



CAPE WINELANDS DISTRICT

MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

TENDER NUMBER: T 2025/040

**CONTRACTOR TO PROVIDE METALWORK AND GLAZING
SERVICES TO CAPE WINELANDS DISTRICT MUNICIPALITY
BUILDINGS FOR THE PERIOD ENDING 30 JUNE 2028**

Name of Tenderer			
Postal Address			
Telephone number			
E-Mail address			
COMPLETION PERIOD:	30 June 2028	B-BBEE LEVEL CLAIMED:	

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Financial and Strategic Support Services
Supply Chain Management
Tel: 086 126 5263

THE TENDER

T1.	TENDERING PROCEDURES	4
T1.1	TENDER NOTICE AND INVITATION	5
T1.3	TENDER DATA	7
T2.	RETURNABLE DOCUMENTS.....	19
T2.1	LIST OF RETURNABLE DOCUMENTS	20
SCHEDULE 1:	INVITATION TO BID - MBD1.....	21
SCHEDULE 2:	COMPULSORY ENTERPRISE QUESTIONNAIRE	23
SCHEDULE 3:	AUTHORITY FOR SIGNATORY.....	25
SCHEDULE 4:	CERTIFICATE OF AUTHORITY FOR JOINT VENTURES	27
SCHEDULE 5:	SCHEDULE OF WORK SATISFACTORILY CARRIED OUT BY THE TENDERER.....	28
SCHEDULE 6A:	SCHEDULE OF WORK SATISFACTORILY CARRIED OUT BY PROJECT LEADER	29
SCHEDULE 6B:	SCHEDULE OF WORK SATISFACTORILY CARRIED OUT BY THE PROJECT ENGINEER.....	30
SCHEDULE 7:	PROPOSED AMENDMENTS AND QUALIFICATIONS	31
SCHEDULE 8:	MUNICIPAL RATES AND SERVICES.....	32
SCHEDULE 9:	DECLARATION OF INTEREST – (MBD 4B)	33
SCHEDULE 10:	TAX CLEARANCE CERTIFICATE REQUIREMENTS	38
SCHEDULE 11:	JOINT VENTURE AGREEMENT, IF APPLICABLE	39
SCHEDULE 12:	PROOF OF PAYMENT OF MUNICIPAL RATES AND TAXES.....	40
SCHEDULE 13:	RECORD OF MINUTES AND ADDENDA TO TENDER DOCUMENTS	41
SCHEDULE 14:	APPLICATION OF PREFERENCE POINT SYSTEM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022.....	42
SCHEDULE 15:	PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022 (MBD 6.1)	43
SCHEDULE 16:	DECLARATION OF BIDDER’S PAST SUPPLY CHAIN MANAGEMENT PRACTICES.....	47
SCHEDULE 17:	CERTIFICATE OF INDEPENDENT BID DETERMINATION.....	49
SCHEDULE 18:	CLAIMING PREFERENCE POINTS.....	51
SCHEDULE 19:	CREDIT ORDER INSTRUCTION	52
SCHEDULE 20:	COIDA LETTER OF GOOD STANDING.....	53
SCHEDULE 21:	OCCUPATIONAL HEALTH AND SAFETY AGREEMENT	54
C1	THE CONTRACT	56
C1.1	FORM OF OFFER AND ACCEPTANCE	57
C1.1	FORM OF OFFER AND ACCEPTANCE (AGREEMENT).....	58

ACCEPTANCE BY EMPLOYER 60

SCHEDULE OF DEVIATIONS 61

CONFIRMATION OF RECEIPT 63

C1.2 Contract Data (Part 1)..... 64

C2. PRICING DATA 66

PRICING OF THE BILL OF QUANTITIES..... 67

C2.2: BILL OF QUANTITIES..... 68

PART C3: SCOPE OF WORK 300

PART C.3.1: DESCRIPTION OF WORKS 301

PART C.3.2: OCCUPATINAL HEALTH AND SAFETY SPECIFICATIONS..... 305

T1.1

TENDER NOTICE AND INVITATION

Tenders are hereby invited from contractors to provide metalwork and glazing services to the Cape Winelands District Municipality buildings for the period ending 30 June 2028.

It is estimated that tenderers should have a CIDB contractors grading of **2 SG/SL** or higher.

Technical enquiries regarding this bid can be directed to Mr Siviwe Phillips at telephone no. 021 888 5204.

Closing date: 11:00 on Friday 24 January 2025

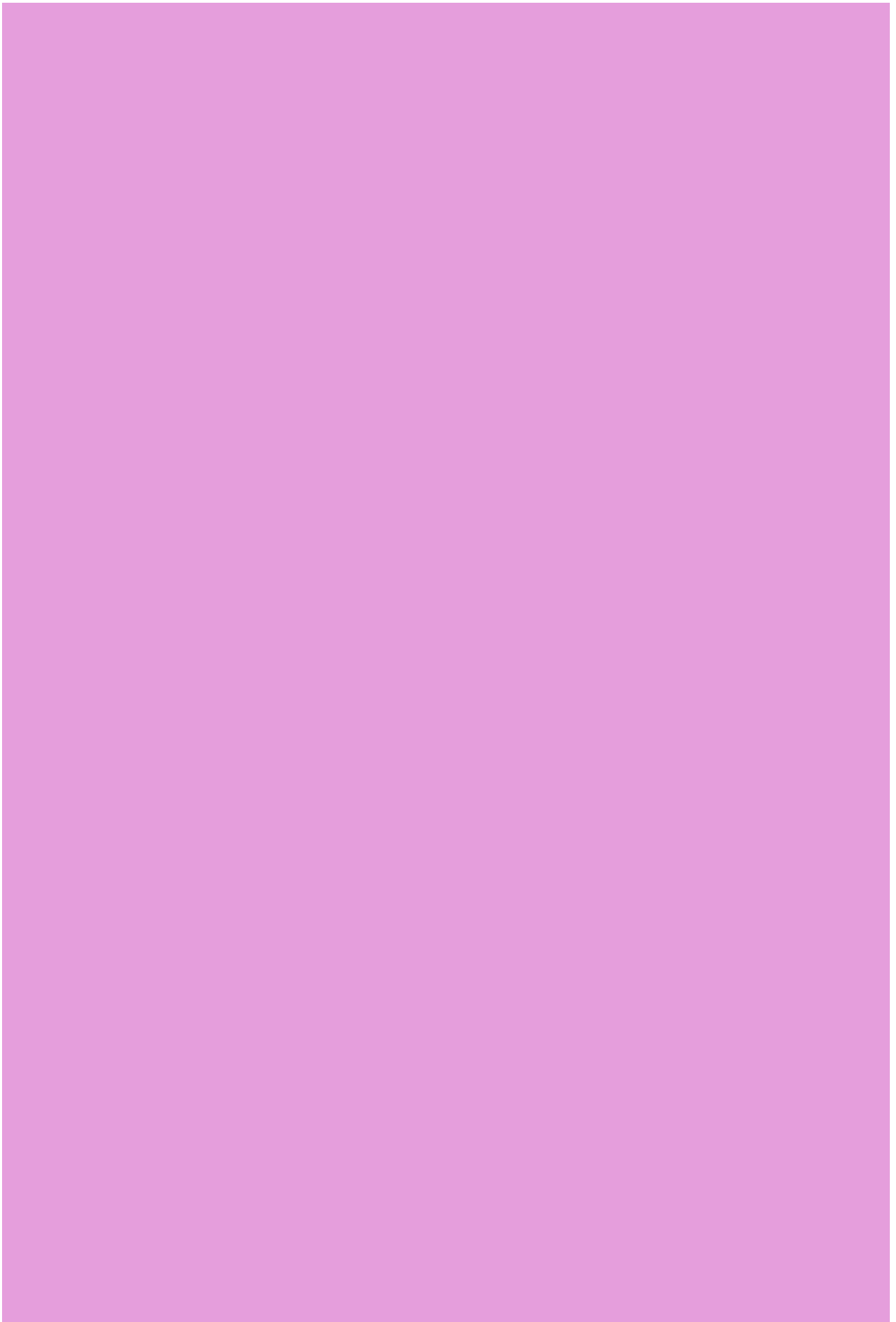
Tender documents, in English, are available free of charge on the websites: www.capewinelands.gov.za or <https://etenders.treasury.gov.za>. Alternatively, hard copies of the document are obtainable from the offices of the Supply Chain Management Unit, Cape Winelands District Municipality at 29 Du Toit Street, Stellenbosch, upon payment of a non-refundable fee of R 263,00 per document.

All prospective bidders must ensure that they are registered and accredited on the CWDM's Supplier Database and the Central Supplier Database, prior to the closing date of the tender.

Duly completed tenders must be enclosed in a (separate) sealed envelope and endorsed with the relevant tender number and description on the envelope/s. The sealed tenders must be placed in the official tender box of the District Municipality's offices at 29 Du Toit Street, Stellenbosch on the abovementioned time and dates.

Tenders will be opened in public as soon as possible after this closing time.

H PRINS
MUNICIPAL MANAGER



INTRODUCTION

The Conditions of Tender as published by the Construction Industry Development Board (CIDB) in Annex C of Board Notice 423 of 2019 in Government Gazette 42622 of 8 August 2019, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement (see www.cidb.org.za), as amended by the employer, shall apply to this contract.

The conditions of tender make several references to the tender data for details that apply specifically to this tender. The tender data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the conditions of tender. Each item of data given below is cross-referenced to the clause in the conditions of tender to which it mainly applies.

The following specific Tender Data, referring to the conditions of tender (T1.2) are applicable to this tender:

Clause number	Tender Data
C.1.1.1	Amend the first sentence of the first paragraph to read as follows: “The employer, as identified in the Tender Data, and each tenderer submitting a tender offer shall comply with these conditions of tender.” The employer is Cape Winelands District Municipality.
C.1.2	The following documents form part of this tender: The General Conditions of Contract for Construction Works (3rd Edition) 2015 as published by the South African Institution of Civil Engineering. This publication is available and tenderers must obtain copies at their own cost from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel: (011) 805 5947, Fax: (011) 805 5971, e-mail: civilinfo@saice.org.za The Document issued by the employer, which comprises: Part T1: Tendering Procedures T1.1 Tender Notice and Invitation to Tender T1.2 Tender Data Part T2: Returnable Documents T2.1 List of Returnable Schedules Part C1: Agreement and Contract Data C1.1 Form of Offer and Acceptance - Agreement C1.2 Contract Data Part C2: Pricing Data C2.1 Pricing Instructions C2.2 Bill of Quantities

	Part C3: Scope of Work C3.1 Description of the Works C3.2 Health and Safety Specifications Part C4: Site Information
C.1.3.	Interpretation
C.1.3.3	Add the following definition: (e) Organisation means a company, firm, enterprise, association or other legal entity, 1whether incorporated or not, or a public body. (f) functionality means the measurement according to the predetermined norms of a service or commodity designed to be practical and useful, working or operating, taking into account quality, reliability, viability and durability of a service and technical capacity and ability of a tenderer.”
C.1.4	Communication and employer’s agent Insert the following after the first sentence in the first paragraph: “Verbal information, given by the employer or his agent during site visits, clarification meetings or at any other time prior to the award of the contract, will not be regarded as binding on the employer or as amending the tender documents unless it is subsequently incorporated formally in an Addendum to Tenderers.” The Employer’s agent: The Employer’s agent: S. Phillips Name: Department Technical Services Address: P.O. Box 100, Stellenbosch,7599 Tel: 021 888 5204 e-mail: Siviwe.phillips@capewinelands.gov.za
C.1.6	A competitive negotiation procedure will not be followed, nor will a two-stage system be followed.
C.2.1	Eligibility Only those tenderers who satisfy all of the following criteria are eligible to submit tenders: Central Supplier Database Registration Only those tenderers who are registered as a service provider on the Central Supplier Database and have been issued with a registration number, are eligible to submit tenders. Construction Industry Development Board (CIDB) Registration Only those tenderers who are registered with the Construction Industry Development Board (CIDB) in a SG/SL contractor designation and whose registrations are active at close of tenders are eligible to submit tenders. Furthermore, a tender offer shall be non-responsive if the CIDB contractor registration grading is not commensurate with the sum tendered with due consideration being given to CIDB Regulation 25 (1B) or 25 (7A), where the reasonable margin in (7A)(a) is set at 15%:

For alpha-numeric associated with the CIDB contractor grading designations, respective maximum contract value and upper limit margins considered reasonable by the employer – refer to table G1 below.

Table G1: CIDB Contractor Grading Designations and Associated Parameters

CIDB Contractor Grading Designation	Maximum value (R) of contract that a contractor is considered capable of performing (CIDB Regulation 17)	Upper limit value (R) of contract that employer will allow contractor to perform with reasonable margin = 15%
1 (class of construction works)	500 000	575 000
2 (class of construction works)	1 000 000	1 150 000
3 (class of construction works)	3 000 000	3 450 000
4 (class of construction works)	6 000 000	6 900 000
5 (class of construction works)	10 000 000	11 500 000
6 (class of construction works)	20 000 000	23 000 000
7 (class of construction works)	60 000 000	69 000 000
8 (class of construction works)	200 000 000	230 000 000
9 (class of construction works)	No Limit	No Limit

In the event that the sum tendered exceeds the upper limit reasonable margin shown then such tender shall be deemed unreasonable and non-responsive.

Joint ventures are eligible to submit tenders provided that:

- a) Every member of the joint venture is registered with the CIDB and their registrations are valid at close of tenders when evaluation of tenders commences.
- b) The lead partner is registered with CIDB in a CE designation and grading equal to or higher than one grading lower than that commensurate with the sum tendered. Notwithstanding the aforementioned, the lead partner of the joint venture shall have the higher or equal grading to all others in the joint venture, and shall also have a higher or equal shareholding to all others in the joint venture.
- c) The combined contractor grading designation calculated in accordance with the CIDB Regulations is equal to or higher than that commensurate with the sum tendered with due consideration being given to CIDB Regulation 25 (1B) or 25 (7A), where the reasonable margin in (7A)(a) is set at 15%;
- d) The contract participation of each member in a joint venture may not exceed the tender value limit of one grade above that member's CIDB grading.

In the event that two or more members of a joint venture have common controlling shareholding, then such members shall be deemed to be a single member of the joint venture, using the CIDB and B-BBEE grading of the member with the higher CIDB grading.

	Compensation For Occupational Injuries and Diseases Act, 1993 (COIDA) A Letter of Good Standing that is valid on closing date of the bid from the Department of Employment and Labour or any institution that is licenced to carry out the business of insurance of its members against liabilities in accordance with the provisions of the COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT, 1993 (Act No. 130 of 1993) or a copy thereof must accompany the bid documents. The Letter of Good Standing (valid at closing date) can alternatively be submitted on a date as mutually agreed upon between the bidder and the Cape Winelands District Municipality. Failure to provide proof of a valid Letter of Good Standing within a mutually agreed upon timeframe from the Department of Employment and Labour or any institution that is licensed to carry out the business of insurance of its members against liabilities, will result in a bidder not being considered for further evaluation purposes. A Letter of good standing for “tender purposes” (valid at closing date) from the Department of Labour will also be accepted. Building Industry Bargaining Council (BIBC). Contractors are obligated to be registered <u>in the name of the entity</u> with the relevant Building Industry Bargaining Council (BIBC). The Contractor(s) shall provide a valid registration certificate with the tender document. Failure to submit a valid registration certificate with the tender document shall disqualify the bidder. A letter of good standing must be submitted by the contractor upon request at a date mutually agreed upon by the parties.
C.2.3	Check documents Amend the section as follows: “Check the tender documents on receipt for completeness and if any pages are found to be missing or duplicated, or if the Pricing Data contain any obvious errors or omissions, notify the employer at once of any such discrepancy or omission so that it may be rectified as no liability will be admitted by the employer in respect of errors in any tender due to the foregoing.”
C.2.7	Clarification meeting “If compulsory site/clarification meeting with representatives of the Employer will take place. The following rules shall apply to this meeting: a) A tender will automatically be disqualified if the meeting is not attended by a representative of the tendering entity. b) Representatives of tendering entities must complete and sign the meeting attendance register, providing full details as required on the register, failure of which will disqualify the tender. c) No late arrivals will be allowed to join the meeting. d) Immediately at the official start of the meeting, the Employer’s Agent shall collect the attendance registers and perform a roll-call confirming the physical presence of all persons who have completed the register and identifying those who were in the room at the official start but have not completed the register. The Employer’s Agent shall delete the details of those entities for which there is no physical presence in the room. Those who are present but had not completed the register will be given an opportunity to do so.

	e) On completion of the meeting and site inspection, if any, the Employer's Agent shall perform a further roll call and confirm the physical presence of all persons who are in attendance by countersigning against the relevant entry on the attendance register. Those who are no longer present shall be indicated as absent and any tender they submit shall be disqualified. f) The name of the lead entity in an envisaged consortium/joint venture must appear on the attendance register, failure of which will disqualify a tender submitted by the consortium/joint venture. g) A representative may not attend the meeting on behalf of more than one tendering entity. This constitutes anti-competitive behavior. In the event of multiple tenders being submitted, either separately or as a member of a joint venture, which reference the attendance of the same person at the site/clarification meeting, ALL those tenders will be disqualified. h) Tendering entities must be represented by a maximum of one person, who must be suitably qualified and experienced to comprehend the implications of the tender. Recorded minutes as well as addenda or any other information, where applicable, will be issued to all whom attended the meeting as an Addendum.
C.2.8	Seek clarification Amend the section as follows: "Request clarification arising out of any ambiguity in the tender documents, or between the tender documents and existing conditions on site, by notifying the employer at least seven calendar days before the closing time stated in the Tender Data. "
C.2.12 C.2.12.3	Alternative tender offers Amend the item as follows: An alternative offer may be considered in the event that the main tender offer would otherwise be the winning tender or if the alternative offer is considered beneficial to the employer."
C.2.13 C.2.13.3 C.2.13.4	Submitting a tender offer Amend the items as follow: Submit the parts of the tender offer communicated on paper as an original plus nil (0) number of copies, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the format as stated in the Tender Data. The employer shall not accept tenders submitted in electronic format. Only those tenders that have been completed in hardcopy of the issued tender document shall be considered. Sign the original and all copies of the tender offer where required in terms of the tender data. The tender shall be signed by a person duly authorised to do so. The employer will hold all authorised signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the

	purpose of the tender offer. Tenders submitted by joint ventures of two or more firms shall be accompanied by the document of formation of the joint venture, authenticated by a notary public or other official deputed to witness sworn statements, in which is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorised to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. The document of formation of the joint venture shall state explicitly what the percentage participation in the joint venture will be of each party involved.”
C.2.13.5	The employer’s address for delivery of tender offers and identification details to be shown on each tender offer package are: Location of tender box: 29 Du Toit Street, STELLENBOSCH,7600 Sealed tenders with the tender number and description on the envelope, must be placed in the official tender box at the abovementioned address.
C.2.13.6	A two-envelope procedure will not be followed.
C.2.15.1	The closing time for submission of tender offers is as per the Tender Notice and Invitation to Tender. Late tender offers will not be accepted.
C.2.16	The tender offer validity period is 180 days.
C.2.18	Provide other material
C.2.18.1	Add “health, safety and environmental arrangements and considerations, “between “preferencing arrangements” and “or samples of materials ...” in the first paragraph.
C.2.23	The following certificates shall be included in the tender submission: CIDB Contractor Registration Tenderers shall append to Schedule 2: Confirmation of CIDB Contractor Registration in T2.2: Returnable Schedules, documentary evidence/proof in the form of an original or copy of a valid certificate of contractor registration issued by the Construction Industry Development Board. In addition to this certificate, tenderers shall also provide a printed copy of the contractor’s listing off the CIDB website. (www.cidb.org.za). In the case of a joint venture, printed copies of the valid certificate of contractor registration and active contractor’s CIDB listing must be provided for each member of the joint venture. Tax Clearance Certificate Tenderers shall append to Schedule 1: Confirmation of Enterprise Registration in T2.2: Returnable Schedules, documentary evidence/proof as stated in Schedule 1 Broad-Based Black Economic Empowerment (B-BBEE) Status Level Certificate Tenderers shall append to Schedule 11: Preference Point Claim Form in C1.6: Returnable Schedules, documentary evidence/proof in the form of an original valid B-BBEE Status Level verification certificate in terms of the current code as determined by the Minister of the Department of Trade and Industry on Black Economic Empowerment. Consortiums or Joint Ventures will qualify for preference points, provided that the entity submits the relevant certificate or scorecard in terms of the Preferential Procurement Regulations, 2022. In the case of unincorporated entities, a verified

