B	C																																						
	\$	\$	\$																																						
25015	Sprayed concrete to slopes.....	116.30	147.60	179.60	25015																																				
	<i>Per square metre</i>																																								

Item	PART II - SLOPE TREATMENTS (CONT'D)			Item
	SURFACE PROTECTION (CONT'D)			
	Grade 20 or 20MPa sprayed concrete, without mesh, and with 50 mm diameter weepholes at 1.50 m staggered centres in each direction	Thickness (mm)	Sprayed concrete without mesh	
		50	75	
		A	B	
		\$	\$	
25016	Sprayed concrete to slopes.....	90.10	121.80	25016
	<i>Per square metre</i>			
25017	Extra over Items 25014 to 25016 inclusive for colour pigment in sprayed concrete.....		A \$ 21.90	25017
	<i>Per number</i>			
25018	Supply and installation of slope registration sign plate as ArchSD Standard Drawing Nos. 7116_01 to 7116_05.....		127.10	25018
	ROCK SCALING, REMOVAL OF BOULDERS, MESH PROTECTION AND SEALING AND INFILLING ROCK JOINTS			
	<i>Per square metre</i>			
25019	Scaling and trimming of rock slopes including boulders n.e. 0.2 m ³		137.50	25019
25020	Mesh protection as ArchSD Standard Drawing No. C2205.....		150.20	25020
	<i>Per cubic metre</i>			
25021	Sealing rock joints with 1:3 cement mortar.....		785.60	25021
25022	Infilling rock joints with no fine concrete.....		516.20	25022
25023	Ditto but with Grade 20 or 20MPa concrete.....		718.30	25023
25024	Ditto but with soil-cement fill.....		512.50	25024
25025	Ditto but with masonry bedded in cement mortar.....		628.50	25025
25026	Ditto but with proprietary epoxy mortar.....		1,645.70	25026
25027	Concrete Grade 20 or 20MPa buttress.....		1,296.30	25027
25028	Concrete Grade 30 or 30MPa buttress.....		1,425.80	25028
25029	Split rocks or boulders exceeding 0.20 m ³ and remove from Site.....		547.90	25029
	(Note :- The above item 25026 will only be paid for, if ordered by the Maintenance Surveyor in writing.)			

Item	PART II - SLOPE TREATMENTS (CONT'D)					Item
ROCK DOWELS		Rock dowels diameter (mm)				
		25	32	40	50	
		A	B	C	D	
		\$	\$	\$	\$	
<i>Each</i>						
25030	Rock dowels n.e. 2.00 m long.....	862.80	892.20	958.90	1,083.40	25030
25031	Ditto 2.00 - 3.00 m long.....	1,181.00	1,218.80	1,374.70	1,453.00	25031
25032	Ditto 3.00 - 4.00 m long.....	1,478.70	1,634.60	1,790.50	1,822.60	25032
25033	Ditto 4.00 - 5.00 m long.....	1,684.00	1,822.60	1,961.20	2,192.20	25033
25034	Ditto 5.00 - 6.00 m long.....	2,053.60	2,192.20	2,330.80	2,561.80	25034
25035	Ditto 6.00 - 7.00 m long.....	2,451.50	2,561.80	2,700.40	2,931.40	25035
25036	Add to Item 25035 for additional length in stages of 1.00 m.....	323.40	335.90	348.40	372.50	25036

Item	PART II - SLOPE TREATMENTS (CONT'D)					Item
	SOIL NAILS	Soil nails diameter (mm)				
	Supply and install soil nails as detailed in ArchSD Standard Drawing No. C2106/1, C2106/2 and C2106/3 :-	25	32	40	50	
	<i>Each</i>	A	B	C	D	
		\$	\$	\$	\$	
25037	Soil nail n.e. 3.00 m long.....	1,649.30	1,767.20	1,885.00	1,975.10	25037
25038	Ditto 3.00 - 4.00 m long.....	2,229.20	2,402.40	2,567.60	2,713.10	25038
25039	Ditto 4.00 - 5.00 m long.....	2,517.90	2,725.80	3,049.20	3,395.70	25039
25040	Ditto 5.00 - 6.00 m long.....	2,806.70	3,049.20	3,395.70	3,776.90	25040
25041	Ditto 6.00 - 7.00 m long.....	3,095.40	3,372.60	3,742.20	4,158.00	25041
25042	Ditto 7.00 - 8.00 m long.....	3,384.20	3,696.00	4,088.70	4,539.20	25042
25043	Ditto 8.00 - 9.00 m long.....	3,672.90	4,019.40	4,435.20	4,920.30	25043
25044	Ditto 9.00 - 10.00 m long.....	4,188.20	4,342.80	4,781.70	5,301.50	25044
25045	Ditto 10.00 - 11.00 m long.....	4,250.40	4,666.20	5,128.20	5,682.60	25045
25046	Ditto 11.00 - 12.00 m long.....	4,539.20	4,989.60	5,474.70	6,063.80	25046
25047	Ditto 12.00 - 13.00 m long.....	5,058.90	5,544.00	6,052.20	6,675.90	25047
25048	Ditto 13.00 - 14.00 m long.....	5,347.70	5,867.40	6,398.70	7,057.10	25048
25049	Ditto 14.00 - 15.00 m long.....	5,636.40	6,190.80	6,745.20	7,438.20	25049
25050	Add to Item 25049 for additional length in stages of 1.00 m.....	374.30	412.10	450.10	498.10	25050
	<i>Each</i>				A	
					\$	
25051	Pull-out test of any diameter.....				9,851.30	25051
25052	Performance test of any diameter.....				3,172.50	25052

Item	PART II - SLOPE TREATMENTS (CONT'D)		Item												
	DRAINAGE AND EROSION CONTROL														
	<i>Each</i>	A \$													
25053	Relief drains 200 mm wide, length n.e. 1.50 m, as detailed in ArchSD Standard Drawing No. C2404.....	291.10	25053												
25054	Ditto for length 1.50 - 3.00 m.....	873.20	25054												
25055	Ditto for length 3.00 - 4.50 m.....	1,455.30	25055												
		<table border="1"> <thead> <tr> <th colspan="2">Overall length of each drain</th> </tr> <tr> <th>n.e. 25.00 m</th> <th>exceeding 25.00 m</th> </tr> <tr> <th>A \$</th> <th>B \$</th> </tr> </thead> <tbody> <tr> <td>184.80</td> <td>207.90</td> </tr> <tr> <td>226.40</td> <td>291.10</td> </tr> <tr> <td>291.10</td> <td>353.40</td> </tr> </tbody> </table>		Overall length of each drain		n.e. 25.00 m	exceeding 25.00 m	A \$	B \$	184.80	207.90	226.40	291.10	291.10	353.40
Overall length of each drain															
n.e. 25.00 m	exceeding 25.00 m														
A \$	B \$														
184.80	207.90														
226.40	291.10														
291.10	353.40														
	<i>Per linear metre</i>														
25056	Raking drains Type 1 upwards at 0° - 45° to the horizontal as detailed in ArchSD Standard Drawing No. C2403.....		25056												
25057	Ditto but Type 2.....		25057												
25058	Ditto but Type 3.....		25058												
	<i>Per item</i>	A \$													
25059	Mobilization for maintenance of raking drains, including flushing with a clean air/water jet with a suitable pressure as agreed by the Maintenance Surveyor, in accordance with the requirements as paragraphs 16 & 17 of ETWB TC(W) No. 10/91.....	7,771.80	25059												
	<i>Per number</i>														
25060	Extra over Item 25059 for completion, to the satisfaction of the Maintenance Surveyor, maintenance of raking drains, including flushing with a clean air/water jet with a suitable pressure in accordance with the requirements at paragraphs 16 & 17 of ETWB TC(W) No. 10/91.....	386.90	25060												

Item	PART II - SLOPE TREATMENTS (CONT'D)		Item																																																									
	DRAINAGE AND EROSION CONTROL																																																											
	Proprietary mats for erosion prevention/control on level or slope complying with the following specification including all necessary fixing accessories and all in accordance with manufacturer's instructions :	Supply and fix																																																										
	<i>Per square metre</i>	A \$																																																										
25061	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Material</td> <td colspan="2">Dense three-dimensional filament structure open matting fused totally where filaments cross and added with carbon black and UV stabilizers to secure resistance to weathering and UV radiation</td> </tr> <tr> <td>Colour</td> <td colspan="2">Black</td> </tr> <tr> <td>Thickness</td> <td colspan="2">≧ 20 mm</td> </tr> <tr> <td>Density</td> <td colspan="2">≧ 25 kg/m³</td> </tr> <tr> <td>Free volume</td> <td colspan="2">≧ 95%</td> </tr> <tr> <td>Area holding capacity (The quantity of soil retained in the mat)</td> <td colspan="2">≧ 19.7 x 10⁶ mm³/m²</td> </tr> <tr> <td>Polymer type</td> <td colspan="2">Polyamide 6</td> </tr> <tr> <td>Polymer density</td> <td colspan="2">≧ 1140 kg/m³</td> </tr> <tr> <td>Tensile strength :</td> <td colspan="2"></td> </tr> <tr> <td>- longitudinal direction</td> <td colspan="2">≧ 2.0 kN/m tested to DIN 53857</td> </tr> <tr> <td>- transverse direction</td> <td colspan="2">≧ 1.2 kN/m tested to EN 10319</td> </tr> <tr> <td>- of the joints</td> <td colspan="2">≧ 0.6 kN/m tested to EN 10319</td> </tr> <tr> <td>Chemical resistance</td> <td colspan="2">Resistant to all chemicals in concentrations normally contained in the earth and surface water</td> </tr> <tr> <td>Temperature resistance</td> <td colspan="2">-30°C to +100°C</td> </tr> <tr> <td>Inflammability</td> <td colspan="2">Classification B2 tested to DIN 4102</td> </tr> <tr> <td>Smoke formation</td> <td colspan="2">Low and suitable for used in tunnels</td> </tr> <tr> <td>Toxicity</td> <td colspan="2">None and suitable for use in potable water reservoirs</td> </tr> <tr> <td>Rodent damage</td> <td colspan="2">No nutritive value to support burrowing animals and rodents</td> </tr> <tr> <td>Environmental protection</td> <td colspan="2">Inert and not harmful to the environment</td> </tr> </table>	Material	Dense three-dimensional filament structure open matting fused totally where filaments cross and added with carbon black and UV stabilizers to secure resistance to weathering and UV radiation		Colour	Black		Thickness	≧ 20 mm		Density	≧ 25 kg/m ³		Free volume	≧ 95%		Area holding capacity (The quantity of soil retained in the mat)	≧ 19.7 x 10 ⁶ mm ³ /m ²		Polymer type	Polyamide 6		Polymer density	≧ 1140 kg/m ³		Tensile strength :			- longitudinal direction	≧ 2.0 kN/m tested to DIN 53857		- transverse direction	≧ 1.2 kN/m tested to EN 10319		- of the joints	≧ 0.6 kN/m tested to EN 10319		Chemical resistance	Resistant to all chemicals in concentrations normally contained in the earth and surface water		Temperature resistance	-30°C to +100°C		Inflammability	Classification B2 tested to DIN 4102		Smoke formation	Low and suitable for used in tunnels		Toxicity	None and suitable for use in potable water reservoirs		Rodent damage	No nutritive value to support burrowing animals and rodents		Environmental protection	Inert and not harmful to the environment			
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	Proprietary mats for erosion prevention	58.40	25061																																																									
25062	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Material</td> <td colspan="2">Four layers of dense webs of polyethylene monofilaments thermally welded together</td> </tr> <tr> <td>Colour</td> <td colspan="2">Black or green</td> </tr> <tr> <td>Weight</td> <td colspan="2">≧ 450 gm/m²</td> </tr> <tr> <td>Thickness</td> <td colspan="2">≧ 18 mm</td> </tr> <tr> <td>Filament diameter</td> <td colspan="2">≧ 0.75 mm</td> </tr> <tr> <td>Porosity</td> <td colspan="2">≧ 90 %</td> </tr> <tr> <td>Tensile strength</td> <td>≧ 3.2 kN/m</td> <td>tested to BS 6906 : Part 1 : 1987</td> </tr> <tr> <td>Elongation</td> <td>≧ 360 %</td> <td>tested to BS 6906 : Part 1 : 1987</td> </tr> <tr> <td>Water flow rate</td> <td>> 1000 L/sec/m2</td> <td>tested to ASTM D4491-89</td> </tr> </table>	Material	Four layers of dense webs of polyethylene monofilaments thermally welded together		Colour	Black or green		Weight	≧ 450 gm/m ²		Thickness	≧ 18 mm		Filament diameter	≧ 0.75 mm		Porosity	≧ 90 %		Tensile strength	≧ 3.2 kN/m	tested to BS 6906 : Part 1 : 1987	Elongation	≧ 360 %	tested to BS 6906 : Part 1 : 1987	Water flow rate	> 1000 L/sec/m2	tested to ASTM D4491-89																																
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Water flow rate	> 1000 L/sec/m2	tested to ASTM D4491-89																																																										
	Proprietary mats for erosion control	39.90	25062																																																									

Item	PART II - SLOPE TREATMENTS (CONT'D)	Item
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DRAINAGE AND EROSION CONTROL (CONT'D)

Proprietary drainage filter system on level or slope complying with the following specification including all necessary fixing accessories and all in accordance with manufacturer's instructions :

Per square metre

25063

Composite drainage unit	Material	A light and flexible geocomposite matting composed of a drainage core of looped polypropylene filaments and nonwoven filter fabric on both sides thermally bonded together over the entire area and where filaments cross	
	Colour	Black	
	Thickness	≧ 9 mm	
	Weight	≧ 540 g/m ²	
	Discharge	≧ 2.00 l/s/m at 20 kPa ≧ 0.80 l/s/m at 50 kPa	tested to EN ISO 12958 under hydraulic gradient 1:1
Filter fabric alone	Water permeability	mean value 110 mm/s mean value 180 μm	tested to EN ISO 11058 at V _{I150} tested to EN ISO 12956 at opening size O ₉₀
	Weight	mean value 90 g/m ²	tested to EN 965
	Thickness	mean value 0.4 mm	tested to EN 964-1
	Tensile strength	mean value 5 kN/m	tested to EN 10319 at machine direction
	Tensile strength	mean value 6 kN/m	tested to EN 10319 at cross machine direction
	Elongation at break	mean value 33 %	tested to EN 10319 at machine direction
	Resistance to static puncture	mean value 0.8 kN/m	tested to EN 12236
	Dynamic perforation resistance	mean value 48 mm	tested to EN 918

Proprietary drainage filter mat suitable to protect vertical surfaces of shallow underground building structures against seepage and for horizontal drainage layer for lightweight green roof constructions and flower planters

70.90 25063

25064

Geotextile wrap	Material	A geocomposite vertical drainage blanket composed of a plastic cusplates inner core (cuspatation on both sides) over wrapped with a heat-bonded non-woven geotextile filter fabric bonded on one side only		
	Mean peak strength	≧ 9 kN/m ≧ 8 kN/m	tested to AS 3706.2 at machine direction tested to AS 3706.2 at cross machine direction	
	Trap tear	≧ 320 N	tested to AS 3706.3 and ASTM D4533	
	Grab tensile	≧ 730 N	tested to AS 2001.2.3	
	CBR burst strength	≧ 1800 N	tested to AS 3706.4 and BS 6906:Part 4	
	Drop cone	≧ 1150 mm	tested to AS 3706.5	
	G rating	> 1000 Nmm ^{0.5}	tested to AS 3706.2	
	G classification	Mod robust	tested to AS 3706.2	
	Pore size	< 120 μm < 75 μm	tested to AS 3706.7 at EOS O ₉₅ tested to AS 3706.7 at O ₉₅ when dry	
	Permeability	> 275 l/m ² /s	tested to AS 3706.9 at flow rate of 10 cm head	
	HDPE plastic core	Core profile	Raised cuspatation on both sides (square shaped)	
		Weight	≧ 900 g/m ²	
Colour		Black		
Fungus resistance		Excellent		
Crush strength		≧ 250 kPa		
Core thickness		≧ 18 mm		

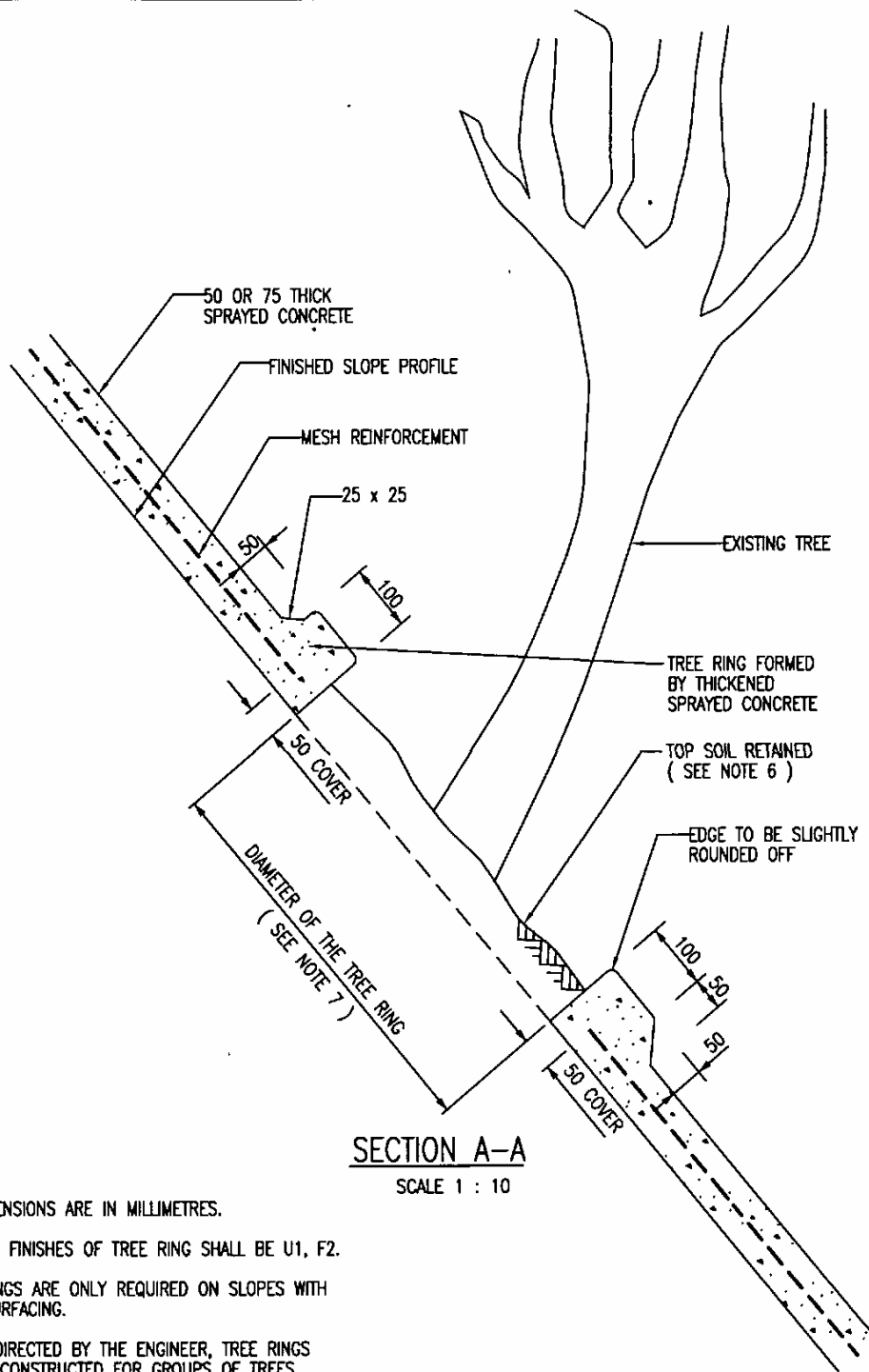
Proprietary drainage blanket suitable to reduce hydrostatic pressure behind structural walls

104.30 25064

Item	PART II - SLOPE TREATMENTS (CONT'D) DRAINAGE AND EROSION CONTROL (CONT'D) Proprietary drainage filter system on level or slope complying with the following specification including all necessary fixing accessories and all in accordance with manufacturer's instructions : (Cont'd) <i>Per square metre</i>	Supply and fix A \$	Item																																
25065	<table border="1"> <tr> <td rowspan="4">Drainage structure</td> <td>Material</td> <td colspan="2">A composite drainage filter structure composed of a three dimensional, high impact and creep resistance polymeric drainage core panel factory bonded to an anti-clogging filter fabric and adhered with a polymeric backing</td> </tr> <tr> <td>Thickness</td> <td colspan="2">≧ 10.2 mm</td> </tr> <tr> <td>Inplane flow rate</td> <td>≧ 261 l/min./m width at 400 kPa</td> <td>tested to ASTM D 4716</td> </tr> <tr> <td>Compressive strength</td> <td>≧ 790 kN/m²</td> <td>tested to ASTM D 1621</td> </tr> <tr> <td rowspan="4">Filter fabric</td> <td>Material</td> <td colspan="2">High flow non-woven needle-punched fabric</td> </tr> <tr> <td>Apparent opening size</td> <td>≧ 0.085 mm</td> <td>tested to BS 6906 Part 1, Part 2 and Part 4</td> </tr> <tr> <td>Puncture resistance</td> <td>≧ 2250 N</td> <td>tested to BS 6906 Part 1, Part 2 and Part 4</td> </tr> <tr> <td>Tensile strength</td> <td>≧ 13.5 kN/m</td> <td>tested to BS 6906 Part 1, Part 2 and Part 4</td> </tr> </table> <p>Proprietary drainage core panel suitable for vertical application behind foundation walls, basement cavity walls and tunnel walls.....</p>	Drainage structure	Material	A composite drainage filter structure composed of a three dimensional, high impact and creep resistance polymeric drainage core panel factory bonded to an anti-clogging filter fabric and adhered with a polymeric backing		Thickness	≧ 10.2 mm		Inplane flow rate	≧ 261 l/min./m width at 400 kPa	tested to ASTM D 4716	Compressive strength	≧ 790 kN/m ²	tested to ASTM D 1621	Filter fabric	Material	High flow non-woven needle-punched fabric		Apparent opening size	≧ 0.085 mm	tested to BS 6906 Part 1, Part 2 and Part 4	Puncture resistance	≧ 2250 N	tested to BS 6906 Part 1, Part 2 and Part 4	Tensile strength	≧ 13.5 kN/m	tested to BS 6906 Part 1, Part 2 and Part 4	124.30	25065						
Drainage structure	Material		A composite drainage filter structure composed of a three dimensional, high impact and creep resistance polymeric drainage core panel factory bonded to an anti-clogging filter fabric and adhered with a polymeric backing																																
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25066	<table border="1"> <tr> <td rowspan="4">Drainage structure</td> <td>Material</td> <td colspan="2">A composite drainage filter structure composed of a three dimensional, high impact and creep resistance polymeric drainage core panel factory bonded to an anti-clogging filter fabric</td> </tr> <tr> <td>Thickness</td> <td colspan="2">≧ 10.2 mm</td> </tr> <tr> <td>Inplane flow rate</td> <td>≧ 302 l/min./m width at 400 kPa</td> <td>tested to ASTM D 4716</td> </tr> <tr> <td>Compressive strength</td> <td>≧ 862 kN/m²</td> <td>tested to ASTM D 1621</td> </tr> <tr> <td rowspan="5">Filter fabric</td> <td>Material</td> <td colspan="2">Woven monofilament anti-clogging fabric</td> </tr> <tr> <td>Apparent opening size</td> <td>≧ 0.30 mm</td> <td>tested to BS 6906 Part 1, Part 2 and Part 4</td> </tr> <tr> <td>% opening</td> <td>≧ 10 %</td> <td></td> </tr> <tr> <td>Puncture resistance</td> <td>≧ 2700 N</td> <td>tested to BS 6906 Part 1, Part 2 and Part 4</td> </tr> <tr> <td>Tensile strength</td> <td>≧ 41 kN/m</td> <td>tested to BS 6906 Part 1, Part 2 and Part 4 at machine direction</td> </tr> <tr> <td></td> <td>≧ 30 kN/m</td> <td>tested to BS 6906 Part 1, Part 2 and Part 4 at cross machine direction</td> </tr> </table> <p>Proprietary drainage core panel suitable for vertical and horizontal surfaces of planter boxes and roof gardens.....</p>	Drainage structure	Material	A composite drainage filter structure composed of a three dimensional, high impact and creep resistance polymeric drainage core panel factory bonded to an anti-clogging filter fabric		Thickness	≧ 10.2 mm		Inplane flow rate	≧ 302 l/min./m width at 400 kPa	tested to ASTM D 4716	Compressive strength	≧ 862 kN/m ²	tested to ASTM D 1621	Filter fabric	Material	Woven monofilament anti-clogging fabric		Apparent opening size	≧ 0.30 mm	tested to BS 6906 Part 1, Part 2 and Part 4	% opening	≧ 10 %		Puncture resistance	≧ 2700 N	tested to BS 6906 Part 1, Part 2 and Part 4	Tensile strength	≧ 41 kN/m	tested to BS 6906 Part 1, Part 2 and Part 4 at machine direction		≧ 30 kN/m	tested to BS 6906 Part 1, Part 2 and Part 4 at cross machine direction	142.80	25066
Drainage structure	Material		A composite drainage filter structure composed of a three dimensional, high impact and creep resistance polymeric drainage core panel factory bonded to an anti-clogging filter fabric																																
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	% opening	≧ 10 %																																	
	Puncture resistance	≧ 2700 N	tested to BS 6906 Part 1, Part 2 and Part 4																																
	Tensile strength	≧ 41 kN/m	tested to BS 6906 Part 1, Part 2 and Part 4 at machine direction																																
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Item	PART II - SLOPE TREATMENTS (CONT'D)		Item
	DRAINAGE AND EROSION CONTROL (CONT'D)	A	
		\$	
	<i>Per cubic metre</i>		
25067	Coarse granular filter (Filter B).....	260.20	25067
25068	Fine granular filter (Filter A).....	251.40	25068
	<i>Each</i>		
25069	Filter drainage pipe as detailed in ArchSD Standard Drawing No. C2302, 50 mm diameter, length n.e. 3.00 m.....	88.50	25069
25070	Ditto, for length 3.00 - 6.00 m.....	143.10	25070
	GEOTECHNICAL INSTRUMENTATION AND SUNDRIES		
	<i>Per month</i>		
25071	Monitoring operation at each survey monitoring point.....	168.40	25071
	<i>Each</i>		
25072	Supply and installation of survey monitoring point.....	357.10	25072
25073	Dismantle and remove survey monitoring point, reinstatement of disturbed surfaces and making good.....	10.10	25073
25074	Monitoring operation at each standpipe piezometer.....	13.00	25074
25075	Construct tree rings in sprayed concrete as detailed in ArchSD Standard Drawing No. C2104, inner ring diameter n.e. 800 mm.....	245.10	25075
25076	Ditto 800 - 1,200 mm.....	325.90	25076
25077	Ditto 1,200 - 1,800 mm.....	489.40	25077
25078	Ditto 1,800 - 2,400 mm.....	615.70	25078
25079	Ditto 2,400 - 3,000 mm.....	816.10	25079
25080	150 mm Diameter perforated pipe planter holes with top soil mix in sprayed concrete.....	42.60	25080
	<i>Per square metre</i>		
25081	Carry out topographic survey..... (Note :- This item will only be paid for, if ordered by the Maintenance Surveyor in writing.)	3.40	25081

Item	PART II - SLOPE TREATMENTS (CONT'D)			Item
	SAFETY FENCE			
		Erect, maintenance, take down and clear away	Erect, maintenance, and left-in position	
		A \$	B \$	
<i>Per linear metre</i>				
25082	Safety fence "Type A" as detailed in Drawing Nos. C2501/1B and C2501/2B.....	1,709.10	1,597.70	25082
25083	Safety fence "Type A with Highway barrier" as detailed in Drawing Nos. C2501/1B, C2501/2B and H2112.....	1,940.80	1,782.10	25083
25084	Safety fence "Type B" as detailed in Drawing Nos. C2502/1C and C2502/2C.....	2,031.10	1,901.90	25084



SECTION A-A

SCALE 1 : 10

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. SURFACE FINISHES OF TREE RING SHALL BE U1, F2.
3. TREE RINGS ARE ONLY REQUIRED ON SLOPES WITH HARD SURFACING.
4. WHERE DIRECTED BY THE ENGINEER, TREE RINGS MAY BE CONSTRUCTED FOR GROUPS OF TREES LOCATED CLOSE TOGETHER, THE DIAMETER OF SUCH TREE RING SHALL BE DETERMINED BY THE ENGINEER ON SITE.
5. SPRAYED CONCRETE TO BE COLOURED AS SPECIFIED.
6. WHERE DIRECTED BY THE ENGINEER, SURFACE LEVEL WITHIN TREE RING MAY BE MADE UP WITH SOIL MIX.
7. THE DIAMETER OF TREE RING SHALL BE THE DIAMETER OF THE TREE TRUNK AT THE GROUND LEVEL PLUS 600mm MINIMUM. WHERE THERE ARE EXPOSED TREE ROOTS AT THE TRUNK BASE, THE DIAMETER OF THE TREE RING SHALL BE DETERMINED BY THE S.O. ON SITE.