	certificate/scorecard in the name of the Consortium/Joint Venture must be submitted with the tender (attached to Schedule 11).
C.3.1	Respond to requests from the tenderer
C.3.1.1	Amend "... and notify all tenderers who collected tender documents." to read "and notify all tenderers who collected tender documents and attended the site clarification meeting."
C.3.2	Issue Addenda In the second line of the first paragraph, change "...are available until three working days before..." to "are available until five calendar days before..." Add the following paragraph: "In the event the Tenderer fails to confirm receipt of Addenda and incorporate the contents thereof into the submitted offer, the Tender will be considered non-responsive. If the Tenderer claims that Addenda was not received, but the employer can prove proof of transmission thereof (via electronic mail, facsimile or registered post) to the contact details as provided by the Tenderer, the submitted offer will be deemed non-responsive."
C.3.4.1	The time and location for opening of the tender offers is: Time: Tenders will be opened immediately after the closing time for receipt of tenders as stated in the Tender Notice and Invitation to Tender, or as stated in any addendum extending the closing date. Representatives of the tenderers and the general public will be permitted to observe the opening of submitted tenders. The summary of the tender opening will be available on request.
C.3.6	Non-disclosure Amend C.3.6 as follows: "Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the Letter of Notification of Acceptance of Tender has been approved. "
C.3.8	Test for responsiveness Add the following paragraph at the end of this section: "Notwithstanding the above, a tender will be considered non-responsive if it fails to comply with the requirements and specifications as listed in the Tender Data."
C.3.8.2	The following will result in a submitted offer being considered non-responsive/invalid: a) the tender offer is not submitted on the Form of Offer and Acceptance contained in this tender document b) the tender is not completed in non-erasable black ink; c) the Offer has not been signed; d) the tenderer does not comply with the CIDB contractor grading designation specified in the Tender Data or required in terms of value of the offer

	submitted. e) The Tenderer does not accept the corrected total of prices in the event correction is needed due to arithmetic errors, omissions or discrepancies that are identified in the tender offer. f) In the event the Tenderer fails to confirm receipt of Addenda and incorporate the contents thereof into the submitted offer, the Tender will be considered non-responsive. If the Tenderer claims that Addenda was not received, but the Employer can provide proof of transmission thereof (via electronic mail, facsimile or registered post) using the contact details as provided by the Tenderer, the submitted offer will be deemed non-responsive.
C.3.9	Arithmetical errors, omissions and discrepancies
C.3.9.2	Replace “C.3.9.2 Check the highest ranked...in accordance with C.3.11 for:” with
C.3.9.2	Check responsive tender offers for:”
C.3.9.3	Replace C.3.9.3 with “Notify the tenderer of all errors and omissions that are identified in the tender offer to confirm the corrected total of prices.”
C.3.9.4	In the first sentence of item (a) of C3.9.4, replace “...the line item total shall govern and the rate shall be corrected.” with “...the unit rate shall govern and the line item total shall be corrected.” In item (b) of C.3.9.4, replace “...the total of the prices will govern the tenderer will be requested to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.” with “the total of the prices shall be corrected.”
C.3.11	The procedure for the evaluation of responsive tenders is Method 1 Price and preference
C.3.11	Evaluation of tender offers
C.3.11.2	Add the following: Tenderers shall only complete the Pricing Schedule and the Form of Offer for that municipal area they intend to work in. It must be noted that the tenders received for each municipal area will be evaluated and awarded separately. Method 1: Price and Preference Score points for preference in terms of C.3.11.4. Score tender evaluation points for price in terms of C.3.11.5. Add the points scored for price and BBEE. Rank tender offers from the highest number of tender evaluation points to the lowest. Perform risk analyses of three highest ranked tenders in terms of C.3.11.6. Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so. Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the recalculated highest number of tender

	evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub-clause is repeated.																																							
C.3.11.3	Method 2: Functionality, Price and Preference Score functionality, rejecting all tender offers that fail to achieve the minimum number of points for functionality as stated in the Tender Data. Tenders that to achieve the minimum qualifying score for functionality shall be regarded as non-responsive and shall not be evaluated any further. Tender that have achieved the minimum qualifying score for functionality shall be evaluated further in terms of price and preference described in C.3.11.2.																																							
C.3.11.4	Scoring preference Score preference of responsive tenders as follows: Determine preference point system to be used for evaluation purposes based on lowest responsive tender offer, excluding alternatives and substitutes, using the following table. <table><tr><th>Value of lowest responsive tender offer</th><th>Financial Offer Points allocation (A)</th><th>Maximum Preference point allocation</th></tr><tr><td>Up to and including R50 million</td><td>80</td><td>20</td></tr><tr><td>Above R50 million</td><td>90</td><td>10</td></tr></table> Award points to a tender for attaining the B-BBEE status level of contributor in accordance with the following table, using the relevant preference points system determined above. <table><tr><th>B-BBEE Status Level of Contributor</th><th>Number of Points for Preference (80/20)</th><th>Number of Points for Preference (90/10)</th></tr><tr><td>1</td><td>50% of 20</td><td>50% of 10</td></tr><tr><td>2</td><td>50% of 18</td><td>50% of 9</td></tr><tr><td>3</td><td>50% of 16</td><td>50% of 8</td></tr><tr><td>4</td><td>50% of 12</td><td>50% of 5</td></tr><tr><td>5</td><td>50% of 8</td><td>50% of 4</td></tr><tr><td>6</td><td>50% of 6</td><td>50% of 3</td></tr><tr><td>7</td><td>50% of 4</td><td>50% of 2</td></tr><tr><td>8</td><td>50% of 2</td><td>50% of 1</td></tr><tr><td>Non-compliant contributor</td><td>0</td><td>0</td></tr></table>	Value of lowest responsive tender offer	Financial Offer Points allocation (A)	Maximum Preference point allocation	Up to and including R50 million	80	20	Above R50 million	90	10	B-BBEE Status Level of Contributor	Number of Points for Preference (80/20)	Number of Points for Preference (90/10)	1	50% of 20	50% of 10	2	50% of 18	50% of 9	3	50% of 16	50% of 8	4	50% of 12	50% of 5	5	50% of 8	50% of 4	6	50% of 6	50% of 3	7	50% of 4	50% of 2	8	50% of 2	50% of 1	Non-compliant contributor	0	0
Value of lowest responsive tender offer	Financial Offer Points allocation (A)	Maximum Preference point allocation																																						
Up to and including R50 million	80	20																																						
Above R50 million	90	10																																						
B-BBEE Status Level of Contributor	Number of Points for Preference (80/20)	Number of Points for Preference (90/10)																																						
1	50% of 20	50% of 10																																						
2	50% of 18	50% of 9																																						
3	50% of 16	50% of 8																																						
4	50% of 12	50% of 5																																						
5	50% of 8	50% of 4																																						
6	50% of 6	50% of 3																																						
7	50% of 4	50% of 2																																						
8	50% of 2	50% of 1																																						
Non-compliant contributor	0	0																																						
C.3.11.5	Scoring price Score price of responsive tenders using the following formula: NFO = W1 x A Where: NFO is the number of tender evaluation points awarded for price is the maximum possible number of tender evaluation points awarded for price as stated in the Tender Data																																							

	A is a number calculated using the formula and option described in the table below, as stated in the Tender Data <table><tr><th>Formula</th><th>Comparison aimed at achieving</th><th>Option 1a</th><th>Option 2a</th></tr><tr><td>1</td><td>Highest price or discount</td><td>$A = (1 + \frac{(P - P_m)}{P_m})$</td><td>A = P/P_m</td></tr><tr><td>2</td><td>Lowest price or percentage commission/fee</td><td>$A = (1 - \frac{(P - P_m)}{P_m})$</td><td>A = P_m/P</td></tr><tr><td>P_m</td><td colspan="3">is the comparative offer of the most favourable comparative offer</td></tr><tr><td>P</td><td colspan="3">is the comparative offer of the tender offer under consideration</td></tr></table>	Formula	Comparison aimed at achieving	Option 1a	Option 2a	1	Highest price or discount	$A = (1 + \frac{(P - P_m)}{P_m})$	A = P/P _m	2	Lowest price or percentage commission/fee	$A = (1 - \frac{(P - P_m)}{P_m})$	A = P _m /P	P _m	is the comparative offer of the most favourable comparative offer			P	is the comparative offer of the tender offer under consideration		
Formula	Comparison aimed at achieving	Option 1a	Option 2a																		
1	Highest price or discount	$A = (1 + \frac{(P - P_m)}{P_m})$	A = P/P _m																		
2	Lowest price or percentage commission/fee	$A = (1 - \frac{(P - P_m)}{P_m})$	A = P _m /P																		
P _m	is the comparative offer of the most favourable comparative offer																				
P	is the comparative offer of the tender offer under consideration																				
C.3.11.6	Risk Analysis Perform a risk analysis in respect of the following: a) reasonableness of the financial offer b) reasonableness of unit rates and prices c) the demonstrated potential of the tenderer with regard to professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience, reputation and personnel to achieve the contract participation goals tendered and perform the contract.”																				
C.3.11.7	Functionality The past performance of service providers in executing similar projects will be evaluated using the references supplied by service providers, as well as any other information available to the Cape Winelands District Municipality. The Cape Winelands District Municipality reserves the right to verify experience and to contact references provided, as well as any other third party that could verify the experience and performance of service providers. The Cape Winelands District Municipality reserves the right to reject a tender from a service provider – a) who during the last five (5) years has failed to perform satisfactorily on a previous contract with the municipality or any other organ of state after written notice was given to that service provider that performance was unsatisfactory; and/or if false references are submitted by a service provide																				
C.3.13.1	Acceptance of tender offer Replace “Accept the” in first line of the first paragraph with “Notify the successful tenderer of the employer’s acceptance of his” Add the following to the item to the list: “(g) the tenderer has demonstrated that adequate provision has been made for health and safety measures and has the necessary resources and competencies to carry out the construction work safely.” Tender offers will only be accepted if the tenderer complies with the following legal requirements: a) The tenderer is registered on the Central Supplier Database (CSD);																				

- b) The tenderer is shown to be tax compliant either via online CSD verification, or by attaching written proof by SARS of approved arrangements in terms of the tenderer's tax clearance;
- c) the tenderer or any of its directors is not listed on the register of tender defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
- d) the tenderer has not abused the employer's Supply Chain Management system, as stated in C.3.13
- e) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer who is approved by the Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act (COID) (Act 130 of 1993);
- f) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.

General supply chain management conditions applicable to tenders:

In terms of its Supply Chain Management Policy the employer may not consider a tender unless the provider who submitted the tender:

- a) has furnished the employer with that provider's:
 - full name;
 - identification number or company or other registration number; and
 - tax reference number and VAT registration number, if any;
- b) has indicated whether:
 - the provider is in the service of the state, or has been in the service of the state in the previous twelve months;
 - the provider is not a natural person, whether any of the directors, managers, principal shareholders or stakeholders is in the service of the state, or has been in the service of the state in the previous twelve months;
 - whether a spouse, child or parent of the provider or of a director, manager, shareholder or stakeholder referred to above is in the service of the state, or has been in the service of the state in the previous twelve months; or
- c) irrespective of the procurement process followed, the employer is prohibited from making an award to:
 - a person who is in the service of the state;
 - a juristic entity of which any director, manager, principal shareholder or stakeholder is in the service of the state;
 - an advisor or consultant contracted with the employer, or
 - a person, advisor or corporate entity involved with the tender specification committee, or a director of such corporate entity.

Combating abuse of the Supply Chain Management Policy:

In terms of the employer's Supply Chain Management Policy, the employer may reject the tender of any tenderer if that tenderer or any of its directors has:

- a) failed, during the last five years, to perform satisfactorily on a previous contract

	with the employer or any other organ of state after written notice was given to that tenderer that performance was unsatisfactory; b) abused the Supply Chain Management system of the employer or has committed any improper conduct in relation to this system; c) been convicted of fraud or corruption during the past five years; d) wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or e) been listed with the Register of Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004) or has been listed on National Treasury's database as a person or juristic entity prohibited from doing business with the public sector. In this regard, tenderers shall complete Schedule 3: Declaration of Interests, Tenderer's Past Supply Chain Management (SCM) Practices and Independent Tender Determination in Part T2.2: Returnable Schedules. Failure to complete this schedule may result in the tender not being considered.
C.3.14	Prepare contract documents Amend the item as follows: (c) other revisions, if any, agreed between the employer and the successful tenderer as recorded in the Schedule of Deviations.
C.3.17	Provide to the successful tenderer one signed copy of the contract on the day of the commencement of the contract.

T2. RETURNABLE DOCUMENTS

T2.1 List of returnable documents

General

Failure to fully complete the relevant returnable documents may render such a tender offer unresponsive.

These forms must be completed in black ink. Returnable documents shall be signed by a signatory duly authorised to sign the tender offer. Any alterations made prior to tender closure countersigned by an authorised signatory.

Tenderers shall note that their signature appended to each returnable form represents a declaration that they vouch for the accuracy and correctness of the information provided.

Notwithstanding any check or audit conducted by or on behalf of the Employer, the information provided in the returnable documents is accepted in good faith and as justification for entering into a contract with a tenderer. If subsequently any information is found to be incorrect such discovery shall be taken as willful misrepresentation by that tenderer to induce the contract. In such event the Employer has the discretionary right under contract condition 9.2 to terminate the contract.

Should a tenderer wish to offer a different time period of completion than that required by the Employer, it shall be submitted as an alternative tender.

If more than one alternative tender is submitted, each one shall be numbered and submitted on a separate copy of form C1.1.1 Offer, completed and signed, and accompanied by the prescribed priced C2.2 Bill of Quantities and supporting documents.

T2.1**LIST OF RETURNABLE DOCUMENTS**

Schedule 1	Invitation to bid - MBD1
Schedule 2	Compulsory Enterprise Questionnaire
Schedule 3	Authority to Signatory
Schedule 4	Certificate of Authority for Joint Ventures
Schedule 5	Schedule of Work Satisfactory carried out by the Tenderer (Company Experience)
Schedule 6	Schedule of Work Satisfactory carried out by the Project Leader (6a) / Project Engineer (6b)
Schedule 7	Proposed Amendments and Qualifications
Schedule 8	Declaration in terms of the MFMA (No 56 of 2003) in terms of Municipal Rates and Services.
Schedule 9	Declaration of Interest
Schedule 10	Tax Clearance Certificate Requirements
Schedule 11	Joint Venture Agreement, If Applicable
Schedule 12	Proof of Payment of Municipal Rates and Taxes
Schedule 13	Record of minutes and Addenda to Tender Documents.
Schedule 14	Application of preference point system in terms of the Preferential Procurement Regulations 2022
Schedule 15:	Preference points claim form in terms of the preferential procurement regulations 2022 (MBD 6.1)
Schedule 16	Declaration of Bidder's past supply chain management practices.
Schedule 17	Certificate of Independent Bid Determination.
Schedule 18	Claiming Preference Points
Schedule 19	Credit Order Instruction
Schedule 20	Letter of Good Standin
Schedule 21	Occupational Health and Safety Agreement

SCHEDULE 1: INVITATION TO BID - MBD1

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF MUNICIPALITY/ MUNICIPAL ENTITY)					
Tender number:	T 2025/040	Closing date:	24/01/2025	Closing time:	11h00
Description	CONTRACTOR TO PROVIDE METALWORK AND GLAZING SERVICES TO CAPE WINELANDS DISTRICT MUNICIPALITY BUILDINGS FOR THE PERIOD ENDING JUNE 2028				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE TENDER BOX SITUATED AT: 29 DU TOIT STREET, STELLENBOSCH					
SUPPLIER INFORMATION					
Name of bidder					
Postal address					
Street address					
Contact person					
Telephone number	Code		Number		
Cell phone number					
E-mail address					
VAT registration number					
COIDA registration number					
COIDA certificate number					
Tax compliance status	TCS PIN:		OR	CSD No:	MAAA
SPECIFIC GOALS IN TERMS OF THIS TENDER:					
50% of the 20/10 points will be allocated to promote the goal of B-BBEE status level of contributor and points will be allocated in terms of the B-BBEE scorecard 50% of the 20/10 points will be allocated to promote the specific goal of locality and points will be allocated in terms of where the enterprise' head office or primary place of business or regional or satellite office is located					
B-BBEE status level verification certificate [tick applicable box]	☐ Yes ☐ No		Proof of Locality [tick applicable box]		☐ Yes ☐ No
B-BBEE status level sworn affidavit [tick applicable box]	☐ Yes ☐ No				
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE / SWORN AFFIDAVIT (FOR EMES & QSEs) AND PROOF OF LOCALITY MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS]					
Are you the accredited representative in South Africa for the goods / services / works offered?	☐ Yes ☐ No [If yes enclose proof]		Are you a foreign based supplier for the goods / services / works offered?		☐ Yes ☐ No [If yes, answer part b:3]
Total number of items offered			Total bid price		R
Signature of bidder			Date		
Capacity under which this bid is signed					

TECHNICAL INFORMATION MAY BE DIRECTED TO:	
Contact person	Siviwe Phillips
Telephone number	021 888 5204
E-mail address	Siviwe.phillips@capewinelandsgov.za
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED	
Contact person	Elmine Niemand
Telephone number	021 888 5175
E-mail address	elmine@capewinelandsgov.za
TERMS AND CONDITIONS FOR BIDDING – PART B	
1. BID SUBMISSION:	
1.1. Bids must be delivered by the stipulated time to the correct address. Late bids will not be accepted for consideration. 1.2. All bids must be submitted on the official forms provided–(not to be re-typed) or online 1.3. This bid is subject to the Preferential Procurement Policy Framework Act and the Preferential Procurement Regulations, 2022, the General Conditions of Contract (GCC) and, if applicable, any other special conditions of contract.	
2. TAX COMPLIANCE REQUIREMENTS	
2.1 Bidders must ensure compliance with their tax obligations. 2.2 Bidders are required to submit their unique personal identification number (pin) issued by SARS to enable the organ of state to view the taxpayer's profile and tax status. 2.3 Application for the tax compliance status (TCS) certificate or pin may also be made via e-filing. In order to use this provision, taxpayers will need to register with SARS as e-filers through the website www.sars.gov.za. 2.4 Foreign suppliers must complete the pre-award questionnaire in part b:3. 2.5 Bidders may also submit a printed TCS certificate together with the bid. 2.6 In bids where consortia / joint ventures / sub-contractors are involved, each party must submit a separate TCS certificate / pin / CSD number. 2.7 Where no TCS is available but the bidder is registered on the central supplier database (CSD), a CSD number must be provided.	
3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS	
3.1. Is the entity a resident of the republic of South Africa (RSA)? ☐ Yes ☐ No 3.2. Does the entity have a branch in the RSA? ☐ Yes ☐ No 3.3. Does the entity have a permanent establishment in the RSA? ☐ Yes ☐ No 3.4. Does the entity have any source of income in the RSA? ☐ Yes ☐ No 3.5. Is the entity liable in the RSA for any form of taxation? ☐ Yes ☐ No If the answer is “no” to all of the above, then it is not a requirement to register for a tax compliance status system pin code from the South African Revenue Service (SARS) and if not register as per 2.3 above.	
NB: failure to provide any of the above particulars may render the bid invalid. No bids will be considered from persons in the service of the state.	

Signature(s):

Name(s):

Date:

SCHEDULE 2: COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted. (Failure to do so may result in your bid being disqualified)														
Section 1:	Name of enterprise:													
Section 2:	VAT registration number, if any: Has and original and valid TAX clearance certificate been attached under Schedule 2D? Yes / No													
Section 3:	Has a B-BBEE status level verification certificate been submitted? Yes / No If Yes, who was the certificate issued by? (Tick applicable box) ☐ An accounting officer as contemplated in the Close Corporation Act. ☐ A verification agency accredited by the South African National Accreditation System (SANAS). ☐ A registered auditor. NB. A B-BBEE status level verification certificate must be submitted in order to qualify for preference points for B-BBEE.													
Section 4:	CIDB registration number, if any:													
Section 5:	Particulars of sole proprietors and partners in partnership													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Name*</th> <th style="width: 33%;">Identity number*</th> <th style="width: 33%;">Personal income tax number*</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			Name*	Identity number*	Personal income tax number*									
Name*	Identity number*	Personal income tax number*												
* Complete only if sole proprietor or partnership and attached separate page if more than 3 partners														
Section 6:	Particulars of companies and close corporations													
Company registration number:														
Close corporation number:														
Tax reference number:														
Section 7:	Record of service of the state													
Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:														
<table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> ☐ a member of any municipal council ☐ a member of any provincial legislature ☐ a member of the National Assembly or the National Council of Province ☐ a member of the board of directors of any municipal entity ☐ an official of any municipality or municipal entity </td> <td style="width: 50%; vertical-align: top;"> ☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) ☐ a member of an accounting authority of any national or provincial public entity ☐ an employee of Parliament or a provincial legislature </td> </tr> </table>			☐ a member of any municipal council ☐ a member of any provincial legislature ☐ a member of the National Assembly or the National Council of Province ☐ a member of the board of directors of any municipal entity ☐ an official of any municipality or municipal entity	☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) ☐ a member of an accounting authority of any national or provincial public entity ☐ an employee of Parliament or a provincial legislature										
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If any of the above boxes are marked, disclose the following: (insert separate page if necessary)														

Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		current	Within last 12 months

Section 8:	Record of spouses, children and partners in the service of the state
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Indicate by marking the relevant boxes with a cross, if any spouse, child or partner of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:

☐ a member of any municipal council ☐ a member of any provincial legislature ☐ a member of the National Assembly or the National Council of Province ☐ a member of the board of directors of any municipal entity ☐ an official of any municipality or municipal entity	☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) ☐ a member of an accounting authority of any national or provincial public entity ☐ an employee of Parliament or a provincial legislature
--	---

If any of the above boxes are marked, disclose the following:

Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		current	Within last 12 months

* Insert separate page if necessary

The undersigned, who warrants that he/ she is duly authorised to do so on behalf of the enterprise:	
i)	Authorized the Employer to obtain a tax clearance certificate from the South Africa Revenue Service that my / our matters are in order;
ii)	Confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
iii)	Confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
iv)	Confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
v)	Confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signature:		Date:	 / / 20.....
Print Name:		Position:	

SCHEDULE 3: AUTHORITY FOR SIGNATORY

We, the undersigned, hereby authorize Mr/Mrs
acting in his/her capacity as
of the business trading as to
sign all documentation in connection with Tender.....

Name of members / directors	Signature	Date

Note: If bidders attached a copy of their Authorized Signatory, it is not necessary to complete this form.

C. Certificate for Joint Venture

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorized Mr/Ms, authorized signatory of the company, acting in the capacity of lead partner, to sign all documents in connection with the tender offer for Contract and any contract resulting from it on our behalf.

This authorization is evidenced by the attached power of attorney signed by legally authorized signatories of all the partners to the Joint Venture.

NAME OF FIRM	ADDRESS	AUTHORISING SIGNATURE, NAME & CAPACITY
Lead partner		

D. Certificate for Sole Proprietor

I, hereby confirm that I am the sole owner of the business trading as

As witnesses:

1.		Chairman:	
2.		Date:	

E. Certificate for Close Corporation

We, the undersigned, being the key members in the business trading as hereby authorize Mr/Ms acting in the capacity of to sign all documents in connection with the tender for Contract and contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

NOTE: This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.

SCHEDULE 4: CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This returnable schedule is to be completed by joint ventures.

We, the undersigned, are submitting this tender offer in joint venture and hereby authorize Mr/Ms, authorised signatory of the company, close corporation or partnership, acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		 Signature: Name: Designation
		 Signature: Name: Designation
		 Signature: Name: Designation

NOTE: A copy of the Joint Venture Agreement showing clearly the **percentage contribution of each partner** to the Joint Venture shall be appended to this schedule.

SCHEDULE 5: SCHEDULE OF WORK SATISFACTORILY CARRIED OUT BY THE TENDERER

The following is a statement of relevant similar work successfully executed by the Tenderer (Company experience). See Similar Work at Tender data - T1.2.6

Employer, contact person and telephone number	Description of Contract	Value of Work Inclusive of VAT (Rand)	Date Completed

Attach additional pages if more space is required.

Signature:		Date:	
Print Name:		Position:	
Tenderer:			

SCHEDULE 6A: SCHEDULE OF WORK SATISFACTORILY CARRIED OUT BY PROJECT LEADER

Project leader Name:

The following is a statement of similar work successfully executed by the foreman / project leader/Artisans. See Similar Work at Tender data - T1.2.6

Employer, contact person and telephone number	Description of Contract	Value of Work Inclusive of VAT (Rand)	Date Completed

Attach additional pages if more space is required.

Signature:		Date:	
Print Name:		Position:	
Tenderer:			

SCHEDULE 6B: SCHEDULE OF WORK SATISFACTORILY CARRIED OUT BY THE PROJECT ENGINEER

Project Engineer Name:

The following is a statement of similar work successfully executed by the foreman / project leader.
See Similar Work at Tender data - T1.2.6

Employer, contact person and telephone number	Description of Contract	Value of Work Inclusive of VAT (Rand)	Date Completed

Attach additional pages if more space is required.

Signature:		Date:	
Print Name:		Position:	
Tenderer:			

SCHEDULE 7: PROPOSED AMENDMENTS AND QUALIFICATIONS

The Tenderer should record any deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such deviations and qualifications in a covering letter to this tender and reference such letter in this schedule.

The Tenderer’s attention is drawn to clause F.3.8 of the Standard Conditions of Tender referenced in the Tender Data regarding the Employer’s handling of material deviations and qualifications.

Page	Clause or Item	Proposal

Signature:		Date:	
Print Name:		Position:	
Tenderer:			

SCHEDULE 8: MUNICIPAL RATES AND SERVICES

Names of Directors / Partners	Physical residential address of the Directors / Partners	Municipal Account Number	Name of Municipality

NB: Please attach certified copy/copies of the Municipal Account(s)

DECLARATION:

I, the undersigned (name)

Certify that the information furnished above is correct. I accept that the state may act against me should this declaration prove to be false.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

SCHEDULE 9: DECLARATION OF INTEREST – (MBD 4B)

(On behalf of the company and its directors/ members/ trustees/ principle shareholders²)

1. No bid/database registration will be accepted from persons in the service of the state¹.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid/database registration. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in the service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.
- 3 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid/database registration in respect of owners/shareholders² of the company.**

3.1	Full Name of bidder or his or her representative		
3.2	Identity Number (person submitting this declaration)		
3.3	Position occupied in the Company (official/director/trustee/s shareholder ²):		
3.4	Company Registration Number		
3.5	Tax Reference Number		
3.6	VAT Registration Number		
3.7	The names of all directors/ members/ trustees/ principle shareholders, their individual identity numbers, personal tax reference numbers and state employee numbers must be indicated in paragraph 4 below		
3.8	Are you or any director/ member/ trustee/ principle shareholder presently in the service of the state?	Yes	No
3.8.1	If yes, furnish particulars. (Please write in Block Letters. Add separate page if more than one.		
SA ID Number:			
Surname:		Relation:	
Full Names:		Persal No:	
Organ of State:		Position:	
3.9	Have you or any director/ member/ trustee/ principle shareholder been in the service of the state for the past twelve months?	Yes	No
3.9.1	If yes, furnish particulars. (Please write in Block Letters. Add separate page if more than one.		
SA ID Number:			
Surname:		Relation:	
Full Names:		Persal No:	
Organ of State:		Position:	

3.10	Do you or any director/ member/ trustee/ principle shareholder have any relationship (family, friend, other) with persons in the service of the state and/or who may be involved with the evaluation and/or adjudication of this or any other prospective bid?	Yes	No
3.10.1	If yes, furnish particulars. (Please write in Block Letters. Add separate page if more than one.		
SA ID Number:		Relation:	
Surname:		Persal No:	
Full Names:			
Organ of State:		Position:	

3.11	Are you aware of any relationship (family, friend, other) between you or any director/ member/ trustee/ principle shareholder and any persons in the service of the state who may be involved with the evaluation and/or adjudication of this or any other prospective bid?	Yes	No
3.11.1	If yes, furnish particulars. (Please write in Block Letters. Add separate page if more than one.		
SA ID Number:		Relation:	
Surname:		Persal No:	
Full Names:			
Organ of State:		Position:	

3.12	Is any spouse, child or parent of the company's directors/ members/ trustees/ principle shareholders or stakeholders in the service of the state?	Yes	No
3.12.1	If yes, furnish particulars. (Please write in Block Letters. Add separate page if more than one.		
SA ID Number:		Relation:	
Surname:		Persal No:	
Full Names:			
Organ of State:		Position:	

3.13	Do you or any director/ member/ trustee/ principle shareholder/ stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract.	Yes	No
3.13.1	If yes, furnish particulars.		

3.14	Is the supplier or any director/ member/ trustee/ principle shareholder listed on the National Treasury's database as a company or person prohibited from doing business with the public sector?	Yes	No
3.14.1	If yes, furnish particulars.		

3.15	Is the supplier or any director/ member/ trustee/ principle shareholder listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?	Yes	No
3.15.1	If yes, furnish particulars.		

3.16	Was the supplier or any director/ member/ trustee/ principle shareholder convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes	No
3.16.1	If yes, furnish particulars.		

3.17	Does the supplier or any director/ member/ trustee/ principle shareholder owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes	No
3.17.1	If yes, furnish particulars. The municipality may not do business with individuals/businesses, including that of all the owners/partners/members/directors, whose municipal rates and taxes and/or service charges are in arrears for more than three (3) months unless arrangements have been made with the municipality to settle such arrears. Refer to SCM Regulation 38(d). (Certified copies of your <i>most current</i> accounts/statements and/or proof of any arrangement to be submitted every three months – provide individual information in the schedule under par. 4.		

3.18	Was any contract between the supplier and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes	No
3.18.1	If yes, furnish particulars.		

4	MFMA Circular No 62 of July 2013 require bidders to submit the names of their directors/ trustees/ shareholders, their individual identity numbers, personal tax reference numbers and employee numbers of those who are in the service of the state as defined in the Municipal Supply Chain Management Regulations as part of their bid submissions. A <u>shareholder</u> is defined as a person who <u>owns</u> shares in the company and is actively involved in the management of the company or business, and exercises control over the company.					
	Full name of directors / trustees / shareholders	Identity Number	% Share-holding in company	Personal Tax Reference Number	State Employee Number (Persal)	Municipal rates & services account numbers (3.17.1) <i>Municipal clearance or most recent service account must be attached as evidence</i>
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

I, the undersigned, certify that the information furnished on this declaration form is true and correct. I accept that my/my company's bid/registration may be rejected and in addition to the rejection that action may be taken against me/ my company should this declaration prove to be false.

.....
Signature

.....
Date

.....
Capacity of Signatory

.....
Name of Bidder/Company/CC Name

MANDATORY SECTION: THIS DECLARATION WILL NOT BE ACCEPTED IF NOT CERTIFIED:

¹ MSCM Regulations: "in the service of the state" means to be –

(a) a member of –

(i) any municipal council;

(ii) any provincial legislature; or

(iii) the national Assembly or the national Council of provinces;

(b) a member of the board of directors of any municipal entity;

(c) an official of any municipality or municipal entity;

(d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);

(e) a member of the accounting authority of any national or provincial public entity; or

(f) an employee of Parliament or a provincial legislature.

² "Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

Commissioner of Oaths

Signed and sworn to before me at

on this the day of 20 by the Deponent, who has acknowledged that he/she knows and understands the contents of this Affidavit, it is true and correct to the best of his/her knowledge and that he/she has no objection to taking the prescribed oath, and that the prescribed oath will be binding on his/her conscience.

Commissioner of Oaths

Position:

Address

Tel:

Apply official stamp of authority on this page:

This document is compulsory, in terms of Regulation 44 of the Supply Chain Management Regulations, to do business with any municipality – If not endorsed by a Commissioner of Oaths, or failure to submit it, will disqualify your business from the acquisition process. (Must be submitted annually)

SCHEDULE 10: TAX CLEARANCE CERTIFICATE REQUIREMENTS

A copy of a Tax Compliance Status Pin, printed from the South African Revenue Service (SARS) website, must accompany the bid documents. The onus is on the bidder to ensure that their tax matters are in order with SARS. In the case of a Consortium/Joint Venture every member must submit a separate Tax Compliance Status Pin, printed from the SARS website, with the bid documents.

If a bid is not supported by a Tax Compliance Status Pin as an attachment to the bid documents, the Municipality reserves the right to obtain such documents after the closing date to verify that the bidder's tax matters are in order. If no such document can be obtained within a period as specified by the Municipality, the bid will be disqualified.

The Tax Compliance Status Pin will be verified by the Municipality on the SARS website.

SCHEDULE 11: JOINT VENTURE AGREEMENT, IF APPLICABLE

The Tenderer shall attach to this page a joint venture agreement, if applicable.

SCHEDULE 12: PROOF OF PAYMENT OF MUNICIPAL RATES AND TAXES

The Tenderer shall attach to this page proof of payment of municipal rates and taxes or municipal services charges in support of Schedule 11.

Please note: Should the tenderer intend claiming preference points for local enterprise status, points shall only be awarded if proof of payment is attached.

SCHEDULE 13: RECORD OF MINUTES AND ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

No.	Date	Title or Detail
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signature:		Date:	
Print Name:		Position:	
Tenderer:			

SCHEDULE 14: APPLICATION OF PREFERENCE POINT SYSTEM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

Regulation No. 2721 of 20 4 November 2022 provide for a preference points system. The applicable **80/20** preferential points system as set out in Preferential Procurement Regulations 2022 will be used to evaluate individual tenders

80/20 Preference point system [(for acquisition of goods or services for a Rand value equal to or above R30 000 and up to R50 million) (all applicable taxes included)]

The points are awarded as follows:

- 80 points is awarded for the **lowest price** if it complies with the Tender / Formal Written Price Quotation conditions.
- Additional points are awarded for the following specific goals:
 - **B-BBEE status level of contributor** and “**Locality**”
- 50% of the 20/10 points will be allocated to promote the goal of B-BBEE status level of contributor and points will be allocated in terms of the B-BBEE scorecard as follows:

B-BBEE Status Level of Contributor	Number of Points for Preference (80/20)	Number of Points for Preference (90/10)
1	50% of 20	50% of 10
2	50% of 18	50% of 9
3	50% of 16	50% of 8
4	50% of 12	50% of 5
5	50% of 8	50% of 4
6	50% of 6	50% of 3
7	50% of 4	50% of 2
8	50% of 2	50% of 1
Non-compliant contributor	0	0

- 50% of the 20/10 points will be allocated to promote the specific goal of locality. Points will be allocated as follows:

No.	Requirement	Number of Points
1	Procurement under the 80/20 preference points system where the enterprise head office or primary place of business or regional or satellite office is located within the boundaries of the Cape Winelands District Municipal Area	5
2	Procurement under the 90/10 preference points system where the enterprise head office or primary place of business or regional or satellite office is located within the boundaries of the Cape Winelands District Municipal Area	2.5
3	Procurement under the 80/20 preference points system where the enterprise head office or primary place of business or regional or satellite office is located within the boundaries of the Western Cape Province	5
4	Procurement under the 90/10 preference points system where the enterprise head office or primary place of business or regional or satellite office is located within the boundaries of the Western Cape Province.	2.5

SCHEDULE 15: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022 (MBD 6.1)

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 To be completed by the organ of state

(a) The applicable preference point system for this tender is the 80/20 preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“Locality”** means an enterprise whose head office or primary place of business or regional or satellite office is located within the boundaries of the Cape Winelands District Municipal Area or Western Cape Province

- (d) **“Proof of locality”** means a –
- 1) municipal account in the name of the tenderer not older than 90 days;
 - 2) lease agreement where the tenderer is the lessee; or
 - 3) an official letter from the bank confirming the registered business address of the tenderer;
- (e) **“Proof of B-BBEE status level of contributor”** means the B-BBEE status level certificate issued by an authorised body or person, a sworn affidavit as prescribed by the B-BBEE Codes of Good Practice; or any other requirement prescribed in terms of the Broad-Based Black Economic Empowerment Act.
- (f) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (g) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (h) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc}
 \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\
 \mathbf{Ps} = \mathbf{80} \left(\mathbf{1} - \frac{\mathbf{Pt} - \mathbf{Pmin}}{\mathbf{Pmin}} \right) & \mathbf{or} & \mathbf{Ps} = \mathbf{90} \left(\mathbf{1} - \frac{\mathbf{Pt} - \mathbf{Pmin}}{\mathbf{Pmin}} \right)
 \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc}
 \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\
 \mathbf{Ps} = \mathbf{80} \left(\mathbf{1} + \frac{\mathbf{Pt} - \mathbf{Pmax}}{\mathbf{Pmax}} \right) & \mathbf{or} & \mathbf{Ps} = \mathbf{90} \left(\mathbf{1} + \frac{\mathbf{Pt} - \mathbf{Pmax}}{\mathbf{Pmax}} \right)
 \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
B-BBEE status level of contributor	5	10		
The promotion of enterprises located in the Western Cape Province for work to be done or services to be rendered in that province;	2.5	5		
The promotion of enterprises located in the Cape Winelands District Municipal area for work to be done or services to be rendered in that municipal area	2.5	5		

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

☐ Partnership/Joint Venture / Consortium

- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

Name and surname

Signature(s) of bidder(s).....

Date.....

Address.....

.....

SCHEDULE 16: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - b. been convicted for fraud or corruption during the past five years;
 - c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied). The Database of Restricted Suppliers now resides on the National Treasury's website(www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	Yes ☐	No ☐
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes ☐	No ☐
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes ☐	No ☐
4.3.1	If so, furnish particulars:		
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes ☐	No ☐

4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes ☐	No ☐
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME) CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

SCHEDULE 17: CERTIFICATE OF INDEPENDENT BID DETERMINATION

1. This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
3. Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. take all reasonable steps to prevent such abuse;
 - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
4. This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

.....
(Bid Number and Description)

in response to the invitation for the bid made by: CAPE WINELANDS DISTRICT MUNICIPALITY do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of:..... that:
(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word

“competitor” shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:

- (a) Has been requested to submit a bid in response to this bid invitation;
- (b) Could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
- (c) Provides the same goods and services as the bidder and/or is in the same line of business as the bidder

- 6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
- 7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) Prices;
 - (b) Geographical area where product or service will be rendered (market allocation)
 - (c) Methods, factors or formulas used to calculate prices;
 - (d) The intention or decision to submit or not to submit, a bid;
 - (e) The submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) Bidding with the intention not to win the bid.
- 8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

SCHEDULE 18: CLAIMING PREFERENCE POINTS

List all partners / members / directors of this enterprise			
Van / Surname / Ifani	Voornaam / First name / Amagama	ID Nr./No. Inombolo	State Employee Number

NB! To claim Preference points a certified copy of your Balanced Broad-Based Black Economic Empowerment Score Card and proof of locality must be submitted with the **MBD 6.1 Claim Form**.

Vir meer inligting besoek: / For more information please visit: / Inkcukach ezithe vetshe uzakuzifumana aph:

The Department of Trade and Industry: <http://bee.thedti.gov.za/>
 South African National Accreditation System: <http://www.sanas.co.za/directory.php>
 Independent Regulatory Board of Auditors: <http://irba.co.za/index.php>

Name of Business/Entity:

1	Percentage of shareholding of persons (HDI) in the business historically disadvantaged because of unfair discrimination based on race .	%
2	Percentage of shareholding of persons (HDI) in the business historically disadvantaged because of unfair discrimination based on gender	%
3	Percentage of shareholding of persons (HDI) in the business historically disadvantaged because of unfair discrimination based on disability .	%
Please Circle your answer below:		
4	Is your business established within the area of jurisdiction of the District Municipality?	In / Out
5	Is your business established within the area of jurisdiction of the Western Cape Province?	In / Out

SCHEDULE 19: CREDIT ORDER INSTRUCTION

It is the policy of the Cape Winelands District Municipality to pay all creditors by means of direct bank transfers. Please complete this information and acquire your banker's confirmation.

Please attached a letter from your bank confirming your banking details.

I/we hereby request and authorise the Cape Winelands district municipality to pay any amounts that may accrue to me/us to the credit of my/our bank account.

I/we understand that a payment advice will be supplied by the Cape Winelands District municipality in the normal way that will indicate the date on which funds will be available in my/our bank account and details of payment.

I/we further undertake to inform the Cape Winelands District municipality in advance of any change in my/our bank details and accept that this authority may only be cancelled by me/us by giving thirty days' notice by prepaid registered post.

.....
INITIALS AND SURNAME:

.....
AUTHORISED SIGNATURE:

.....
DATE:

SCHEDULE 20: COIDA LETTER OF GOOD STANDING

A Letter of Good Standing that is **valid on closing date** of the bid from the Department of Employment and Labour or any institution that is licenced to carry out the business of insurance of its members against liabilities in accordance with the provisions of the COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT, 1993 (Act No. 130 of 1993) or a copy thereof must accompany the bid documents. The Letter of Good Standing (valid at closing date) can alternatively be submitted on a date as mutually agreed upon between the bidder and the Cape Winelands District Municipality. Failure to provide proof of a valid Letter of Good Standing within a mutually agreed upon timeframe from the Department of Employment and Labour or any institution that is licensed to carry out the business of insurance of its members against liabilities, will result in a bidder not being considered for further evaluation purposes. A Letter of good standing for “tender purposes” (valid at closing date) from the Department of Labour will also be accepted.

CF Reg No:

Certificate No:

SCHEDULE 21: OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

**AGREEMENT MADE AND ENTERED INTO BETWEEN THE CAPE WINELANDS DISTRICT
MUNICIPALITY (HEREINAFTER CALLED THE "EMPLOYER")**

AND

.....
(Contractor/Mandatory/Company/CC Name)

**IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, ACT No. 85 OF
1993 AS AMENDED.**

I,, representing
....., as an employer
in its own right, do hereby undertake to ensure, as far as is reasonably practicable, that all work will be
performed, and all equipment, machinery or plant used in such a manner as to comply with the provisions of
the Occupational Health and Safety Act (OHSA) and the Regulations promulgated thereunder.

I furthermore confirm that I am/we are registered with the Compensation Commissioner and that all
registration and assessment monies due to the Compensation Commissioner have been fully paid or that
I/We are insured with an approved licensed compensation insurer.

COID ACT Registration Number:

OR Compensation Insurer: Policy No.:

I undertake to appoint, where required, suitable competent persons, in writing, in terms of the requirements
of OHSA and the Regulations and to charge him/them with the duty of ensuring that the provisions of OHSA
and Regulations as well as the Council's Special Conditions of Contract, Way Leave, Lock-Out and Work
Permit Procedures are adhered to as far as reasonably practicable.

I further undertake to ensure that any subcontractors employed by me will enter into an occupational health
and safety agreement separately, and that such subcontractors comply with the conditions set.