(MODIFIED FROM CEDD STANDARD DRAWING NO. C2104E)

TREE RING



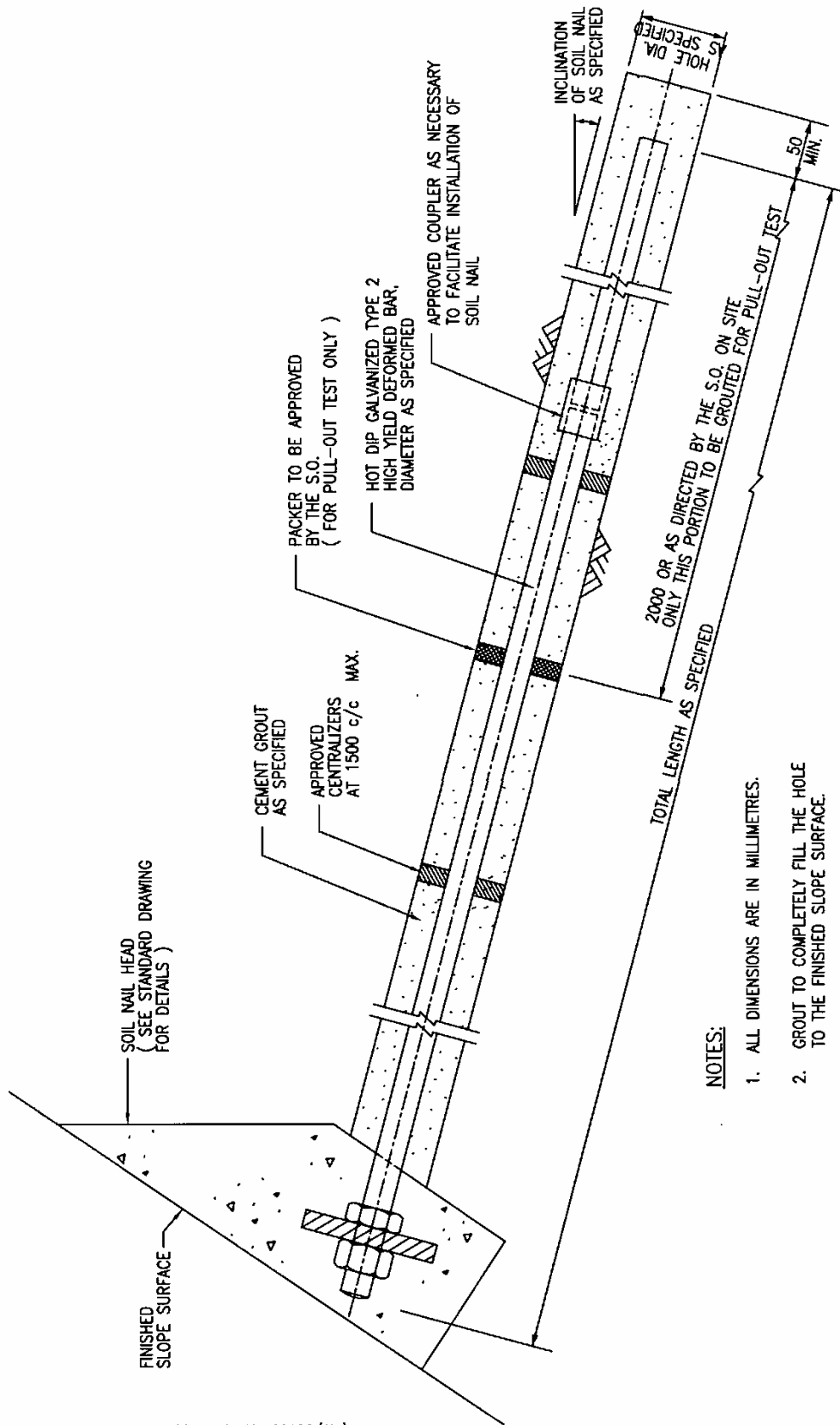
ARCHITECTURAL SERVICES DEPARTMENT

SCALE AS SHOWN

DRAWING NO.

DATE JUNE 2009

C2104



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. GROUT TO COMPLETELY FILL THE HOLE TO THE FINISHED SLOPE SURFACE.

(MODIFIED FROM CEDD STANDARD DRAWING NO. C2106/11)

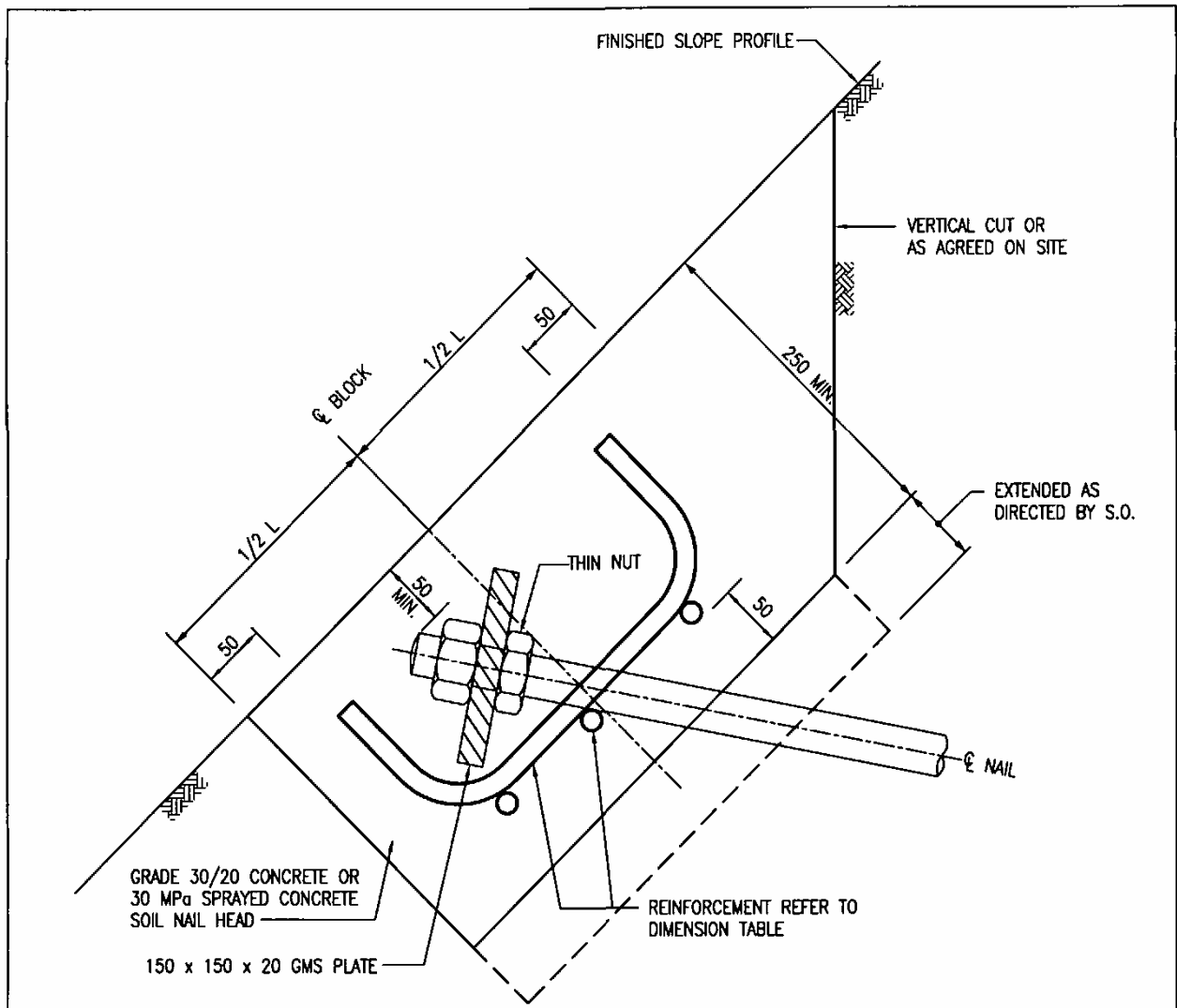
**TYPICAL DETAILS OF
SOIL NAIL**



ARCHITECTURAL SERVICES DEPARTMENT

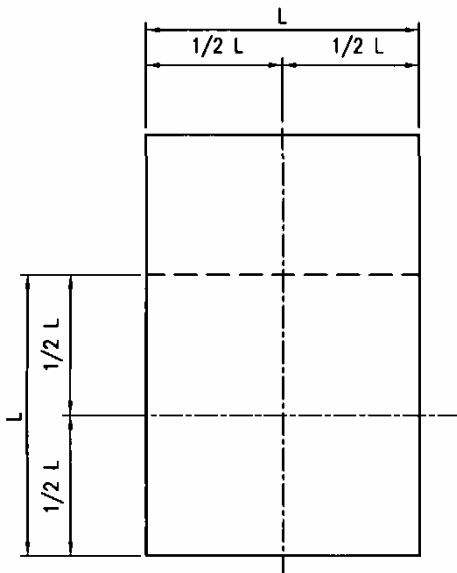
SCALE DIAGRAMMATIC
DATE JUNE 2009

DRAWING NO.
C2106/1



TYPICAL SECTION

SCALE 1:5



VIEW NORMAL TO SOIL NAIL HEAD

SCALE 1:10

(MODIFIED FROM CEDD STANDARD DRAWING NO. C2106/2F)

DIMENSION TABLE

NAIL HEAD SIZE (L X L) (mm)	REINFORCEMENT
400 x 400	3T16 U-BARS BOTH WAYS
600 x 600	3T16 U-BARS BOTH WAYS
800 x 800	4T16 U-BARS BOTH WAYS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. THE CLEARANCE BETWEEN THE STEEL BAR AND THE HOLE OF THE STEEL PLATE SHALL NOT BE MORE THAN 2mm.
3. THE SIZE OF SOIL NAIL HEAD SHALL BE SPECIFIED BY THE S.O.
4. CONSTRUCTION OF SOIL NAIL HEAD SHALL BE REFERRED TO THIS P.S.

SOIL NAIL HEAD DETAILS



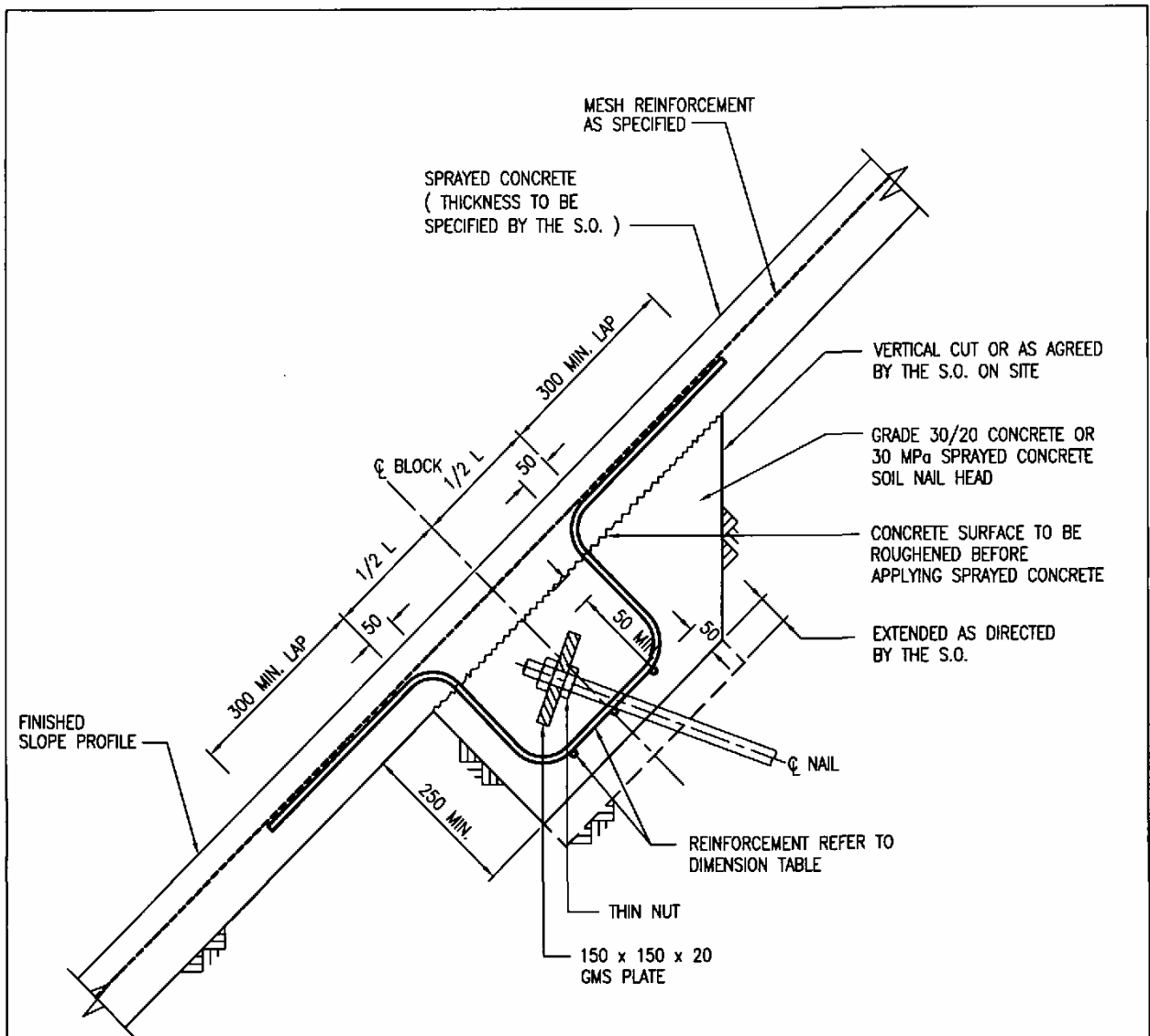
ARCHITECTURAL SERVICES DEPARTMENT

SCALE AS SHOWN

DRAWING NO.

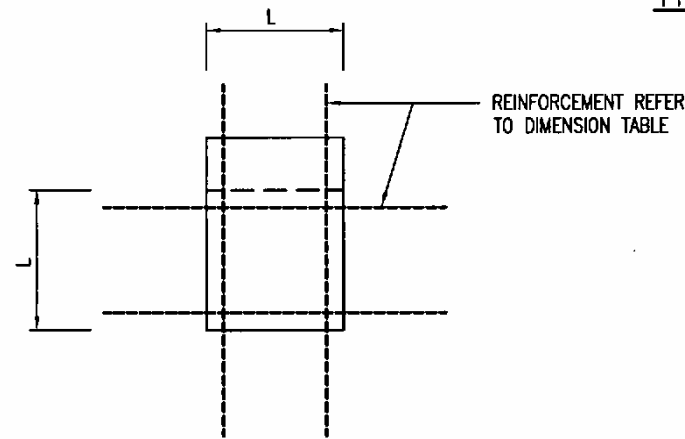
DATE JUNE 2009

C2106/2



TYPICAL SECTION

SCALE 1 : 10



**VIEW NORMAL TO
SOIL NAIL HEAD**

SCALE 1 : 20

DIMENSION TABLE

NAIL HEAD SIZE (L X L) (mm)	REINFORCEMENT
400 x 400	3T16 U-BARS BOTH WAYS
600 x 600	3T16 U-BARS BOTH WAYS
800 x 800	4T16 U-BARS BOTH WAYS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. THE CLEARANCE BETWEEN THE STEEL BAR AND THE HOLE OF THE STEEL PLATE SHALL NOT BE MORE THAN 2mm.
3. THE SIZE OF SOIL NAIL HEAD SHALL BE SPECIFIED BY THE S.O.
4. CONSTRUCTION OF SOIL NAIL HEAD SHALL BE REFERRED TO THIS P.S.

(MODIFIED FROM CEDD STANDARD DRAWING NO. C2106/3F)

**SOIL NAIL HEAD DETAILS
FOR SPRAYED CONCRETE
SLOPE SURFACE**



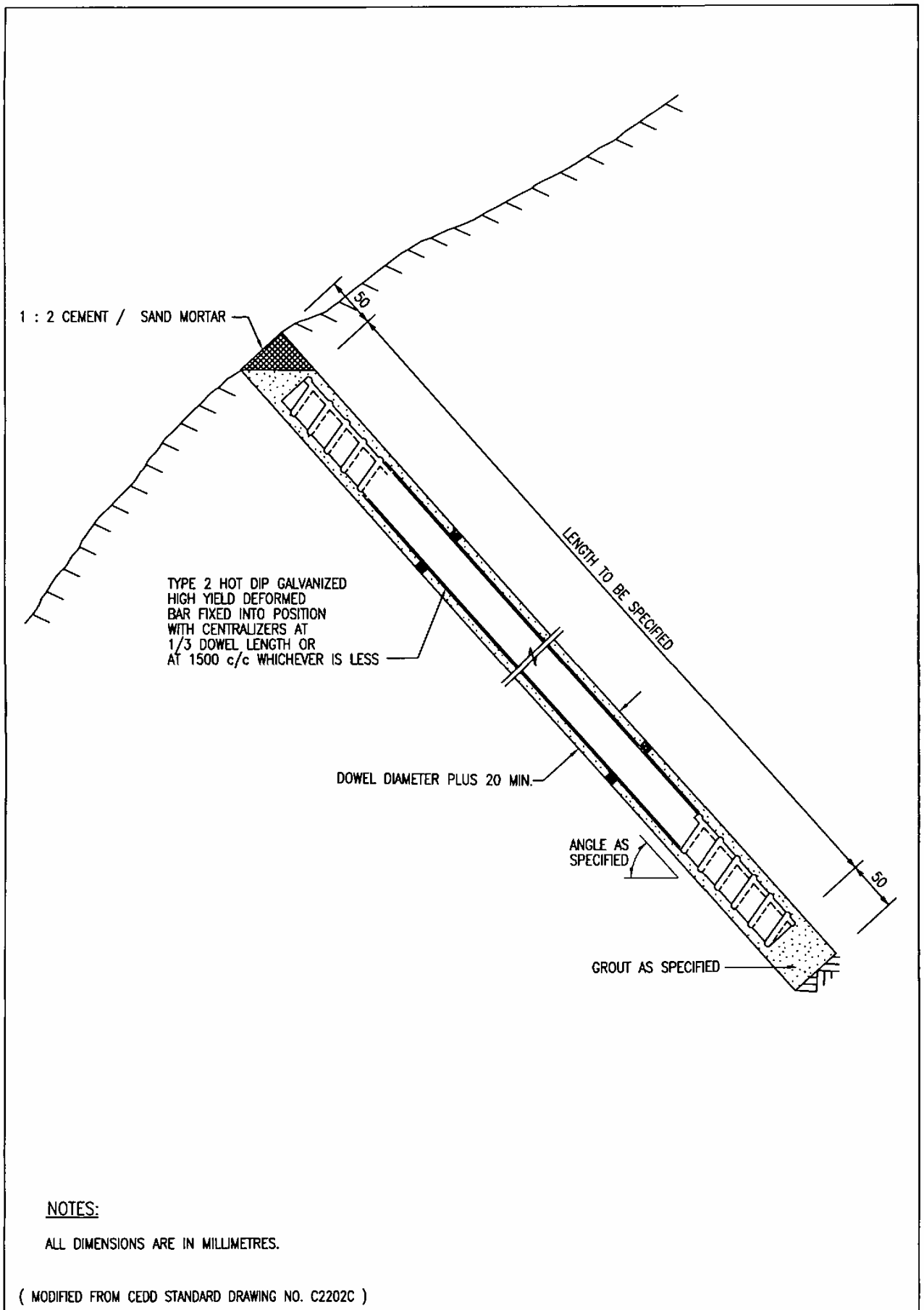
ARCHITECTURAL SERVICES DEPARTMENT

SCALE AS SHOWN

DRAWING NO.

DATE JUNE 2009

C2106/3



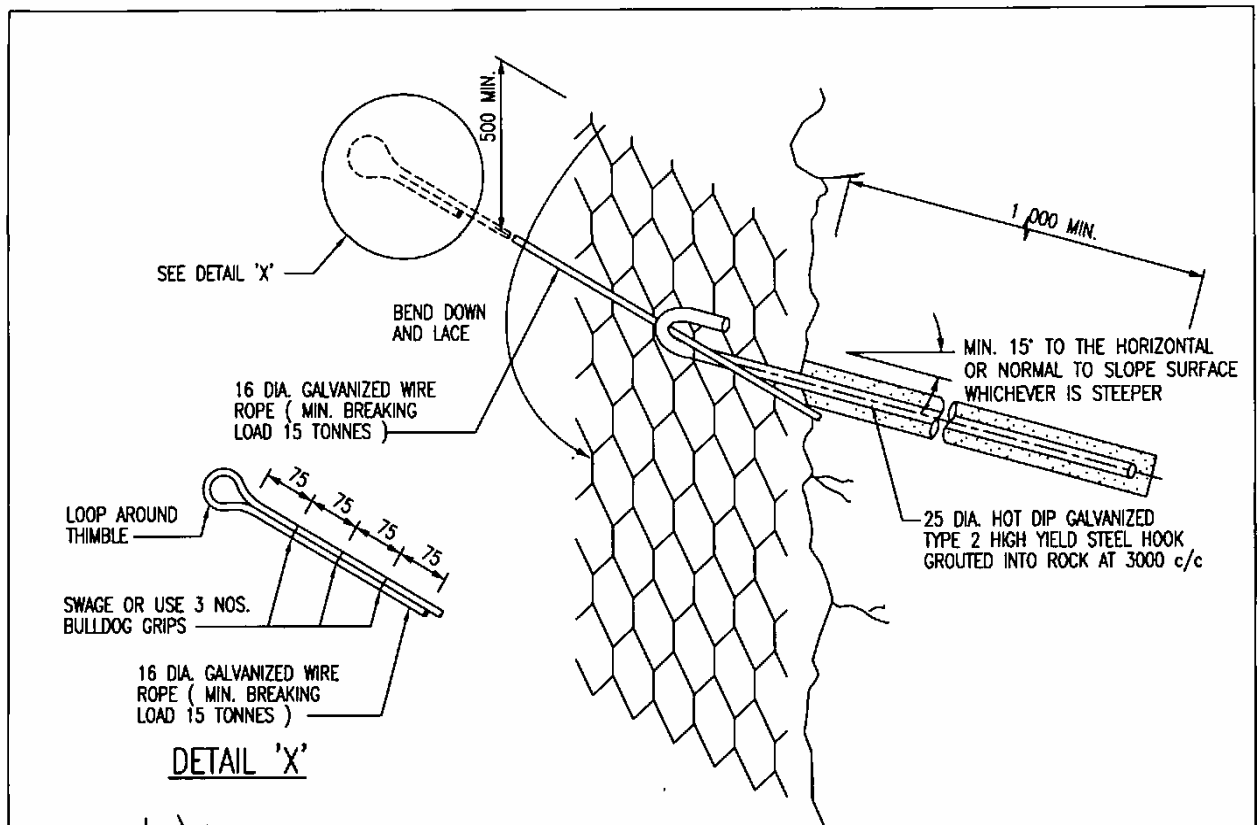
**TYPICAL ARRANGEMENT OF
ROCK DOWEL**



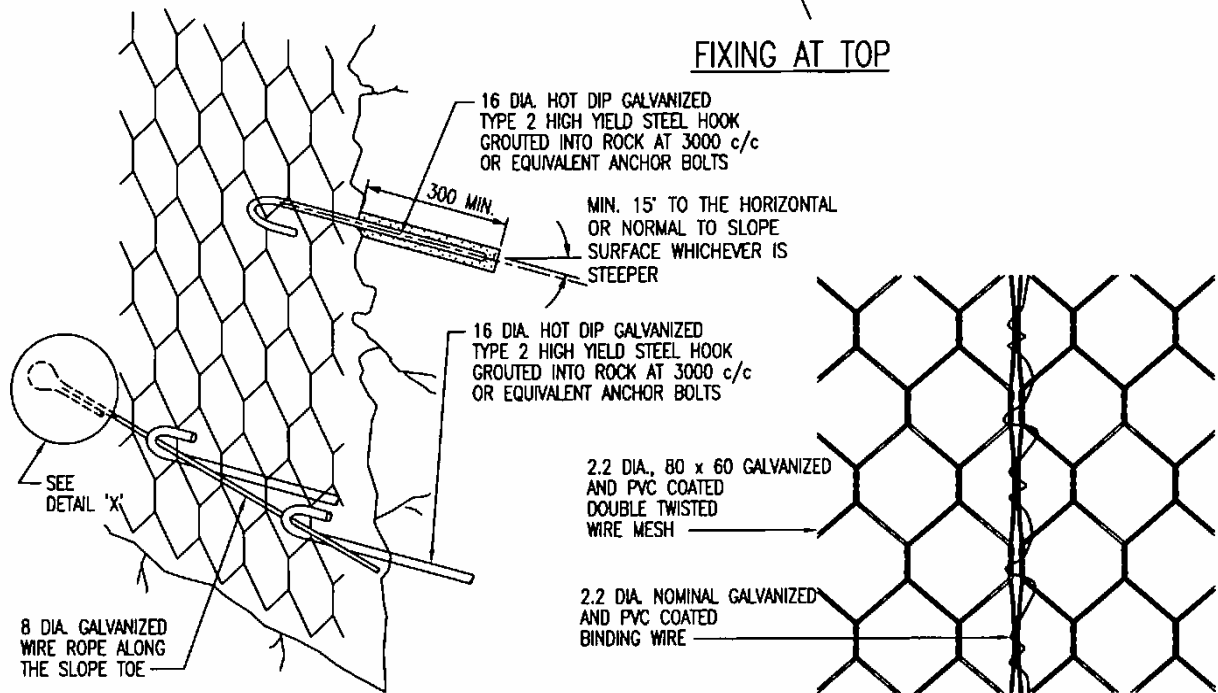
ARCHITECTURAL SERVICES DEPARTMENT

SCALE 1 : 5
DATE JUNE 2009

DRAWING NO.
C2202



FIXING AT TOP



FIXING MESH TO FACE AND AT BOTTOM OF FACE

LACING OF ADJACENT MESH SHEETS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. PVC THICKNESS SHALL BE 0.4mm MINIMUM.

(MODIFIED FROM CEDD STANDARD DRAWING NO. C2205/D)

FIXING OF WIRE MESH TO ROCK FACE



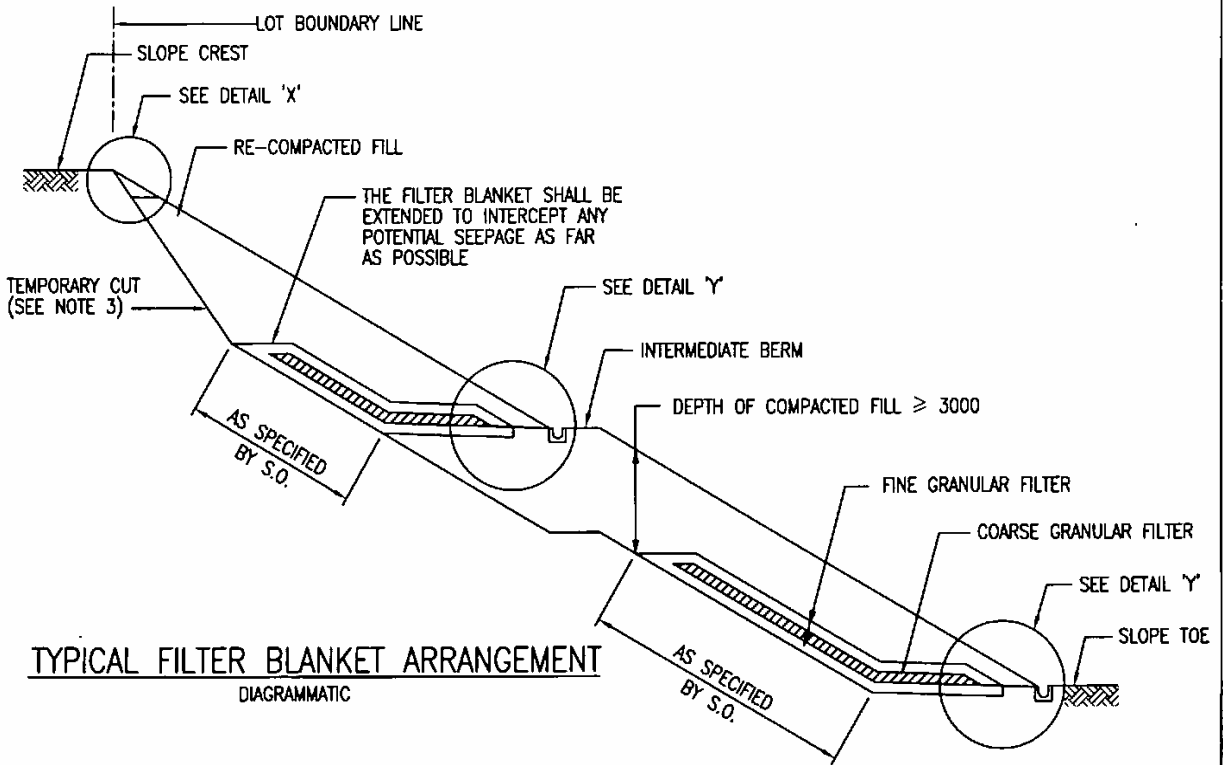
ARCHITECTURAL SERVICES DEPARTMENT

SCALE DIAGRAMMATIC

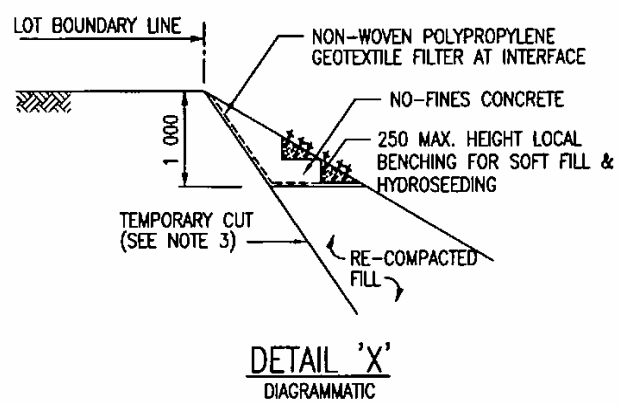
DRAWING NO.