I hereby declare that I have read and understand the appended Occupational Health and Safety Conditions
and undertake to comply therewith at all times.

I hereby also undertake to comply with the Occupational Health and Safety Specification and Plan.

Signed aton the.....day of.....20.....

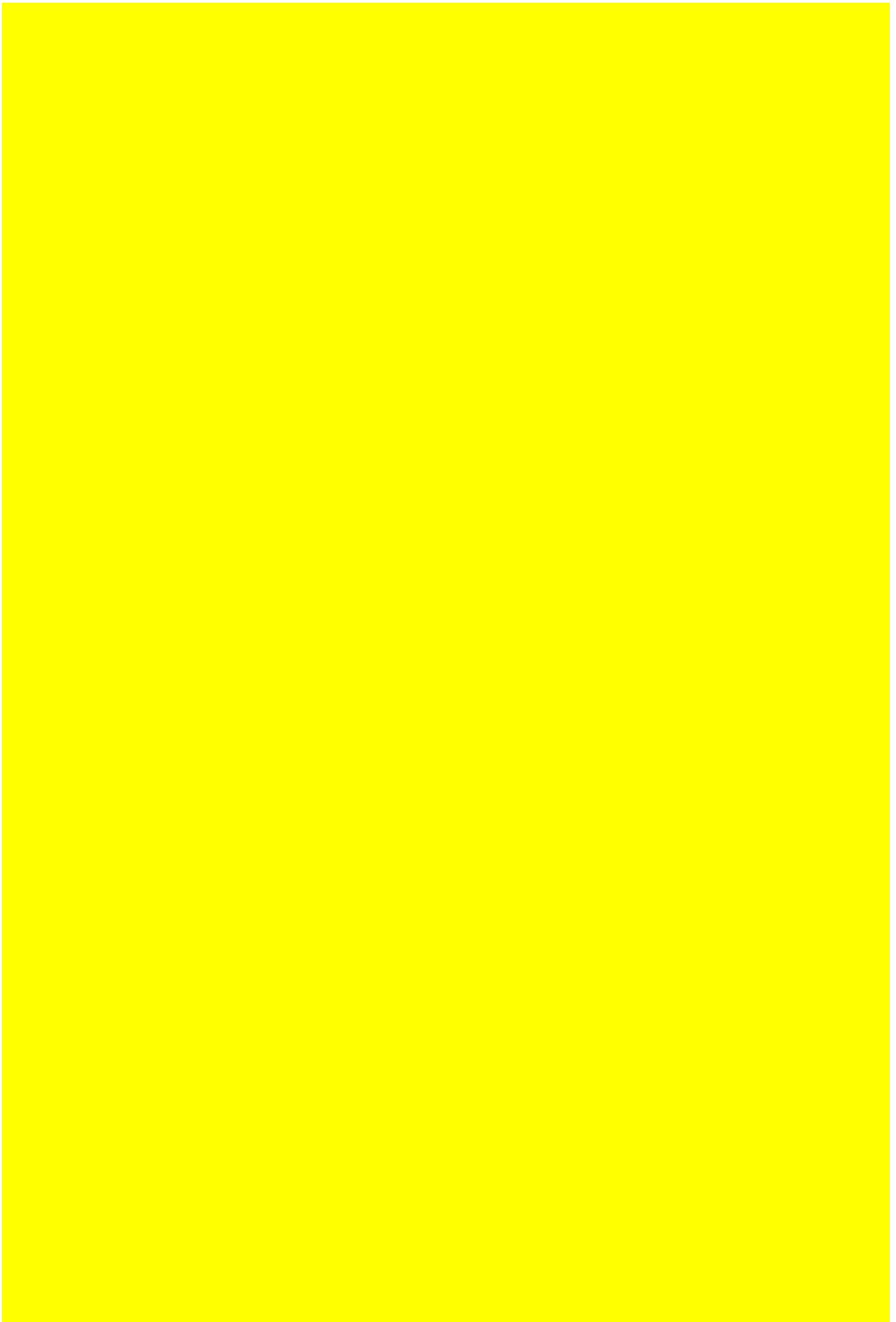
.....
Witness

.....
Mandatory

Signed aton the.....day of.....20.....

.....
Witness

.....
for and on behalf of
Cape Winelands District Municipality



Part C1: Agreements and Contract Data

C1.1 Form of Offer and Acceptance

Part C2: Pricing Data

C2.1 Pricing Assumptions

C2.2 Bill of Quantities

Part C3: Scope of Works

C3.1 Scope of Work

IMPORTANT NOTE:

The Tender Form (Offer by Tenderer) shall be completed and signed by all tenderers. Failure to properly complete and sign the Tender Form shall lead to disqualification of the tender.

The Acceptance Form shall be signed by the Employer to formalise the Contract Agreement after the successful tenderer has been formally notified of award.

The Schedule of Deviations forms an integral part of the Contract Agreement.

C1.1 FORM OF OFFER AND ACCEPTANCE (AGREEMENT)

OFFER BY TENDERER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works: Contract No:

T 2025/040: CONTRACTOR TO PROVIDE METALWORK AND GLAZING SERVICES TO CAPE WINELANDS DISTRICT MUNICIPALITY BUILDINGS FOR THE PERIOD ENDING JUNE 2028

The Tenderer, identified in the Offer signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the Tenderer, deemed to be duly authorized, signing this part of this Form of Offer and Acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

Signature: *(of person authorized to sign the tender)*

Name: *(of signatory in capitals)*:

Capacity: *(of Signatory)*:

Name of Tenderer: *(organisation)*:

Address:

Telephone number: **Fax number:**.....

Witness:

Signature:

Name: *(in capitals)*:

Date:

[Failure of a Tenderer to complete and sign this Form of Offer will invalidate the tender]

MUNICIPAL AREA		Bill of quantities total	15% VAT	Total	% Escalation Year 2	% Escalation Year 3
C2.2/1 WC 022: WITZENBERG	METALWORKS	R	R	R	%	%
	GLAZING	R	R	R	%	%
	TOTAL			R		
C2.2/2 WC 023: DRAKENSTEIN	METALWORKS	R	R	R	%	%
	GLAZING	R	R	R	%	%
	TOTAL			R		
C2.2/3 WC 024: STELLENBOSCH	METALWORKS	R	R	R	%	%
	GLAZING	R	R	R	%	%
	TOTAL			R		
C2.2/4 WC 025: BREEDER VALLEY	METALWORKS	R	R	R	%	%
	GLAZING	R	R	R	%	%
	TOTAL			R		
C2.2/5 WC 026: LANGEBOEG	METALWORKS	R	R	R	%	%
	GLAZING	R	R	R	%	%
	TOTAL			R		

ACCEPTANCE BY EMPLOYER

By signing this part of the Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer's Offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the contract are contained in

- Part C1 Agreement, and Contract Data, (which include this Agreement)
- Part C2 Pricing Data, including the Bill of Quantities
- Part C3 Scope of Work

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C3 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto as listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The Tenderer shall within two weeks after receiving a formal Letter of Award, including the Schedule of Deviations (if any), contact the Employer or its agent (whose details are given in the Contract Data) to arrange the delivery of bonds, guarantees and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data, upon receipt of which the Employer will execute the contract by signing this Agreement. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now Contractor) within five days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

Signature(s):

Name(s):

Capacity for the Tenderer:

Name of organization.....

Name and Signature of Witness:Date:

SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender,
2. A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such, letter, which constitutes a deviation as aforesaid become the subject of agreements reached during the process of, offer and acceptance, the outcome of such agreement shall be recorded here,
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here,
4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract,

1. **Subject:**.....

Details:

.....

2. **Subject:**

Details:

.....

3. **Subject:**

Details:

.....

4. **Subject:**

Details:

.....

5. **Subject:**

Details:

.....

By the duly authorised representatives signing this Agreement, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the Tenderer:

Signature:

Name: *(in capitals)*

Capacity:

Name of Tenderer *(organisation)*

Address:

Witness: Signature: **Name** *(in capitals)*:

Date:

For the Employer:

Signature:

Name: *(in capitals)*

Capacity:

Name of Employer *(organisation)*

Address:

Witness: Signature: **Name** *(in capitals)*:

Date:

CONFIRMATION OF RECEIPT

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

the (day) of(month) 20..... at (place).

For the Tenderer:

Signature:

Name: (*in capitals*)

Capacity:

Name of Tenderer (*organisation*)

Address:

Witness: Signature: **Name (*in capitals*):**

Date:

For the Employer:

Signature:

Name: (*in capitals*)

Capacity:

Name of Employer (*organisation*)

Address:

Witness: Signature: **Name (*in capitals*):**

Date:

C1.2 Contract Data (Part 1)

General Conditions of Contract

The General Conditions of Contract for Construction Works Third Edition (2015) published by the South African Institute of Civil Engineering is applicable to this Contract.

The Conditions of Contract is available for inspection and scrutiny at the offices of the Employer's Agent.

The General Conditions of Contract for Construction Works make several references to the Contract Data. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the General Conditions of Contract.

Clause	Wording
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1.1.1.14	Due Completion Date
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	The completion date will be the date on the works programme as agreed upon.
--	---

5.2.1	Commencement of the contract
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	The commencement of the contract will be the date which appears on the appointment letter issued by the employer's agent.
--	---

5.3	Commencement of the Works
------------	----------------------------------

	The commencement of the Works will be the date which appears on the Works programme as agreed upon.
--	---

5.3.1	The documentation required before commencement with the Works execution are:
--------------	--

- | | |
|--|---|
| | <ul style="list-style-type: none">• Works Programme• Health and Safety Plan• Public Liability Insurance |
|--|---|

5.3.2	The time to submit the documentation required before commencement of the works is within ten (10) working days of the award of the tender.
--------------	--

5.1.3	Suspension of the Works by the Employer
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5.13.1	The period of suspension shall not exceed <u>three</u> (3) months from the date of issue of a written order.
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5.14.1	Penalty for Delay
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	The penalty for late completion or failing to complete the works is R 750.00 for every day that elapses between the due completion date and the actual date of practical completion including non-working and special non-working days.
--	---

5.16.3	Latent Defects Liability Period
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	The latent defects period for the project is <u>six</u> (6) months from the date of the issue of the certificate of completion
--	--

6.8.2	Adjustment in rates and/or prices
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	The contract price shall not be subject to any contract price adjustment and the rates and prices tendered in the Bill of Quantities shall be final and binding throughout the period of the contract.
--	--

6.10	Payments
	Interim Payments

- 6.10.1 The Contractor shall deliver to the Employer's Agent a monthly statement for payment of all amounts he considers to be due to him for payment subject to approval, for payment within 30 days from the date of the invoice.
- 6.10.1.5 No payments will be made for material brought on to site but not yet built into the Permanent Works.
- 6.10.3 Retention**
The limit of Retention Money will be 10% per Payment Certificate to the maximum of 5% of the contract value of which 50% will be paid at the issue of the Certificate of Completion, and the remaining 50% within 14 days of the expiration of the latent Defects Liability Period, the date of issue of the Final Approval Certificate.
- 8.6.1.3 Public Liability Insurance**
The successful contractor must ensure that he/she has adequate Public Liability Insurance that will cover any possible claim(s) arising from or during the fulfilment of the Contract, irrespective of the amount of such claim(s).
- a. Amicable Settlement**
- 10.4.1 Interim settlement of disputes shall be by Mediation.
- 10.7 Arbitration**
- 10.7.1 The determination of disputes shall be by Arbitration.

C2. PRICING DATA

C2.1: PRICING ASSUMPTIONS

C2.2: BILL OF QUANTITIES

C2.1: PRICING ASSUMPTIONS

C2.1.1 GENERAL

The Bill of Quantities forms part of the Contract Documents and must be read and priced in conjunction with all the other documents comprising the Contract Documents, which include the Conditions of Tender, Conditions of Contract and the Scope of Works.

Tenderers shall only complete the Pricing Schedule and the Form of Offer for that municipal area they intend to work in. It must be noted that the tenders received for each municipal area will be evaluated and awarded separately.

C2.1.1.2 DESCRIPTION OF ITEMS IN THE SCHEDULE

The short description given in the Bill of Quantities are a brief description used to identify the activities for which prices are required. Detailed descriptions of the activities to be priced are provided in the Scope of Works.

C2.1.1.3 QUANTITIES REFLECTED IN THE SCHEDULE

The quantities reflecting in the bill of quantities and the tendered rates as per the Bill of Quantities will be the amounts used to evaluate and award the tender and should not be interpreted as an indication of the quantum of the work that is required.

All quantities will be re-measured and checked on completion for Final Account purposes.

The Contract Price for the completed contract shall be according to the Bill of Quantities.

C2.1.1.4 PRICING OF THE BILL OF QUANTITIES

OVERVIEW

This is not a lump-sum tender. Tenderers shall allow opposite each item for any cost involved with such item. Where products or services are rendered free of charge, in such instance the rate or price should be indicated as R 0.00. A fully completed and priced tender document must be handed in with tender-closing.

This tender is subject to escalation. The tenderer must indicate their escalation percentages on the pricing schedules. The prices for the first year shall remain fixed and escalation shall be effective on the 1st of July annually throughout the duration of this contract.

Pricing Schedules not fully and correctly completed will invalidate the Tenderer's offer.

The Bill of Quantities includes normal services and additional services when needed. The Form of Offer will be approved for purposes of finalising the Final Account of the successful service provider.

C2.2: BILL OF QUANTITIES

MUNICIPAL AREA		Select Region (Tick or X tendered Region)
C2.2/1	WC 022: WITZENBERG	
C2.2/2	WC 023: DRAKENSTEIN	
C2.2/3	WC 024: STELLENBOSCH	
C2.2/4	WC 025: BREEDE VALLEY	
C2.2/5	WC 026: LANGEBERG	

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>SECTION NO. 2</u> <u>BILL NO. 13</u> Plant and Equipment <u>Scaffolding</u> Access to works, for working at height inclusive of rigging, scaffolding or any means to accordance with all applicable regulations and safety standards (this item will be priced with each Work Package) CALL OUT Call out fee for supervisor/Artisan to attend to site inspections <u>METALWORK</u> <u>Standard Preambles</u> The "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" obtainable on the Public Works Website: http://www.publicworks.gov.za/ under "Forms & Documents; Consultant's Guidelines"; Item 2.2.1 and 2.2.2 or from the Departmental Project Manager/Leader should be read in support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards Users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system, represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications The Standard Preambles and the Notes in the various trade bills are to apply equally to this section	Days	5		
			No	50		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>Descriptions of bolts, anchors, etc</u> Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres <u>Aluminium doors, windows, etc</u> Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass shall be as described in the headings to window descriptions. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed The following certificates shall be provided prior to commencement of site work: 1. A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2. A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively 3. A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process 4. A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing				

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked 5. A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years				
		<u>GALVANISED STEEL STAIRS</u> <u>Welded stair with balustrades to walls</u>				
1		4.5mm "Vastrap" plate continuous treads, risers and landing	kg	50		
		Ditto 0 - 50	kg	1		
2		200 x 8mm Flat section stringers	kg	50		
		Ditto 0 - 50	kg	1		
3		Extra over for ramp or knee	No	5		
		Ditto 0 - 5	m ²	1		
4		Extra over for L-intersection	No	25		
5		Hole through 8mm steel for bolt	No	25		
6		40 x 8mm Flat section continuous handrails and bottom rails	kg	50	-	
		Ditto 0 - 50	kg	1		
7		Extra over for fanged end	No	25		
8		Extra over for L-intersection	No	25		
9		Extra over for T-intersection	No	25		
10		Extra over for turned down end	No	25		
11		Extra over for ramp or knee	No	25		
12		Square hollow section balusters	kg	50		
		Ditto 0 - 50	kg	1		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
13		Square hollow section standard framed through bottom rail	kg	50		
14		High tensile bolts (class 8.8)	kg	5		
		Ditto 0 - 5	kg	1		
15		12mm Diameter expansion bolt	No	5		
		<u>HANDRAILS</u>				
		<u>Hot-dip galvanised steel welded handrails to walls</u>				
16		50 x 10mm Flat section rails	m	25		
		Ditto 0 - 25	m	1		
17		Extra over for mitred L-intersection	No	25		
18		Extra over for ramp or knee	No	25		
19		Extra over for bend	No	25		
20		50 x 20 x 2.5mm Hollow section continuous rails	m	25		
		Ditto 0 - 25	m	1		
21		Extra over for flat closed end	No	25		
22		Extra over for mitred L-intersection	No	25		
23		Extra over for ramp or knee	No	25		
24		50mm Diameter handrails	m	25		
		Ditto 0 - 25	m	1		
25		Extra over for rounded closed end	No	25		
26		Extra over for ramp or knee	No	25		
27		Extra over for bend	No	25		
28		Bracket of 20mm diameter bar 200mm girth, once bent to and with one end welded to rail and other end with 150mm diameter x 6mm thick plate four holed for bolts and welded on	No	25		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
29		12mm Expansion bolt	No	5		
30		12mm Expansion anchor with loose bolt	No	5		
31		12mm Chemical anchor with loose bolt	No	5		
		<u>BALUSTRADING</u>				
		<u>Hot-dip galvanised steel welded balustrade</u>				
32		Horizontal balustrade to walkways 1100mm high, of 50 x 10mm flat section continuous top rail and bottom rail, 20 x 20 x 2mm square hollow section intermediate balusters at 150mm centres between top and bottom rails and 50 x 50 x 3mm square hollow section posts at approximately 1000mm centres each with 100 x 100 x 6mm flat section base plate bolted to concrete (bolts elsewhere)	m	25		
		Ditto 0 - 25	m	1		
33		Extra over for L-intersection of horizontal balustrades	No	25		
34		Raking balustrading to staircases 1100mm high, of 50 x 10mm flat section continuous top rail and bottom rail, 20 x 20 x 2mm square hollow section intermediate balusters at 150mm centres between top and bottom rails and 50 x 50 x 3mm square hollow section posts at approximately 1000mm centres each with 100 x 100 x 6mm flat section base plate bolted to concrete (bolts elsewhere)	m	25		
		Ditto 0 - 25	m	1		
35		Extra over for junction of end of horizontal with end of raking balustrades	No	25		

WC 022 WITZENBERG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
36		Horizontal balustrade 1100mm high, of 60mm external diameter x 2.5mm thick continuous pipe top and bottom rails, 60mm diameter x 2.5mm thick hollow section posts at approximately 1000mm centres with 100 x 100 x 6mm base plates bolted to concrete (bolts elsewhere) and 16mm diameter intermediate vertical balusters at 150mm centres between top and bottom rails	m	25		
		Ditto 0 - 25	m	1		
37		Extra over for L-intersection of horizontal balustrades	No	25		
		Raking balustrading 1100mm high, of 60mm external diameter x 2.5mm thick continuous pipe top and bottom rails, 60mm diameter x 2.5mm thick hollow section posts at approximately 1000mm centres with 100 x 100 x 6mm base plates bolted to concrete (bolts elsewhere) and 16mm diameter intermediate vertical balusters at 150mm centres between top and bottom rails	m	25		
38		Ditto 0 - 25	m	1		
39		Extra over for junction of end of horizontal with end of raking balustrades	No	25		
		Horizontal balustrades 1100mm high of 60mm diameter continuous top and bottom rails, 16mm diameter intermediate balusters at approximately 150mm centres between top and bottom rails and 60mm diameter posts at approximately 1000mm centres each with 100 x 100 base plate bolted to concrete	m	25		
40						
41		Extra over for L-intersection of horizontal balustrades	No	25		
		Raking balustrades 1100mm high of 60mm diameter continuous top and bottom rails, 16mm diameter intermediate balusters at approximately 150mm centres between top and bottom rails and 60mm diameter posts at approximately 1000mm centres each with 100 x 100 base plate bolted to concrete	m	25		
42						

WC 022 WITZENBERG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		Ditto 0 - 25	m	1		
43		Extra over for junction of end of horizontal with end of raking balustrades	No	25		
		<u>Hot-dip galvanised steel welded balustrading and handrails</u>				
44		50mm Diameter tubular handrail	m	25		
		Ditto 0 - 25	m	1		
45		Extra over for closed end	No	25		
46		Extra over for ramped end	No	25		
47		Extra over for 90 degree ramped bend between horizontal and raking rail	No	25		
48		30mm Diameter bottom rail, intermediate and end posts	m	25		
		Ditto 0 - 25	m	1		
49		Extra over for split and fanged ends for casting into concrete	No	25		
50		Extra over for cut, scribed and welded T-intersection	No	25		
51		10mm Diameter solid bar infill balusters	m	25		
		Ditto 0 - 25	m	1		
52		Extra for cut, scribed and welded T-intersection with handrail or bottom rail	m	25		
		Ditto 0 - 25	m	1		
53		16mm Diameter solid bar handrail bracket 250mm girth once bent, one end welded to handrail and other end split and fanged for building in	No	25		
54		Set up and build split and fanged end of handrail brackets into brickwork and set in epoxy mortar	No	25		
55		Set up and build split and fanged end of baluster posts into reinforced concrete and set in epoxy mortar	No	25		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
56		<u>Galvanised mild steel "Mentis" ball type or similar approved balustrading</u>				
		34,1mm Diameter x 2,5mm thick Handrail tubing	m	25		
57		Ditto 0 - 25	m	1		
		Extra over for slip joint as item 6	No	25		
58		Ditto, 90 degree long radius bend as item 1	No	25		
		Ditto, 90 degree short radius bend as item 5	No	25		
59		Ditto, 45 degree stairway bend as item 4	No	25		
		Ditto, 90 degree straight closure as item 2B	No	25		
60		Ditto, 90 degree straight closure as item 2M	No	25		
		Ditto, but 45 degree angle closure as item 3	No	25		
61		Wall end plate as item 7	No	25		
		42,9mm Diameter x 3mm thick type MT90 stanchion 1000mm long	No	25		
62		42,9mm Diameter x 3,3mm thick type MS90 stanchion 1140mm long	No	25		
		42,9mm Diameter x 3,2mm thick type MST30 stanchion 1000mm long	No	25		
63		42,9mm Diameter x 3,4mm thick type MSL30 and MSR30 stanchion 1140mm long	No	25		
		M16 x 100mm long galvanised mild steel flush expansion bolt including mortice in concrete	No	25		
64		<u>Stainless steel grade 304 "Mentis" ball type or similar approved balustrading</u>				
		31,8mm Diameter x 1,5mm thick handrail tubing	m	25		
70		Ditto 0 - 25	m	1		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
71		Extra over for slip joint as item 6	No	25		
72		Ditto, 90 degree long radius bend as item 1	No	25		
73		Ditto, 90 degree short radius bend as item 5	No	25		
74		Ditto, 45 degree stairway bend as item 4	No	25		
75		Ditto, 90 degree straight closure as item 2B	No	25		
76		Ditto, 90 degree straight closure as item 2M	No	25		
77		Ditto, but 45 degree angle closure as item 3	No	25		
78		Wall end plate as item 7	No	25		
79		42,9mm Diameter x 3mm thick type MT90 stanchion 1000mm long	No	25		
80		42,9mm Diameter x 3,3mm thick type MS90 stanchion 1140mm long	No	25		
81		42,9mm Diameter x 3,2mm thick type MST30 stanchion 1000mm long	No	25		
82		42,9mm Diameter x 3,4mm thick type MSL30 and MSR30 stanchion 1140mm long	No	25		
83		M16 x 100mm long galvanised mild steel flush expansion bolt including mortice in concrete	No	25		
		<u>CAT LADDERS</u>				
		<u>Hot-dip galvanised steel welded cat ladder 500mm wide to tank room</u>				
84		65 x 10mm Flat section stringers	kg	50		
		Ditto 0 - 50	kg	1		
85		Extra over for mitred L-intersection	No	25		
86		Extra over for bend across flat	No	25		
87		Extra over for bend across edge to 150mm internal radius	No	25		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
88		20mm Diameter rungs 500mm long with ends welded to stringers	kg	25		
		Ditto 0 - 50	kg	1		
89		150 x 150 x 6mm Fixing plate twice holed for bolts and welded on	No	25		
		65 x 6mm Flat section bracket 200mm girth once bent across flat, once holed for bolt and welded on	No	25		
90						
91		12mm Expansion bolt	No	5		
92		12mm Expansion anchor with loose bolt	No	5		
		<u>GATES, SCREENS, ETC</u>				
93		<u>Galvanised steel welded screens and gates</u>				
		50 x 2.5mm Fully galvanised diamond mesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
94		50 x 2.5mm Plastic coated fully galvanised diamond mesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
95		50 x 50 x 3.15mm Fully galvanised weldmesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
96		100mm Diameter (3mm wall thickness) galvanised steel post with a pressed steel mushroom cap and 300 x 300 x 6mm baseplate welded to bottom (cap and baseplate elsewhere)	m	25		
		Ditto 0 - 25	m	1		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
97		75mm Diameter (2mm wall thickness) galvanised steel rails, post and framing welded	m	25		
		Ditto 0 - 25	m	1		
98		Extra over for closed end	No	5		
99		Extra for mitred L-intersection	No	5		
100		Extra over for cut, scribed and welded T-intersection	No	5		
101		300 x 300 x 6mm Base plate four times holed for bolts and welded on	No	5		
102		100mm Diameter pressed steel mushroom welded on	No	5		
103		Single gate formed of 40 x 2.5mm thick round hollow section framing, middle rail and diagonal braces, covered with mesh netting (elsewhere), hung on two adjustable ring pivot hinges with tails split and spread and caulked into and including mortices in brickwork or concrete in 1.1 cement mortar or bolted to post and with 100mm pad bolt and keep welded on, size 1000 x 2100mm	No	5		
104		Double gate, each leaf formed of 40 x 2.5mm thick round hollow section framing, middle rail and diagonal braces, covered with mesh netting (elsewhere), each leaf hung on two adjustable ring pivot hinges with tails split and spread and caulked into and including mortices in brickwork or concrete in 1.1 cement mortar or bolted to post, with 254mm tower bolt welded to one leaf and with 203mm pad bolt and keep welded on at meeting stiles, size 2500 x 2100mm high overall.	No	5		
		<u>Hot-dip galvanised steel framed and welded gates with mitred intersections, etc</u>				

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
105		Single gate formed of 40 x 40 x 3mm thick hollow section perimeter framing and one middle rail, the top and bottom panels each filled with 16mm diameter round vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1000 x 2100mm high overall	No	5		
106		Single gate formed of 40 x 40 x 3mm thick hollow section perimeter framing and two middle rails 150mm apart with 3mm thick plate welded between same, the top and bottom panels each filled with 25 x 25 x 3mm thick square hollow section vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1000 x 2100mm high overall	No	5		
107		Double gate, each leave formed of 40 x 40 x 3mm thick hollow section perimeter framing and one middle rail, the top and bottom panels each filled with 16mm diameter round vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 2000 x 2100mm high overall	No	5		
108		Double gate, each leave formed of 40 x 40 x 3mm thick hollow section perimeter framing and two middle rails 150mm apart with 3mm thick plate welded between same, the top and bottom panels each filled with 25 x 25 x 3mm thick square hollow section vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1800 x 2100mm high overall	No	5		
109		Galvanised steel lock box welded to steel gate including all cutting and welding	No	5		
110		100mm Long heavy duty lockable pad bolt welded on	No	5		
111		Heavy duty hasp and staple welded on	No	5		

WC 022 WITZENBERG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>The following in hot-dip galvanised mild steel framed and welded stoneguard cage formed of 30 x 30 x 3mm angle front and back perimeter frame and four 200mm long separating spacers at corners, 40 x 3mm flat section vertical and horizontal intermediates welded to front frame at approximately 400mm centres, 40 x 3mm flat bars welded on diagonally at 300mm centres to top and sides of cage, 25 x 50 x 3 x 3mm thick heavy duty expanded metal mesh welded to front, sides, top and bottom of cage, back angle perimeter frame holed for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt with bolt spot welded to frame on completion including all welding, cutting, drilling and grinding smooth, touching up with cold galvanising, etc</u>				
112		25 x 50 x 3 x 3mm Thick heavy duty expanded metal mesh covering welded to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
113		30 x 30 x 3mm Angle section front and back perimeter frame	m	25		
		Ditto 0 - 25	m	1		
114		Extra over for mitred L-intersection	No	5		
115		40 x 3mm Flat section vertical and horizontal intermediates and spaces	m	25		
		Ditto 0 - 25	m	1		
116		Extra over for T-intersection	No	5		
117		Hole for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt	No	5		
		<u>The following in hot-dip galvanised mild steel framed and welded burglar bars formed of flat bar or square hollow section frames filled in with flat, square or round bars</u>				
118		30 x 5mm Flat section frame	m	25		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
119		Ditto 0 - 25	m	1		
		40 x 5mm Flat section frame	m	25		
		Ditto 0 - 25	m	1		
120		Extra over for mitred L-intersection	No	5		
121		30 x 5mm Flat section bars	m	25		
122		Ditto 0 - 25	m	1		
		40 x 5mm Flat section bars	m	25		
		Ditto 0 - 25	m	1		
123		Extra over for T-intersection	No	5		
124		12mm Diameter round bars	m	25		
125		Ditto 0 - 25	m	1		
		16mm Diameter round bars	m	25		
		Ditto 0 - 25	m	1		
126		12mm Square bars	m	25		
127		Ditto 0 - 25	m	1		
		16mm Square bars	m	25		
		Ditto 0 - 25	m	1		
128		Extra over for T-intersection	No	5		
129		30 x 30 x 3mm Thick square hollow section	m	25		
130		Ditto 0 - 25	m	1		
		40 x 40 x 3mm Thick square hollow section	m	25		
		Ditto 0 - 25	m	1		
131		Extra over for mitred L-intersection	No	5		
132		Extra over for T-intersection	No	5		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
133		Hole for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt	No	5		
		<u>GALVANISED STEEL MINOR WORK</u>				
		<u>Bolts</u>				
134		High tensile bolts, nuts and washers	kg	5		
		Ditto 0 - 5	kg	1		
135		100mm Long M10 diameter expansion bolt	No	5		
136		125mm Long M12 diameter expansion bolt	No	5		
137		150mm long M16 diameter expansion bolt	No	5		
138		200mm M12 chemical expansion bolt	No	5		
		<u>Corner protectors</u>				
139		50 x 50mm x 3.77kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
140		60 x 60mm x 4.57kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
141		70 x 70mm x 6.38kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
142		Extra over for mitred L-intersection	No	5		

WC 022 WITZENBERG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>Hot-dip galvanised steel posts</u>				
143		100 x 100 x 3mm Square tube posts	kg	50		
		Ditto 0 - 50	kg	1		
144		Extra over for flat closed end	No	5		
145		100 x 3mm Thick round hollow section post	kg	50		
		Ditto 0 - 50	kg	1		
146		Extra over for flat closed end	No	5		
147		200 x 200 x 6mm Base plate welded on to foot of post and four times holed for anchor bolts (bolts elsewhere measured)	No	5		
148		150 x 3mm thick x 500mm girth channel shaped bracket eight times holed for bolts (bolts elsewhere measured) and welded to post	No	5		
		<u>Hot-dip galvanised mild steel security ceiling mesh and frames, including all on and off -site welding, cutting, drilling, grinding smooth, touching up with cold galvanising, fixing in position between trusses</u>				
149		50 x 50 x 3mm Angle iron framing holed at 300mm centres and fixed to truss tie beam (truss beam elsewhere measured)	kg	50		
		Ditto 0 - 50	kg	1		
150		25 x 50 x 3mm Flat expanded metal security mesh welded all round to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
		<u>Hot-dip galvanised mild steel fixed screens and side screens, including all on and off -site welding, cutting, drilling, grinding smooth, touching up with cold galvanising, fixing in position to concrete surface bed and brick wall</u>				
151		50 x 50 x 3mm Square hollow section framing	kg	50		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
152		Ditto 0 - 50	kg	1		
		50 x 70 x 3mm Cleat welded on and once holed for 8mm bolts (bolts elsewhere measured)	No	5		
153		75 x 75 x 3mm Base plate welded on and twice holed for 8mm bolts (bolts elsewhere measured)	No	5		
154		50 x 50 x 2mm Channel welded to form frame	kg	50		
155		Ditto 0 - 50	kg	1		
		50 x 2mm Flat bar supports	kg	50		
		Ditto 0 - 50	kg	1		
156		25 x 50 x 1.8mm Flat expanded metal security mesh welded all round to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
157		<u>Galvanised steel powder coated security gates, fixed to brickwork or concrete</u>				
		Trellidoor or similar approved single gate with and including slam lock, for opening size 1000 x 2100mm high	No	5		
158		Trellidoor or similar approved, single gate with and including slam lock, for opening size 1000 x 2500mm high	No	5		
159		Trellidoor or similar approved single gate with and including slam lock, for opening size 2000 x 2100mm high	No	5		
160		Trellidoor or similar approved single gate with and including slam lock, for opening size 2000 x 2500mm high	No	5		
161		Trellidoor or similar approved double gate with and including slam lock, for opening size 3000 x 2100mm high	No	5		
162		Trellidoor or similar approved double gate with and including slam lock, for opening size 3000 x 2500mm high	No	5		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
163		<u>STAINLESS STEEL MINOR WORK</u>				
		<u>Grade 304 stainless steel corner protectors</u>				
		40 x 40mm x 3mm Angle section corner protectors to vertical corners, plugged on both sides	No	5		
164		<u>Grade 316 stainless steel</u>				
		38mm Tubing three step fully welded stainless steel pool ladder with non-slip treads complete with and fixed into compression anchors	No	5		
165		<u>BRASS MINOR WORK</u>				
		3 x 32mm Flat section water bars fixed in and including groove in concrete	m	25		
166		Ditto 0 - 25	m	1		
		3 x 32mm Flat section frame with 3 x 25 x 150mm long flat section lugs brazed on with ends split and spread at 300mm centres and caulked into and including mortices in concrete in 1.1 cement mortar	m	25		
167		Ditto 0 - 25	m	1		
		Extra over for mitred and L-intersection	No	25		
168		<u>PRESSED STEEL DOOR FRAMES</u>				
		<u>1,6mm Thick single rebated frame for half brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame for door size 762 x 2032mm	No	2		
169		Ditto but galvanised	No	1		
		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>1,6mm Thick double rebated frame for half brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
170		Frame for door size 762 x 2032mm	No	2		
		Ditto but galvanised	No	1		
171		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		
172		Frame for door size 813 x 2032mm with transom over for fixed fanlight size 813 x 305mm	No	2		
		Ditto but galvanised	No	1		
173		Frame for door size 813 x 2032mm with transom over for bottom hung fanlight size 813 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
174		Frame for double door size 1511 x 2032mm	No	2		
		Ditto but galvanised	No	1		
175		Frame for double door size 1613 x 2032mm	No	2		
		Ditto but galvanised	No	1		
176		Frame for double door size 1511 x 2032mm with transom over for fixed fanlight size 1511 x 305mm	No	2		
		Ditto but galvanised	No	1		
177		Frame for double door size 1613 x 2032mm with transom over for fixed fanlight size 1613 x 305mm with 13 x 13mm glazing beads cut and mitred around and countersunk screwed to steel	No	2		
		Ditto but galvanised	No	1		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
178		Frame for double door size 1511 x 2032mm with transom over for bottom hung fanlight size 1511 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
179		Frame for double door size 1613 x 2032mm with transom over for bottom hung fanlight size 1613 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
180		<u>1,6mm Thick double rebated frame for one brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame for door size 762 x 2032mm	No	2		
		Ditto but galvanised	No	1		
181		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		
182		Frame for door size 813 x 2032mm with transom over for fixed fanlight size 813 x 305mm	No	2		
		Ditto but galvanised	No	1		
183		Frame for door size 813 x 2032mm with transom over for bottom hung fanlight size 813 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
184		Frame for double door size 1511 x 2032mm	No	2		
		Ditto but galvanised	No	1		
185		Frame for double door size 1613 x 2032mm	No	2		
		Ditto but galvanised	No	1		
186		Frame for double door size 1511 x 2032mm with transom over for fixed fanlight size 1511 x 305mm	No	2		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
187		Ditto but galvanised	No	1		
		Frame for double door size 1613 x 2032mm with transom over for fixed fanlight size 1613 x 305mm with 13 x 13mm glazing beads cut and mitred around and countersunk screwed to steel	No	2		
		Ditto but galvanised	No	1		
188		Frame for double door size 1511 x 2032mm with transom over for bottom hung fanlight size 1511 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
189		Frame for double door size 1613 x 2032mm with transom over for bottom hung fanlight size 1613 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
		<u>PRESSED STEEL CUPBOARD DOOR FRAMES</u>				
190		<u>1,6mm Thick Single rebated cupboard frame complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame type CAS size 673 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
191		Frame type CAL size 825 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
192		Frame type CBS size 1270 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
193		Frame type CBL size 1575 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
194		Frame type CAS size 673 x 2085mm overall	No	2		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
195		Ditto but galvanised	No	1		
		Frame type CAFS size 673 x 2580mm overall	No	2		
196		Ditto but galvanised	No	1		
		Frame type CAFL size 825 x 2580mm overall	No	2		
197		Ditto but galvanised	No	1		
		Frame type CBFS size 1270 x 2580mm overall	No	2		
198		Ditto but galvanised	No	1		
		Frame type CBFL size 1575 x 2580mm overall	No	2		
199		Ditto but galvanised	No	1		
		Frame type CCS coupled together with three cleats size 1943 x 2085mm overall	No	2		
200		Ditto but galvanised	No	1		
		Frame type CCFS coupled together with three cleats size 1943 x 2580mm overall	No	2		
		Ditto but galvanised	No	1		
		<u>GALVANISED PRESSED STEEL TRANSFORMER ROOM DOORS AND FRAMES</u>				
		<u>1,6mm Thick door with 1,6mm thick double rebated frame for one brick wall complete with butts, etc and including setting up, building in, filling back of frame with cement mortar, etc</u>				
201		Vent type ALU size 900 x 745mm and frame	No	2		
202		Vent type BLU size 1590 x 745mm and frame	No	2		
203		Door type A size 813 x 2032mm and frame	No	2		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
204		Door type F size 1220 x 2440mm and frame	No	2		
205		Door with vent type AV size 813 x 2032mm and frame	No	2		
206		Door with vent type BV size 915 x 2135mm and frame	No	2		
207		Door with vent type CV size 1220 x 2135mm and frame	No	2		
208		Door with vent type H size 915 x 2440mm and frame	No	2		
209		Double door type D size 1830 x 2440mm and frame	No	2		
210		Double door with vent type MV size 1525 x 2135mm and frame	No	2		
211		Double door with vent type YV size 1525 x 2440mm and frame	No	2		
212		Double door with vent type DV size 1830 x 2440mm and frame.	No	2		
		<u>WISPECO SUPERIOR CHROMADEK PRE-PAINTED GALVANISED MILD STEEL ROLL-UP DOORS</u>				
213		Push up operation roller shutter door complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
214		Electrically operated roller shutter door complete with overhead gear, guides, fixing bolts, etc., including electrical connection and commissioning (electrical isolator elsewhere) to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>ROLLERSTYLE PRE-PAINTED ALUMINIUM ROLL-UP DOORS</u>				

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
215		Electrically operated roller shutter door complete with overhead gear, guides, fixing bolts, etc., including electrical connection and commissioning (electrical isolator elsewhere) to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>HOT DIP GALVANISED STEEL ROLLER SHUTTER DOORS WITH CHROMADEK OR OTHER APPROVED PRE-PAINTED FINISH</u>				
216		Push up operation roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 2500 x 2500mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
217		Push up operation roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
218		Chain operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
219		Chain operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 4000 x 4000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
220		Roll-Up crank operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts.	No	2		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
221		Roll-Up crank operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 4000 x 4000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
222		Roll-Up remote controlled electrically operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, operating gear, motor, fixing bolts, etc., to suit plain opening size 5000 x 5000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>STEEL WINDOWS, DOORS, ETC</u>				
		<u>School type windows of residential section complete with NBP2 burglar bars to all sashes, ironmongery and including setting up, building in, filling back of frame with cement mortar, etc</u>				
223		Window type 3-HCH size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
224		Window type 48H size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
225		Window type 9-F/LT size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
226		Window type 1-HCH size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		
227		Window type 2-BH size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		
228		Window type 8-F/LT size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
229		Window type 6-HCH size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
230		Window type 14-BH size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
231		Window type 11-F/LT size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
232		Window type 5-HCH size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
233		Window type 12-BH size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
234		Window type 10-F/LT size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
235		Composite type 6/4 coupled together with standard coupling mullion, size 889 x 1248mm overall	No	2		
		Ditto but galvanised	No	1		
		<u>STEEL RECORDROOM AND STRONGROOM DOORS, VENTILATORS, ETC</u>				
236		Double ended strongroom ventilator size 255 x 255mm with telescopic sleeve, gauze and baffle plates, drop shutter, etc including setting up, building in and caulking all around in 1.1 cement mortar	No	2		
237		Double ended strongroom ventilator size 255 x 255mm with telescopic sleeve, gauze and baffle plates, drop shutter, etc including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	2		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
238		Record room door and frame with a mass of 130kg to suit wall opening size 830 x 1935mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
239		Record room door and frame with a mass of 130kg to wall opening size 830 x 1935mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
240		Category 1 strongroom door and frame with a mass of 450kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
241		Category 1 strongroom door and frame with a mass of 450kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
242		Category 2 light duty strongroom door and frame with a mass of 460kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
243		Category 2 light duty strongroom door and frame with a mass of 460kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
244		Category 2 heavy duty strongroom door and frame with a mass of 480kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
245		Category 2 heavy duty strongroom door and frame with a mass of 480kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>STEEL SECURITY PAYROLL WINDOWS</u>				
		<u>Mutual or similar approved security payroll windows suitable for one brick walls, fixed to brickwork or concrete</u>				
246		Type 1 level G1 pay window size 600 x 800mm high	No	2		
247		Type 1 level G2 pay window size 600 x 800mm high	No	2		
248		Type 1 level G3 pay window size 600 x 800mm high	No	1		
		<u>ANTI-BANDIT DOORS</u>				
		<u>Mutual or similar approved bullet resistant anti-bandit doors with commercial veneer and frames, 5 pin Cisa dead lock, continuous Roton type hinge, aluminium Slambar and D-style pull handles, fixed to brickwork or concrete</u>				
249		Internal type level G1 door and frame size 940 x 2105mm high overall	No	1		
250		External type level G1 door and frame size 940 x 2105mm high overall	No	1		
251		Internal type level G1 door with view panel and frame size 940 x 2105mm high overall	No	1		
252		External type level G1 door with view panel and frame size 940 x 2105mm high overall	No	1		
253		Internal type level G2 door and frame size 940 x 2105mm high overall	No	1		
254		External type level G2 door and frame size 940 x 2105mm high overall	No	1		
255		Internal type level G2 door with view panel and frame size 940 x 2105mm high overall	No	1		
256		External type level G2 door with view panel and frame size 940 x 2105mm high overall	No	1		
257		Internal type level G3 door and frame size 940 x 2105mm high overall	No	1		