DATE JUNE 2009

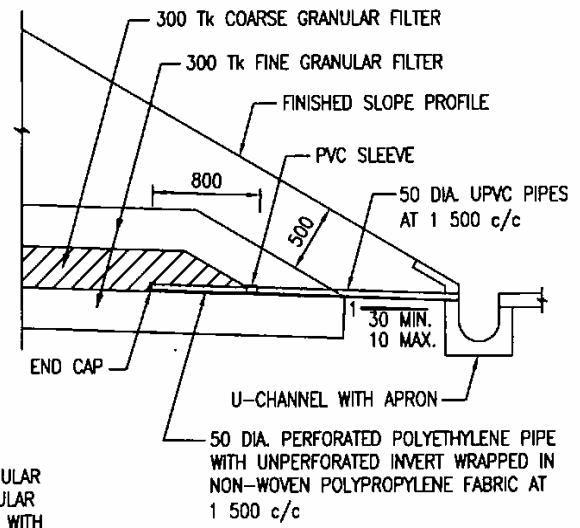
C2205



TYPICAL FILTER BLANKET ARRANGEMENT
DIAGRAMMATIC



DETAIL 'X'
DIAGRAMMATIC



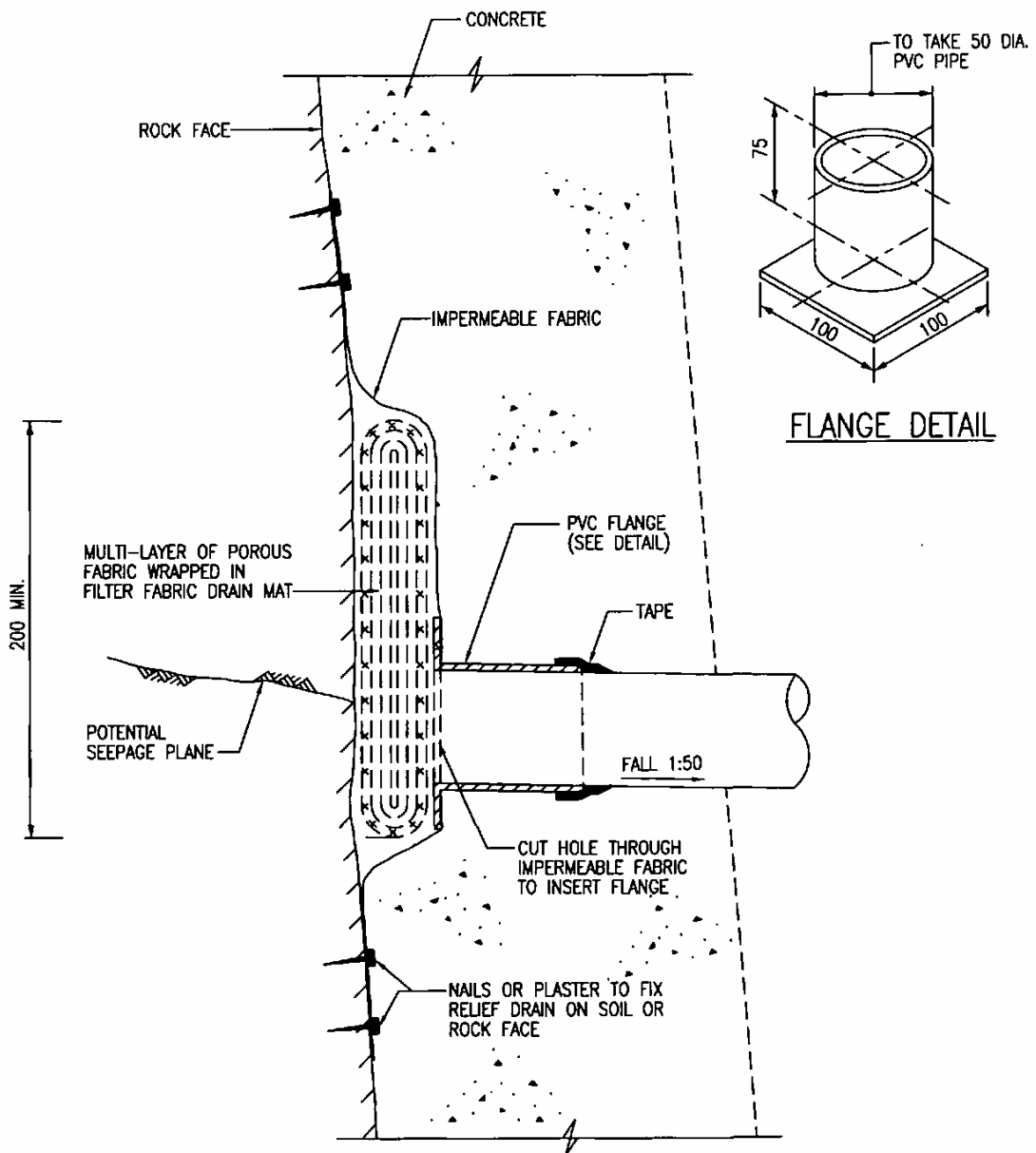
DETAIL 'Y'
SCALE 1 : 50

- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETRES.
 2. FINE GRANULAR FILTER SERVES AS FILTER FOR SOIL. COARSE GRANULAR FILTER SERVES AS FILTER FOR FINE GRANULAR FILTER. THE GRANULAR FILTERS SHALL BE DESIGNED BY THE CONTRACTOR IN ACCORDANCE WITH GEO PUBLICATION NO. 1/93.
 3. DIMENSIONS OF TEMPORARY CUT TO BE SPECIFIED BY THE S.O. SUPPORT TO THE TEMPORARY CUT SHALL BE DESIGNED BY THE CONTRACTOR.
 4. SINGLE LAYER OF 500mm THICK GRANULAR FILTER LAYER SHALL BE USED FOR ROCKFILL.

(MODIFIED FROM CEDD STANDARD DRAWING NO. C2302F)

**FILTER BLANKET FOR FILL SLOPE
AND FILLING DETAILS
AT SLOPE CREST**

	ARCHITECTURAL SERVICES DEPARTMENT	
	SCALE AS SHOWN	DRAWING NO. C2302
	DATE JUNE 2009	



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. FOR SPECIFICATIONS OF FILTER FABRIC, SEE THIS P.S.

(MODIFIED FROM CEDD STANDARD DRAWING NO. C2404D)

RELIEF DRAIN DETAILS



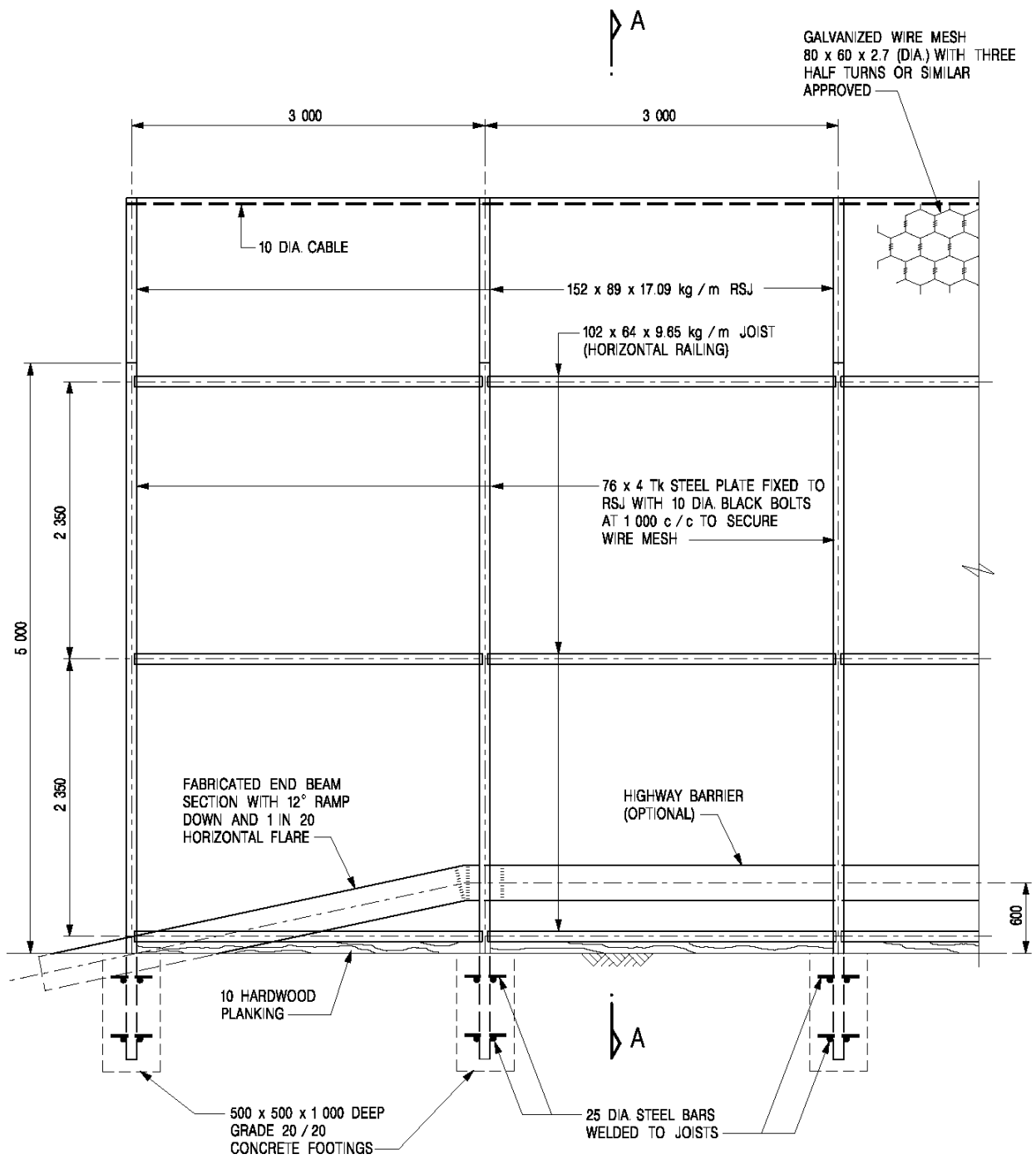
ARCHITECTURAL SERVICES DEPARTMENT

SCALE DIAGRAMMATIC

DRAWING NO.

DATE JUNE 2009

C2404



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL STRUCTURAL STEEL SHALL BE GRADE 43 AND COMPLIED WITH BS 4360 OR EQUIVALENT.
3. ALL WELDING SHALL COMFORM TO BS 1856.
4. ALL BLACK BOLTS SHALL COMPLY WITH BS 4190.
5. ADDITIONAL FULL HEIGHT PROTECTIVE TARPAULIN SHEETS OR NYLON NET WITH OPENINGS NOT GREATER THAN 16mm SHALL BE FIXED SECURELY ONTO THE GALVANIZED WIRE MESH AS SPECIFIED.

ELEVATION

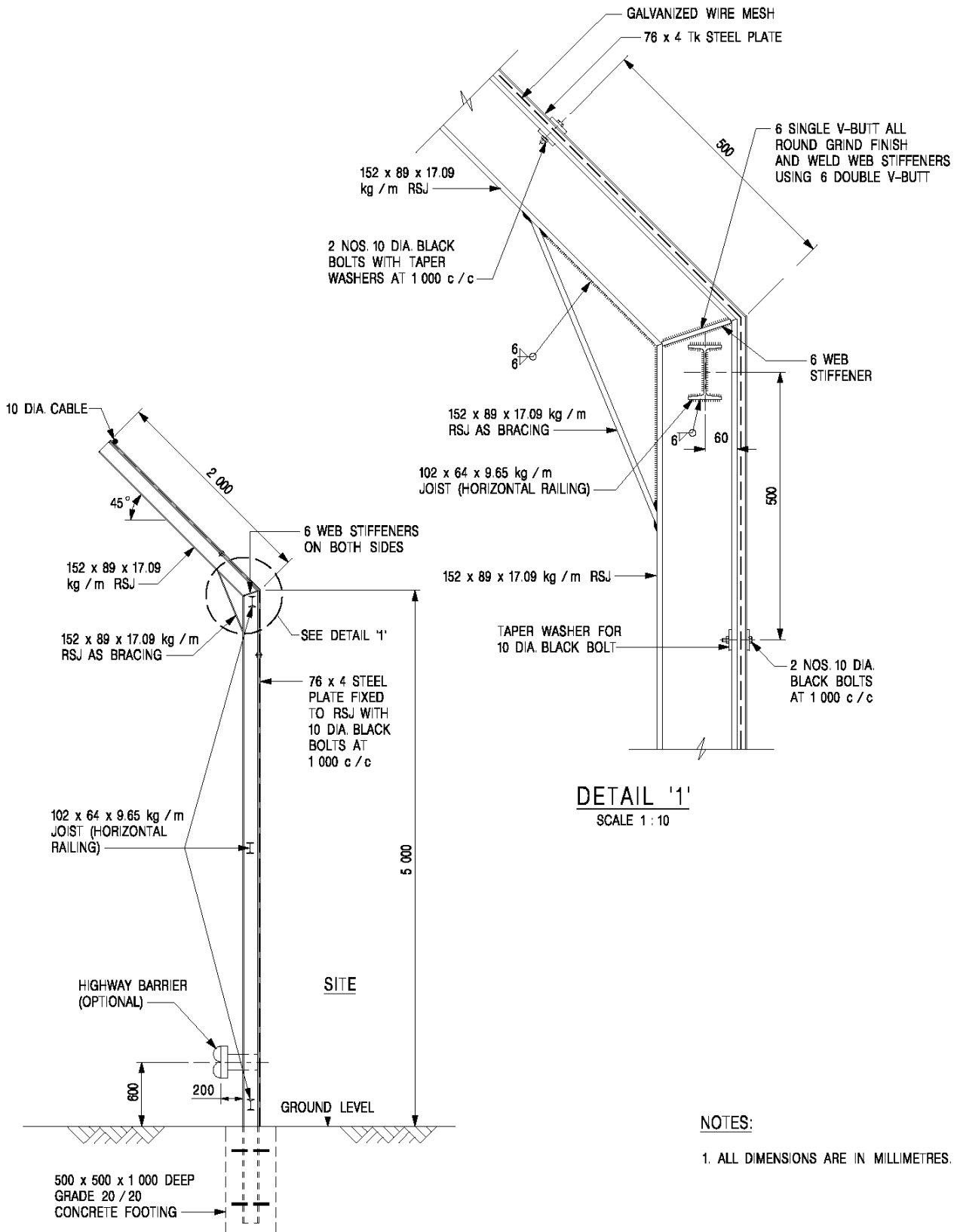
B	NOTE 5 AMENDED.	Original Signed	01.2005
A	MINOR AMENDMENT.	Original Signed	3.94
REF.	REVISION	SIGNATURE	DATE

**TEMPORARY SAFETY FENCE
(TYPE A)**

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 50 DRAWING NO. C2501 / 1B

DATE JAN 1991



TEMPORARY SAFETY FENCE (TYPE A)

B	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
A	MINOR AMENDMENT.	Original Signed	3.94
REF.	REVISION	SIGNATURE	DATE



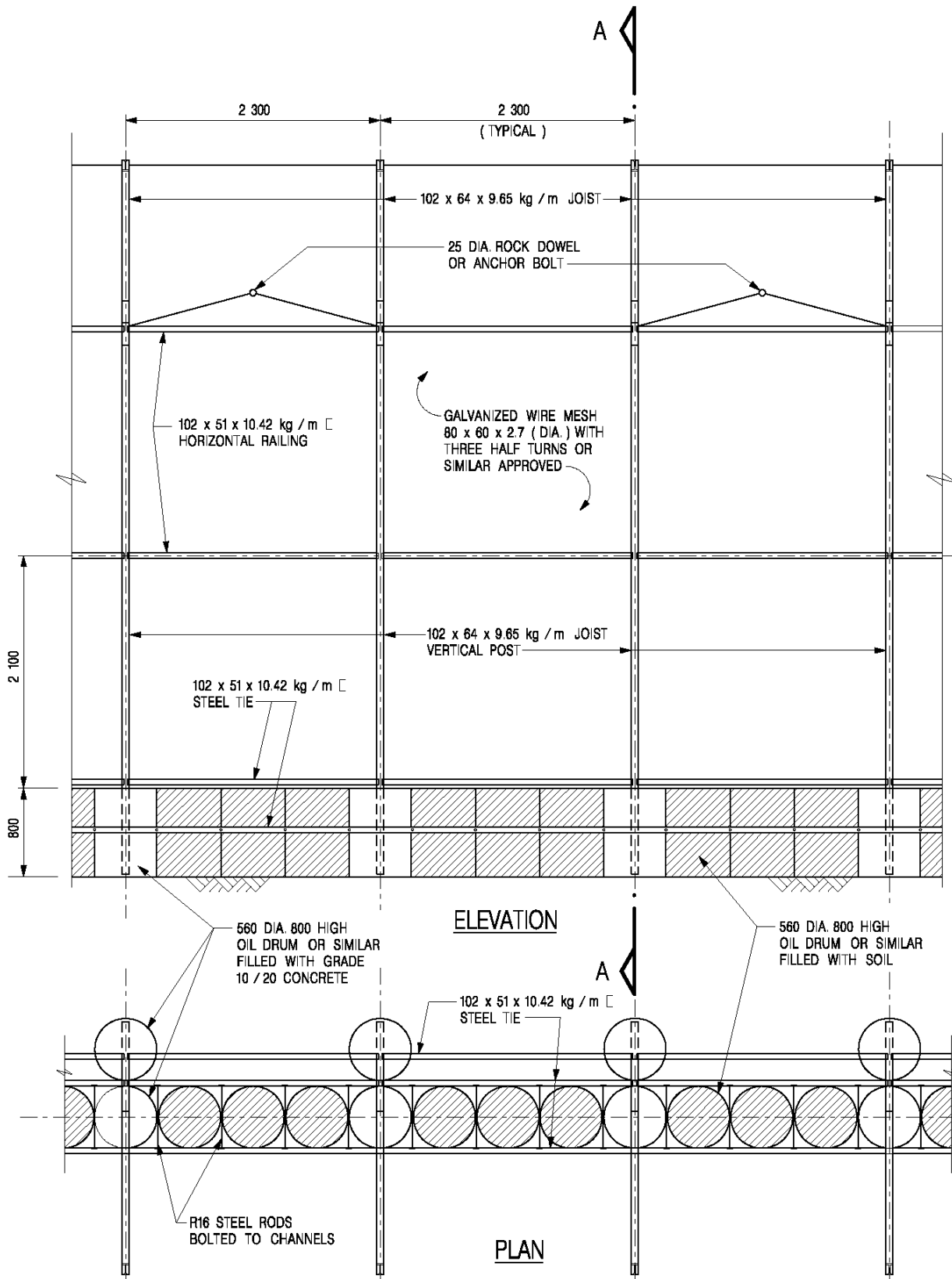
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE AS SHOWN

DRAWING NO.

DATE JAN 1991

C2501 / 2B



NOTE:

1. ALL DIMENSIONS ARE IN MILLIMETRES.

**TEMPORARY SAFETY FENCE
(TYPE B)**

C	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
B	MINOR AMENDMENT.	Original Signed	12.2002
A	WIRE MESH SPECIFICATION CHANGED.	Original Signed	10.92
REF.	REVISION	SIGNATURE	DATE



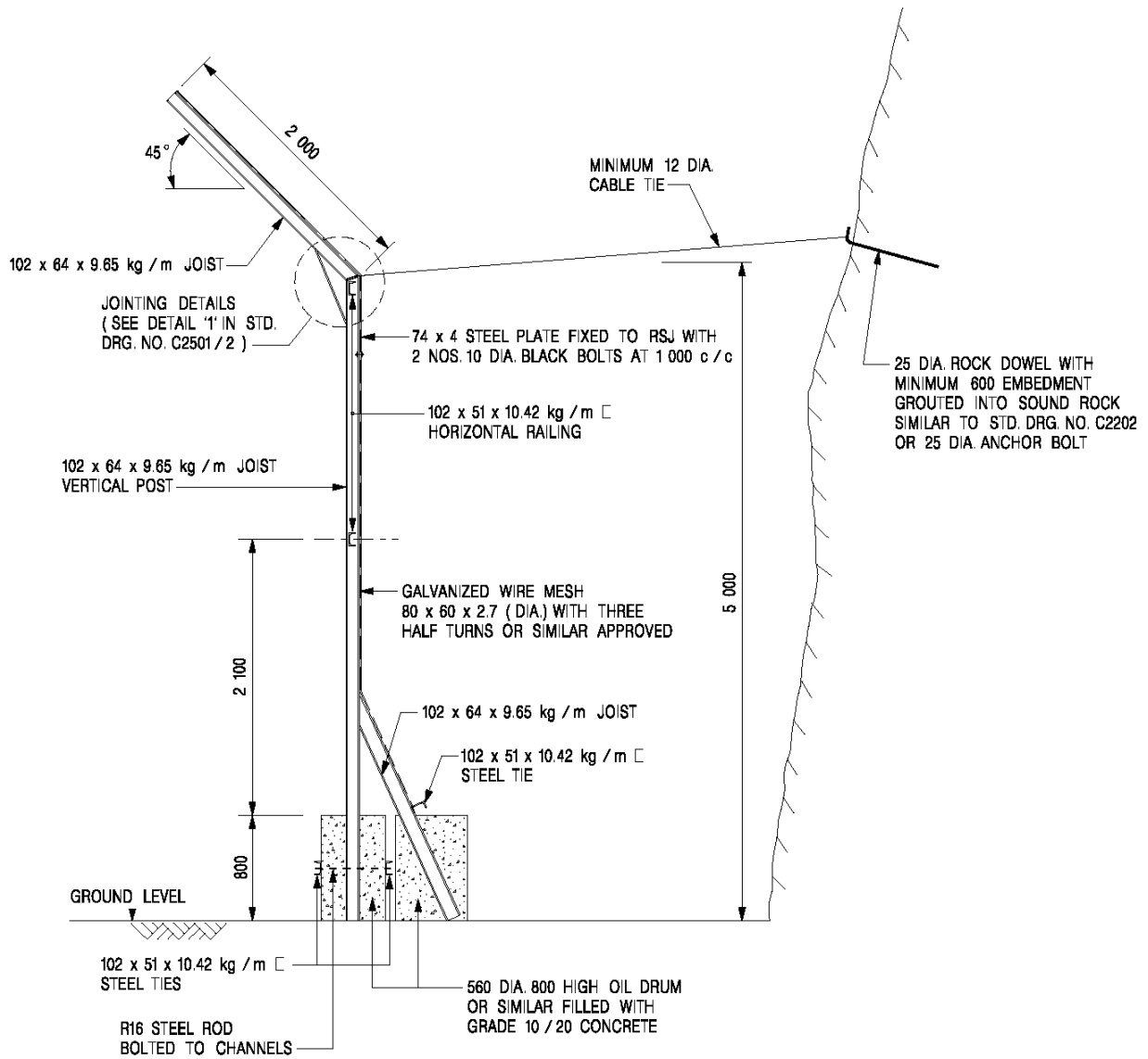
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 50

DATE JAN 1991

DRAWING NO.

C2502 / 1C



SECTION A - A

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL STRUCTURAL STEEL TO BE GRADE 43 AND COMPLY WITH BS 4360 OR EQUIVALENT.
3. ALL WELDING SHALL COMPLY WITH BS 1856.
4. ALL BLACK BOLTS SHALL COMPLY WITH BS 4190.
5. ADDITIONAL FULL HEIGHT PROTECTIVE TARPULIN SHEETS OR NYLON NET WITH OPENINGS NOT GREATER THAN 10mm ARE TO BE FIXED SECURELY ONTO THE GALVANIZED WIRE MESH AS SPECIFIED.

C	NOTE 5 AMENDED.	Original Signed	01.2005
B	MINOR AMENDMENT.	Original Signed	3.94
A	WIRE MESH SPECIFICATION CHANGED. NOTE 2 TO 5 ADDED.	Original Signed	10.92
REF.	REVISION	SIGNATURE	DATE

TEMPORARY SAFETY FENCE (TYPE B)



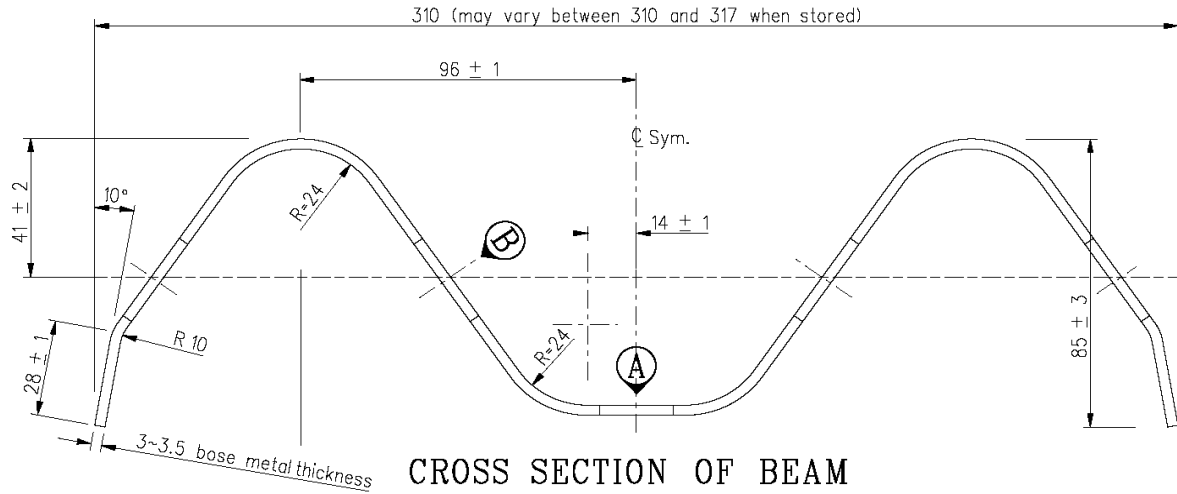
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 50

DRAWING NO.