WC 022 WITZENBERG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
258		External type level G3 door and frame size 940 x 2105mm high overall	No	1		
259		Internal type level G3 door with view panel and frame size 940 x 2105mm high overall	No	1		
260		External type level G3 door with view panel and frame size 940 x 2105mm high overall	No	1		
		<u>NATURAL ANODISED ALUMINIUM WINDOWS, DOORS, ETC BY AAAMSA MEMBERS ONLY AND PROVIDE AAAMSA PERFORMANCE TEST CERTIFICATE</u>				
		<u>Casement pre-glazed side hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
261		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
262		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
263		Window type PT69 size 600 x 900mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
264		Window type PT129 size 1200 x 900mm, ditto	No	10		
265		Window type PT159 size 1500 x 900mm, ditto	No	10		
266		Window type PT159 size 1500 x 900mm, ditto	No	10		
267		Window type PT612 size 600 x 1200mm, ditto	No	10		
268		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
269		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
270		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
271		Window type PT615 size 600 x 1500mm, ditto	No	10		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
272		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
273		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
274		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
275		Window type PT618 size 600 x 1800mm, ditto	No	10		
276		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
277		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
278		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Casement pre-glazed top hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
279		Window type PT66 size 600 x 600mm glazed with 4mm clear float glass	No	10		
280		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
281		Window type PT66 size 600 x 600mm glazed with 4mm Pacific obscure glass	No	10		
282		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
283		Window type PT96 size 900 x 600mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
284		Window type PT69 size 600 x 900mm, ditto	No	10		
285		Window type PT99 size 900 x 900mm, ditto	No	10		
286		Window type PT129 size 1200 x 900mm, ditto	No	10		
287		Window type PT159 size 1500 x 900mm, ditto	No	10		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
288		Window type PT612 size 600 x 1200mm, ditto	No	10		
289		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
290		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
291		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
292		Window type PT615 size 600 x 1500mm, ditto	No	10		
293		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
294		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
295		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
296		Window type PT618 size 600 x 1800mm, ditto	No	10		
297		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
298		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
299		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Palace pre-glazed aluminium sliding doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
300		Door type SD1521OX, size 1500 x 2100mm high overall	No	10		
301		Door type SD1821OX, size 1800 x 2100mm high overall	No	10		
302		Door type SD2121OX, size 2100 x 2100mm high overall	No	10		
303		Door type SD2421OX, size 2400 x 2100mm high overall	No	10		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
304		Door type SD3021OXXO, size 3000 x 2100mm high overall	No	10		
305		Door type SD3621OXXO, size 3600 x 2100mm high overall	No	10		
		<u>Vistafold pre-glazed aluminium frames, doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
306		Frame and door type SFD1821-3 Panel size 1800 x 2100mm high overall	No	10		
307		Frame and door type SFD2121-3 Panel size 2100 x 2100mm high overall	No	10		
308		Frame and door type SFD2421-3 Panel size 2400 x 2100mm high overall	No	10		
309		Frame and door type SFD2721-3 Panel size 2700 x 2100mm high overall	No	10		
310		Frame and door type SFD1824-3 Panel size 1800 x 2400mm high overall	No	10		
311		Frame and door type SFD2124-3 Panel size 2100 x 2400mm high overall	No	10		
312		Frame and door type SFD2424-3 Panel size 2400 x 2400mm high overall	No	10		
313		Frame and door type SFD2724-3 Panel size 2700 x 2400mm high overall	No	10		
314		Frame and door type SFD1827-3 Panel size 1800 x 2700mm high overall	No	10		
315		Frame and door type SFD2127-3 Panel size 2100 x 2700mm high overall	No	10		
316		Frame and door type SFD2427-3 Panel size 2400 x 2700mm high overall	No	10		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
317		Frame and door type SFD2727-3 Panel size 2700 x 2700mm high overall	No	10		
318		Frame and door type SFD3324-5 Panel size 3300 x 2400mm high overall	No	10		
319		Frame and door type SFD3624-5 Panel size 3600 x 2400mm high overall	No	10		
320		Frame and door type SFD3327-5 Panel size 3300 x 2700mm high overall	No	10		
321		Frame and door type SFD3627-5 Panel size 3600 x 2700mm high overall	No	10		
		<u>POWDER COATED ALUMINIUM WINDOWS, DOORS, ETC BY AAAMSA MEMBERS ONLY AND PROVIDE AAAMSA PERFORMANCE TEST CERTIFICATE</u>				
		<u>Casement pre-glazed side hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
322		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
323		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
324		Window type PT69 size 600 x 900mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
325		Window type PT129 size 1200 x 900mm, ditto	No	10		
326		Window type PT159 size 1500 x 900mm, ditto	No	10		
327		Window type PT159 size 1500 x 900mm, ditto	No	10		
328		Window type PT612 size 600 x 1200mm, ditto	No	10		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
329		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
330		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
331		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
332		Window type PT615 size 600 x 1500mm, ditto	No	10		
333		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
334		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
335		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
336		Window type PT618 size 600 x 1800mm, ditto	No	10		
337		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
338		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
339		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Casement pre-glazed top hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
340		Window type PT66 size 600 x 600mm glazed with 4mm clear float glass	No	10		
341		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
342		Window type PT66 size 600 x 600mm glazed with 4mm Pacific obscure glass	No	10		
343		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
344		Window type PT96 size 900 x 600mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
345		Window type PT69 size 600 x 900mm, ditto	No	10		
346		Window type PT99 size 900 x 900mm, ditto	No	10		
347		Window type PT129 size 1200 x 900mm, ditto	No	10		
348		Window type PT159 size 1500 x 900mm, ditto	No	10		
349		Window type PT612 size 600 x 1200mm, ditto	No	10		
350		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
351		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
352		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
353		Window type PT615 size 600 x 1500mm, ditto	No	10		
354		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
355		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
356		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
357		Window type PT618 size 600 x 1800mm, ditto	No	10		
358		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
359		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
360		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Palace pre-glazed aluminium sliding doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
361		Door type SD1521OX, size 1500 x 2100mm high overall	No	10		
362		Door type SD1821OX, size 1800 x 2100mm high overall	No	10		
363		Door type SD2121OX, size 2100 x 2100mm high overall	No	10		
364		Door type SD2421OX, size 2400 x 2100mm high overall	No	10		
365		Door type SD3021OXXO, size 3000 x 2100mm high overall	No	10		
366		Door type SD3621OXXO, size 3600 x 2100mm high overall	No	10		
		<u>Vistafold pre-glazed aluminium frames, doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
367		Frame and door type SFD1821-3 Panel size 1800 x 2100mm high overall	No	10		
368		Frame and door type SFD2121-3 Panel size 2100 x 2100mm high overall	No	10		
369		Frame and door type SFD2421-3 Panel size 2400 x 2100mm high overall	No	10		
370		Frame and door type SFD2721-3 Panel size 2700 x 2100mm high overall	No	10		
371		Frame and door type SFD1824-3 Panel size 1800 x 2400mm high overall	No	10		
372		Frame and door type SFD2124-3 Panel size 2100 x 2400mm high overall	No	10		
373		Frame and door type SFD2424-3 Panel size 2400 x 2400mm high overall	No	10		
374		Frame and door type SFD2724-3 Panel size 2700 x 2400mm high overall	No	10		

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
375		Frame and door type SFD1827-3 Panel size 1800 x 2700mm high overall	No	10		
376		Frame and door type SFD2127-3 Panel size 2100 x 2700mm high overall	No	10		
377		Frame and door type SFD2427-3 Panel size 2400 x 2700mm high overall	No	10		
378		Frame and door type SFD2727-3 Panel size 2700 x 2700mm high overall	No	10		
379		Frame and door type SFD3324-5 Panel size 3300 x 2400mm high overall	No	10		
380		Frame and door type SFD3624-5 Panel size 3600 x 2400mm high overall	No	10		
381		Frame and door type SFD3327-5 Panel size 3300 x 2700mm high overall	No	10		
382		Frame and door type SFD3627-5 Panel size 3600 x 2700mm high overall	No	10		
		<u>ALUMINIUM LOUVRE UNITS</u>				
		<u>NATURAL ANODISED HORIZONTAL ALUMINIUM LOUVRE UNITS</u>				
		<u>Trox or similar approved fixed louvre units fixed to brickwork or concrete</u>				
383		Standard louvre unit type AGS-T, 400 x 400mm high	No	10		
384		Standard louvre unit type AGS-T, 500 x 500mm high	No	10		
385		Standard louvre unit type AGS-T, 600 x 600mm high	No	10		
		<u>POWDER COATED HORIZONTAL ALUMINIUM LOUVRE UNITS</u>				
		<u>Trox or similar approved fixed louvre units fixed to brickwork or concrete</u>				

WC 022 WITZENBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
386		Standard louvre unit type AGS-T, 400 x 400mm high	No	10		
387		Standard louvre unit type AGS-T, 500 x 500mm high	No	10		
388		Standard louvre unit type AGS-T, 600 x 600mm high	No	10		
		<u>SHOWER CUBICLE PANELS AND DOORS</u>				
		<u>Powder coated aluminium shower cubicle panels and doors with frames, sliding gear, pivot hinges, cleats, stops, etc. and 6mm toughened clear safety glass, plugged to tiled walls and sealed with silicone sealant (sizes to be verified on site):</u>				
389		Bi - fold door approximate size 1 000 x 1 800mm high	No	15		
390		Fixed panel approximate size 300 x 1 800mm high	No	15		
391		Sliding door approximate size 960 x 1 800mm high	No	15		
392		Sliding shower door in three leaves to suit plain opening size 900 x 2000mm high	No	15		
Carried to page 59						

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>SECTION NO. 2</u> <u>BILL NO. 13</u> Plant and Equipment <u>Scaffolding</u> Access to works, for working at height inclusive of rigging, scaffolding or any means to accordance with all applicable regulations and safety standards (this item will be priced with each Work Package) CALL OUT Call out fee for supervisor/Artisan to attend to site inspections <u>METALWORK</u> <u>Standard Preambles</u> The "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" obtainable on the Public Works Website: http://www.publicworks.gov.za/ under "Forms & Documents; Consultant's Guidelines"; Item 2.2.1 and 2.2.2 or from the Departmental Project Manager/Leader should be read in support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards Users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system, represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications The Standard Preambles and the Notes in the various trade bills are to apply equally to this section	Days	5		
			No	50		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>Descriptions of bolts, anchors, etc</u> Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres <u>Aluminium doors, windows, etc</u> Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass shall be as described in the headings to window descriptions. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed The following certificates shall be provided prior to commencement of site work: 1. A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2. A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively 3. A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process 4. A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing				

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked 5. A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years				
		<u>GALVANISED STEEL STAIRS</u>				
		<u>Welded stair with balustrades to walls</u>				
1		4.5mm "Vastrap" plate continuous treads, risers and landing	kg	50		
		Ditto 0 - 50	kg	1		
2		200 x 8mm Flat section stringers	kg	50		
		Ditto 0 - 50	kg	1		
3		Extra over for ramp or knee	No	5		
		Ditto 0 - 5	m ²	1		
4		Extra over for L-intersection	No	25		
5		Hole through 8mm steel for bolt	No	25		
6		40 x 8mm Flat section continuous handrails and bottom rails	kg	50	-	
		Ditto 0 - 50	kg	1		
7		Extra over for fanged end	No	25		
8		Extra over for L-intersection	No	25		
9		Extra over for T-intersection	No	25		
10		Extra over for turned down end	No	25		
11		Extra over for ramp or knee	No	25		
12		Square hollow section balusters	kg	50		
		Ditto 0 - 50	kg	1		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
13		Square hollow section standard framed through bottom rail	kg	50		
14		High tensile bolts (class 8.8)	kg	5		
		Ditto 0 - 5	kg	1		
15		12mm Diameter expansion bolt	No	5		
		<u>HANDRAILS</u>				
		<u>Hot-dip galvanised steel welded handrails to walls</u>				
16		50 x 10mm Flat section rails	m	25		
		Ditto 0 - 25	m	1		
17		Extra over for mitred L-intersection	No	25		
18		Extra over for ramp or knee	No	25		
19		Extra over for bend	No	25		
20		50 x 20 x 2.5mm Hollow section continuous rails	m	25		
		Ditto 0 - 25	m	1		
21		Extra over for flat closed end	No	25		
22		Extra over for mitred L-intersection	No	25		
23		Extra over for ramp or knee	No	25		
24		50mm Diameter handrails	m	25		
		Ditto 0 - 25	m	1		
25		Extra over for rounded closed end	No	25		
26		Extra over for ramp or knee	No	25		
27		Extra over for bend	No	25		
28		Bracket of 20mm diameter bar 200mm girth, once bent to and with one end welded to rail and other end with 150mm diameter x 6mm thick plate four holed for bolts and welded on	No	25		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
29		12mm Expansion bolt	No	5		
30		12mm Expansion anchor with loose bolt	No	5		
31		12mm Chemical anchor with loose bolt	No	5		
		<u>BALUSTRADING</u>				
		<u>Hot-dip galvanised steel welded balustrade</u>				
32		Horizontal balustrade to walkways 1100mm high, of 50 x 10mm flat section continuous top rail and bottom rail, 20 x 20 x 2mm square hollow section intermediate balusters at 150mm centres between top and bottom rails and 50 x 50 x 3mm square hollow section posts at approximately 1000mm centres each with 100 x 100 x 6mm flat section base plate bolted to concrete (bolts elsewhere)	m	25		
		Ditto 0 - 25	m	1		
33		Extra over for L-intersection of horizontal balustrades	No	25		
34		Raking balustrading to staircases 1100mm high, of 50 x 10mm flat section continuous top rail and bottom rail, 20 x 20 x 2mm square hollow section intermediate balusters at 150mm centres between top and bottom rails and 50 x 50 x 3mm square hollow section posts at approximately 1000mm centres each with 100 x 100 x 6mm flat section base plate bolted to concrete (bolts elsewhere)	m	25		
		Ditto 0 - 25	m	1		
35		Extra over for junction of end of horizontal with end of raking balustrades	No	25		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
36		Horizontal balustrade 1100mm high, of 60mm external diameter x 2.5mm thick continuous pipe top and bottom rails, 60mm diameter x 2.5mm thick hollow section posts at approximately 1000mm centres with 100 x 100 x 6mm base plates bolted to concrete (bolts elsewhere) and 16mm diameter intermediate vertical balusters at 150mm centres between top and bottom rails	m	25		
		Ditto 0 - 25	m	1		
37		Extra over for L-intersection of horizontal balustrades	No	25		
		Raking balustrading 1100mm high, of 60mm external diameter x 2.5mm thick continuous pipe top and bottom rails, 60mm diameter x 2.5mm thick hollow section posts at approximately 1000mm centres with 100 x 100 x 6mm base plates bolted to concrete (bolts elsewhere) and 16mm diameter intermediate vertical balusters at 150mm centres between top and bottom rails	m	25		
38		Ditto 0 - 25	m	1		
		Extra over for junction of end of horizontal with end of raking balustrades	No	25		
39		Horizontal balustrades 1100mm high of 60mm diameter continuous top and bottom rails, 16mm diameter intermediate balusters at approximately 150mm centres between top and bottom rails and 60mm diameter posts at approximately 1000mm centres each with 100 x 100 base plate bolted to concrete	m	25		
		Extra over for L-intersection of horizontal balustrades	No	25		
40		Raking balustrades 1100mm high of 60mm diameter continuous top and bottom rails, 16mm diameter intermediate balusters at approximately 150mm centres between top and bottom rails and 60mm diameter posts at approximately 1000mm centres each with 100 x 100 base plate bolted to concrete	m	25		
41						
42						

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
43		Ditto 0 - 25	m	1		
		Extra over for junction of end of horizontal with end of raking balustrades	No	25		
		<u>Hot-dip galvanised steel welded balustrading and handrails</u>				
44		50mm Diameter tubular handrail	m	25		
45		Ditto 0 - 25	m	1		
		Extra over for closed end	No	25		
		Extra over for ramped end	No	25		
46		Extra over for 90 degree ramped bend between horizontal and raking rail	No	25		
47		30mm Diameter bottom rail, intermediate and end posts	m	25		
48		Ditto 0 - 25	m	1		
49		Extra over for split and fanged ends for casting into concrete	No	25		
		Extra over for cut, scribed and welded T-intersection	No	25		
		10mm Diameter solid bar infill balusters	m	25		
50		Ditto 0 - 25	m	1		
51		Extra for cut, scribed and welded T-intersection with handrail or bottom rail	m	25		
		Ditto 0 - 25	m	1		
		16mm Diameter solid bar handrail bracket 250mm girth once bent, one end welded to handrail and other end split and fanged for building in	No	25		
52		Set up and build split and fanged end of handrail brackets into brickwork and set in epoxy mortar	No	25		
53		Set up and build split and fanged end of baluster posts into reinforced concrete and set in epoxy mortar	No	25		
54						
55						

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
56		<u>Galvanised mild steel "Mentis" ball type or similar approved balustrading</u>				
		34,1mm Diameter x 2,5mm thick Handrail tubing	m	25		
57		Ditto 0 - 25	m	1		
		Extra over for slip joint as item 6	No	25		
58		Ditto, 90 degree long radius bend as item 1	No	25		
		Ditto, 90 degree short radius bend as item 5	No	25		
59		Ditto, 45 degree stairway bend as item 4	No	25		
		Ditto, 90 degree straight closure as item 2B	No	25		
60		Ditto, 90 degree straight closure as item 2M	No	25		
		Ditto, but 45 degree angle closure as item 3	No	25		
61		Wall end plate as item 7	No	25		
		42,9mm Diameter x 3mm thick type MT90 stanchion 1000mm long	No	25		
62		42,9mm Diameter x 3,3mm thick type MS90 stanchion 1140mm long	No	25		
		42,9mm Diameter x 3,2mm thick type MST30 stanchion 1000mm long	No	25		
63		42,9mm Diameter x 3,4mm thick type MSL30 and MSR30 stanchion 1140mm long	No	25		
		M16 x 100mm long galvanised mild steel flush expansion bolt including mortice in concrete	No	25		
64		<u>Stainless steel grade 304 "Mentis" ball type or similar approved balustrading</u>				
		31,8mm Diameter x 1,5mm thick handrail tubing	m	25		
70		Ditto 0 - 25	m	1		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
71		Extra over for slip joint as item 6	No	25		
72		Ditto, 90 degree long radius bend as item 1	No	25		
73		Ditto, 90 degree short radius bend as item 5	No	25		
74		Ditto, 45 degree stairway bend as item 4	No	25		
75		Ditto, 90 degree straight closure as item 2B	No	25		
76		Ditto, 90 degree straight closure as item 2M	No	25		
77		Ditto, but 45 degree angle closure as item 3	No	25		
78		Wall end plate as item 7	No	25		
79		42,9mm Diameter x 3mm thick type MT90 stanchion 1000mm long	No	25		
80		42,9mm Diameter x 3,3mm thick type MS90 stanchion 1140mm long	No	25		
81		42,9mm Diameter x 3,2mm thick type MST30 stanchion 1000mm long	No	25		
82		42,9mm Diameter x 3,4mm thick type MSL30 and MSR30 stanchion 1140mm long	No	25		
83		M16 x 100mm long galvanised mild steel flush expansion bolt including mortice in concrete	No	25		
		<u>CAT LADDERS</u>				
		<u>Hot-dip galvanised steel welded cat ladder 500mm wide to tank room</u>				
84		65 x 10mm Flat section stringers	kg	50		
		Ditto 0 - 50	kg	1		
85		Extra over for mitred L-intersection	No	25		
86		Extra over for bend across flat	No	25		
87		Extra over for bend across edge to 150mm internal radius	No	25		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
88		20mm Diameter rungs 500mm long with ends welded to stringers	kg	25		
		Ditto 0 - 50	kg	1		
89		150 x 150 x 6mm Fixing plate twice holed for bolts and welded on	No	25		
90		65 x 6mm Flat section bracket 200mm girth once bent across flat, once holed for bolt and welded on	No	25		
91		12mm Expansion bolt	No	5		
92		12mm Expansion anchor with loose bolt	No	5		
		<u>GATES, SCREENS, ETC</u>				
		<u>Galvanised steel welded screens and gates</u>				
93		50 x 2.5mm Fully galvanised diamond mesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
94		50 x 2.5mm Plastic coated fully galvanised diamond mesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	0		
95		50 x 50 x 3.15mm Fully galvanised weldmesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
96		100mm Diameter (3mm wall thickness) galvanised steel post with a pressed steel mushroom cap and 300 x 300 x 6mm baseplate welded to bottom (cap and baseplate elsewhere)	m	25		
		Ditto 0 - 25	m	1		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
97		75mm Diameter (2mm wall thickness) galvanised steel rails, post and framing welded	m	25		
		Ditto 0 - 25	m	1		
98		Extra over for closed end	No	5		
99		Extra for mitred L-intersection	No	5		
100		Extra over for cut, scribed and welded T-intersection	No	5		
101		300 x 300 x 6mm Base plate four times holed for bolts and welded on	No	5		
102		100mm Diameter pressed steel mushroom welded on	No	5		
103		Single gate formed of 40 x 2.5mm thick round hollow section framing, middle rail and diagonal braces, covered with mesh netting (elsewhere), hung on two adjustable ring pivot hinges with tails split and spread and caulked into and including mortices in brickwork or concrete in 1.1 cement mortar or bolted to post and with 100mm pad bolt and keep welded on, size 1000 x 2100mm	No	5		
104		Double gate, each leaf formed of 40 x 2.5mm thick round hollow section framing, middle rail and diagonal braces, covered with mesh netting (elsewhere), each leaf hung on two adjustable ring pivot hinges with tails split and spread and caulked into and including mortices in brickwork or concrete in 1.1 cement mortar or bolted to post, with 254mm tower bolt welded to one leaf and with 203mm pad bolt and keep welded on at meeting stiles, size 2500 x 2100mm high overall.	No	5		
		<u>Hot-dip galvanised steel framed and welded gates with mitred intersections, etc</u>				