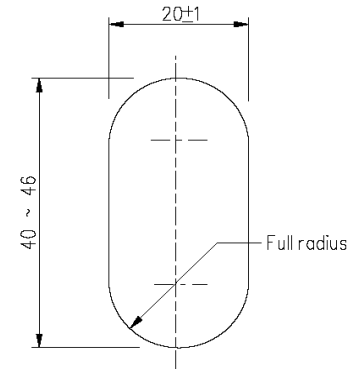
DATE JAN 1991

C2502 / 2C



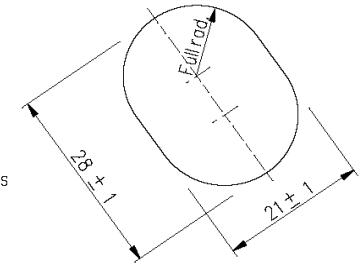
CROSS SECTION OF BEAM

(Scale 1 : 2)



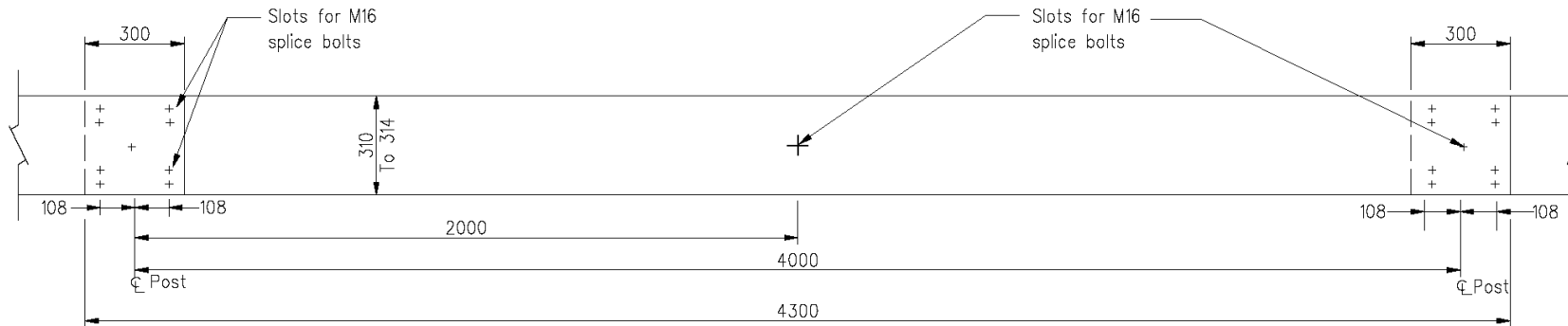
VIEW 'A'

(Scale 1 : 1)



VIEW 'B'

(4 positions)
(Scale 1:1)



ELEVATION OF BEAM

(Scale 1 : 20)

Notes:

1. Dimensions are in millimetres.
2. The section shall be hot dip galvanized to BS EN ISO 1461: 1999.

A	Note 2 updated		Sep 07
	Former Drg. No. H2005/2 with general revision		Jun 94
REF.	REVISION	SIGNATURE	DATE

**BEAM BARRIERS -
CORRUGATED BEAM**

HIGHWAYS DEPARTMENT

REFERENCE

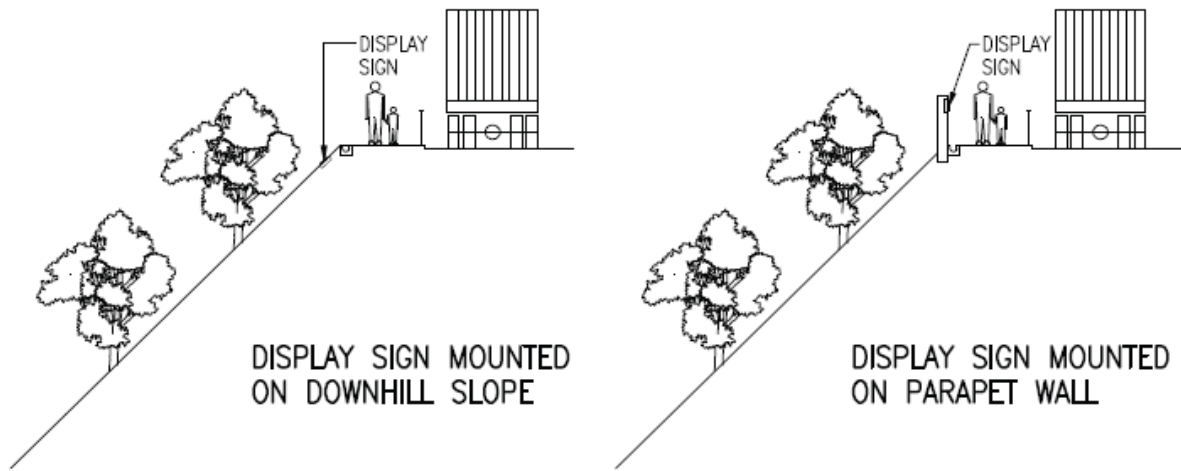
DRAWING No.

CAD

SCALE

As shown

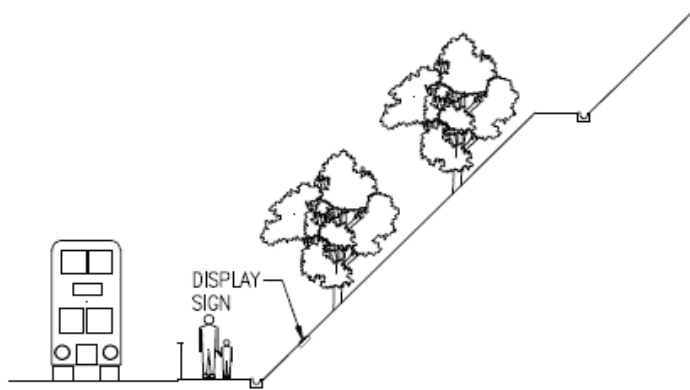
H 2112A



DISPLAY SIGN MOUNTED
ON DOWNHILL SLOPE

DISPLAY SIGN MOUNTED
ON PARAPET WALL

MOUNTING FOR SLOPE ON DOWNHILL SIDE



MOUNTING FOR SLOPE ON UPHILL SIDE

NOTES:

- WORKS BUREAU TECHNICAL CIRCULAR NO. 10/2000 SHOULD BE FOLLOWED FOR DISPLAY OF SLOPE REGISTRATION NUMBER.
- FOR EACH REGISTRATION FEATURE, ONE SIGN PLATE IS TO BE PROVIDED. FOR FEATURES ADJOINING EACH OTHER, GROUPING OF THEIR REGISTRATION NUMBERS INTO ONE SIGN PLATE SHOULD BE CONSIDERED. SIGN PLATE SHOULD NOT BE ERECTED ON POSTS WHERE THIS CAN BE AVOIDED.

CHECKED
CA/3

D. Jones

DATE

20/11/2000

APPROVED
AD(PS)

[Signature]

DATE

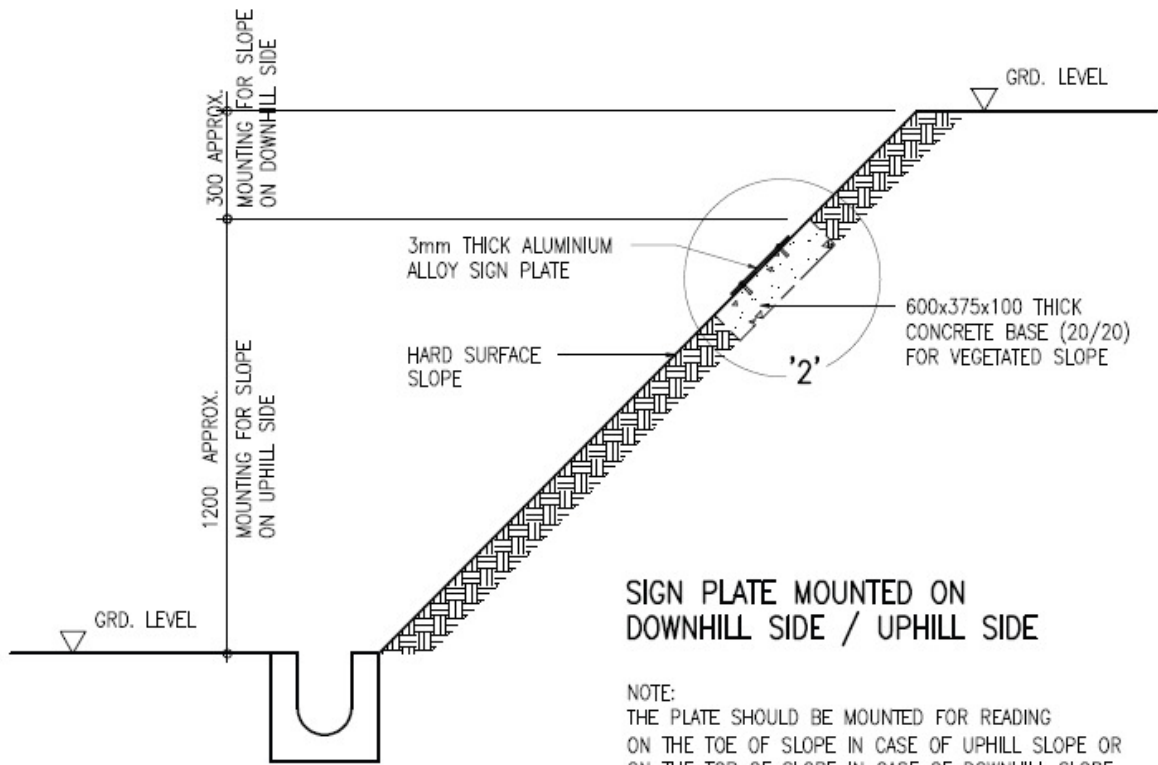
20 11 2000

**ARCHITECTURAL BRANCH
ARCH. SERVICES DEPT.**

title DISPLAY SIGN FOR MAN-MADE SLOPES/
RETAINING WALLS (1 OF 5)

scale
1:200

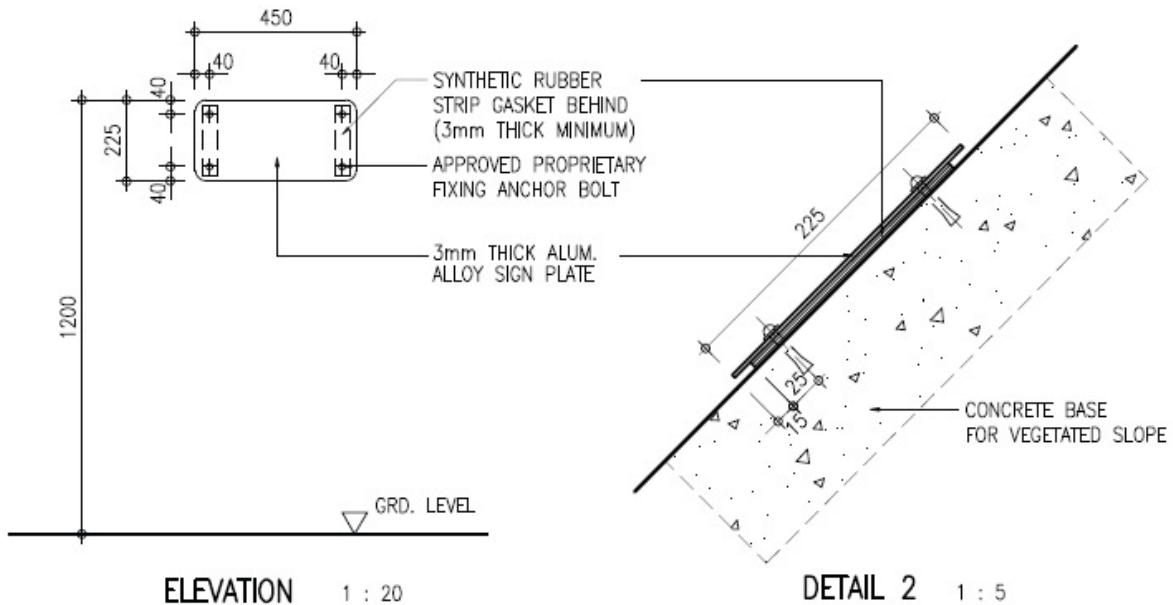
drawing no.
7116_01 (09/00)



**SIGN PLATE MOUNTED ON
DOWNHILL SIDE / UPHILL SIDE**

NOTE:
THE PLATE SHOULD BE MOUNTED FOR READING
ON THE TOE OF SLOPE IN CASE OF UPHILL SLOPE OR
ON THE TOP OF SLOPE IN CASE OF DOWNHILL SLOPE

SECTION 1 : 20



ELEVATION 1 : 20

DETAIL 2 1 : 5

SIGN PLATE MOUNTED ON SLOPE

CHECKED
CA/3 *D. Gnan.*

DATE
20/11/2000

APPROVED
AD(PS) *[Signature]*

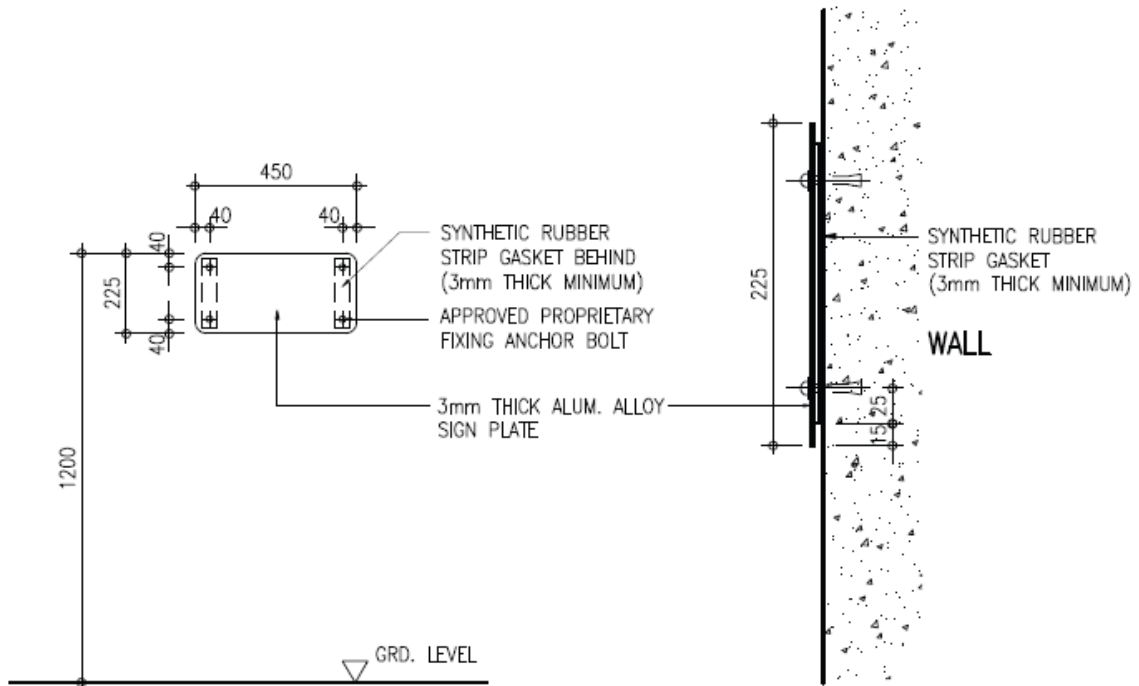
DATE
20 11 2000

**ARCHITECTURAL BRANCH
ARCH. SERVICES DEPT.**

title **DISPLAY SIGN FOR MAN-MADE SLOPES/
RETAINING WALLS (2 OF 5)**

scale
AS
SHOWN

drawing no.
7116_02 (09/00)



ELEVATION 1 : 20

SECTION 1 : 5

SIGN PLATE MOUNTED ON WALL

CHECKED
CA/3

D. Ghera

DATE

20/11/2000

APPROVED
AD(PS)

[Signature]

DATE

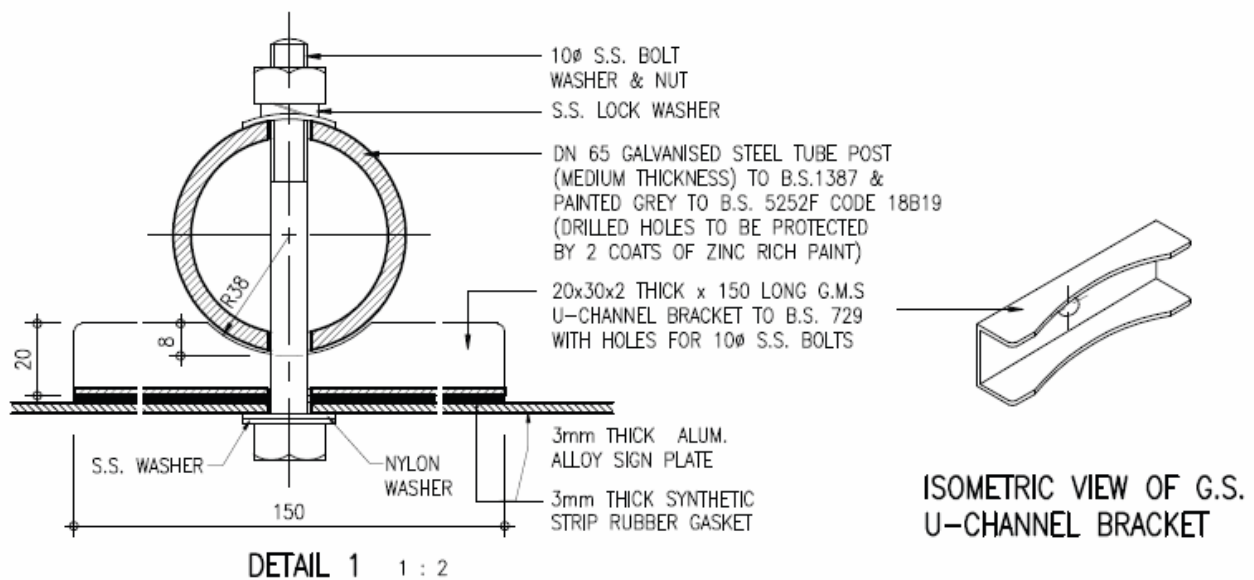
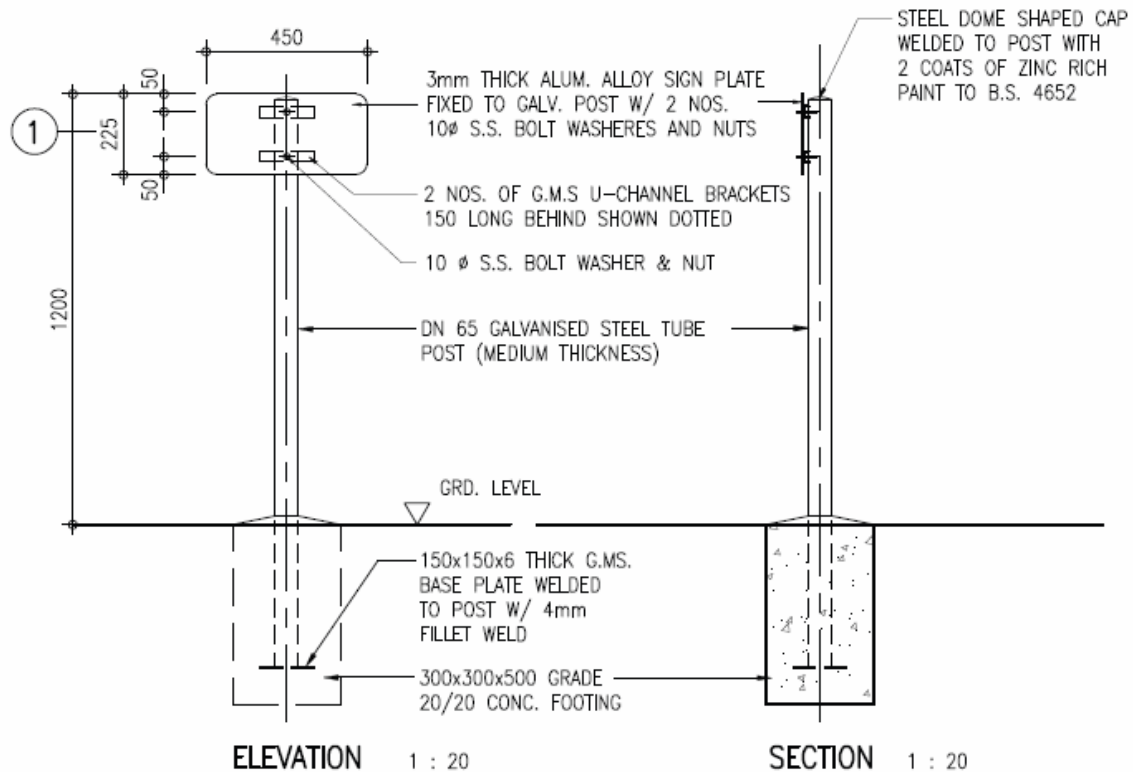
20 11 2000

ARCHITECTURAL BRANCH
ARCH. SERVICES DEPT.

title DISPLAY SIGN FOR MAN-MADE SLOPES/
RETAINING WALLS (3 OF 5)

scale
AS
SHOWN

drawing no.
7116_03 (09/00)



SIGN PLATE MOUNTED ON POST

* SIGN PLATE SHOULD BE MOUNTED ON POST ONLY IF UNAVOIDABLE.

CHECKED
CA/3

CA/3

DATE

20/11/2000

APPROVED
AD(PS)

AD(PS)

DATE

20 11 2000

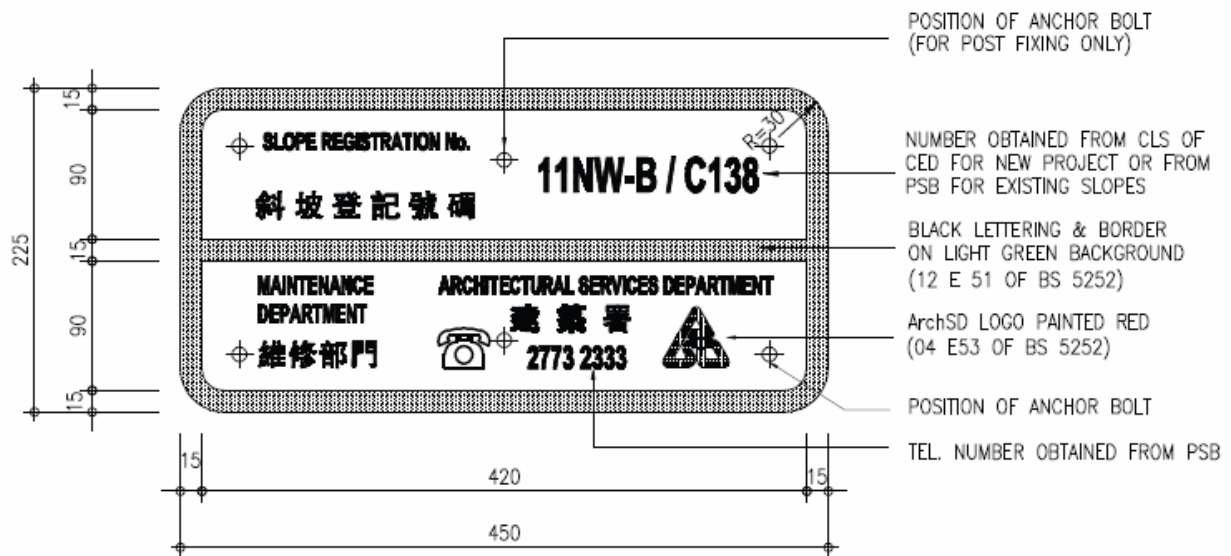
**ARCHITECTURAL BRANCH
ARCH. SERVICES DEPT.**

title

DISPLAY SIGN FOR MAN-MADE SLOPES/
RETAINING WALLS (4 OF 5)

scale
AS
SHOWN

drawing no.
7116_04 (09/00)



SIGN PLATE FOR SLOPES / RETAINING WALLS

NOTES:

- WORKS BUREAU TECHNICAL CIRCULAR No. 10/2000 SHOULD BE FOLLOWED FOR DISPLAY OF MAN-MADE SLOPES/RETAINING WALLS REGISTRATION NUMBERS.
- SIGN PLATE SHALL BE CUT FROM 3mm THICK ALUMINIUM ALLOY PLATE.
- PAINTING TO FACES FOR SIGN PLATES SHALL COMPLY WITH THE REQUIREMENTS GIVEN IN CLAUSE 12.15 OF THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS (1992 EDITION) AS FOLLOWS:
 1. FACES OF SIGNS TO WHICH A PAINTED OR STOVED FINISH IS TO BE APPLIED SHALL BE THOROUGHLY CLEANED AND PRE-TREATED BEFORE PAINTING AND STOVING.
 2. PRE-TREATMENT SHALL BE BY ANODISING OR BY USING AN ETCHING PRIMER OR BY A PROCESS APPROVED BY THE ARCHITECT.
 3. AT LEAST ONE UNDERCOAT AND AT LEAST ONE FINISHING COAT OF PAINT SHALL BE APPLIED AND STOVED TO A THICKNESS OF BETWEEN 0.0315 mm AND 0.0375 mm OF ENAMEL OVER A MINIMUM THICKNESS OF 0.025 mm OF PRIMER. IF LIGHT COLOURS ARE TO BE APPLIED OVER DARK COLOURS, AT LEAST TWO COATS OF THE LIGHT COLOUR SHALL BE APPLIED. THE FINAL SURFACE SHALL HAVE A UNIFORM THICKNESS AND AN EGG-SHELL FLAT FINISH AND SHALL BE SMOOTH AND FREE FROM DEFECTS.
 4. THE COLOURS OF THE FINISHED COATING SHALL BE UNIFORM.
 5. PARTS OF FACES COLOURED BLACK SHALL BE NON-RETROREFLECTIVE AND SHALL HAVE A LUMINANCE FACTOR NOT EXCEEDING 0.05 AS MEASURED IN ACCORDANCE WITH BS 873:PART 6.

CHECKED
CA/3

D. Gner.

DATE
20/11/2000

APPROVED
AD(PS)

[Signature]

DATE
20 11 2000

ARCHITECTURAL BRANCH
ARCH. SERVICES DEPT.

title **DISPLAY SIGN FOR MAN-MADE SLOPES/
RETAINING WALLS (5 OF 5)**

scale
1 : 5

drawing no.
7116_05 (09/00)

Section 26

SITE SAFETY

SPECIAL CONDITIONS

- | | |
|---------------------------------|--|
| Particular Specification | I. This Section shall be read and used in conjunction with the Particular Specification for Site Safety and relevant Conditions of Contract adopted in the Contract. |
| Particular Preamble | II. Pre-priced rates appearing in this Section shall be deemed to allow for the value of work in connection with meeting all statutory and contractual obligations in the upkeep of safety and health in the execution of the Works and any other related obligations, liabilities, risks and profit. In the event that the rates have been insufficient or where there are any aspects where the methods of measurement provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Schedule of Rates. |

SAFETY PLAN

Complete Draft Safety Plan

- | | |
|--|--|
| Measurement of complete draft Safety Plan | III. The item for “complete draft Safety Plan” shall be measured and paid for when the draft Safety Plan has been submitted and the content is in order when confirmed by the Maintenance Surveyor in writing. |
| Rates for complete draft Safety Plan | IV. The rates for “complete draft Safety Plan” shall include for : - <ul style="list-style-type: none"> (a) Prepare and complete the draft Safety Plan incorporating the details required by the Contract. (b) Submit the draft Safety Plan to the Maintenance Surveyor. (c) Attend ad hoc meetings with the Maintenance Surveyor to discuss the draft Safety Plan. |

Complete Safety Plan

- | | |
|--|--|
| Measurement of complete Safety Plan | V. The item for “complete Safety Plan” shall be measured and paid for when the Maintenance Surveyor is satisfied and confirmed in writing that the Safety Plan has been completed and it meets all requirements of the Contract at the time of its completion and copies distributed. |
| Rates for complete Safety Plan | VI. The rates for “complete Safety Plan” shall include for : - <ul style="list-style-type: none"> (a) Develop and complete the Safety Plan based on the draft Safety Plan and taking into account comments given by the Maintenance Surveyor or any other parties. (b) Distribute the Safety Plan to all relevant parties. |

Updating of Safety Plan

- | | |
|---|--|
| Measurement of updating of Safety Plan | VII. The item for “updating of Safety Plan” shall be measured for the period of time commencing from the completion of the Safety Plan until the date of substantial completion of the last Works Order or an earlier or later date notified by the Maintenance Surveyor.

No measurement shall be made for the “updating of Safety Plan” for any period of time in which the Contractor fails to discharge any of its contractual obligations in respect of reviewing, revising updating the Safety Plan. |
| Rates for updating of Safety Plan | VIII. The rates for “updating of Safety Plan” shall include for : - <ul style="list-style-type: none"> (a) Review, update and revise the Safety Plan taking also into account of comments made on the Safety Plan by the Maintenance Surveyor and any other parties. (b) Update risk assessment for the work scheduled at least for the next two months. (c) Review and establish safety and health provisions, safe working procedures and method statements. (d) Update emergency and rescue procedures. (e) Distribute the revisions of the Safety Plan to all relevant parties. |

SPECIAL CONDITIONS (CONT'D)**PROVIDE SAFETY OFFICER**Provide Safety Officer

- IX. The item for “provide Safety Officer” shall be measured for the period commencing from the date of appointment of the Safety Officer as approved by the Maintenance Surveyor or the date on which the Safety Officer commences his duty on the Site whichever is the later. **Measurement of provide Safety Officer**

No measurement shall be made for any Safety Officer employed by the Contractor over and above the minimum number of Safety Officers required under the Particular Specification for Site Safety.

No measurement shall be made after the date of substantial completion of the last Works Order or an earlier or later date notified by the Maintenance Surveyor.

No measurement shall be made for any period of time in which the Safety Officer fails to discharge any of his duties.

- X. The rates for “provide Safety Officer” shall include for :- **Rates for provide Safety Officer**
- (a) Submission to the Maintenance Surveyor for approval of the qualifications and experience of the proposed Safety Officer.
 - (b) Provision of sufficient number of Safety Officers in accordance with the Particular Specification for Site Safety and supporting staff to the Safety Officer.
 - (c) Performance of all duties of the Safety Officer.
 - (d) Maintenance of the safety diary.

SITE SAFETY AND SITE SAFETY MANAGEMENT COMMITTEEAttend Site Safety Committee

- XI. The measurement shall commence from the date of the first meeting of the Site Safety Committee until the substantial completion of the last Works Order or an earlier or later date notified by the Maintenance Surveyor. **Measurement of attend Site Safety Committee**

No measurement shall be made for any month in which the Contractor fails to hold or attend any such Committee meeting in accordance with the Contract or fails to deal with any of the matters associated with such Committee in a satisfactory manner.

- XII. The rates for “attend Site Safety Committee” shall include for :- **Rates for attend Site Safety Committee**
- (a) Establish the Site Safety Committee.
 - (b) Arrange and give adequate notice to relevant parties of the Site Safety Committee meeting to be held for that month.
 - (c) Attend at Site Safety Committee meetings.
 - (d) Completion and distribution of minutes of meetings.