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
105		Single gate formed of 40 x 40 x 3mm thick hollow section perimeter framing and one middle rail, the top and bottom panels each filled with 16mm diameter round vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1000 x 2100mm high overall	No	5		
106		Single gate formed of 40 x 40 x 3mm thick hollow section perimeter framing and two middle rails 150mm apart with 3mm thick plate welded between same, the top and bottom panels each filled with 25 x 25 x 3mm thick square hollow section vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1000 x 2100mm high overall	No	5		
107		Double gate, each leave formed of 40 x 40 x 3mm thick hollow section perimeter framing and one middle rail, the top and bottom panels each filled with 16mm diameter round vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 2000 x 2100mm high overall	No	5		
108		Double gate, each leave formed of 40 x 40 x 3mm thick hollow section perimeter framing and two middle rails 150mm apart with 3mm thick plate welded between same, the top and bottom panels each filled with 25 x 25 x 3mm thick square hollow section vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1800 x 2100mm high overall	No	5		
109		Galvanised steel lock box welded to steel gate including all cutting and welding	No	5		
110		100mm Long heavy duty lockable pad bolt welded on	No	5		
111		Heavy duty hasp and staple welded on	No	5		

WC 023 DRAKENSTEIN- METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>The following in hot-dip galvanised mild steel framed and welded stoneguard cage formed of 30 x 30 x 3mm angle front and back perimeter frame and four 200mm long separating spacers at corners, 40 x 3mm flat section vertical and horizontal intermediates welded to front frame at approximately 400mm centres, 40 x 3mm flat bars welded on diagonally at 300mm centres to top and sides of cage, 25 x 50 x 3 x 3mm thick heavy duty expanded metal mesh welded to front, sides, top and bottom of cage, back angle perimeter frame holed for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt with bolt spot welded to frame on completion including all welding, cutting, drilling and grinding smooth, touching up with cold galvanising, etc</u>				
112		25 x 50 x 3 x 3mm Thick heavy duty expanded metal mesh covering welded to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
113		30 x 30 x 3mm Angle section front and back perimeter frame	m	25		
		Ditto 0 - 25	m	1		
114		Extra over for mitred L-intersection	No	5		
115		40 x 3mm Flat section vertical and horizontal intermediates and spaces	m	25		
		Ditto 0 - 25	m	1		
116		Extra over for T-intersection	No	5		
117		Hole for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt	No	5		
		<u>The following in hot-dip galvanised mild steel framed and welded burglar bars formed of flat bar or square hollow section frames filled in with flat, square or round bars</u>				
118		30 x 5mm Flat section frame	m	25		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
119		Ditto 0 - 25	m	1		
		40 x 5mm Flat section frame	m	25		
		Ditto 0 - 25	m	1		
120		Extra over for mitred L-intersection	No	5		
121		30 x 5mm Flat section bars	m	25		
		Ditto 0 - 25	m	1		
		40 x 5mm Flat section bars	m	25		
122		Ditto 0 - 25	m	1		
		40 x 5mm Flat section bars	m	25		
		Ditto 0 - 25	m	1		
123		Extra over for T-intersection	No	5		
124		12mm Diameter round bars	m	25		
		Ditto 0 - 25	m	1		
		16mm Diameter round bars	m	25		
125		Ditto 0 - 25	m	1		
		12mm Square bars	m	25		
		Ditto 0 - 25	m	1		
126		16mm Square bars	m	25		
		Ditto 0 - 25	m	1		
		Extra over for T-intersection	No	5		
127		30 x 30 x 3mm Thick square hollow section	m	25		
		Ditto 0 - 25	m	1		
		40 x 40 x 3mm Thick square hollow section	m	25		
128		Ditto 0 - 25	m	1		
		Extra over for mitred L-intersection	No	5		
		Extra over for T-intersection	No	5		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
133		Hole for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt	No	5		
		<u>GALVANISED STEEL MINOR WORK</u>				
		<u>Bolts</u>				
134		High tensile bolts, nuts and washers	kg	5		
		Ditto 0 - 5	kg	1		
135		100mm Long M10 diameter expansion bolt	No	5		
136		125mm Long M12 diameter expansion bolt	No	5		
137		150mm long M16 diameter expansion bolt	No	5		
138		200mm M12 chemical expansion bolt	No	5		
		<u>Corner protectors</u>				
139		50 x 50mm x 3.77kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
140		60 x 60mm x 4.57kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
141		70 x 70mm x 6.38kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
142		Extra over for mitred L-intersection	No	5		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>Hot-dip galvanised steel posts</u>				
143		100 x 100 x 3mm Square tube posts	kg	50		
		Ditto 0 - 50	kg	1		
144		Extra over for flat closed end	No	5		
145		100 x 3mm Thick round hollow section post	kg	50		
		Ditto 0 - 50	kg	1		
146		Extra over for flat closed end	No	5		
147		200 x 200 x 6mm Base plate welded on to foot of post and four times holed for anchor bolts (bolts elsewhere measured)	No	5		
148		150 x 3mm thick x 500mm girth channel shaped bracket eight times holed for bolts (bolts elsewhere measured) and welded to post	No	5		
		<u>Hot-dip galvanised mild steel security ceiling mesh and frames, including all on and off -site welding, cutting, drilling, grinding smooth, touching up with cold galvanising, fixing in position between trusses</u>				
149		50 x 50 x 3mm Angle iron framing holed at 300mm centres and fixed to truss tie beam (truss beam elsewhere measured)	kg	50		
		Ditto 0 - 50	kg	1		
150		25 x 50 x 3mm Flat expanded metal security mesh welded all round to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
		<u>Hot-dip galvanised mild steel fixed screens and side screens, including all on and off -site welding, cutting, drilling, grinding smooth, touching up with cold galvanising, fixing in position to concrete surface bed and brick wall</u>				
151		50 x 50 x 3mm Square hollow section framing	kg	50		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
152		Ditto 0 - 50	kg	1		
		50 x 70 x 3mm Cleat welded on and once holed for 8mm bolts (bolts elsewhere measured)	No	5		
153		75 x 75 x 3mm Base plate welded on and twice holed for 8mm bolts (bolts elsewhere measured)	No	5		
154		50 x 50 x 2mm Channel welded to form frame	kg	50		
155		Ditto 0 - 50	kg	1		
		50 x 2mm Flat bar supports	kg	50		
		Ditto 0 - 50	kg	1		
156		25 x 50 x 1.8mm Flat expanded metal security mesh welded all round to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
157		<u>Galvanised steel powder coated security gates, fixed to brickwork or concrete</u>				
		Trellidoor or similar approved single gate with and including slam lock, for opening size 1000 x 2100mm high	No	5		
158		Trellidoor or similar approved, single gate with and including slam lock, for opening size 1000 x 2500mm high	No	5		
159		Trellidoor or similar approved single gate with and including slam lock, for opening size 2000 x 2100mm high	No	5		
160		Trellidoor or similar approved single gate with and including slam lock, for opening size 2000 x 2500mm high	No	5		
161		Trellidoor or similar approved double gate with and including slam lock, for opening size 3000 x 2100mm high	No	5		
162		Trellidoor or similar approved double gate with and including slam lock, for opening size 3000 x 2500mm high	No	5		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
163		<u>STAINLESS STEEL MINOR WORK</u>				
		<u>Grade 304 stainless steel corner protectors</u>				
		40 x 40mm x 3mm Angle section corner protectors to vertical corners, plugged on both sides	No	5		
164		<u>Grade 316 stainless steel</u>				
		38mm Tubing three step fully welded stainless steel pool ladder with non-slip treads complete with and fixed into compression anchors	No	5		
165		<u>BRASS MINOR WORK</u>				
		3 x 32mm Flat section water bars fixed in and including groove in concrete	m	25		
166		Ditto 0 - 25	m	1		
		3 x 32mm Flat section frame with 3 x 25 x 150mm long flat section lugs brazed on with ends split and spread at 300mm centres and caulked into and including mortices in concrete in 1.1 cement mortar	m	25		
167		Ditto 0 - 25	m	1		
		Extra over for mitred and L-intersection	No	25		
168		<u>PRESSED STEEL DOOR FRAMES</u>				
		<u>1,6mm Thick single rebated frame for half brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame for door size 762 x 2032mm	No	2		
169		Ditto but galvanised	No	1		
		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>1,6mm Thick double rebated frame for half brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
170		Frame for door size 762 x 2032mm	No	2		
		Ditto but galvanised	No	1		
171		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		
172		Frame for door size 813 x 2032mm with transom over for fixed fanlight size 813 x 305mm	No	2		
		Ditto but galvanised	No	1		
173		Frame for door size 813 x 2032mm with transom over for bottom hung fanlight size 813 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
174		Frame for double door size 1511 x 2032mm	No	2		
		Ditto but galvanised	No	1		
175		Frame for double door size 1613 x 2032mm	No	2		
		Ditto but galvanised	No	1		
176		Frame for double door size 1511 x 2032mm with transom over for fixed fanlight size 1511 x 305mm	No	2		
		Ditto but galvanised	No	1		
177		Frame for double door size 1613 x 2032mm with transom over for fixed fanlight size 1613 x 305mm with 13 x 13mm glazing beads cut and mitred around and countersunk screwed to steel	No	2		
		Ditto but galvanised	No	1		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
178		Frame for double door size 1511 x 2032mm with transom over for bottom hung fanlight size 1511 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
179		Frame for double door size 1613 x 2032mm with transom over for bottom hung fanlight size 1613 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
180		<u>1,6mm Thick double rebated frame for one brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame for door size 762 x 2032mm	No	2		
		Ditto but galvanised	No	1		
181		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		
182		Frame for door size 813 x 2032mm with transom over for fixed fanlight size 813 x 305mm	No	2		
		Ditto but galvanised	No	1		
183		Frame for door size 813 x 2032mm with transom over for bottom hung fanlight size 813 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
184		Frame for double door size 1511 x 2032mm	No	2		
		Ditto but galvanised	No	1		
185		Frame for double door size 1613 x 2032mm	No	2		
		Ditto but galvanised	No	1		
186		Frame for double door size 1511 x 2032mm with transom over for fixed fanlight size 1511 x 305mm	No	2		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
187		Ditto but galvanised	No	1		
		Frame for double door size 1613 x 2032mm with transom over for fixed fanlight size 1613 x 305mm with 13 x 13mm glazing beads cut and mitred around and countersunk screwed to steel	No	2		
		Ditto but galvanised	No	1		
188		Frame for double door size 1511 x 2032mm with transom over for bottom hung fanlight size 1511 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
189		Frame for double door size 1613 x 2032mm with transom over for bottom hung fanlight size 1613 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
		<u>PRESSED STEEL CUPBOARD DOOR FRAMES</u>				
190		<u>1,6mm Thick Single rebated cupboard frame complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame type CAS size 673 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
191		Frame type CAL size 825 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
192		Frame type CBS size 1270 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
193		Frame type CBL size 1575 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
194		Frame type CAS size 673 x 2085mm overall	No	2		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
195		Ditto but galvanised	No	1		
		Frame type CAFS size 673 x 2580mm overall	No	2		
196		Ditto but galvanised	No	1		
		Frame type CAFL size 825 x 2580mm overall	No	2		
197		Ditto but galvanised	No	1		
		Frame type CBFS size 1270 x 2580mm overall	No	2		
198		Ditto but galvanised	No	1		
		Frame type CBFL size 1575 x 2580mm overall	No	2		
199		Ditto but galvanised	No	1		
		Frame type CCS coupled together with three cleats size 1943 x 2085mm overall	No	2		
200		Ditto but galvanised	No	1		
		Frame type CCFS coupled together with three cleats size 1943 x 2580mm overall	No	2		
		Ditto but galvanised	No	1		
		<u>GALVANISED PRESSED STEEL TRANSFORMER ROOM DOORS AND FRAMES</u>				
		<u>1,6mm Thick door with 1,6mm thick double rebated frame for one brick wall complete with butts, etc and including setting up, building in, filling back of frame with cement mortar, etc</u>				
201		Vent type ALU size 900 x 745mm and frame	No	2		
202		Vent type BLU size 1590 x 745mm and frame	No	2		
203		Door type A size 813 x 2032mm and frame	No	2		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
204		Door type F size 1220 x 2440mm and frame	No	2		
205		Door with vent type AV size 813 x 2032mm and frame	No	2		
206		Door with vent type BV size 915 x 2135mm and frame	No	2		
207		Door with vent type CV size 1220 x 2135mm and frame	No	2		
208		Door with vent type H size 915 x 2440mm and frame	No	2		
209		Double door type D size 1830 x 2440mm and frame	No	2		
210		Double door with vent type MV size 1525 x 2135mm and frame	No	2		
211		Double door with vent type YV size 1525 x 2440mm and frame	No	2		
212		Double door with vent type DV size 1830 x 2440mm and frame.	No	2		
		<u>WISPECO SUPERIOR CHROMADEK PRE-PAINTED GALVANISED MILD STEEL ROLL-UP DOORS</u>				
213		Push up operation roller shutter door complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
214		Electrically operated roller shutter door complete with overhead gear, guides, fixing bolts, etc., including electrical connection and commissioning (electrical isolator elsewhere) to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>ROLLERSTYLE PRE-PAINTED ALUMINIUM ROLL-UP DOORS</u>				

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
215		Electrically operated roller shutter door complete with overhead gear, guides, fixing bolts, etc., including electrical connection and commissioning (electrical isolator elsewhere) to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>HOT DIP GALVANISED STEEL ROLLER SHUTTER DOORS WITH CHROMADEK OR OTHER APPROVED PRE-PAINTED FINISH</u>				
216		Push up operation roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 2500 x 2500mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
217		Push up operation roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
218		Chain operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
219		Chain operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 4000 x 4000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
220		Roll-Up crank operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts.	No	2		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
221		Roll-Up crank operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 4000 x 4000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
222		Roll-Up remote controlled electrically operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, operating gear, motor, fixing bolts, etc., to suit plain opening size 5000 x 5000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>STEEL WINDOWS, DOORS, ETC</u>				
		<u>School type windows of residential section complete with NBP2 burglar bars to all sashes, ironmongery and including setting up, building in, filling back of frame with cement mortar, etc</u>				
223		Window type 3-HCH size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
224		Window type 48H size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
225		Window type 9-F/LT size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
226		Window type 1-HCH size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		
227		Window type 2-BH size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		
228		Window type 8-F/LT size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
229		Window type 6-HCH size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
230		Window type 14-BH size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
231		Window type 11-F/LT size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
232		Window type 5-HCH size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
233		Window type 12-BH size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
234		Window type 10-F/LT size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
235		Composite type 6/4 coupled together with standard coupling mullion, size 889 x 1248mm overall	No	2		
		Ditto but galvanised	No	1		
		<u>STEEL RECORDROOM AND STRONGROOM DOORS, VENTILATORS, ETC</u>				
236		Double ended strongroom ventilator size 255 x 255mm with telescopic sleeve, gauze and baffle plates, drop shutter, etc including setting up, building in and caulking all around in 1.1 cement mortar	No	2		
237		Double ended strongroom ventilator size 255 x 255mm with telescopic sleeve, gauze and baffle plates, drop shutter, etc including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	2		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
238		Record room door and frame with a mass of 130kg to suit wall opening size 830 x 1935mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
239		Record room door and frame with a mass of 130kg to wall opening size 830 x 1935mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
240		Category 1 strongroom door and frame with a mass of 450kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
241		Category 1 strongroom door and frame with a mass of 450kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
242		Category 2 light duty strongroom door and frame with a mass of 460kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
243		Category 2 light duty strongroom door and frame with a mass of 460kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
244		Category 2 heavy duty strongroom door and frame with a mass of 480kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
245		Category 2 heavy duty strongroom door and frame with a mass of 480kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>STEEL SECURITY PAYROLL WINDOWS</u>				
		<u>Mutual or similar approved security payroll windows suitable for one brick walls, fixed to brickwork or concrete</u>				
246		Type 1 level G1 pay window size 600 x 800mm high	No	2		
247		Type 1 level G2 pay window size 600 x 800mm high	No	2		
248		Type 1 level G3 pay window size 600 x 800mm high	No	1		
		<u>ANTI-BANDIT DOORS</u>				
		<u>Mutual or similar approved bullet resistant anti-bandit doors with commercial veneer and frames, 5 pin Cisa dead lock, continuous Roton type hinge, aluminium Slambar and D-style pull handles, fixed to brickwork or concrete</u>				
249		Internal type level G1 door and frame size 940 x 2105mm high overall	No	1		
250		External type level G1 door and frame size 940 x 2105mm high overall	No	1		
251		Internal type level G1 door with view panel and frame size 940 x 2105mm high overall	No	1		
252		External type level G1 door with view panel and frame size 940 x 2105mm high overall	No	1		
253		Internal type level G2 door and frame size 940 x 2105mm high overall	No	1		
254		External type level G2 door and frame size 940 x 2105mm high overall	No	1		
255		Internal type level G2 door with view panel and frame size 940 x 2105mm high overall	No	1		
256		External type level G2 door with view panel and frame size 940 x 2105mm high overall	No	1		
257		Internal type level G3 door and frame size 940 x 2105mm high overall	No	1		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
258		External type level G3 door and frame size 940 x 2105mm high overall	No	1		
259		Internal type level G3 door with view panel and frame size 940 x 2105mm high overall	No	1		
260		External type level G3 door with view panel and frame size 940 x 2105mm high overall	No	1		
		<u>NATURAL ANODISED ALUMINIUM WINDOWS, DOORS, ETC BY AAAMSA MEMBERS ONLY AND PROVIDE AAAMSA PERFORMANCE TEST CERTIFICATE</u>				
		<u>Casement pre-glazed side hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
261		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
262		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
263		Window type PT69 size 600 x 900mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
264		Window type PT129 size 1200 x 900mm, ditto	No	10		
265		Window type PT159 size 1500 x 900mm, ditto	No	10		
266		Window type PT159 size 1500 x 900mm, ditto	No	10		
267		Window type PT612 size 600 x 1200mm, ditto	No	10		
268		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
269		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
270		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
271		Window type PT615 size 600 x 1500mm, ditto	No	10		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
272		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
273		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
274		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
275		Window type PT618 size 600 x 1800mm, ditto	No	10		
276		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
277		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
278		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Casement pre-glazed top hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
279		Window type PT66 size 600 x 600mm glazed with 4mm clear float glass	No	10		
280		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
281		Window type PT66 size 600 x 600mm glazed with 4mm Pacific obscure glass	No	10		
282		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
283		Window type PT96 size 900 x 600mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
284		Window type PT69 size 600 x 900mm, ditto	No	10		
285		Window type PT99 size 900 x 900mm, ditto	No	10		
286		Window type PT129 size 1200 x 900mm, ditto	No	10		
287		Window type PT159 size 1500 x 900mm, ditto	No	10		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
288		Window type PT612 size 600 x 1200mm, ditto	No	10		
289		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
290		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
291		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
292		Window type PT615 size 600 x 1500mm, ditto	No	10		
293		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
294		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
295		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
296		Window type PT618 size 600 x 1800mm, ditto	No	10		
297		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
298		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
299		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Palace pre-glazed aluminium sliding doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
300		Door type SD1521OX, size 1500 x 2100mm high overall	No	10		
301		Door type SD1821OX, size 1800 x 2100mm high overall	No	10		
302		Door type SD2121OX, size 2100 x 2100mm high overall	No	10		
303		Door type SD2421OX, size 2400 x 2100mm high overall	No	10		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
304		Door type SD3021OXXO, size 3000 x 2100mm high overall	No	10		
305		Door type SD3621OXXO, size 3600 x 2100mm high overall	No	10		
		<u>Vistafold pre-glazed aluminium frames, doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
306		Frame and door type SFD1821-3 Panel size 1800 x 2100mm high overall	No	10		
307		Frame and door type SFD2121-3 Panel size 2100 x 2100mm high overall	No	10		
308		Frame and door type SFD2421-3 Panel size 2400 x 2100mm high overall	No	10		
309		Frame and door type SFD2721-3 Panel size 2700 x 2100mm high overall	No	10		
310		Frame and door type SFD1824-3 Panel size 1800 x 2400mm high overall	No	10		
311		Frame and door type SFD2124-3 Panel size 2100 x 2400mm high overall	No	10		
312		Frame and door type SFD2424-3 Panel size 2400 x 2400mm high overall	No	10		
313		Frame and door type SFD2724-3 Panel size 2700 x 2400mm high overall	No	10		
314		Frame and door type SFD1827-3 Panel size 1800 x 2700mm high overall	No	10		
315		Frame and door type SFD2127-3 Panel size 2100 x 2700mm high overall	No	10		
316		Frame and door type SFD2427-3 Panel size 2400 x 2700mm high overall	No	10		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
317		Frame and door type SFD2727-3 Panel size 2700 x 2700mm high overall	No	10		
318		Frame and door type SFD3324-5 Panel size 3300 x 2400mm high overall	No	10		
319		Frame and door type SFD3624-5 Panel size 3600 x 2400mm high overall	No	10		
320		Frame and door type SFD3327-5 Panel size 3300 x 2700mm high overall	No	10		
321		Frame and door type SFD3627-5 Panel size 3600 x 2700mm high overall	No	10		
		<u>POWDER COATED ALUMINIUM WINDOWS, DOORS, ETC BY AAAMSA MEMBERS ONLY AND PROVIDE AAAMSA PERFORMANCE TEST CERTIFICATE</u>				
		<u>Casement pre-glazed side hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
322		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
323		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
324		Window type PT69 size 600 x 900mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
325		Window type PT129 size 1200 x 900mm, ditto	No	10		
326		Window type PT159 size 1500 x 900mm, ditto	No	10		
327		Window type PT159 size 1500 x 900mm, ditto	No	10		
328		Window type PT612 size 600 x 1200mm, ditto	No	10		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
329		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
330		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
331		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
332		Window type PT615 size 600 x 1500mm, ditto	No	10		
333		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
334		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
335		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
336		Window type PT618 size 600 x 1800mm, ditto	No	10		
337		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
338		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
339		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Casement pre-glazed top hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
340		Window type PT66 size 600 x 600mm glazed with 4mm clear float glass	No	10		
341		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
342		Window type PT66 size 600 x 600mm glazed with 4mm Pacific obscure glass	No	10		
343		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
344		Window type PT96 size 900 x 600mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
345		Window type PT69 size 600 x 900mm, ditto	No	10		
346		Window type PT99 size 900 x 900mm, ditto	No	10		
347		Window type PT129 size 1200 x 900mm, ditto	No	10		
348		Window type PT159 size 1500 x 900mm, ditto	No	10		
349		Window type PT612 size 600 x 1200mm, ditto	No	10		
350		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
351		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
352		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
353		Window type PT615 size 600 x 1500mm, ditto	No	10		
354		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
355		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
356		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
357		Window type PT618 size 600 x 1800mm, ditto	No	10		
358		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
359		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
360		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Palace pre-glazed aluminium sliding doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
361		Door type SD1521OX, size 1500 x 2100mm high overall	No	10		
362		Door type SD1821OX, size 1800 x 2100mm high overall	No	10		
363		Door type SD2121OX, size 2100 x 2100mm high overall	No	10		
364		Door type SD2421OX, size 2400 x 2100mm high overall	No	10		
365		Door type SD3021OXXO, size 3000 x 2100mm high overall	No	10		
366		Door type SD3621OXXO, size 3600 x 2100mm high overall	No	10		
		<u>Vistafold pre-glazed aluminium frames, doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
367		Frame and door type SFD1821-3 Panel size 1800 x 2100mm high overall	No	10		
368		Frame and door type SFD2121-3 Panel size 2100 x 2100mm high overall	No	10		
369		Frame and door type SFD2421-3 Panel size 2400 x 2100mm high overall	No	10		
370		Frame and door type SFD2721-3 Panel size 2700 x 2100mm high overall	No	10		
371		Frame and door type SFD1824-3 Panel size 1800 x 2400mm high overall	No	10		
372		Frame and door type SFD2124-3 Panel size 2100 x 2400mm high overall	No	10		
373		Frame and door type SFD2424-3 Panel size 2400 x 2400mm high overall	No	10		
374		Frame and door type SFD2724-3 Panel size 2700 x 2400mm high overall	No	10		