SPECIAL CONDITIONS (CONT'D)Attend Site Safety Management Committee

Measurement
of attend
Site Safety
Management
Committee

- XIII. The measurement shall commence from the date of the first meeting of the Site Safety Management Committee until the substantial completion of the last Works Order or an earlier or later date notified by the Maintenance Surveyor.
- No measurement shall be made for any month in which the Contractor fails to hold or attend any such Committee meeting in accordance with the Contract or fails to deal with any of the matters associated with such Committee in a satisfactory manner.

Rates for
attend
Site Safety
Management
Committee

- XIV. The rates for "attend Site Safety Management Committee" shall include for : -
- (a) Attend Site Safety Management Committee meetings and complete the agenda of the meetings.
 - (b) Arrange inspection of the Site by members of the Site Safety Management Committee before meetings.
 - (c) Provide necessary assistance for the proper functioning of the Site Safety Management Committee.
 - (d) Submission of a monthly safety report for consideration at the meeting.

ARRANGE AND ATTEND WEEKLY SAFETY WALKArrange and Attend Weekly Safety Walk

Measurement of
arrange and
attend weekly
safety walk

- XV. Only those safety walks conducted in accordance with Particular Specification for Site Safety during the period between the date for the commencement of the Works and the date of substantial completion of the last Works Order or an earlier or later date notified by the Maintenance Surveyor shall be measured.

No measurement shall be made for the weekly safety walk when any one of the following events occurs during that week : -

- (i) Any Suspension Notice has been issued by the Labour Department pursuant to the Occupational Safety and Health Ordinance in respect of any activities on the Site until the notice has been revoked or the operation of that notice is suspended.
- (ii) The Maintenance Surveyor has suspended the progress of the Works or any part thereof due to any reason caused by any default on the part of the Contractor in failing to ensure safety and health.
- (iii) The Maintenance Surveyor has given written notification to the Contractor requiring the Contractor to rectify any failure in the proper and full implementation of the Safety Plan and the Contractor has failed to rectify within a reasonable time.

SPECIAL CONDITIONS (CONT'D)Arrange and Attend Weekly Safety Walk (Cont'd)

- | | | |
|------|--|--|
| XVI. | The rates for “arrange and attend weekly safety walk” shall include for : - | Rates for
arrange and
attend weekly
safety walk |
| | (a) Arranging and giving adequate notice to relevant parties of the safety walk. | |
| | (b) Using a comprehensive checklist during the walk to identify and record, and subsequently rectifying any deficiencies noted in the safety provisions. | |
| | (c) Preparing reports on safety walks and safety inspections conducted. | |
| | (d) Implementing and upkeeping all measures stipulated in the Safety Plan and maintaining the effectiveness of all such provisions for the duration of the Contract. | |
| | (e) Safety inspections including, but not be limited to : - | |
| | (i) scaffolding; | |
| | (ii) temporary electrical supply; and | |
| | (iii) site cleanliness; | |
| | (f) Implementing the decisions and recommendations made by the Site Safety Management Committee on matters of safety and health. | |

PROVIDE SAFETY TRAININGProvide Trade Specific Advanced Safety Training to Skilled Workers

- | | | |
|--------|---|--|
| XVII. | The item for “provide trade specific advanced safety training to skilled workers” shall be paid on a per worker basis subject to the production of a “Silver Card” issued by the Construction Industry Training Authority as evidence in accordance with Particular Specification for Site Safety. Payment shall only be made for attending the second day of the two-day trade specific advanced safety training course. No payment will be made if the second day of the course is attended : - | Measurement
of provide
trade specific
advanced safety
training to
skilled workers |
| | (a) before the skilled worker starts works on Site; or | |
| | (b) after the skilled worker has left the Site. | |
| XVIII. | The rates for “provide trade specific advanced safety training to skilled workers” shall include for : - | Rates for
provide trade
specific advanced
safety training to
skilled workers |
| | (a) Arranging skilled workers to attend the “Silver Card” training course organised by the Construction Industry Training Authority or any other recognised courses notified by the Maintenance Surveyor. | |
| | (b) Payment of the token allowance to skilled workers. | |
| | (c) Preparation of training programme and records, and submission of certified monthly statements to the Maintenance Surveyor. | |
| | (d) Administration in connection with (a), (b) and (c) above. | |

Provide Site Specific Safety Induction Training

- | | | |
|------|---|---|
| XIX. | The item for “provide site specific safety induction training” shall be measured on a per person per talk basis. Refresher talks required by the Contract shall also be measured. | Measurement
of provide
site specific
safety induction
training |
| | Adjustment to payment or no payment will be made to the item for “provide site specific safety induction training” if the Maintenance Surveyor is dissatisfied with the frequency, arrangements, numbers certified, relevance or quality of such training and the Contractor cannot provide any justification acceptable to the Maintenance Surveyor. | |

SPECIAL CONDITIONS (CONT'D)

Provide Site Specific Safety Induction Training (Cont'd)

Rates for
provide site
specific safety
induction training

- XX. The rates for “provide site specific safety induction training” shall include for : -
- (a) Site specific safety induction talks conducted in accordance with Particular Specification for Site Safety.
 - (b) The necessary facilities, trainers and demonstration equipment for compliance with (a) above.
 - (c) Preparation of the training programme and records, submission of certified monthly statements to the Maintenance Surveyor.
 - (d) Administration in connection with (a), (b) and (c) above.

Provide Tool Box Talks

Measurement of
provide tool
box talks

- XXI. The item for “provide tool box talks” shall be measured on a per worker per talk basis on a frequency of one talk per worker every two weeks in accordance with Particular Specification for Site Safety. Adjustment to payment or no payment to be made to the item for “provide tool box talks” if the Maintenance Surveyor is dissatisfied with the frequency, arrangements, numbers certified, relevance or quality of such talks and the Contractor cannot provide any justification acceptable to the Maintenance Surveyor.

Rates for
provide tool
box talks

- XXII. The rates for “provide tool box talks” shall include for : -
- (a) Tool box talks conducted in accordance with Particular Specification for Site Safety.
 - (b) The necessary training of Safety Supervisors, foremen or gangers to conduct tool box talks.
 - (c) Basing such talks on training kits published by the Hong Kong Construction Association Ltd. or other training kits of comparable standard approved by the Maintenance Surveyor.
 - (d) Preparation of training programme and records, and submission of certified monthly statements to the Maintenance Surveyor.
 - (e) Administration in connection with (a), (b), (c) and (d) above.

Item	SCHEDULE FOR PAY FOR SAFETY SCHEME (Based on an estimated annual expenditure of \$100 million for a period of 3 years)	Item
	Note : - The sums set out in this section will only be paid for, if ordered by the Maintenance Surveyor in writing and demonstrated compliance with the Particular Specification for Site Safety	
	<i>Per item</i>	A \$
26001	Complete draft Safety Plan.....	22,000.00 26001
26002	Complete Safety Plan.....	22,000.00 26002
	<i>Per month</i>	
26003	Updating of Safety Plan.....	3,000.00 26003
	<i>Per number-month</i>	
26004	Provide Safety Officer.....	16,000.00 26004
	<i>Per month</i>	
26005	Attend Site Safety Management Committee.....	3,300.00 26005
26006	Attend Site Safety Committee.....	3,300.00 26006
	<i>Per number-week</i>	
26007	Arrange and attend weekly safety walk.....	7,300.00 26007
	<i>Per number</i>	
26008	Provide trade specific advanced safety training to skilled workers.....	650.00 26008
26009	Provide site specific induction training.....	100.00 26009
26010	Provide tool box talks.....	30.00 26010

Section 51

SITE CLEANLINESS AND TIDINESS

SITE CLEANLINESS AND TIDINESS

SPECIAL CONDITIONS

- | | |
|--------------------------------------|--|
| Particular Specification | I. This Section shall be read and used in conjunction with the Particular Specification for Daily Cleaning and Weekly Tidying and relevant Conditions of Contract adopted for the Contract. |
| Particular Preamble | II. Pre-priced rates appearing in this Section shall be deemed to allow for the value of work in connection with meeting all statutory and contractual obligations in the upkeep of site cleanliness and tidiness in the execution of the Works and any other related obligations, liabilities, risks and profit. In the event that the rates have been insufficient or where there are any aspects where the methods of measurement provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Schedule of Rates. |
| Measurement of daily cleaning | <p>III. The measurement of “Daily cleaning” shall be made after cleaning and tidying up work of the Site of a Works Order for a Cleaning Day is carried out satisfactorily in accordance with Clause 1(c) “Daily Cleaning” of Particular Specification for Daily Cleaning and Weekly Tidying. The measurement of this item for a Cleaning Day shall be the area of the Public Cleaning Areas in a Works Order for that Cleaning Day. The Daily cleaning for the areas of the Site other than the Public Cleaning Areas shall be deemed to be included in the rates of other items of work for such Works Order and shall not be measured for payment.</p> <p>The extent of the Public Cleaning Areas required for cleaning shall be determined by the Maintenance Surveyor's Representative for each Works Order.</p> <p>The Contractor shall not be entitled to any payment for the item for “Daily cleaning” for a Works Order on a Cleaning Day if the performance of the Contractor on cleanliness and tidiness for any part of the Site including areas other than the Public Cleaning Areas of such Works Order for that Cleaning Day is not carried out to the satisfaction of the Maintenance Surveyor's Representative. For the avoidance of doubt, the measurement for “Daily cleaning” for each Works Order on a Cleaning Day shall be either in full or none.</p> <p>The Contractor shall not be entitled to any payment for the item for “Daily cleaning” for more than one day for the cleaning and tidying up work carried out by the Contractor in one Cleaning Day.</p> |
| Rates for daily cleaning | <p>IV. The item for “Daily cleaning” shall include for :</p> <ul style="list-style-type: none"> (a) Daily cleaning on each Cleaning Day. (b) Development of inspection checklist for the daily cleaning, and its revision. (c) Assignment of person responsible for the inspection and checking after the daily cleaning has been carried out on the Site. (d) Completion of the inspection checklist and preparation of records and photographs for checking by the Maintenance Surveyor's Representative. (e) Inspection of the Site before any work commences to clear any rubbish and debris that may be littered by the public. |

SPECIAL CONDITIONS (CONT'D)

- V. The measurement of "Weekly tidying" shall be made after the overall cleaning and tidying up work of the Site of a Works Order for a Cleaning Week Day is carried out satisfactorily in accordance with Clause 1(d) "Weekly Tidying" of Particular Specification for Daily Cleaning and Weekly Tidying. The measurement of this item for a satisfactory completed Cleaning Week Day shall be the area of the Public Cleaning Areas in a Works Order for that Cleaning Week Day. The Weekly tidying for the areas of the Site other than the Public Cleaning Areas shall be deemed to be included in the rates of other items of work for such Works Order and shall not be measured for payment.

**Measurement of
weekly tidying**

The extent of the Public Cleaning Areas required for weekly tidying is identical to those defined for daily cleaning given in Clause II above.

The Contractor shall not be entitled to any payment for the item for "Weekly tidying" for a Works Order on a Cleaning Week Day if the Contractor fails to rectify the identified defects pursuant to Clause V(e) below to the satisfaction of the Maintenance Surveyor's Representative before the end of the day (which is not a General Holiday) following the Cleaning Week Day. For the avoidance of doubt, the measurement for "Weekly tidying" for each Works Order on a Cleaning Week Day shall be either in full or none.

The Contractor shall not be entitled to any payment for the item for "Weekly tidying" for more than one day for the cleaning and tidying up work and/or defects rectification carried out by the Contractor in one Cleaning Week Day.

- VI. The item for "Weekly tidying" shall include for : -

**Rates for
weekly tidying**

- (a) Weekly tidying of the Site on the Cleaning Week Day.
- (b) Development of inspection checklist for weekly tidying, and its revision.
- (c) Assignment of person responsible for the inspection and checking after the weekly tidying has been carried out on the Site.
- (d) Completion of the inspection checklist and preparation of records and photographs for checking by the Maintenance Surveyor's Representative.
- (e) Rectification of defects identified by the assigned person as referred to in sub-clause (c) above and/or the Maintenance Surveyor's Representative.
- (f) Inspection of the Site before any work commences to clear any rubbish and debris that may be littered by the public.

Item	SCHEDULE FOR PAY FOR SITE CLEANLINESS AND TIDINESS	Item
	Note : - The sums set out in this section will only be paid for, if ordered by the Maintenance Surveyor in writing and demonstrated compliance with the Particular Specification for Site Cleanliness and Tidiness by the Contractor for these items.	A \$
	<i>Per m²- day</i>	
51001	Daily cleaning.....	0.80 51001
51002	Weekly tidying.....	1.40 51002

Section 52

TRIP TICKET SYSTEM

TRIP TICKET SYSTEM

SPECIAL CONDITIONS

- Particular Specification**
- I. This Section shall be read and used in conjunction with the Particular Specification for Trip Ticket System and relevant Conditions of Contract adopted for the Contract.
- Particular Preamble**
- II. Pre-priced rates appearing in this Section shall be deemed to allow for the value of work in connection with meeting all statutory and contractual obligations in ensuring proper disposal of construction and demolition materials generated from the Site to designated disposal ground under the Contract or other disposal grounds approved or as directed by the Maintenance Surveyor, and any other related obligations, liabilities, risks and profit. In the event that the rates are insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Contract.
- Measurement of complete site management plan for trip ticket system**
- III. The item for “complete site management plan for trip ticket system” shall be measured once for the whole Contract when the Maintenance Surveyor approves the site management plan.
- Measurement of implementation of site management plan for trip ticket system**
- IV. The measurement of the “implementation of site management plan for trip ticket system” shall be the period of time commencing from the date of approval by the Maintenance Surveyor of the site management plan until all construction and demolition materials have been removed from the Site, or an earlier or later date notified by the Maintenance Surveyor. This item is measured for the whole Contract.
- No measurement shall be made for the “implementation of site management plan for trip ticket system” for any month during which there is any incident of improper disposal or major improper disposal as defined in Clauses 15 and 16 of the Particular Specification for Trip Ticket System, or late submission of the records as required in Clause 9 of the Particular Specification for Trip Ticket System, or there is no disposal of construction and demolition materials off the Site during the month.
- Rates for complete site management plan for trip ticket system**
- V. The item for “complete site management plan for trip ticket system” shall include for : -
- (a) Prepare the site management plan for trip ticket system to the satisfaction of the Maintenance Surveyor.
 - (b) Distribute or inform all relevant parties details of the site management plan for trip ticket system.
 - (c) Inform truck drivers engaged in the disposal of construction and demolition materials the requirements under the trip ticket system.
- Rates for implementation of site management plan for trip ticket system**
- VI. The item for the “implementation of site management plan for trip ticket system” shall include for : -
- (a) Review, update and revise the site management plan for trip ticket system taking into account the comments made by the Maintenance Surveyor or any other parties.
 - (b) Assign staff and provide / operate / maintain / remove video recording system and other necessary facilities/equipment for overseeing and implementation of site management plan for trip ticket system.

SPECIAL CONDITIONS (CONT'D)

- VI. (c) Implement measures to ensure that trucks carrying construction and demolition materials from the Site proceed to the disposal grounds designated in the Contract or directed or approved by the Maintenance Surveyor to his satisfaction.
- (d) Devise and implement appropriate measures to ensure that the sorted recyclable materials, which are sorted on the Site for the purpose of recycling such materials, are delivered to a proper recycling outlet for processing.
- (e) Compile, submit and maintain disposal records.
- (f) Investigate and report on incidents of improper disposal and non-compliance with the trip ticket system.
- (g) Monitor performance of trip ticket system and implement improvement measures.
- (h) Implement additional measures to control disposal of construction and demolition materials to alternative disposal ground which the Maintenance Surveyor has approved.
- (i) Distribute revisions of the site management plan for trip ticket system to all relevant parties including the truck drivers engaged in delivery of construction and demolition materials for disposal.
- (j) Other requirements for implementation of the trip ticket system as stipulated in the Particular Specification clauses for Trip Ticket System.

**Rates for
implementation of
site management
plan for trip ticket
system (cont'd)**

Item	SCHEDULE FOR PAY FOR TRIP TICKET SYSTEM	Item
	<i>Per item</i>	
52001	Complete Site Management Plan.....	52001
	<i>Per month</i>	
52002	Implementation of Site Management Plan.....	52002

A
\$
12,000.00
1,000.00

Section 53

PRESERVATION OF OLD AND VALUABLE TREES

PRESERVATION AND PROTECTION OF PRESERVED TREES INCLUDING OLD AND VALUABLE TREES

SPECIAL CONDITIONS

- | | |
|---|--|
| Particular Specification | I. This Section shall be read and used in conjunction with the Particular Specification for Preservation and Protection of Existing Trees including Old and Valuable Trees and relevant Conditions of Contract adopted in the Contract. |
| Particular Preamble | II. The items in this Section are applicable to existing trees which are to be preserved and protected including Old and Valuable Trees (hereinafter referred to as "OVT") from the register at the website : http://www.lcsd.gov.hk/LEISURE/LP/gc/tree |
| <u>PRESERVATION AND PROTECTION OF PRESERVED TREES INCLUDING OLD AND VALUABLE TREES</u> | |
| Measurement of preservation and protection of preserved trees including Old and Valuable Trees | III. The measurement for the items for the "preservation and protection measures for Old and Valuable Trees" shall be the duration in which preservation and protection measures for OVT are stated in the Works Order and provided in accordance with the requirements of the Contract. One item shall be measured for each OVT. |
| | IV. The measurement for the item for the preservation and protection measures for preserved trees other than Old and Valuable Trees shall be the duration in which preservation and protection measures for preserved trees other than OVT are stated in the Works Order and provided in accordance with the requirements of the Contract. One item shall be measured for each tree. |
| Rates for preservation and protection of preserved trees including Old and Valuable Trees | V. The rates for preservation and protection measures for Old and Valuable Trees shall include for : - <ul style="list-style-type: none"> (a) All works, materials and services for preservation and protection for the OVT in accordance with the Contract. (b) Provision, installation, securing, maintenance, reinstatement and removal of identification, labelling or marking system for OVT. (c) Provision, installation, securing, maintenance, reinstatement and removal of temporary protective fencing/armouring/mulching for OVT. (d) Provision, installation, securing, maintenance, reinstatement and removal of physical support measures to protect the OVT from instability. (e) Provision, installation, securing, maintenance and reinstatement of measures to protect the OVT from reduction in ground level, including construction of retaining wall, precautionary measures during excavation and root cutting, and measures to maintain balanced moisture content after change in ground level. (f) Provision, installation, securing, maintenance and reinstatement of measures to protect the OVT from rise in ground level, including construction of dry wall and soil aeration system. (g) Measures to protect the OVT from excavation, including submission of photographic records, precautionary measures during excavation, tunneling of services and root cutting, and measures to maintain balanced moisture content after excavation. (h) Measures to protect the OVT from drilling, including precautionary measures during drilling and root cutting, and measures to maintain balanced moisture content after drilling. (i) Measures to control pest and disease for the OVT, including precautionary measures to prevent pest and disease attack and control measures to eradicate pest and disease from the infected trees. |

SPECIAL CONDITIONS (CONT'D)

PRESERVATION AND PROTECTION OF PRESERVED TREES INCLUDING OLD AND VALUABLE TREES (Cont'd)

- | | | |
|-----|---|--|
| V. | <ul style="list-style-type: none"> (j) Pruning of the OVT, including pre-pruning preparation, pruning operation, post-pruning treatment, and reinstatement of affected areas. (k) Precautionary measures for the OVT as stated in the Contract. | <p>Rates for preservation and protection of preserved trees including Old and Valuable Trees (cont'd)</p> |
| VI. | <p>The rates for preservation and protection measures for preserved trees other than Old and Valuable Trees shall include for :-</p> <ul style="list-style-type: none"> (a) All works, materials and services for preservation and protection to preserved trees other than OVT in accordance with the Contract. (b) Provision, installation, securing, maintenance, reinstatement and removal of identification labelling or marking systems for preserved trees other than OVT. (c) Provision, installation, securing, maintenance, reinstatement and removal of temporary protective fencing/armouring/mulching for preserved trees other than OVT. (d) Provision, installation, securing, maintenance, reinstatement and removal of physical support measures to protect the preserved trees other than OVT from instability. (e) Provision, installation, securing, maintenance and reinstatement of measures to protect the preserved trees other than OVT from reduction in ground level, including construction of retaining wall, precautionary measures during excavation and root cutting, and measures to maintain balanced moisture content after change in ground level. (f) Provision, installation, securing, maintenance and reinstatement of measures to protect the preserved trees other than OVT from rise in ground level, including construction of dry wall and soil aeration system. (g) Measures to protect the preserved trees other than OVT from excavation, including submission of photographic records, precautionary measures during excavation, tunnelling of services and root cutting, and measures to maintain balanced moisture content after excavation. (h) Measures to protect the preserved trees other than OVT from drilling, including precautionary measures during drilling and root cutting, and measures to maintain balanced moisture content after drilling. (i) Measures to control pest and disease for the preserved trees other than OVT, including precautionary measures to prevent pest and disease attack and control measures to eradicate pest and disease from infected trees. (j) Pruning of the preserved trees other than OVT, including pre-pruning preparation, pruning operation, post-pruning treatment and reinstatement of affected areas. (k) Precautionary measures for the preserved trees other than OVT as stated in the Contract. | <p>Rates for preservation and protection of preserved trees other than Old and Valuable Trees</p> |

SPECIAL CONDITIONS (CONT'D)

TREE SURVEY

- | | | |
|-----------------------------------|-------|--|
| Measurement of tree survey | VII. | The item for tree survey of each existing tree other than Old and Valuable Tree shall be measured for each tree to be surveyed as stated in the Works Order and required in the Contract. |
| Measurement of reports | VIII. | The item for reports on photographic record of each preserved tree other than Old and Valuable Tree shall be measured for each tree to be preserved as stated in the Works Order and required in the Contract. |
| Rates for tree survey | IX. | The rates for tree survey of each existing tree other than Old and Valuable Tree shall include for : - <ul style="list-style-type: none"> (a) All works, materials and services for undertaking tree survey of existing trees other than OVT in accordance with the Works Order. (b) Preparing, amending and submitting to the Maintenance Surveyor the updated survey record of the trees. (c) Provision and installation of identification labelling or marking systems for all existing trees other than OVT earmarked to be felled under the Works Order. |
| Rates for reports | X. | The rates for reports on photographic record of each preserved tree other than Old and Valuable Tree shall include for : - <ul style="list-style-type: none"> (a) All works, materials and services for preparation, submission, amendments and updating of reports on photographic record of preserved trees other than OVT in accordance with the Works Order. (b) Taking updated photographs of preserved trees other than OVT. |

INDEPENDENT TREE SPECIALIST

- | | | |
|---|------|---|
| Measurement of independent tree specialist | XI. | The measurement for the items for independent tree specialist (hereinafter referred to as ITS) shall be the duration in which the services of an ITS is stated in the Works Order and provided in accordance with the Contract. |
| Rates for independent tree specialist | XII. | The rates for "ITS" shall include for : - <ul style="list-style-type: none"> (a) Payment for wages for the ITS. (b) Provision of services required from the ITS as stipulated in the Contract including conducting tree surveys, site surveys and soil tests, submitting reports and providing advice. (c) All works, materials and services for employment of the ITS and provision of the services required from the ITS in accordance with the Contract including payment of all fees and charges, provision of facilities and attendance on the ITS. |

SPECIAL CONDITIONS (CONT'D)

AFTERCARE TO OLD AND VALUABLE TREES

- | | | |
|-------|--|---|
| XIII. | The measurement for the items for “aftercare to Old and Valuable Trees” shall be made to the duration in which all requirements for providing aftercare to OVT as stated in the Works Order and provided in the Contract are complied with. One item shall be measured for each OVT. | Measurement
of aftercare to
Old and Valuable
Trees |
| XIV. | The rates for “aftercare to each Old and Valuable Tree” shall include for :-

(a) All works, materials and services for providing aftercare to OVT in accordance with the Contract.

(b) Tree maintenance work, work of repair to damage or health deterioration, or precautionary or mitigation measures against damage.

(c) Removal of all debris and surplus materials off the Site.

(d) Reinstatement of the affected areas. | Rates for
aftercare to each
Old and Valuable
Tree |

**PRESERVATION AND PROTECTION OF PRESERVED TREES
INCLUDING OLD AND VALUABLE TREES**

Item	PRESERVATION AND PROTECTION OF PRESERVED TREES INCLUDING OLD AND VALUABLE TREES	A \$	Item
	<i>Per month</i>		
53001	Preservation and protection measures for Old and Valuable Trees.....	2,500.00	53001
53002	Preservation and protection measures for preserved trees other than Old and Valuable Trees.....	150.00	53002
	TREE SURVEY		
	<i>Per number</i>		
53003	Tree survey of each existing tree other than Old and Valuable Tree.....	130.00	53003
53004	Reports on photographic record of each preserved tree other than Old and Valuable Tree.....	100.00	53004
	INDEPENDENT TREE SPECIALIST		
	<i>Per month</i>		
53005	Independent tree specialist.....	16,500.00	53005
	AFTERCARE TO OLD AND VALUABLE TREES		
	<i>Per month</i>		
53006	Aftercare to each Old and Valuable Tree.....	1,800.00	53006

Section 54

**CONTROL TREATMENT ON PESTS,
TERMITES AND RED IMPORTED FIRE ANTS**

CONTROL TREATMENT ON PESTS, TERMITES AND RED IMPORTED FIRE ANTS

SPECIAL CONDITIONS

PART I - CONTROL TREATMENT ON PESTS AND TERMITES

Measurement of pest and termite control

- I. Only the infested areas by pests and termites as directed by the Maintenance Surveyor shall be measured.

Rates for pest and termite control

- II. The rates for pest and termite control shall include for :-
- (a) The application of an appropriate pesticide or insecticide approved by the Agriculture, Fisheries and Conservation Department (“AFCD”) or any control treatment methods approved by the Maintenance Surveyor.
 - (b) The employment of a pest control specialist approved by the Maintenance Surveyor.
 - (c) Applying the pesticide or insecticide in strict accordance with the manufacturer's instructions.

Rates for termite treatment

- III. The rates for termite treatment shall further include for :-
- (a) Preparing and drilling holes around termite mounds for the injection of the approved pesticide or insecticide .
 - (b) Treatment services on the termite mounds.
 - (c) Collection services of specimens of termites.
 - (d) Eradication and removal of all termites and their queens.

PART II - TREATMENT SERVICES ON RED IMPORTED FIRE ANTS

Particular Specification

- IV. This Section shall be read and used in conjunction with the Particular Specification for Treatment Services on Red Imported Fire Ants and relevant Conditions of Contract adopted for the Contract.

Particular Preamble

- V. A pest control specialist in controlling Red Imported Fire Ants (“RIFA”) from the list provided by AFCD shall be employed to provide treatment services for the RIFA including their mounds.
- The updated list of the pesticides for RIFA treatment available from AFCD shall be referred when proposing pesticides for approval.

PROTECTION OF EXISTING PLANTING

Measurement of treatment services on Red Imported Fire Ants

- VI. The items for “maintain and protect all existing planting in the controlling area” shall be measured where treatment services are required to be carried out in planted area.

Rates for treatment services on Red Imported Fire Ants

- VII. The rates for “maintain and protect all existing planting in the controlling area” shall include for the following whenever maintenance or protection is not possible :-
- (a) Report to the Maintenance Surveyor with alternative proposal.
 - (b) Resume the original condition including re-planting to the satisfaction of the Maintenance Surveyor.

SPECIAL CONDITIONS (CONT'D)

COLLECTION SERVICES OF THE SUSPECTED RED IMPORTED FIRE ANTS

- | | | |
|-------|--|---|
| VIII. | The items for “mark, cordon off and isolate possible infested zone around single suspected RIFA mound” shall be measured once for a single suspect of RIFA in one location. If there are multiple suspected RIFA mounds in the same location, the “add to Item” shall be measured for each additional mound. | Measurement of collection services of the suspected Red Imported Fire Ants |
| IX. | The items for “collect specimen of suspected RIFA” shall be measured once for each Works Order as directed by the Maintenance Surveyor. | |
| X. | The items for “add to Item for each additional specimen collection” shall only be measured as directed by the Maintenance Surveyor. | |
| XI. | The item for “reporting to relevant Government Authorities” shall be measured once only for the Works Order. | |
| XII. | The rates for “mark, cordon off and isolate possible infested zone” and “add to Item for each multiple suspected RIFA mound” shall include for : - | Rates for collection services of the suspected Red Imported Fire Ants |
| | (a) The provision of cordon line.
(b) Clear warning signs in both English and Chinese about the presence of suspected RIFA and the relevant pest control situation. | |
| XIII. | The rates for “collect specimen of suspected RIFA” and “add to for each additional specimen collection” shall include for : - | |
| | (a) Storage of specimen in an approved container and in 70% alcohol.
(b) Collection, handling and transporting all specimens of suspected RIFA to the Plant and Pesticides Regulatory Division of AFCD. | |
| XIV. | The rates for “reporting to the relevant Government Authorities” shall include for : - | |
| | (a) Completion and submission of necessary information in the appropriate forms to AFCD, Development Bureau and other relevant Government Authorities. | |

CONTROL SERVICES OF THE CONFIRMED RED IMPORTED FIRE ANTS

- | | | |
|--------|---|--|
| XV. | The item for “submit a proposal of controlling RIFA” shall be measured once only for the Works Order of treatment services on RIFA. | Measurement of control services of the confirmed Red Imported Fire Ants |
| XVI. | The item for “clear and remove mulch from site” shall be measured for the infested area of the site as directed by the Maintenance Surveyor. | |
| XVII. | The items for “pest control over infested area” shall be measured for the infested area of the site as directed by the Maintenance Surveyor. | |
| XVIII. | The item for “pest control to confirmed RIFA mounds” shall be measured where RIFA mounds are confirmed and as directed by the Maintenance Surveyor. | |
| XIX. | The item for “submit written report after each controlling service” shall be measured for each controlling service completed. | |

SPECIAL CONDITIONS (CONT'D)

CONTROL SERVICES OF THE CONFIRMED RED IMPORTED FIRE ANTS (Cont'd)**Rates for control services of the confirmed Red Imported Fire Ants**

- XX. The rates for “submit a proposal of controlling RIFA” shall include for : -
- (a) Submission of proposal for controlling RIFA including but not limited to pest control methodology to individual mound treatment and/or over large infested area.
 - (b) Submission of working programme including pest control schedule and surveillance programme schedule.
 - (c) Submission of layout plan showing the location of pest control to be provided.
 - (d) Submission of details of the pesticides to be applied including Material Safety Date Sheet, application procedures with precaution measures and ecological information.
- XXI. The rates for “clear and remove mulch from site” shall include for : -
- (a) Treating mulch with approved pest control methodology before removal.
 - (b) Making good disturbed surfaces to match existing.
- XXII. The rates for “pest control over large infested area” shall include for : -
- (a) The application of a pest control methodology approved by the Maintenance Surveyor.
- XXIII. The rates for “pest control up to five confirmed RIFA mounds” shall include for : -
- (a) The application of a pest control methodology approved by the Maintenance Surveyor.
 - (b) The application up to the first 5 number of confirmed RIFA mounds identified for the Works Order.
- XXIV. The rates for “submit written report after each controlling service” shall include for : -
- (a) Reporting the effectiveness of each individual pest control.
 - (b) Reporting any new findings of RIFA mound.

SURVEILLANCE MONITORING OF THE CONFIRMED RED IMPORTED FIRE ANTS**Measurement of surveillance monitoring of the confirmed Red Imported Fire Ants**

- XXV. The item for “carry out surveillance visit” shall be measured for the monitoring the effectiveness of RIFA eradication as directed by the Maintenance Surveyor.
- XXVI. The item for “submit written report after each surveillance visit” shall be measured for each surveillance visit completed.
- XXVII. The rates for “carry out surveillance visit up to five confirmed RIFA mound” shall include for : -
- (a) Carry out the visit to monitor the effectiveness of RIFA eradication up to the first 5 number of confirmed RIFA mounds.
- XXVIII. The rates for “submit written report after each surveillance visit” shall include for : -
- (a) Reporting the effectiveness of the RIFA eradication.
 - (b) Reporting any new findings of RIFA mound.

Rates for surveillance monitoring of the confirmed Red Imported Fire Ants

Item		A	Item
	PART I - CONTROL TREATMENT ON PESTS AND TERMITES		
	PEST CONTROL	\$	
	<i>Per square metre</i>		
54001	Provide pest/mosquito control over infested area for which the Contractor is not liable under his contractual obligations and when ordered by the Maintenance Surveyor.....	5.60	54001
	TERMITE CONTROL		
	<i>Per item</i>		
54002	Provide termite treatment in mounds and to timber skirting, floor boards, wall linings, door frames and architraves, cupboards and wardrobes and all other surfaces within an infested premise of enclosed and covered internal floor area n.e. 100 m ²	1,470.40	54002
54003	Add to Item 54002 for each additional 10 m ² or part thereof in area	130.10	54003
	PART II - TREATMENT SERVICES ON RED IMPORTED FIRE ANTS		
	PROTECTION OF EXISTING PLANTING		
	<i>Per item</i>		
54004	Maintain and protect all existing planting in the controlling area.....	1,577.90	54004
	COLLECTION SERVICES OF THE SUSPECTED RED IMPORTED FIRE ANTS		
	<i>Each</i>		
54005	Mark, cordon off and isolate possible infested zone around single suspected Red Imported Fire Ant mound.....	1,506.30	54005
54006	Add to Item 54005 for each multiple suspected Red Imported Fire Ant mound.....	282.40	54006
54007	Collect specimen of suspected Red Imported Fire Ant.....	959.30	54007
54008	Add to Item 54007 for each additional specimen collection.....	399.50	54008
	<i>Per item</i>		
54009	Reporting to relevant Government Authorities.....	559.90	54009
	CONTROL SERVICES OF THE CONFIRMED RED IMPORTED FIRE ANTS		
	<i>Per item</i>		
54010	Submit a proposal of controlling Red Imported Fire Ant.....	1,496.90	54010
	<i>Per square metre</i>		
54011	Clear and remove mulch from Site.....	10.70	54011
54012	Pest control over infested area.....	5.60	54012
	<i>Per item</i>		
54013	Pest control up to five confirmed Red Imported Fire Ant mounds.....	2,139.50	54013
	<i>Each</i>		
54014	Add to Item 54013 for each subsequent confirmed Red Imported Fire Ant mound.....	427.90	54014
	<i>Per item</i>		
54015	Submit written report after each controlling service.....	559.90	54015

Item	PART II - TREATMENT SERVICES ON RED IMPORTED FIRE ANTS (CONT'D)	Item
	SURVEILLANCE MONITORING OF THE CONFIRMED RED IMPORTED FIRE ANTS	
	<i>Per item</i>	A \$
54016	Carry out surveillance visit up to five confirmed Red Imported Fire Ant mounds.....	1,997.10
	<i>Each</i>	
54017	Add to Item 54016 for each subsequent confirmed Red Imported Fire Ant mound.....	399.50
	<i>Per item</i>	
54018	Submit written report after each surveillance visit.....	559.90

Section 55

MONITORING PAYMENT OF WAGES

MONITORING PAYMENT OF WAGES

SPECIAL CONDITIONS

Particular Specification	I. This Section shall be read and used in conjunction with the Particular Specification for Monitoring of Wage Payment to Site Personnel and relevant Conditions of Contract adopted for the Contract.
Unit of measurement	<p>II. The unit of measurement shall be :</p> <p>(a) Establishing monitoring system for payment of wages item.</p> <p>(b) Operating monitoring system for payment of wages month.</p> <p>(c) Providing Contractor's Labour Officer month.</p>
Measurement for operating monitoring system for payment of wages	<p>III. The item for "operating monitoring system for payment of wages" shall be measured commencing from the date of approval by the Maintenance Surveyor of completion of establishment of monitoring system for payment of wages and the item for "providing Contractor's Labour Officer" shall commence from the date the Contractor's Labour Officer provided by the Contractor is approved by the Maintenance Surveyor and reports duty on Site. These items shall not be measured:</p> <p>(a) Where the Works are not divided into Sections, between</p> <p style="padding-left: 40px;">(i) the end of the prescribed time or extended time for completion of the last Works Order except Establishment Works and Aftercare to Old and Valuable Trees due to extension of time which has been granted by the Maintenance Surveyor to the Contractor under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 53; and</p> <p style="padding-left: 40px;">(ii) the date of completion of the last Works Order except Establishment Works and Aftercare to Old and Valuable Trees certified by the Maintenance Surveyor in accordance with GCC Clause 56.</p> <p style="padding-left: 40px;">For the purpose of calculating the extended time for completion of the Works due to extension of time granted by the Maintenance Surveyor under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 53, the periods of extended time for completion granted under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 53 shall be summed and added to the end of the prescribed time for completion of the last Works Order.</p> <p>(b) Where the Works are divided into Sections, between</p> <p style="padding-left: 40px;">(i) the end of the prescribed time or extended time for completion of the Section of the Works (<i>excluding the Sections for Establishment Works and Aftercare for Old and Valuable Trees</i>) due to extension of time which has been granted by the Maintenance Surveyor to the Contractor under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 53, which happens to be the latest in time (for the purpose of calculating the extended time for completion of each Section of the Works due to extension of time granted by the Maintenance Surveyor under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 53, the periods of extended time for completion granted under sub-clauses (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC Clause 53 for that Section of the Works shall be summed and added to the end of the prescribed time for completion of that Section of the Works); and</p> <p style="padding-left: 40px;">(ii) the date of completion of whichever Section of the Works (<i>excluding the Sections for Establishment Works and Aftercare for Old and Valuable Trees</i>) certified by the Maintenance Surveyor in accordance with GCC Clause 56 which happens to be the latest in time.</p> <p>(c) After the expiry of the Maintenance Period (or where there is more than one such Maintenance Period, after the expiry of the last Maintenance Period <i>other than the Maintenance Periods for Establishment Works and Aftercare for Old and Valuable Trees</i>) where services are required as a consequence of the default of the Contractor.</p>

SPECIAL CONDITIONS (CONT'D)

- | | | |
|-----|---|---|
| IV. | No measurement and no payment shall be made for the item “operating monitoring system for payment of wages” for the period where there is any incident of non-compliance with respect to the submission of documents and records in accordance with Particular Specification “Section X” and payment for the item shall therefore be measured on a pro rata basis. | Measurement and payment for operating monitoring system for payment of wages |
| V. | <p>The item for “establishing monitoring system for payment of wages” is given as a pre-priced rate and shall include for :</p> <ul style="list-style-type: none"> (a) Preparation of the monitoring system for payment of wages to the satisfaction of the Maintenance Surveyor. (b) Setting-up the monitoring system for payment of wages and any modifications thereof. (c) Provision for collection and maintenance records of payment of wages to Site Personnel. (d) Opening of accounts in designated bank for relevant parties as required in Particular Specification Clauses X.5 (1) to (2). (e) Nomination of a Contractor’s Labour Officer as required in Particular Specification Clause Y.1. (f) Setting up the attendance recording system for accurate attendance records of Site Personnel and any modifications thereof. (g) Issuing identification cards to Site Personnel and self-employed workers. (h) Insurance for the self-employed workers. (i) Establishing a hotline in the Maintenance Surveyor’s site office to receive enquiries from workers and Site Personnel on employment matters. (j) Advising Site Personnel of the monitoring system and the procedures for reporting wages arrears. | Rate for establishing monitoring system for payment of wages |
| VI. | <p>The item for “operating monitoring system for payment of wages” is given as a pre-priced rate. In the event that the rate is insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Schedule of Rates. In addition, the rate shall also be deemed to include for :</p> <ul style="list-style-type: none"> (a) Operating and maintaining the attendance recording system to obtain accurate attendance records of Site Personnel. (b) Controlling the issue of identification cards to Site Personnel and self-employed workers. (c) Reviewing, updating and revising the monitoring system for payment of wages taking into account the comments made by the Maintenance Surveyor or any other parties. (d) Implementing measures to ensure that payments of wages to Site Personnel are consistent with the records of the attendance recording system. (e) Compiling, submitting and maintaining records of payment of wages and other monetary benefits to Site Personnel. (f) Observing all statutory and contractual obligations in ensuring proper payment of wages and other monetary benefits to Site Personnel, and any other related obligations, liabilities, risks and profit. | Rate for operating monitoring system for payment of wages |

SPECIAL CONDITIONS (CONT'D)

Rate for operating monitoring system for payment of wages (cont'd)

- VI. (g) Providing all necessary assistance to the Labour Relations Officer in the discharge of his duties, functions and responsibilities.
- (h) Maintaining a hotline in the Maintenance Surveyor's site office.
- (i) Maintaining insurance for the self-employed workers.
- (j) Providing access and assistance to visitors as required under Particular Specification Clause Y.3 including the necessary insurance coverage.

Rate for providing Contractor's Labour Officer

- VII. The item for "Providing Contractor's Labour Officer" is given as a pre-priced rate. In the event that the rate is insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Schedule of Rates. In addition, the rate shall include the costs and expenses of providing the Contractor's Labour Officer and supporting staff inclusive and without limitation to the following:

- (a) Basic salary.
- (b) Gratuity.
- (c) Overtime payment.
- (d) Sundry allowance.
- (e) Housing allowance.
- (f) Travel allowance.
- (g) Leave allowance.
- (h) Education allowance.
- (i) Medical allowance.
- (j) Dental allowance.
- (k) Bonus.
- (l) Contribution to the Mandatory Provident Fund.
- (m) All necessary levies, e.g. Construction Industry Council.
- (n) Insurances.
- (o) Fringe benefits.

Item	MONITORING PAYMENT OF WAGES		Item
	<i>Per item</i>	A \$	
55001	Establishing monitoring system for payment of wages.....	10,000.00	55001
	<i>Per month</i>		
55002	Operating monitoring system for payment of wages.....	15,000.00	55002
55003	Providing Contractor's Labour Officer.....	15,000.00	55003

Section 56

SUB-CONTRACTOR MANAGEMENT PLAN

SUB-CONTRACTOR MANAGEMENT PLAN

IMPLEMENTATION OF SUB-CONTRACTOR MANAGEMENT PLAN

SPECIAL CONDITIONS

- | | | |
|--|------|--|
| Particular Specification | I. | This Section shall be read and used in conjunction with the Particular Specification for Management of Sub-contractors and relevant Conditions of Contract adopted for the Contract. |
| Particular Preamble | II. | The pre-priced rates appearing in the items under this Section shall be deemed to have allowed for the value of work in connection with meeting all contractual obligations regarding the Sub-contractor Management Plan (SMP) in the execution of the Works and any other related obligations, liabilities, risks and profit. In the event that the rates have been insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Schedule of Rates. |
| Measurement of complete Sub-contractor Management Plan | III. | <p>Measurement</p> <p>(a) The item for "complete Sub-contractor Management Plan" shall be measured and paid for when the SMP has been submitted, the content is in order and the Maintenance Surveyor is satisfied and confirmed in writing that it has been completed and it meets all requirements of the contract at the time of its completion.</p> <p>(b) The item for "quarterly updating of Sub-contractor Management Plan" shall be measured and paid for when the quarterly updated SMP has been submitted, the content is in order and the Maintenance Surveyor is satisfied and confirmed in writing that the SMP has been completed and meets all the requirements of the Contract at the time of its completion. The declaration referred to in PS 41.3(ii) shall be considered as quarterly updating of the SMP. No measurement shall be made for Contractor's interim notification of major changes of sub-contractor management.</p> |
| Rate for complete Sub-contractor Management Plan | IV. | <p>The item for "complete Sub-contractor Management Plan" include for:</p> <p>(a) Develop and complete the SMP incorporating the details required by the Contract.</p> <p>(b) Submit the required copies of the SMP to the Maintenance Surveyor.</p> |
| Rate for quarterly updating of Sub-contractor Management Plan | V. | <p>The item for "quarterly updating of Sub-contractor Management Plan" include for:</p> <p>(a) Reviewing, updating and revising SMP taking into account the changes in the Contractor's sub-contracting arrangement during the period and/or comments made by the Maintenance Surveyor.</p> <p>(b) Submit the required copies of the quarterly updated SMP to the Maintenance Surveyor.</p> |

Item	SUB-CONTRACTOR MANAGEMENT PLAN		Item
	<i>Per item</i>	A \$	
56001	Complete Sub-contractor Management Plan.....	15,000.00	56001
	<i>Each</i>		
56002	Quarterly updating of Sub-contractor Management Plan.....	2,000.00	56002

**MEMORANDA
(TABLES OF METAL WEIGHTS, ETC.)**

Pages M/01 - M/24

MEMORANDA

Table		Page
1	Metric/Imperial equivalents.....	M/02
2	Mass (Weight) of wire.....	M/03
3	Mass (Weight) of sheet lead.....	M/04
4	Mass (Weight) of sheet zinc.....	M/04
5	Mass (Weight) of sheet metal.....	M/05
6	Mass (Weight) of metal plates.....	M/06
7	Mass (Weight) of round bars.....	M/07
8	Mass (Weight) of square bars.....	M/07
9	Mass (Weight) of flat bars.....	M/08
10	Mass (Weight) of black bolts and nuts.....	M/09
11	Mass (Weight) of cup-headed rivets.....	M/10
12	Mass (Weight) of rolled steel equal angles.....	M/11
13	Mass (Weight) of rolled steel unequal angles.....	M/11
14	Mass (Weight) of rolled steel short stalk T-bars.....	M/12
15	Mass (Weight) of rolled steel universal columns.....	M/12
16	Mass (Weight) of rolled steel joists.....	M/12
17	Mass (Weight) of rolled steel universal bearing piles.....	M/12
18	Mass (Weight) of rolled steel universal beams.....	M/13
19	Mass (Weight) of rolled steel channels.....	M/13
20	Mass (Weight) of rolled steel round hollow tubes.....	M/14
21	Mass (Weight) of rolled steel square hollow sections.....	M/15
22	Mass (Weight) of rolled steel rectangular hollow sections.....	M/15
23	Mass (Weight) of solid aluminium round bars.....	M/16
24	Mass (Weight) of solid aluminium square bars.....	M/16
25	Mass (Weight) of solid aluminium flats.....	M/17
26	Mass (Weight) of aluminium equal angles.....	M/18
27	Mass (Weight) of aluminium unequal angles.....	M/18
28	Mass (Weight) of aluminium channels.....	M/19
29	Mass (Weight) of aluminium tee sections.....	M/19
30	Mass (Weight) of aluminium round hollow tubes.....	M/20
31	Mass (Weight) of aluminium square hollow sections.....	M/21
32	Mass (Weight) of aluminium rectangular hollow sections.....	M/21
33	Mass (Weight) of stainless steel flat bars.....	M/22
34	Mass (Weight) of stainless steel angles.....	M/22
35	Mass (Weight) of stainless steel channels.....	M/22
36	Mass (Weight) of stainless steel round tubes.....	M/22
37	Mass (Weight) of stainless steel square hollow sections.....	M/22
38	Mass (Weight) of stainless steel rectangular hollow sections.....	M/22
39	Standard BRC fabrics square meshes.....	M/23
40	Standard BRC fabrics rectangular meshes.....	M/23
41	Mass (Weight) of steel sheet piles.....	M/24
42	Mass (Weight) of steel chequer plate.....	M/24

TABLE 1
METRIC/IMPERIAL EQUIVALENTS

Metric sizes or dimensions (millimetres)	Imperial equivalents (inches)
3	1/8
6	1/4
10	3/8
13	1/2
16	5/8
19	3/4
22	7/8
25	1
32	1-1/4
35	1-3/8
38	1-1/2
44	1-3/4
51	2
57	2-1/4
64	2-1/2
70	2-3/4
76	3
83	3-1/4
89	3-1/2
95	3-3/4
100	4
125	5
150	6
175	7
200	8
225	9
250	10
275	11
300	12
450	18
600	24
750	30
900	36
1,200	48

Examples :-

1. An imperial sized scantling measuring 2" x 3" shall be paid for as a 50 x 75 mm scantling.
2. An imperial sized tower bolt measuring 9" long shall be paid for as a 225 mm long tower bolt.

TABLE 2
MASS (WEIGHT) OF WIRE

Preferred diameter (mm) BS 4391 : 1972	S.W.G.	Gauge diameter (mm)	kg/100 m	
			Steel	Copper
	40	0.122	0.01	0.01
0.125			0.01	0.01
	39	0.132	0.01	0.01
	38	0.152	0.01	0.02
0.160			0.02	0.02
	37	0.173	0.02	0.02
	36	0.193	0.02	0.02
0.200			0.02	0.02
	35	0.213	0.03	0.03
	34	0.234	0.03	0.04
0.250			0.04	0.04
	33	0.254	0.04	0.04
	32	0.274	0.05	0.05
	31	0.295	0.05	0.06
0.300			0.06	0.06
	30	0.315	0.06	0.07
	29	0.345	0.07	0.08
	28	0.376	0.09	0.09
0.400			0.10	0.11
	27	0.417	0.11	0.11
	26	0.457	0.13	0.14
0.500			0.15	0.17
	25	0.508	0.16	0.17
	24	0.559	0.19	0.21
0.600			0.22	0.24
	23	0.610	0.23	0.25
0.700			0.30	0.32
	22	0.711	0.31	0.33
0.800			0.39	0.42
	21	0.813	0.41	0.44
0.900			0.50	0.54
	20	0.914	0.52	0.55

Preferred diameter (mm) BS 4391 : 1972	S.W.G.	Gauge diameter (mm)	kg/100 m	
			Steel	Copper
1.000			0.62	0.66
	19	1.016	0.64	0.68
1.200			0.89	0.95
	18	1.219	0.92	0.98
	17	1.422	1.25	1.34
1.600			1.58	1.69
	16	1.626	1.63	1.75
	15	1.829	2.06	2.21
2.000			2.47	2.64
	14	2.032	2.55	2.73
	13	2.337	3.37	3.61
2.500			3.85	4.13
	12	2.642	4.31	4.62
	11	2.946	5.35	5.74
3.000			5.55	5.95
	10	3.251	6.52	6.99
	9	3.658	8.25	8.85
4.000			9.87	10.58
	8	4.064	10.19	10.92
	7	4.470	12.32	13.21
	6	4.877	14.67	15.73
5.000			15.42	16.53
	5	5.385	17.89	19.17
	4	5.893	21.42	22.96
6.000			22.20	23.80
	3	6.401	25.27	27.09
	2	7.010	30.31	32.49
	1	7.620	35.81	38.39
8.000			39.47	42.32

Note :-

For mass of iron wire, multiply the mass of steel wire by 0.991.
For mass of brass wire, multiply the mass of steel wire by 1.072.

TABLE 3

MASS (WEIGHT) OF SHEET LEAD

Code number	Thickness (mm)	kg/m ² *	Colour marking
3	1.25	14.18	green
4	1.80	20.41	blue
5	2.24	25.40	red
6	2.50	28.36	black
7	3.15	35.72	white
8	3.55	40.26	orange

* Basic value : 11,450 kg/m³

TABLE 4

MASS (WEIGHT) OF SHEET ZINC

Metric thickness BS-DD5 : 1971	Zinc gauge	Gauge thickness (mm)	kg/m ² *
	1	0.102	0.73
	2	0.152	1.09
	3	0.178	1.28
	4	0.203	1.46
0.25			1.80
	5	0.254	1.83
	6	0.273	1.97
0.30			2.16
	7	0.330	2.38
	8	0.381	2.74
0.40			2.88
	9	0.432	3.11
	10	0.483	3.48
0.50			3.60
	11	0.559	4.02
0.60			4.32
	12	0.635	4.57
0.70			5.04
	13	0.711	5.12
	14	0.787	5.67
0.80			5.76
0.90			6.48
	15	0.914	6.58
1.00			7.20
	16	1.041	7.50
	17	1.168	8.41
1.20			8.64
	18	1.295	9.32
	19	1.448	10.43
1.60	20	1.600	11.52
	21	1.778	12.80
2.00			14.40

* Basic value : 7,200 kg/m³

TABLE 5
MASS (WEIGHT) OF SHEET METAL

Metric thickness (mm)	S.W.G.	Gauge thickness (mm)	kg/m ² *			
			Steel	Stainless steel	Copper	Aluminium
	34	0.234	1.84	1.84	2.09	0.63
0.25			1.96	1.97	2.23	0.68
	33	0.254	1.99	2.00	2.27	0.69
	32	0.274	2.15	2.16	2.45	0.74
	31	0.295	2.31	2.32	2.64	0.80
0.30			2.35	2.36	2.68	0.81
	30	0.315	2.47	2.48	2.82	0.85
	29	0.345	2.71	2.72	3.08	0.93
	28	0.376	2.95	2.96	3.36	1.02
0.40			3.14	3.15	3.58	1.08
	27	0.417	3.27	3.29	3.73	1.13
	26	0.457	3.58	3.60	4.08	1.24
0.50			3.92	3.94	4.47	1.35
	25	0.508	3.98	4.00	4.54	1.38
	24	0.559	4.38	4.41	5.00	1.51
0.60			4.71	4.73	5.36	1.62
	23	0.610	4.78	4.81	5.45	1.65
0.70			5.49	5.52	6.26	1.89
	22	0.711	5.58	5.60	6.35	1.92
0.80			6.27	6.30	7.15	2.17
	21	0.813	6.38	6.41	7.27	2.20
0.90			7.06	7.09	8.04	2.44
	20	0.914	7.17	7.20	8.17	2.47
1.00			7.84	7.88	8.94	2.71
	19	1.016	7.97	8.01	9.08	2.75
1.20			9.41	9.46	10.73	3.25
	18	1.219	9.56	9.61	10.90	3.30
	17	1.422	11.15	11.21	12.71	3.85
1.60			12.55	12.61	14.30	4.33
	16	1.626	12.75	12.81	14.53	4.40
	15	1.829	14.34	14.41	16.35	4.95
2.00			15.69	15.76	17.88	5.41
	14	2.032	15.94	16.01	18.16	5.50
	13	2.337	18.33	18.42	20.89	6.33
2.50			19.61	19.70	22.35	6.77
	12	2.642	20.72	20.82	23.61	7.15
	11	2.946	23.11	23.22	26.33	7.97
3.00			23.53	23.64	26.81	8.12
	10	3.251	25.50	25.62	29.06	8.80
	9	3.658	28.69	28.83	32.70	9.90
4.00			31.37	31.52	35.75	10.83
	8	4.064	31.87	32.03	36.32	11.00
	7	4.470	35.06	35.23	39.95	12.10
	6	4.877	38.25	38.44	43.59	13.20
5.00			39.22	39.41	44.69	13.54
	5	5.385	42.23	42.44	48.13	14.58
	4	5.893	46.22	46.44	52.67	15.95
6.00			47.06	47.29	53.63	16.24
	3	6.401	50.20	50.45	57.21	17.33
	2	7.010	54.98	55.25	62.66	18.98
	1	7.620	59.76	60.05	68.11	20.63
8.00			62.74	63.05	71.50	21.66

* Basic value : Mild steel 7,843 kg/m³
 Stainless steel 7,881 kg/m³
 Copper 8,938 kg/m³
 Aluminium 2,707 kg/m³

For mass of iron sheeting, multiply the mass of steel sheeting by 0.991.
 For mass of brass sheeting, multiply the mass of steel sheeting by 1.072.
 For mass of sheeting galvanized on both sides, add 0.730 kg/m².

TABLE 6
MASS (WEIGHT) OF METAL PLATES

Metric thickness (mm)	Imperial thickness (inches)	Metric equivalents (mm)	kg/m ² *			
			Steel	Stainless steel	Copper	Aluminium
	1/16	1.59	12.47	12.53	14.21	4.30
1.60			12.55	12.61	14.30	4.33
2.00			15.69	15.76	17.88	5.41
3.00			23.53	23.64	26.81	8.12
	1/8	3.18	24.94	25.06	28.42	8.61
4.00			31.37	31.52	35.75	10.83
	3/16	4.76	37.33	37.51	42.54	12.89
5.00			39.22	39.41	44.69	13.54
6.00			47.06	47.29	53.63	16.24
	1/4	6.35	49.80	50.04	56.76	17.19
8.00			62.74	63.05	71.50	21.66
	3/8	9.53	74.74	75.11	85.18	25.80
10.00			78.43	78.81	89.38	27.07
12.00			94.12	94.57	107.26	32.48
	1/2	12.70	99.61	100.09	113.51	34.38
15.00			117.65	118.22	134.07	40.61
	5/8	15.88	124.55	125.15	141.94	42.99
18.00			141.17	141.86	160.88	48.73
	3/4	19.05	149.41	150.13	170.27	51.57
20.00			156.86	157.62	178.76	54.14
	7/8	22.23	174.35	175.19	198.69	60.18
25.00			196.08	197.03	223.45	67.68
	1	25.40	199.21	200.18	227.03	68.76

* Basic value :

Mild steel	7,843	kg/m ³
Stainless steel	7,881	kg/m ³
Copper	8,938	kg/m ³
Aluminium	2,707	kg/m ³

For mass of iron sheeting, multiply the mass of steel sheeting by 0.991.
 For mass of brass sheeting, multiply the mass of steel sheeting by 1.072.
 For mass of sheeting galvanized on both sides, add 0.730 kg/m².

TABLE 7

**MASS (WEIGHT) OF
MILD STEEL ROUND BARS**

Preferred metric diameter (mm) BS 4461 : 1971	Imperial sizes (inches)	Metric equivalents of imperial sizes (mm)	kg/m*
6			0.22
	1/4	6.350	0.25
8			0.39
	3/8	9.525	0.56
10			0.62
12			0.89
	1/2	12.700	0.99
	5/8	15.875	1.55
16			1.58
	3/4	19.050	2.24
20			2.46
	7/8	22.225	3.04
25			3.85
	1	25.400	3.98
	1-1/8	28.575	5.03
	1-1/4	31.750	6.21
32			6.31
	1-3/8	34.925	7.52
	1-1/2	38.100	8.95
40			9.86
	1-5/8	41.275	10.50
	1-3/4	44.450	12.18
	1-7/8	47.625	13.98
	2	50.800	15.90

TABLE 8

**MASS (WEIGHT) OF
ROLLED STEEL SQUARE BARS**

Recommended metric size (mm) BS 4429 : 1972	Imperial sizes (inches)	Metric equivalents of imperial sizes (mm)	kg/m*
	1/4	6.350	0.32
	5/16	7.938	0.49
	3/8	9.525	0.71
10			0.78
	7/16	11.112	0.97
12			1.13
	1/2	12.700	1.26
14			1.54
	9/16	14.288	1.60
	5/8	15.875	1.98
16			2.01
	11/16	17.462	2.39
18			2.54
	3/4	19.050	2.85
20			3.14
	13/16	20.638	3.34
	7/8	22.225	3.87
	15/16	23.812	4.45
25			4.90
	1	25.400	5.06
28			6.15
	1-1/8	28.575	6.40
	1-1/4	31.750	7.91
32			8.03
	1-3/8	34.925	9.57
35			9.61
	1-1/2	38.100	11.38
40			12.55
	1-5/8	41.275	13.36
	1-3/4	44.450	15.50
	1-7/8	47.625	17.80
	2	50.800	20.24

* Basic value : Mild steel 7,843 kg/m³

For mass of cast iron bars, multiply the mass of steel bars by 0.919.

For mass of wrought iron bars, multiply the mass of steel bars by 0.991.

For mass of brass bars, multiply the mass of steel bars by 1.072.

For mass of copper bars, multiply the mass of steel bars by 1.134.

TABLE 9
MASS (WEIGHT) OF ROLLED STEEL FLAT BARS

Width (mm)	kg/m*													
	Thickness (mm)													
	1	2	3	4	5	6	7	8	9	10	20	30	40	50
5	0.04	0.08	0.12	0.16	0.20	0.24	0.27	0.31	0.35	0.39	0.78	1.18	1.57	1.96
10	0.08	0.16	0.24	0.31	0.39	0.47	0.55	0.63	0.71	0.78	1.57	2.35	3.14	3.92
15	0.12	0.24	0.35	0.47	0.59	0.71	0.82	0.94	1.06	1.18	2.35	3.53	4.71	5.88
20	0.16	0.31	0.47	0.63	0.78	0.94	1.10	1.25	1.41	1.57	3.14	4.71	6.27	7.84
25	0.20	0.39	0.59	0.78	0.98	1.18	1.37	1.57	1.76	1.96	3.92	5.88	7.84	9.80
30	0.24	0.47	0.71	0.94	1.18	1.41	1.65	1.88	2.12	2.35	4.71	7.06	9.41	11.76
35	0.27	0.55	0.82	1.10	1.37	1.65	1.92	2.20	2.47	2.75	5.49	8.24	10.98	13.73
40	0.31	0.63	0.94	1.25	1.57	1.88	2.20	2.51	2.82	3.14	6.27	9.41	12.55	15.69
45	0.35	0.71	1.06	1.41	1.76	2.12	2.47	2.82	3.18	3.53	7.06	10.59	14.12	17.65
50	0.39	0.78	1.18	1.57	1.96	2.35	2.75	3.14	3.53	3.92	7.84	11.76	15.69	19.61
55	0.43	0.86	1.29	1.73	2.16	2.59	3.02	3.45	3.88	4.31	8.63	12.94	17.25	21.57
60	0.47	0.94	1.41	1.88	2.35	2.82	3.29	3.76	4.24	4.71	9.41	14.12	18.82	23.53
65	0.51	1.02	1.53	2.04	2.55	3.06	3.57	4.08	4.59	5.10	10.20	15.29	20.39	25.49
70	0.55	1.10	1.65	2.20	2.75	3.29	3.84	4.39	4.94	5.49	10.98	16.47	21.96	27.45
75	0.59	1.18	1.76	2.35	2.94	3.53	4.12	4.71	5.29	5.88	11.76	17.65	23.53	29.41
80	0.63	1.25	1.88	2.51	3.14	3.76	4.39	5.02	5.65	6.27	12.55	18.82	25.10	31.37
85	0.67	1.33	2.00	2.67	3.33	4.00	4.67	5.33	6.00	6.67	13.33	20.00	26.67	33.33
90	0.71	1.41	2.12	2.82	3.53	4.24	4.94	5.65	6.35	7.06	14.12	21.18	28.23	35.29
95	0.75	1.49	2.24	2.98	3.73	4.47	5.22	5.96	6.71	7.45	14.90	22.35	29.80	37.25
100	0.78	1.57	2.35	3.14	3.92	4.71	5.49	6.27	7.06	7.84	15.69	23.53	31.37	39.22
110	0.86	1.73	2.59	3.45	4.31	5.18	6.04	6.90	7.76	8.63	17.25	25.88	34.51	43.14
120	0.94	1.88	2.82	3.76	4.71	5.65	6.59	7.53	8.47	9.41	18.82	28.23	37.65	47.06
130	1.02	2.04	3.06	4.08	5.10	6.12	7.14	8.16	9.18	10.20	20.39	30.59	40.78	50.98
140	1.10	2.20	3.29	4.39	5.49	6.59	7.69	8.78	9.88	10.98	21.96	32.94	43.92	54.90
150	1.18	2.35	3.53	4.71	5.88	7.06	8.24	9.41	10.59	11.76	23.53	35.29	47.06	58.82
160	1.25	2.51	3.76	5.02	6.27	7.53	8.78	10.04	11.29	12.55	25.10	37.65	50.20	62.74
170	1.33	2.67	4.00	5.33	6.67	8.00	9.33	10.67	12.00	13.33	26.67	40.00	53.33	66.67
180	1.41	2.82	4.24	5.65	7.06	8.47	9.88	11.29	12.71	14.12	28.23	42.35	56.47	70.59
190	1.49	2.98	4.47	5.96	7.45	8.94	10.43	11.92	13.41	14.90	29.80	44.71	59.61	74.51
200	1.57	3.14	4.71	6.27	7.84	9.41	10.98	12.55	14.12	15.69	31.37	47.06	62.74	78.43
210	1.65	3.29	4.94	6.59	8.24	9.88	11.53	13.18	14.82	16.47	32.94	49.41	65.88	82.35
220	1.73	3.45	5.18	6.90	8.63	10.35	12.08	13.80	15.53	17.25	34.51	51.76	69.02	86.27
230	1.80	3.61	5.41	7.22	9.02	10.82	12.63	14.43	16.24	18.04	36.08	54.12	72.16	90.19
240	1.88	3.76	5.65	7.53	9.41	11.29	13.18	15.06	16.94	18.82	37.65	56.47	75.29	94.12
250	1.96	3.92	5.88	7.84	9.80	11.76	13.73	15.69	17.65	19.61	39.22	58.82	78.43	98.04
260	2.04	4.08	6.12	8.16	10.20	12.24	14.27	16.31	18.35	20.39	40.78	61.18	81.57	101.96
270	2.12	4.24	6.35	8.47	10.59	12.71	14.82	16.94	19.06	21.18	42.35	63.53	84.70	105.88
280	2.20	4.39	6.59	8.78	10.98	13.18	15.37	17.57	19.76	21.96	43.92	65.88	87.84	109.80
290	2.27	4.55	6.82	9.10	11.37	13.65	15.92	18.20	20.47	22.74	45.49	68.23	90.98	113.72
300	2.35	4.71	7.06	9.41	11.76	14.12	16.47	18.82	21.18	23.53	47.06	70.59	94.12	117.65
310	2.43	4.86	7.29	9.73	12.16	14.59	17.02	19.45	21.88	24.31	48.63	72.94	97.25	121.57
320	2.51	5.02	7.53	10.04	12.55	15.06	17.57	20.08	22.59	25.10	50.20	75.29	100.39	125.49
330	2.59	5.18	7.76	10.35	12.94	15.53	18.12	20.71	23.29	25.88	51.76	77.65	103.53	129.41
340	2.67	5.33	8.00	10.67	13.33	16.00	18.67	21.33	24.00	26.67	53.33	80.00	106.66	133.33
350	2.75	5.49	8.24	10.98	13.73	16.47	19.22	21.96	24.71	27.45	54.90	82.35	109.80	137.25
360	2.82	5.65	8.47	11.29	14.12	16.94	19.76	22.59	25.41	28.23	56.47	84.70	112.94	141.17
370	2.90	5.80	8.71	11.61	14.51	17.41	20.31	23.22	26.12	29.02	58.04	87.06	116.08	145.10
380	2.98	5.96	8.94	11.92	14.90	17.88	20.86	23.84	26.82	29.80	59.61	89.41	119.21	149.02
390	3.06	6.12	9.18	12.24	15.29	18.35	21.41	24.47	27.53	30.59	61.18	91.76	122.35	152.94
400	3.14	6.27	9.41	12.55	15.69	18.82	21.96	25.10	28.23	31.37	62.74	94.12	125.49	156.86
410	3.22	6.43	9.65	12.86	16.08	19.29	22.51	25.73	28.94	32.16	64.31	96.47	128.63	160.78
420	3.29	6.59	9.88	13.18	16.47	19.76	23.06	26.35	29.65	32.94	65.88	98.82	131.76	164.70
430	3.37	6.74	10.12	13.49	16.86	20.23	23.61	26.98	30.35	33.72	67.45	101.17	134.90	168.62
440	3.45	6.90	10.35	13.80	17.25	20.71	24.16	27.61	31.06	34.51	69.02	103.53	138.04	172.55
450	3.53	7.06	10.59	14.12	17.65	21.18	24.71	28.23	31.76	35.29	70.59	105.88	141.17	176.47
460	3.61	7.22	10.82	14.43	18.04	21.65	25.25	28.86	32.47	36.08	72.16	108.23	144.31	180.39
470	3.69	7.37	11.06	14.74	18.43	22.12	25.80	29.49	33.18	36.86	73.72	110.59	147.45	184.31
480	3.76	7.53	11.29	15.06	18.82	22.59	26.35	30.12	33.88	37.65	75.29	112.94	150.59	188.23
490	3.84	7.69	11.53	15.37	19.22	23.06	26.90	30.74	34.59	38.43	76.86	115.29	153.72	192.15
500	3.92	7.84	11.76	15.69	19.61	23.53	27.45	31.37	35.29	39.22	78.43	117.65	156.86	196.08

* Basic value : Mild steel 7,843 kg/m³

For mass of cast iron bars, multiply the mass of steel bars by 0.919.

For mass of wrought iron bars, multiply the mass of steel bars by 0.991.

For mass of brass bars, multiply the mass of steel bars by 1.072.

For mass of copper bars, multiply the mass of steel bars by 1.134.

For mass of lead bars, multiply the mass of steel bars by 1.454.

TABLE 10

MASS (WEIGHT) OF BS 4190 ISO METRIC BLACK BOLTS WITH NUT

Length under head (mm)	Approximate mass in kilogrammes per 1,000 bolts complete including hexagon head and one nut each										
	Nominal size of bolt										
	M6	M8	M10	M12	M16	M20	M24	M30	M36	M42	M48
25	8.97	18.70	36.60	52.50	-	-	-	-	-	-	-
30	10.10	20.70	39.10	56.10	107.00	186.00	-	-	-	-	-
35	11.20	22.70	42.20	59.70	114.00	196.00	-	-	-	-	-
40	12.30	24.70	45.30	64.10	121.00	207.00	347.00	-	-	-	-
45	13.40	26.70	48.40	68.50	128.00	217.00	362.00	-	-	-	-
50	14.50	28.70	51.50	72.90	136.00	227.00	377.00	-	-	-	-
55	15.60	30.70	54.60	77.30	144.00	238.00	392.00	-	-	-	-
60	16.70	32.70	57.70	81.70	152.00	251.00	407.00	-	-	-	-
65	17.80	34.70	60.80	86.10	160.00	264.00	422.00	-	-	-	-
70	18.90	36.70	63.90	90.50	168.00	277.00	440.00	-	-	-	-
75	20.00	38.70	67.00	95.00	176.00	290.00	458.00	-	-	-	-
80	21.10	40.70	70.10	100.00	182.00	303.00	476.00	853.00	-	-	-
90	-	44.70	76.30	109.00	198.00	329.00	511.00	908.00	-	-	-
100	-	48.70	82.50	118.00	214.00	355.00	547.00	963.00	1,520.00	-	-
110	-	-	88.70	127.00	230.00	381.00	-	-	-	-	-
120	-	-	94.90	136.00	246.00	407.00	618.00	1,070.00	1,680.00	2,450.00	-
130	-	-	101.00	145.00	262.00	433.00	-	-	-	-	-
140	-	-	107.00	154.00	278.00	459.00	689.00	1,180.00	1,840.00	2,670.00	-
150	-	-	113.00	163.00	294.00	485.00	725.00	1,230.00	1,920.00	2,780.00	3,860.00
160	-	-	119.00	172.00	310.00	501.00	760.00	1,290.00	2,000.00	2,890.00	4,000.00
170	-	-	125.00	181.00	326.00	527.00	-	-	-	-	-
180	-	-	131.00	190.00	342.00	553.00	831.00	1,400.00	2,160.00	3,110.00	4,280.00
190	-	-	137.00	199.00	358.00	579.00	-	-	-	-	-
200	-	-	143.00	208.00	374.00	605.00	902.00	1,510.00	2,320.00	3,330.00	4,560.00
Add for extra nut per 1,000	2.32	4.82	10.90	15.90	30.80	60.30	103.00	216.00	369.00	610.00	924.00

Note : -

For mass of stainless steel bolts, multiply by the mass of black bolts by factor : 7881/7843

TABLE 11
MASS (WEIGHT) OF STEEL CUP-HEADED RIVETS

Length under head (mm)	Approximate mass in kilogrammes per 1,000						
	Diameter of rivet (mm)						
	10	12	16	20	22	24	27
25	21.50	31.90	-	-	-	-	-
30	24.60	36.30	71.00	125.00	-	-	-
35	27.70	40.80	78.80	137.00	-	-	-
40	30.80	45.20	86.70	149.00	186.00	238.00	-
45	33.80	49.70	94.60	162.00	201.00	255.00	-
50	36.90	54.10	103.00	174.00	216.00	273.00	-
55	40.00	58.50	110.00	186.00	231.00	291.00	-
60	43.10	63.00	118.00	199.00	246.00	309.00	386.00
65	46.20	67.40	126.00	211.00	261.00	326.00	408.00
70	49.30	71.80	134.00	223.00	276.00	344.00	431.00
75	52.30	76.30	142.00	236.00	291.00	362.00	453.00
80	55.40	80.70	150.00	248.00	306.00	380.00	476.00
90	-	89.60	166.00	273.00	335.00	415.00	521.00
100	-	98.50	181.00	297.00	365.00	451.00	566.00
110	-	-	197.00	322.00	395.00	486.00	611.00
120	-	-	213.00	347.00	425.00	522.00	656.00
130	-	-	-	371.00	455.00	557.00	700.00
140	-	-	-	396.00	485.00	593.00	745.00
150	-	-	-	-	514.00	628.00	790.00
160	-	-	-	-	554.00	664.00	835.00
170	-	-	-	-	574.00	699.00	880.00
180	-	-	-	-	604.00	735.00	925.00
190	-	-	-	-	-	770.00	970.00
200	-	-	-	-	-	806.00	1,050.00
Approx. mass in kg of 1,000 heads	6.10	9.70	23.60	50.60	66.80	95.50	116.20
Variation in mass of 1,000 rivets per mm of length	0.62	0.89	1.58	2.47	2.98	3.55	4.49

TABLE 12

**MASS (WEIGHT) OF ROLLED STEEL
EQUAL ANGLES**

Designation		Mass/unit length (kg/m)
Size (mm)	Thickness (mm)	
25 x 25	3	1.11
25 x 25	4	1.45
25 x 25	5	1.77
30 x 30	3	1.36
30 x 30	4	1.78
30 x 30	5	2.18
40 x 40	4	2.42
40 x 40	5	2.97
40 x 40	6	3.52
45 x 45	4	2.74
45 x 45	5	3.38
45 x 45	6	4.00
50 x 50	5	3.77
50 x 50	6	4.47
50 x 50	8	5.82
60 x 60	5	4.57
60 x 60	6	5.42
60 x 60	8	7.09
60 x 60	10	8.69
70 x 70	6	6.38
70 x 70	8	8.36
70 x 70	10	10.30
80 x 80	6	7.34
80 x 80	8	9.63
80 x 80	10	11.90
90 x 90	6	8.30
90 x 90	8	10.90
90 x 90	10	13.40
90 x 90	12	15.90
100 x 100	8	12.20
100 x 100	12	17.80
100 x 100	15	21.90
120 x 120	8	14.70
120 x 120	10	18.20
120 x 120	12	21.60
120 x 120	15	26.60
150 x 150	10	23.00
150 x 150	12	27.30
150 x 150	15	33.80
150 x 150	18	40.10
200 x 200	16	48.50
200 x 200	18	54.20
200 x 200	20	59.90
200 x 200	24	71.10

TABLE 13

**MASS (WEIGHT) OF ROLLED STEEL
UNEQUAL ANGLES**

Designation		Mass/unit length (kg/m)
Size (mm)	Thickness (mm)	
40 x 25	4	1.93
60 x 30	5	3.37
60 x 30	6	3.99
65 x 50	5	4.35
65 x 50	6	5.16
65 x 50	8	6.75
75 x 50	6	5.65
75 x 50	8	7.39
80 x 60	6	6.37
80 x 60	7	7.36
80 x 60	8	8.34
100 x 65	7	8.77
100 x 65	8	9.94
100 x 65	10	12.30
100 x 75	8	10.60
100 x 75	10	13.00
100 x 75	12	15.40
125 x 75	8	12.20
125 x 75	10	15.00
125 x 75	12	17.80
150 x 75	10	17.00
150 x 75	12	20.20
150 x 75	15	24.80
150 x 90	10	18.20
150 x 90	12	21.60
150 x 90	15	26.60
200 x 100	10	23.00
200 x 100	12	27.30
200 x 100	15	33.70
200 x 150	12	32.00
200 x 150	15	39.60
200 x 150	18	47.10

TABLE 14

**MASS (WEIGHT) OF ROLLED STEEL
SHORT STALK T-BARS**

Designation		
Nominal size (mm) [inches]		Mass/unit length (kg/m)
152 x 152 [6 x 6]		36.09 29.23
152 x 102 [6 x 4]		29.78 24.16
152 x 76 [6 x 3]		21.63 16.50
127 x 102 [5 x 4]		21.63 16.45
127 x 76 [5 x 3]		19.09 14.59
102 x 102 [4 x 4]		19.04 14.53
102 x 76 [4 x 3]		16.50 12.66
76 x 76 [3 x 3]		10.73
64 x 64 [2-1/2 x 2-1/2]		8.81 6.08
51 x 51 [2 x 2]		4.76
38 x 38 [1-1/2 x 1-1/2]		3.49

TABLE 15

**MASS (WEIGHT) OF ROLLED STEEL
UNIVERSAL COLUMNS**

Designation			Nominal size (mm)
Serial size (mm) [inches]		Mass/unit length (kg/m)	
356 x 406 [14 x 16]		634.00	475 x 424
		551.00	456 x 418
		467.00	437 x 412
		393.00	419 x 407
		340.00	406 x 403
		287.00	394 x 399
		235.00	381 x 395
356 x 368 [14 x 14-1/2]		477.00	427 x 424
		202.00	375 x 374
		177.00	368 x 372
		153.00	362 x 370
305 x 305 [12 x 12]		129.00	356 x 368
		283.00	365 x 322
		240.00	353 x 318
		198.00	340 x 314
		158.00	327 x 311
254 x 254 [10 x 10]		137.00	320 x 309
		118.00	314 x 307
		97.00	308 x 305
		167.00	289 x 264
		132.00	276 x 261
		107.00	267 x 258
203 x 203 [8 x 8]		89.00	260 x 256
		73.00	254 x 254
		86.00	222 x 209
		71.00	216 x 206
		60.00	210 x 205
152 x 152 [6 x 6]		52.00	206 x 204
		46.00	203 x 203
		37.00	162 x 154
		30.00	158 x 153
	23.00	152 x 152	

TABLE 16

**MASS (WEIGHT) OF ROLLED STEEL
JOISTS WITH 5 DEGREE
TAPERED FLANGES**

Designation		
Nominal size (mm) [inches]		Mass/unit length (kg/m)
203 x 102 [8 x 4]		25.33
178 x 102 [7 x 4]		21.54
152 x 89 [6 x 3-1/2]		17.09
127 x 76 [5 x 3]		13.36
102 x 64 [4 x 2-1/2]		9.65
76 x 51 [3 x 2]		6.67

TABLE 17

**MASS (WEIGHT) OF ROLLED STEEL
UNIVERSAL BEARING PILES**

Designation			Nominal size (mm)
Serial size (mm) [inches]		Mass/unit length (kg/m)	
356 x 368 [14 x 14-1/2]		174.00	362 x 378
		152.00	356 x 376
		133.00	352 x 373
		109.00	346 x 370
305 x 305 [12 x 12]		110.00	308 x 310
		79.00	299 x 306
254 x 254 [10 x 10]		85.00	254 x 260
		63.00	247 x 256
203 x 203 [8 x 8]		54.00	204 x 207

TABLE 18

MASS (WEIGHT) OF ROLLED STEEL UNIVERSAL BEAMS

Designation			Designation		
Serial size (mm) [inches]	Mass/unit length (kg/m)	Nominal size (mm)	Serial size (mm) [inches]	Mass/unit length (kg/m)	Nominal size (mm)
914 x 419 [36 x 16-1/2]	388.00	920 x 420	457 x 152 [18 x 6]	82.00	465 x 154
	343.00	911 x 418		74.00	461 x 153
914 x 305 [36 x 12]	289.00	927 x 308		67.00	457 x 152
	253.00	918 x 306		60.00	455 x 153
	224.00	910 x 304		52.00	450 x 152
	201.00	903 x 303	406 x 178 [16 x 7]	74.00	413 x 180
838 x 292 [33 x 11-1/2]	226.00	851 x 294		67.00	409 x 179
	194.00	841 x 292		60.00	406 x 178
	176.00	835 x 292		54.00	403 x 178
762 x 267 [30 x 10-1/2]	197.00	770 x 268	406 x 152 [16 x 6]	74.00	416 x 154
	173.00	762 x 267		67.00	412 x 153
	147.00	754 x 265		60.00	408 x 152
686 x 254 [27 x 10]	170.00	693 x 256	406 x 140 [16 x 5-1/2]	46.00	402 x 142
	152.00	688 x 254		39.00	397 x 142
	140.00	684 x 254	381 x 152 [15 x 6]	67.00	389 x 154
	125.00	678 x 253		60.00	385 x 153
610 x 305 [24 x 12]	238.00	633 x 312		52.00	381 x 152
	179.00	618 x 307	356 x 171 [14 x 6-3/4]	67.00	364 x 173
	149.00	610 x 305		57.00	359 x 172
610 x 229 [24 x 9]	140.00	617 x 230		51.00	356 x 172
	125.00	612 x 229		45.00	352 x 171
	113.00	607 x 228	356 x 127 [14 x 5]	39.00	353 x 126
	101.00	602 x 228		33.00	348 x 125
610 x 178 [24 x 7]	91.00	602 x 178	305 x 165 [12 x 6-1/2]	54.00	311 x 167
	82.00	598 x 178		46.00	307 x 166
533 x 330 [21 x 13]	212.00	545 x 334		40.00	304 x 165
	189.00	540 x 332	305 x 127 [12 x 5]	48.00	310 x 125
	167.00	533 x 330		42.00	307 x 124
533 x 210 [21 x 8-1/4]	122.00	545 x 212		37.00	304 x 124
	109.00	540 x 211	305 x 102 [12 x 4]	33.00	313 x 102
	101.00	537 x 210		28.00	309 x 102
	92.00	533 x 209		25.00	305 x 102
	82.00	528 x 209	254 x 146 [10 x 5-3/4]	43.00	260 x 147
533 x 165 [21 x 6-1/2]	73.00	529 x 166		37.00	256 x 146
	66.00	525 x 165		31.00	252 x 146
457 x 191 [18 x 7-1/2]	98.00	467 x 193	254 x 102 [10 x 4]	28.00	260 x 102
	89.00	464 x 192		25.00	257 x 102
	82.00	460 x 191		22.00	254 x 102
	74.00	457 x 190	203 x 133 [8 x 5-1/4]	30.00	207 x 134
	67.00	454 x 190		25.00	203 x 133

TABLE 19

MASS (WEIGHT) OF ROLLED STEEL CHANNELS

Designation			Designation		
Nominal size (mm)	Mass/unit length (kg/m)	Imperial size [inches]	Nominal size (mm)	Mass/unit length (kg/m)	Imperial size [inches]
432 x 102	66.54	[17 x 4]	203 x 76	23.82	[8 x 3]
381 x 102	55.10	[15 x 4]	178 x 89	26.81	[7 x 3-1/2]
305 x 102	46.18	[12 x 4]	178 x 76	20.84	[7 x 3]
305 x 89	41.69	[12 x 3-1/2]	152 x 89	23.84	[6 x 3-1/2]
254 x 89	35.74	[10 x 3-1/2]	152 x 76	17.88	[6 x 3]
254 x 76	28.59	[10 x 3]	127 x 64	14.90	[5 x 2-1/2]
229 x 89	32.76	[9 x 3-1/2]	102 x 51	10.42	[4 x 2]
229 x 76	26.06	[9 x 3]	76 x 38	6.70	[3 x 1-1/2]
203 x 89	29.78	[8 x 3-1/2]			

TABLE 20

**MASS (WEIGHT) OF ROLLED STEEL
ROUND HOLLOW TUBES**

Diameter (mm)	Thickness (mm)	Mass/unit length (kg/m)
21.30	3.20	1.43
26.90	3.20	1.87
33.70	2.60	1.99
	3.20	2.41
	4.00	2.93
42.40	2.60	2.55
	3.20	3.09
	4.00	3.79
48.30	3.20	3.56
	4.00	4.37
	5.00	5.34
60.30	3.20	4.51
	4.00	5.55
	5.00	6.82
76.10	3.20	5.75
	4.00	7.11
	5.00	8.77
88.90	3.20	6.76
	4.00	8.38
	5.00	10.30
114.30	3.60	9.83
	5.00	13.50
	6.30	16.80
139.70	5.00	16.60
	6.30	20.70
	8.00	26.00
	10.00	32.00
168.30	5.00	20.10
	6.30	25.20
	8.00	31.60
	10.00	39.00
193.70	5.40	25.10
	6.30	29.10
	8.00	36.60
	10.00	45.30
	12.50	55.90
219.10	16.00	70.10
	6.30	33.10
	8.00	41.60
	10.00	51.60
	12.50	63.70
219.10	16.00	80.10
	20.00	98.20

Diameter (mm)	Thickness (mm)	Mass/unit length (kg/m)
244.50	6.30	37.00
	8.00	46.70
	10.00	57.80
	12.50	71.50
	16.00	90.20
	20.00	111.00
273.00	6.30	41.40
	8.00	52.30
	10.00	64.90
	12.50	80.30
	16.00	101.00
	20.00	125.00
323.90	25.00	153.00
	8.00	62.30
	10.00	77.40
	12.50	96.00
	16.00	121.00
355.60	20.00	150.00
	25.00	184.00
	8.00	68.60
	10.00	85.20
	12.50	106.00
406.40	16.00	134.00
	20.00	166.00
	25.00	204.00
	10.00	97.80
	12.50	121.00
457.00	16.00	154.00
	20.00	191.00
	25.00	235.00
	32.00	295.00
	10.00	110.00
	12.50	137.00
	16.00	174.00
20.00	216.00	
25.00	266.00	
32.00	335.00	
40.00	411.00	

TABLE 21

**MASS (WEIGHT) OF ROLLED STEEL
SQUARE HOLLOW SECTIONS**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
20 x 20	2.00	1.12
	2.60	1.39
30 x 30	2.60	2.21
	3.20	2.65
40 x 40	2.60	3.03
	3.20	3.66
	4.00	4.46
50 x 50	3.20	4.66
	4.00	5.72
	5.00	6.97
60 x 60	3.20	5.67
	4.00	6.97
	5.00	8.54
70 x 70	3.60	7.46
	5.00	10.10
80 x 80	3.60	8.59
	5.00	11.70
	6.30	14.40
90 x 90	3.60	9.72
	5.00	13.30
	6.30	16.40
100 x 100	4.00	12.00
	5.00	14.80
	6.30	18.40
	8.00	22.90
	10.00	27.90
120 x 120	5.00	18.00
	6.30	22.30
	8.00	27.90
	10.00	34.20
150 x 150	5.00	22.70
	6.30	28.30
	8.00	35.40
	10.00	43.60
	12.50	53.40
180 x 180	6.30	34.20
	8.00	43.00
	10.00	53.00
	12.50	65.20
	16.00	81.40
200 x 200	6.30	38.20
	8.00	48.00
	10.00	59.30
	12.50	73.00
	16.00	91.50
250 x 250	6.30	48.10
	8.00	60.50
	10.00	75.00
	12.50	92.60
300 x 300	10.00	117.00
	12.50	142.00
	16.00	177.00
350 x 350	10.00	106.00
	12.50	132.00
	16.00	167.00
400 x 400	10.00	122.00
	12.50	152.00
	16.00	192.00

TABLE 22

**MASS (WEIGHT) OF ROLLED STEEL
RECTANGULAR HOLLOW SECTIONS**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
50 x 30	2.60	3.03
	3.20	3.66
60 x 40	3.20	4.66
	4.00	5.72
80 x 40	3.20	5.67
	4.00	6.97
90 x 50	3.60	7.46
	5.00	10.10
100 x 50	3.20	7.18
	4.00	8.86
	5.00	10.90
100 x 60	3.60	8.59
	5.00	11.70
	6.30	14.40
120 x 60	3.60	9.72
	5.00	13.30
	6.30	16.40
120 x 80	5.00	14.80
	6.30	18.40
	8.00	22.90
	10.00	27.90
150 x 100	5.00	18.70
	6.30	23.30
	8.00	29.10
	10.00	35.70
160 x 80	5.00	18.00
	6.30	22.30
	8.00	27.90
	10.00	34.20
200 x 100	5.00	22.70
	6.30	28.30
	8.00	35.40
	10.00	43.60
	12.50	53.40
250 x 150	6.30	38.20
	8.00	48.00
	10.00	59.30
	12.50	73.00
	16.00	91.50
300 x 200	6.30	48.10
	8.00	60.50
	10.00	75.00
	12.50	92.60
	16.00	117.00
400 x 200	10.00	90.70
	12.50	112.00
	16.00	142.00
450 x 250	10.00	106.00
	12.50	132.00
	16.00	167.00

TABLE 23

MASS (WEIGHT) OF SOLID ALUMINIUM ROUND BARS

Diameter (mm)	Mass/unit length (kg/m)
5.00	0.054
6.35	0.086
6.73	0.097
7.14	0.109
7.92	0.134
8.74	0.162
9.14	0.178
9.52	0.193
10.31	0.226
11.10	0.263
11.89	0.301
12.70	0.344
14.27	0.434
15.06	0.484
15.87	0.537

Diameter (mm)	Mass/unit length (kg/m)
17.45	0.649
19.05	0.772
19.84	0.838
20.62	0.906
21.44	0.979
22.22	1.052
23.80	1.207
25.40	1.375
26.97	1.552
28.19	1.694
28.58	1.740
30.15	1.936
31.75	2.147
33.32	2.366
34.92	2.598

Diameter (mm)	Mass/unit length (kg/m)
35.99	2.760
36.50	2.838
38.10	3.092
44.45	4.210
46.99	4.656
47.62	4.832
50.80	5.497
52.98	6.207
57.15	6.959
60.32	7.753
63.50	8.590
69.85	10.387
76.20	12.359

TABLE 24

MASS (WEIGHT) OF SOLID ALUMINIUM SQUARE BARS

Size (mm)	Mass/unit length (kg/m)
6.35	0.109
7.92	0.171
9.52	0.244

Size (mm)	Mass/unit length (kg/m)
12.19	0.403
12.70	0.438
15.88	0.682

Size (mm)	Mass/unit length (kg/m)
19.05	0.984
22.22	1.341
25.40	1.750

TABLE 25

**MASS (WEIGHT) OF SOLID
ALUMINIUM FLATS**

Size (mm)	Mass/unit length (kg/m)
6.35 x 3.18	0.054
9.52 x 2.36	0.061
9.52 x 3.18	0.082
9.52 x 6.35	0.016
10.10 x 2.01	0.055
11.10 x 3.96	0.118
11.10 x 6.35	0.190
12.70 x 1.57	0.054
12.70 x 2.36	0.080
12.70 x 3.18	0.109
12.70 x 4.75	0.164
12.70 x 6.35	0.219
14.00 x 3.00	0.113
15.88 x 1.57	0.067
15.88 x 2.36	0.101
15.88 x 3.18	0.137
15.88 x 4.75	0.204
15.88 x 6.35	0.272
15.88 x 9.52	0.409
17.45 x 3.18	0.150
17.45 x 4.75	0.223
17.45 x 6.35	0.301
18.24 x 8.74	0.427
18.64 x 4.37	0.219
19.05 x 1.57	0.082
19.05 x 2.36	0.122
19.05 x 3.18	0.164
19.05 x 4.75	0.246
19.05 x 6.35	0.329
19.05 x 9.07	0.491
19.99 x 3.00	0.162
22.22 x 3.18	0.192
22.22 x 6.35	0.381
22.22 x 9.52	0.574
23.80 x 3.18	0.205
23.80 x 6.35	0.409
23.80 x 9.52	0.615
24.99 x 8.00	0.543
25.40 x 1.57	0.109
25.40 x 2.36	0.162
25.40 x 3.18	0.219
25.40 x 4.75	0.327
25.40 x 6.35	0.438
25.40 x 7.92	0.546
25.40 x 9.52	0.656
25.40 x 12.70	0.875
25.40 x 15.88	1.094

Size (mm)	Mass/unit length (kg/m)
25.40 x 19.05	1.312
25.58 x 3.18	0.242
25.58 x 6.35	0.491
31.75 x 1.60	0.138
31.75 x 3.18	0.274
31.75 x 4.75	0.409
31.75 x 6.35	0.546
31.75 x 9.52	0.820
31.75 x 12.70	1.089
34.92 x 3.18	0.301
34.92 x 6.35	0.582
34.92 x 9.52	0.903
34.92 x 12.70	1.204
38.10 x 1.57	0.162
38.10 x 2.36	0.244
38.10 x 3.18	0.327
38.10 x 4.75	0.490
38.10 x 6.35	0.656
38.10 x 9.52	0.982
38.10 x 12.70	1.310
38.10 x 15.88	1.640
38.10 x 19.05	1.964
38.10 x 25.40	2.625
41.28 x 3.18	0.356
41.28 x 6.35	0.711
41.28 x 9.52	1.065
44.45 x 3.18	0.382
44.45 x 6.35	0.765
44.45 x 9.52	1.149
44.45 x 12.70	1.531
50.80 x 1.57	0.217
50.80 x 3.18	0.438
50.80 x 4.75	0.655
50.80 x 6.35	0.875
50.80 x 9.52	1.312
50.80 x 12.70	1.750
50.80 x 15.88	2.188
57.15 x 2.29	0.354
57.15 x 3.18	0.492
57.15 x 6.35	0.984
57.15 x 9.52	1.476
57.15 x 12.70	1.969
57.15 x 19.05	2.952
59.44 x 3.56	0.573
63.37 x 19.30	3.319
63.50 x 1.57	0.271
63.50 x 2.36	0.406

Size (mm)	Mass/unit length (kg/m)
63.50 x 3.18	0.546
63.50 x 6.35	1.094
63.50 x 9.52	1.644
63.50 x 12.70	2.188
63.50 x 19.05	3.281
69.85 x 3.18	0.601
69.85 x 4.75	0.952
69.85 x 6.35	1.204
69.85 x 9.52	1.804
69.85 x 12.70	2.406
69.85 x 15.88	3.008
76.20 x 1.57	0.324
76.20 x 3.18	0.658
76.20 x 6.35	1.312
76.20 x 9.52	1.969
76.20 x 12.70	2.619
76.20 x 19.05	3.938
82.55 x 3.18	0.665
82.55 x 6.35	1.423
82.55 x 12.70	2.844
88.90 x 3.18	0.765
88.90 x 6.35	1.531
88.90 x 9.52	2.296
88.90 x 12.70	3.063
95.25 x 3.18	0.821
95.25 x 6.35	1.641
95.25 x 9.52	2.461
95.25 x 12.70	3.281
101.60 x 3.18	0.875
101.60 x 6.35	1.750
101.60 x 9.52	2.619
101.60 x 31.75	8.750
114.30 x 2.03	0.629
114.30 x 6.35	1.969
114.30 x 9.52	2.952
114.30 x 12.70	3.929
127.00 x 6.35	2.188
127.00 x 9.52	3.289
127.00 x 12.70	4.375
127.00 x 19.05	6.563
133.35 x 6.35	2.274
139.70 x 6.35	2.406
146.05 x 6.35	2.490
152.40 x 3.18	1.302
152.40 x 6.35	2.625
152.40 x 9.52	3.938

TABLE 26

**MASS (WEIGHT) OF
ALUMINIUM EQUAL ANGLES**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
9.52	1.19	0.058
9.52	1.57	0.076
12.70	1.02	0.067
12.70	1.19	0.079
12.70	1.57	0.101
12.70	2.36	0.147
12.70	3.18	0.192
15.88	1.57	0.129
15.88	3.18	0.244
15.88	4.75	0.351
19.05	1.19	0.119
19.05	1.57	0.156
19.05	2.39	0.231
19.05	3.18	0.301
20.22	1.17	0.124
22.22	3.18	0.356
25.40	1.19	0.161
25.40	1.57	0.210
25.40	2.36	0.308
25.40	3.18	0.409
25.40	6.35	0.766
28.58	3.18	0.464
31.75	1.57	0.266
31.75	3.18	0.521
31.75	6.35	0.967
34.92	3.18	0.574
38.10	1.57	0.318
38.10	3.18	0.629
38.10	4.75	0.918
38.10	6.35	1.202
44.45	3.18	0.738
44.45	6.35	1.421
50.00	3.00	0.789
50.00	5.00	1.290
50.80	1.60	0.432
50.80	2.36	0.635
50.80	3.18	0.845
50.80	4.75	1.244
50.80	6.35	1.640
63.50	3.18	1.066
63.50	6.35	2.068
63.50	7.92	2.564
76.20	6.35	2.502
80.01	5.99	2.504
80.01	10.01	4.073

TABLE 27

**MASS (WEIGHT) OF
ALUMINIUM UNEQUAL ANGLES**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
12.70 x 6.35	3.18	0.137
15.88 x 12.70	3.18	0.219
19.05 x 6.35	3.18	0.190
19.05 x 9.52	3.18	0.219
19.05 x 12.70	1.19	0.100
19.05 x 12.70	1.57	0.129
19.05 x 12.70	3.18	0.247
22.22 x 12.70	1.19	0.109
22.22 x 12.70	3.18	0.274
25.40 x 12.70	1.19	0.119
25.40 x 12.70	1.57	0.158
25.40 x 12.70	2.36	0.231
25.40 x 12.70	3.18	0.301
25.40 x 19.05	3.18	0.356
31.75 x 12.70	1.19	0.140
31.75 x 12.70	1.57	0.183
31.75 x 12.70	2.36	0.272
31.75 x 12.70	3.18	0.186
31.75 x 19.05	2.08	0.275
31.75 x 19.05	3.18	0.409
31.75 x 25.40	3.18	0.464
38.10 x 11.10	1.57	0.204
38.10 x 12.70	1.19	0.161
38.10 x 12.70	1.27	0.170
38.10 x 12.70	1.57	0.210
38.10 x 12.70	2.36	0.311
38.10 x 12.70	3.18	0.409
38.10 x 19.05	2.36	0.354
38.10 x 19.05	3.18	0.464
38.10 x 25.40	1.57	0.265
38.10 x 25.40	2.36	0.391
38.10 x 25.40	3.18	0.521
38.10 x 31.75	3.18	0.574
44.45 x 12.70	1.57	0.234
44.45 x 12.70	3.18	0.464
44.45 x 25.40	1.57	0.292
44.45 x 25.40	2.36	0.432
44.45 x 25.40	3.18	0.574
47.72 x 15.88	3.18	0.516
50.80 x 12.70	1.19	0.202
50.80 x 12.70	1.57	0.265
50.80 x 12.70	2.36	0.391
50.80 x 12.70	3.18	0.519
50.80 x 19.05	3.18	0.574
50.80 x 25.40	1.57	0.318
50.80 x 25.40	3.18	0.626
50.80 x 38.10	3.18	0.729
63.50 x 12.70	2.54	0.507
63.50 x 25.40	3.18	0.740
63.50 x 38.10	6.35	1.637
76.20 x 12.70	1.60	0.379
76.20 x 12.70	2.36	0.555
76.20 x 25.40	3.18	0.847
76.20 x 31.75	3.18	0.903
88.90 x 25.40	6.35	1.845
88.90 x 44.45	3.18	1.122

TABLE 28

MASS (WEIGHT) OF ALUMINIUM CHANNELS

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
7.14 x 5.16	1.19	0.049
7.39 x 5.99	1.29	0.051
7.77 x 5.54	1.52	0.065
7.92 x 12.70	1.57	0.129
9.53 x 9.53	1.19	0.085
9.53 x 9.53	1.57	0.109
11.94 x 15.24	2.36	0.239
12.70 x 9.53	1.57	0.122
12.70 x 9.53	3.18	0.219
12.70 x 12.70	1.57	0.149
12.70 x 12.70	2.36	0.214
12.70 x 19.05	1.57	0.202
12.70 x 19.05	2.36	0.293
12.70 x 19.05	3.18	0.384
14.23 x 4.75	2.36	0.122
15.87 x 3.96	1.57	0.087
15.88 x 12.70	3.18	0.301
15.88 x 15.88	1.57	0.190
15.88 x 15.88	1.60	0.192
15.88 x 25.40	3.18	0.519
17.45 x 11.10	3.18	0.286
19.05 x 9.53	1.57	0.149
19.05 x 9.53	2.54	0.228
19.05 x 12.70	1.19	0.137
19.05 x 12.70	2.54	0.271
19.05 x 19.05	1.57	0.231
19.05 x 19.05	3.18	0.437
19.05 x 38.10	3.18	0.763
22.22 x 12.79	1.19	0.147
25.40 x 12.70	1.57	0.202
25.40 x 19.05	2.36	0.379
25.40 x 25.40	3.18	0.601
25.40 x 38.10	3.18	0.818
31.75 x 12.70	1.19	0.180
31.75 x 12.70	3.40	0.466
31.75 x 25.40	2.36	0.498
31.75 x 25.40	3.18	0.656
31.75 x 41.28	3.18	0.930

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
34.92 x 6.35	1.57	0.190
38.10 x 12.70	1.57	0.257
38.10 x 12.70	2.36	0.376
38.10 x 19.05	3.18	0.602
38.10 x 25.40	1.57	0.366
38.10 x 38.10	3.18	0.930
38.10 x 69.85	1.78	0.841
44.45 x 15.88	3.18	0.602
44.45 x 25.40	3.18	0.766
50.80 x 12.70	1.14	0.229
50.80 x 12.70	1.57	0.311
50.80 x 12.70	2.36	0.457
50.80 x 12.70	3.18	0.601
50.80 x 25.40	1.57	0.419
50.80 x 25.40	2.03	0.537
50.80 x 25.40	3.18	0.812
50.80 x 25.40	9.50	1.186
50.80 x 50.80	3.18	1.257
53.97 x 6.53	1.57	0.271
57.15 x 12.70	1.57	0.445
63.50 x 12.70	2.36	0.580
63.50 x 15.88	3.18	0.766
63.50 x 22.22	3.18	0.875
63.50 x 38.10	3.18	1.147
70.00 x 25.00	3.00	0.928
76.20 x 12.70	1.60	0.427
76.20 x 12.70	2.36	0.620
76.20 x 12.70	3.18	0.818
76.20 x 25.40	2.36	0.783
76.20 x 25.40	3.18	1.040
76.20 x 38.10	2.54	1.015
76.20 x 44.45	2.36	1.028
95.25 x 25.40	3.18	2.689
100.00 x 20.00	1.75	0.649
101.60 x 25.40	2.03	0.817
101.60 x 38.10	3.18	1.473
127.00 x 69.85	3.18	2.232

TABLE 29

MASS (WEIGHT) OF ALUMINIUM TEE SECTIONS

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
12.70 x 12.70	3.18	0.190
15.88 x 15.88	3.18	0.245
19.05 x 19.05	1.57	0.156
19.05 x 19.05	3.18	0.305
19.05 x 31.75	3.18	0.409
25.40 x 19.05	1.57	0.180
25.40 x 25.40	1.57	0.211
25.40 x 25.40	3.18	0.409
25.40 x 30.15	1.57	0.231
25.40 x 31.75	3.18	0.466
25.40 x 38.10	1.57	0.262
25.40 x 38.10	3.18	0.519

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
28.58 x 38.10	3.18	0.549
31.75 x 19.05	2.08	0.275
31.75 x 25.40	3.18	0.466
38.10 x 25.40	2.39	0.396
38.10 x 25.40	3.96	0.641
38.10 x 38.10	3.18	0.629
38.10 x 38.10	6.35	1.201
50.80 x 19.05	3.18	0.574
50.80 x 25.40	3.18	0.629
50.80 x 38.10	3.18	0.738
50.80 x 50.80	4.75	1.247

TABLE 30
MASS (WEIGHT) OF ALUMINIUM ROUND HOLLOW TUBES

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
10.31	1.27	0.098
12.29	1.45	0.134
12.70	1.22	0.122
12.70	1.57	0.149
13.34	1.57	0.159
15.65	1.42	0.173
15.88	1.57	0.235
15.88	2.03	0.239
18.01	1.50	0.211
19.05	1.24	0.180
19.05	1.57	0.235
19.05	2.03	0.295
19.05	2.36	0.336
19.05	3.18	0.429
19.99	4.50	0.594
20.00	1.50	0.236
21.49	3.51	0.552
22.23	1.57	0.277
22.23	2.03	0.349
23.01	1.50	0.277
23.01	5.00	0.768
23.50	1.50	0.281
23.50	3.81	0.678
24.13	3.18	0.567
25.40	1.24	0.256
25.40	1.91	0.381
25.40	2.03	0.405
25.40	2.36	0.464
25.40	3.18	0.601
25.91	1.27	0.266
26.19	1.09	0.234
26.49	3.25	0.643
26.97	2.39	0.493
26.97	5.94	1.052
27.00	4.90	0.905
27.20	1.60	0.350
28.58	1.47	0.339
28.58	2.49	0.554
29.01	8.99	1.534
29.06	4.57	0.954
29.11	5.41	1.082
29.11	7.01	1.305
29.36	6.35	1.246
30.99	9.00	1.686
31.24	2.74	0.664
31.75	1.47	0.379
31.75	1.57	0.408

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
31.75	2.03	0.515
31.75	3.18	0.774
31.75	4.75	1.085
31.75	6.35	1.360
32.99	1.52	0.405
33.02	6.35	1.429
33.35	3.18	0.820
34.93	1.47	0.420
34.93	2.79	0.790
34.93	3.18	0.851
34.93	4.75	1.222
34.93	4.95	0.689
34.93	6.35	1.531
34.93	7.14	1.692
35.00	1.50	0.466
38.10	3.25	0.966
38.10	1.57	0.490
38.10	2.36	0.719
38.10	2.64	0.798
38.10	3.18	0.945
38.10	5.08	1.430
38.10	6.17	1.677
38.10	8.74	2.186
38.99	7.98	2.089
39.37	9.37	2.378
39.67	6.35	1.802
40.13	9.07	2.400
41.28	4.70	1.461
41.28	5.94	1.793
41.28	10.34	2.723
42.85	1.57	0.558
42.93	6.93	2.124
43.99	8.00	2.429
44.45	1.57	0.579
44.45	3.18	1.115
44.45	4.06	1.399
44.45	6.02	1.610
44.45	6.73	2.164
44.45	8.74	2.633
44.45	14.22	3.664
44.45	15.88	3.866
45.24	1.98	0.731
45.72	2.03	0.749
45.72	2.34	0.865
47.63	3.66	1.371
47.63	4.75	1.722
47.63	7.32	2.509

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
47.75	6.60	2.292
48.21	5.61	2.037
48.26	1.91	0.753
49.99	4.04	4.750
50.50	13.23	4.204
50.80	1.57	0.661
50.80	3.18	1.289
50.80	5.38	2.067
50.80	7.92	2.869
50.80	9.39	3.286
50.80	13.41	4.229
50.80	14.30	4.445
50.93	4.00	1.583
50.93	7.49	2.769
51.00	11.99	3.985
51.00	16.76	4.686
51.56	6.09	2.336
51.56	8.31	3.034
51.99	10.00	3.542
51.99	11.99	4.048
52.50	1.50	0.652
52.50	16.00	4.973
52.98	15.49	4.947
53.26	2.03	0.878
53.98	6.99	3.542
54.00	2.24	0.991
54.00	2.26	0.991
54.48	2.59	1.140
54.51	2.29	1.018
55.88	16.51	5.540
57.15	3.86	1.801
57.51	1.50	0.716
58.93	11.48	4.642
58.98	11.99	7.405
60.96	5.84	2.716
60.96	9.83	4.239
60.96	8.26	3.670
61.11	2.36	1.183
63.50	1.60	0.844
63.50	3.13	0.143
63.50	6.99	3.329
76.20	2.36	1.487
76.20	4.76	2.897
76.20	20.32	9.676
101.60	6.35	5.155
127.00	12.70	12.369

TABLE 31

**MASS (WEIGHT) OF ALUMINIUM
SQUARE HOLLOW SECTIONS**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
9.54	1.57	0.135
12.88	1.20	0.150
12.70	1.57	0.244
15.88	1.20	0.191
18.24	3.18	0.519
19.05	1.20	0.232
19.05	1.57	0.296
19.05	2.36	0.428
25.40	1.40	0.364
25.40	1.60	0.415
25.40	2.03	0.515
25.40	2.36	0.589
25.40	3.18	0.765
30.00	2.00	0.604
31.75	2.03	0.655
38.10	1.57	0.623
38.10	2.03	0.795
38.10	3.18	1.205
44.45	2.39	1.091
46.62	3.18	1.531
50.00	2.00	1.044
50.80	2.03	1.074
50.80	2.36	1.241
63.50	3.18	2.056
76.20	3.18	2.516
80.00	2.49	2.092

TABLE 32

**MASS (WEIGHT) OF ALUMINIUM
RECTANGULAR HOLLOW SECTIONS**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
12.70 x 9.85	1.59	0.165
25.40 x 12.70	1.60	0.302
25.40 x 12.70	1.20	0.232
31.75 x 19.05	2.36	0.591
36.10 x 19.05	2.36	0.673
38.10 x 25.40	1.40	0.461
38.10 x 25.40	2.03	0.655
38.10 x 25.40	2.54	0.811
47.63 x 23.80	3.18	1.122
50.00 x 40.00	2.00	0.933
50.80 x 25.40	1.40	0.557
50.80 x 25.40	1.57	0.624
50.80 x 25.40	2.03	0.795
50.80 x 25.40	2.36	0.917
50.80 x 38.10	1.60	0.744
50.80 x 38.10	2.03	0.935
50.80 x 38.10	2.36	1.016
63.50 x 31.75	2.36	1.161
63.50 x 38.10	2.54	1.327
63.50 x 38.10	3.18	1.652
69.85 x 31.75	3.18	1.641
76.20 x 25.40	1.80	0.957
76.20 x 25.40	2.36	1.241
76.20 x 38.10	3.18	1.860
76.20 x 44.45	1.80	1.143
76.20 x 44.45	2.36	1.439
76.20 x 44.45	3.18	1.958
76.20 x 50.80	2.36	1.567
76.20 x 50.80	3.18	2.076
80.00 x 20.00	2.00	1.045
80.00 x 40.00	2.00	1.258
80.00 x 50.00	2.50	1.688
82.55 x 28.58	2.36	1.360
100.00 x 40.00	2.50	1.823
101.60 x 25.40	1.80	1.205
101.60 x 25.40	2.03	1.354
101.60 x 25.40	2.36	1.567
101.60 x 38.10	3.18	2.292
101.60 x 44.45	1.80	1.391
101.60 x 44.45	1.98	1.529
101.60 x 44.45	2.36	1.813
101.60 x 44.45	3.18	2.403
101.60 x 60.33	2.36	2.015
127.00 x 25.40	2.36	1.894

TABLE 33

**MASS (WEIGHT) OF STAINLESS
STEEL FLAT BARS**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
19.05	3.00	0.450
19.05	6.00	0.901
25.40	3.00	0.601
25.40	6.00	1.201
31.80	3.00	0.751
31.80	3.60	0.901
31.80	6.00	1.802
50.80	6.00	2.402

TABLE 34

**MASS (WEIGHT) OF STAINLESS
STEEL ANGLES**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
9.52 x 9.52	1.00	0.142
12.70 x 12.70	1.00	0.192
19.05 x 19.05	1.00	0.292
25.40 x 25.40	1.00	0.392
12.70 x 25.40	1.00	0.293
38.10 x 38.10	3.00	1.731

TABLE 35

**MASS (WEIGHT) OF STAINLESS
STEEL CHANNELS**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
9.52 x 9.52	0.50	0.109
9.52 x 9.52	0.80	0.170
12.70 x 12.70	0.50	0.146
12.70 x 12.70	0.80	0.230
12.70 x 19.05	0.50	0.171
12.70 x 25.40	0.50	0.196
12.70 x 38.10	0.50	0.246
12.70 x 50.80	0.50	0.296
12.70 x 76.20	0.50	0.396
12.70 x 101.60	0.80	0.791

TABLE 36

**MASS (WEIGHT) OF STAINLESS
STEEL ROUND TUBES**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
9.52	0.80	0.173
12.70	1.00	0.290
15.87	0.80	0.298
19.05	1.00	0.447
19.05	1.20	0.530
25.40	1.00	0.604
25.40	1.50	0.888
31.75	1.00	0.761
31.75	1.50	1.123
38.10	1.50	1.359
44.45	1.50	1.595
50.80	1.50	1.831
60.32	1.50	2.184

TABLE 37

**MASS (WEIGHT) OF STAINLESS
STEEL SQUARE HOLLOW SECTIONS**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
19.05	1.00	0.569
25.40	1.00	0.769
12.70	1.00	0.369
19.05	1.00	0.569
25.40	1.20	0.915
31.75	1.20	1.156
38.10	1.20	1.396
50.80	1.20	1.876

TABLE 38

**MASS (WEIGHT) OF STAINLESS STEEL
RECTANGULAR HOLLOW SECTIONS**

Size (mm)	Thickness (mm)	Mass/unit length (kg/m)
12.70 x 25.40	1.00	0.569
15.87 x 31.75	1.20	0.855
25.40 x 38.10	1.20	1.156
25.40 x 50.80	1.20	1.396
38.10 x 76.20	1.50	2.631
44.45 x 76.20	1.50	2.782
50.80 x 101.60	2.00	4.678

TABLE 39
STANDARD BRC FABRICS
SQUARE MESHES

BRC reference number	BS 4483 or SS-32 reference number	Main wire		Cross wire		Mass per unit area (kg/m ²)
		Size (mm)	Spacing (mm)	Size (mm)	Spacing (mm)	
A 10	A 393	10.00	200.00	10.00	200.00	6.16
A 9	-	9.00	200.00	9.00	200.00	4.99
A 8	A 252	8.00	200.00	8.00	200.00	3.95
A 7	A 193	7.00	200.00	7.00	200.00	3.02
A 6.5	-	6.50	200.00	6.50	200.00	2.61
A 6	A 142	6.00	200.00	6.00	200.00	2.22
A 5	A 98	5.00	200.00	5.00	200.00	1.54
A 4	-	4.00	200.00	4.00	200.00	0.99

TABLE 40
STANDARD BRC FABRICS
RECTANGULAR MESHES

BRC reference number	BS 4483 or SS-32 reference number	Main wire		Cross wire		Mass per unit area (kg/m ²)
		Size (mm)	Spacing (mm)	Size (mm)	Spacing (mm)	
B 12	B 1131	12.00	100.00	8.00	200.00	10.90
B 10	B 785	10.00	100.00	8.00	200.00	8.14
B 9	-	9.00	100.00	8.00	200.00	6.97
B 8	B 503	8.00	100.00	8.00	200.00	5.93
B 7	B 385	7.00	100.00	7.00	200.00	4.53
B 6	B 283	6.00	100.00	7.00	200.00	3.73
B 5	B 196	5.00	100.00	7.00	200.00	3.05
C 10	C 785	10.00	100.00	6.00	400.00	6.72
C 9	C 636	9.00	100.00	6.00	400.00	5.55
C 8	C 503	8.00	100.00	5.00	400.00	4.34
C 7	C 385	7.00	100.00	5.00	400.00	3.41
C 6	C 283	6.00	100.00	5.00	400.00	2.61
C 5	-	5.00	100.00	5.00	400.00	1.93

TABLE 41

MASS (WEIGHT) OF
STEEL SHEET PILES

Type	Mass per pile (kg/m)	Mass per wall width (kg/m ²)
FSP-I _A	35.50	88.80
FSP-II	48.00	120.00
FSP-II _A	43.20	108.00
FSP-III	60.00	150.00
FSP-III _A	58.40	146.00
FSP-III _L	68.00	138.00
FSP-IV	76.10	190.00
FSP-IV _A	74.00	185.00
FSP-IV _L	87.50	175.00
FSP-V _L	105.00	210.00
FSP-VI _L	120.00	240.00
YSP-I	36.50	91.20
YSP-U ₅	35.50	88.80
YSP-II	48.00	120.00
YSP-U ₉	43.20	108.00
YSP-III	60.00	150.00
YSP-U ₁₅	58.40	146.00
YSP-IV	76.10	190.00
YSP-U ₂₃	74.00	185.00
YSP-V	105.00	250.00

TABLE 42

MASS (WEIGHT) OF STEEL CHEQUER PLATE

Thickness on plain mm (t)	Projected thickness (inclusive of raised pattern) mm	Approximate weight kg/m ²
3.0	4.5	28.70
4.5	6.0	40.50
6.0	7.5	52.20
8.0	9.5	67.90
10.0	11.5	83.60
12.5	14.0	103.10