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
375		Frame and door type SFD1827-3 Panel size 1800 x 2700mm high overall	No	10		
376		Frame and door type SFD2127-3 Panel size 2100 x 2700mm high overall	No	10		
377		Frame and door type SFD2427-3 Panel size 2400 x 2700mm high overall	No	10		
378		Frame and door type SFD2727-3 Panel size 2700 x 2700mm high overall	No	10		
379		Frame and door type SFD3324-5 Panel size 3300 x 2400mm high overall	No	10		
380		Frame and door type SFD3624-5 Panel size 3600 x 2400mm high overall	No	10		
381		Frame and door type SFD3327-5 Panel size 3300 x 2700mm high overall	No	10		
382		Frame and door type SFD3627-5 Panel size 3600 x 2700mm high overall	No	10		
		<u>ALUMINIUM LOUVRE UNITS</u>				
		<u>NATURAL ANODISED HORIZONTAL ALUMINIUM LOUVRE UNITS</u>				
		<u>Trox or similar approved fixed louvre units fixed to brickwork or concrete</u>				
383		Standard louvre unit type AGS-T, 400 x 400mm high	No	10		
384		Standard louvre unit type AGS-T, 500 x 500mm high	No	10		
385		Standard louvre unit type AGS-T, 600 x 600mm high	No	10		
		<u>POWDER COATED HORIZONTAL ALUMINIUM LOUVRE UNITS</u>				
		<u>Trox or similar approved fixed louvre units fixed to brickwork or concrete</u>				

WC 023 DRAKENSTEIN- METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
386		Standard louvre unit type AGS-T, 400 x 400mm high	No	10		
387		Standard louvre unit type AGS-T, 500 x 500mm high	No	10		
388		Standard louvre unit type AGS-T, 600 x 600mm high	No	10		
		<u>SHOWER CUBICLE PANELS AND DOORS</u>				
		<u>Powder coated aluminium shower cubicle panels and doors with frames, sliding gear, pivot hinges,cleats, stops, etc. and 6mm toughened clear safety glass, plugged to tiled walls and sealed with silicone sealant (sizes to be verified on site):</u>				
389		Bi - fold door approximate size 1 000 x 1 800mm high	No	15		
390		Fixed panel approximate size 300 x 1 800mm high	No	15		
391		Sliding door approximate size 960 x 1 800mm high	No	15		
392		Sliding shower door in three leaves to suit plain opening size 900 x 2000mm high	No	15		
Carried to page 59						

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>SECTION NO. 2</u> <u>BILL NO. 13</u> Plant and Equipment <u>Scaffolding</u> Access to works, for working at height inclusive of rigging, scaffolding or any means to accordance with all applicable regulations and safety standards (this item will be priced with each Work Package) CALL OUT Call out fee for supervisor/Artisan to attend to site inspections <u>METALWORK</u> <u>Standard Preambles</u> The "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" obtainable on the Public Works Website: http://www.publicworks.gov.za/ under "Forms & Documents; Consultant's Guidelines"; Item 2.2.1 and 2.2.2 or from the Departmental Project Manager/Leader should be read in support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards Users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system, represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications The Standard Preambles and the Notes in the various trade bills are to apply equally to this section	Days	5		
			No	50		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>Descriptions of bolts, anchors, etc</u> Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres <u>Aluminium doors, windows, etc</u> Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass shall be as described in the headings to window descriptions. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed The following certificates shall be provided prior to commencement of site work: 1. A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2. A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively 3. A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process 4. A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing				

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked 5. A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years				
		<u>GALVANISED STEEL STAIRS</u> <u>Welded stair with balustrades to walls</u>				
1		4.5mm "Vastrap" plate continuous treads, risers and landing	kg	50		
		Ditto 0 - 50	kg	1		
2		200 x 8mm Flat section stringers	kg	50		
		Ditto 0 - 50	kg	1		
3		Extra over for ramp or knee	No	5		
		Ditto 0 - 5	m ²	1		
4		Extra over for L-intersection	No	25		
5		Hole through 8mm steel for bolt	No	25		
6		40 x 8mm Flat section continuous handrails and bottom rails	kg	50	-	
		Ditto 0 - 50	kg	1		
7		Extra over for fanged end	No	25		
8		Extra over for L-intersection	No	25		
9		Extra over for T-intersection	No	25		
10		Extra over for turned down end	No	25		
11		Extra over for ramp or knee	No	25		
12		Square hollow section balusters	kg	50		
		Ditto 0 - 50	kg	1		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
13		Square hollow section standard framed through bottom rail	kg	50		
14		High tensile bolts (class 8.8)	kg	5		
		Ditto 0 - 5	kg	1		
15		12mm Diameter expansion bolt	No	5		
		<u>HANDRAILS</u>				
		<u>Hot-dip galvanised steel welded handrails to walls</u>				
16		50 x 10mm Flat section rails	m	25		
		Ditto 0 - 25	m	1		
17		Extra over for mitred L-intersection	No	25		
18		Extra over for ramp or knee	No	25		
19		Extra over for bend	No	25		
20		50 x 20 x 2.5mm Hollow section continuous rails	m	25		
		Ditto 0 - 25	m	1		
21		Extra over for flat closed end	No	25		
22		Extra over for mitred L-intersection	No	25		
23		Extra over for ramp or knee	No	25		
24		50mm Diameter handrails	m	25		
		Ditto 0 - 25	m	1		
25		Extra over for rounded closed end	No	25		
26		Extra over for ramp or knee	No	25		
27		Extra over for bend	No	25		
28		Bracket of 20mm diameter bar 200mm girth, once bent to and with one end welded to rail and other end with 150mm diameter x 6mm thick plate four holed for bolts and welded on	No	25		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
29		12mm Expansion bolt	No	5		
30		12mm Expansion anchor with loose bolt	No	5		
31		12mm Chemical anchor with loose bolt	No	5		
		<u>BALUSTRADING</u>				
		<u>Hot-dip galvanised steel welded balustrade</u>				
32		Horizontal balustrade to walkways 1100mm high, of 50 x 10mm flat section continuous top rail and bottom rail, 20 x 20 x 2mm square hollow section intermediate balusters at 150mm centres between top and bottom rails and 50 x 50 x 3mm square hollow section posts at approximately 1000mm centres each with 100 x 100 x 6mm flat section base plate bolted to concrete (bolts elsewhere)	m	25		
		Ditto 0 - 25	m	1		
33		Extra over for L-intersection of horizontal balustrades	No	25		
34		Raking balustrading to staircases 1100mm high, of 50 x 10mm flat section continuous top rail and bottom rail, 20 x 20 x 2mm square hollow section intermediate balusters at 150mm centres between top and bottom rails and 50 x 50 x 3mm square hollow section posts at approximately 1000mm centres each with 100 x 100 x 6mm flat section base plate bolted to concrete (bolts elsewhere)	m	25		
		Ditto 0 - 25	m	1		
35		Extra over for junction of end of horizontal with end of raking balustrades	No	25		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
36		Horizontal balustrade 1100mm high, of 60mm external diameter x 2.5mm thick continuous pipe top and bottom rails, 60mm diameter x 2.5mm thick hollow section posts at approximately 1000mm centres with 100 x 100 x 6mm base plates bolted to concrete (bolts elsewhere) and 16mm diameter intermediate vertical balusters at 150mm centres between top and bottom rails	m	25		
		Ditto 0 - 25	m	1		
37		Extra over for L-intersection of horizontal balustrades	No	25		
38		Raking balustrading 1100mm high, of 60mm external diameter x 2.5mm thick continuous pipe top and bottom rails, 60mm diameter x 2.5mm thick hollow section posts at approximately 1000mm centres with 100 x 100 x 6mm base plates bolted to concrete (bolts elsewhere) and 16mm diameter intermediate vertical balusters at 150mm centres between top and bottom rails	m	25		
		Ditto 0 - 25	m	1		
39		Extra over for junction of end of horizontal with end of raking balustrades	No	25		
40		Horizontal balustrades 1100mm high of 60mm diameter continuous top and bottom rails, 16mm diameter intermediate balusters at approximately 150mm centres between top and bottom rails and 60mm diameter posts at approximately 1000mm centres each with 100 x 100 base plate bolted to concrete	m	25		
41		Extra over for L-intersection of horizontal balustrades	No	25		
42		Raking balustrades 1100mm high of 60mm diameter continuous top and bottom rails, 16mm diameter intermediate balusters at approximately 150mm centres between top and bottom rails and 60mm diameter posts at approximately 1000mm centres each with 100 x 100 base plate bolted to concrete	m	25		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		Ditto 0 - 25	m	1		
43		Extra over for junction of end of horizontal with end of raking balustrades	No	25		
		<u>Hot-dip galvanised steel welded balustrading and handrails</u>				
44		50mm Diameter tubular handrail	m	25		
		Ditto 0 - 25	m	1		
45		Extra over for closed end	No	25		
46		Extra over for ramped end	No	25		
47		Extra over for 90 degree ramped bend between horizontal and raking rail	No	25		
48		30mm Diameter bottom rail, intermediate and end posts	m	25		
		Ditto 0 - 25	m	1		
49		Extra over for split and fanged ends for casting into concrete	No	25		
50		Extra over for cut, scribed and welded T-intersection	No	25		
51		10mm Diameter solid bar infill balusters	m	25		
		Ditto 0 - 25	m	1		
52		Extra for cut, scribed and welded T-intersection with handrail or bottom rail	m	25		
		Ditto 0 - 25	m	1		
53		16mm Diameter solid bar handrail bracket 250mm girth once bent, one end welded to handrail and other end split and fanged for building in	No	25		
54		Set up and build split and fanged end of handrail brackets into brickwork and set in epoxy mortar	No	25		
55		Set up and build split and fanged end of baluster posts into reinforced concrete and set in epoxy mortar	No	25		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
56		<u>Galvanised mild steel "Mentis" ball type or similar approved balustrading</u>				
		34,1mm Diameter x 2,5mm thick Handrail tubing	m	25		
57		Ditto 0 - 25	m	1		
		Extra over for slip joint as item 6	No	25		
58		Ditto, 90 degree long radius bend as item 1	No	25		
		Ditto, 90 degree short radius bend as item 5	No	25		
59		Ditto, 45 degree stairway bend as item 4	No	25		
		Ditto, 90 degree straight closure as item 2B	No	25		
60		Ditto, 90 degree straight closure as item 2M	No	25		
		Ditto, but 45 degree angle closure as item 3	No	25		
61		Wall end plate as item 7	No	25		
		42,9mm Diameter x 3mm thick type MT90 stanchion 1000mm long	No	25		
62		42,9mm Diameter x 3,3mm thick type MS90 stanchion 1140mm long	No	25		
		42,9mm Diameter x 3,2mm thick type MST30 stanchion 1000mm long	No	25		
63		42,9mm Diameter x 3,4mm thick type MSL30 and MSR30 stanchion 1140mm long	No	25		
		M16 x 100mm long galvanised mild steel flush expansion bolt including mortice in concrete	No	25		
64		<u>Stainless steel grade 304 "Mentis" ball type or similar approved balustrading</u>				
		31,8mm Diameter x 1,5mm thick handrail tubing	m	25		
70		Ditto 0 - 25	m	1		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
71		Extra over for slip joint as item 6	No	25		
72		Ditto, 90 degree long radius bend as item 1	No	25		
73		Ditto, 90 degree short radius bend as item 5	No	25		
74		Ditto, 45 degree stairway bend as item 4	No	25		
75		Ditto, 90 degree straight closure as item 2B	No	25		
76		Ditto, 90 degree straight closure as item 2M	No	25		
77		Ditto, but 45 degree angle closure as item 3	No	25		
78		Wall end plate as item 7	No	25		
79		42,9mm Diameter x 3mm thick type MT90 stanchion 1000mm long	No	25		
80		42,9mm Diameter x 3,3mm thick type MS90 stanchion 1140mm long	No	25		
81		42,9mm Diameter x 3,2mm thick type MST30 stanchion 1000mm long	No	25		
82		42,9mm Diameter x 3,4mm thick type MSL30 and MSR30 stanchion 1140mm long	No	25		
83		M16 x 100mm long galvanised mild steel flush expansion bolt including mortice in concrete	No	25		
		<u>CAT LADDERS</u>				
		<u>Hot-dip galvanised steel welded cat ladder 500mm wide to tank room</u>				
84		65 x 10mm Flat section stringers	kg	50		
		Ditto 0 - 50	kg	1		
85		Extra over for mitred L-intersection	No	25		
86		Extra over for bend across flat	No	25		
87		Extra over for bend across edge to 150mm internal radius	No	25		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
88		20mm Diameter rungs 500mm long with ends welded to stringers	kg	25		
		Ditto 0 - 50	kg	1		
89		150 x 150 x 6mm Fixing plate twice holed for bolts and welded on	No	25		
90		65 x 6mm Flat section bracket 200mm girth once bent across flat, once holed for bolt and welded on	No	25		
91		12mm Expansion bolt	No	5		
92		12mm Expansion anchor with loose bolt	No	5		
		<u>GATES, SCREENS, ETC</u>				
		<u>Galvanised steel welded screens and gates</u>				
93		50 x 2.5mm Fully galvanised diamond mesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
94		50 x 2.5mm Plastic coated fully galvanised diamond mesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	0		
95		50 x 50 x 3.15mm Fully galvanised weldmesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
96		100mm Diameter (3mm wall thickness) galvanised steel post with a pressed steel mushroom cap and 300 x 300 x 6mm baseplate welded to bottom (cap and baseplate elsewhere)	m	25		
		Ditto 0 - 25	m	1		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
97		75mm Diameter (2mm wall thickness) galvanised steel rails, post and framing welded	m	25		
		Ditto 0 - 25	m	1		
98		Extra over for closed end	No	5		
99		Extra for mitred L-intersection	No	5		
100		Extra over for cut, scribed and welded T-intersection	No	5		
101		300 x 300 x 6mm Base plate four times holed for bolts and welded on	No	5		
102		100mm Diameter pressed steel mushroom welded on	No	5		
103		Single gate formed of 40 x 2.5mm thick round hollow section framing, middle rail and diagonal braces, covered with mesh netting (elsewhere), hung on two adjustable ring pivot hinges with tails split and spread and caulked into and including mortices in brickwork or concrete in 1.1 cement mortar or bolted to post and with 100mm pad bolt and keep welded on, size 1000 x 2100mm	No	5		
104		Double gate, each leaf formed of 40 x 2.5mm thick round hollow section framing, middle rail and diagonal braces, covered with mesh netting (elsewhere), each leaf hung on two adjustable ring pivot hinges with tails split and spread and caulked into and including mortices in brickwork or concrete in 1.1 cement mortar or bolted to post, with 254mm tower bolt welded to one leaf and with 203mm pad bolt and keep welded on at meeting stiles, size 2500 x 2100mm high overall.	No	5		
		<u>Hot-dip galvanised steel framed and welded gates with mitred intersections, etc</u>				

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
105		Single gate formed of 40 x 40 x 3mm thick hollow section perimeter framing and one middle rail, the top and bottom panels each filled with 16mm diameter round vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1000 x 2100mm high overall	No	5		
106		Single gate formed of 40 x 40 x 3mm thick hollow section perimeter framing and two middle rails 150mm apart with 3mm thick plate welded between same, the top and bottom panels each filled with 25 x 25 x 3mm thick square hollow section vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1000 x 2100mm high overall	No	5		
107		Double gate, each leave formed of 40 x 40 x 3mm thick hollow section perimeter framing and one middle rail, the top and bottom panels each filled with 16mm diameter round vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 2000 x 2100mm high overall	No	5		
108		Double gate, each leave formed of 40 x 40 x 3mm thick hollow section perimeter framing and two middle rails 150mm apart with 3mm thick plate welded between same, the top and bottom panels each filled with 25 x 25 x 3mm thick square hollow section vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1800 x 2100mm high overall	No	5		
109		Galvanised steel lock box welded to steel gate including all cutting and welding	No	5		
110		100mm Long heavy duty lockable pad bolt welded on	No	5		
111		Heavy duty hasp and staple welded on	No	5		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>The following in hot-dip galvanised mild steel framed and welded stoneguard cage formed of 30 x 30 x 3mm angle front and back perimeter frame and four 200mm long separating spacers at corners, 40 x 3mm flat section vertical and horizontal intermediates welded to front frame at approximately 400mm centres, 40 x 3mm flat bars welded on diagonally at 300mm centres to top and sides of cage, 25 x 50 x 3 x 3mm thick heavy duty expanded metal mesh welded to front, sides, top and bottom of cage, back angle perimeter frame holed for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt with bolt spot welded to frame on completion including all welding, cutting, drilling and grinding smooth, touching up with cold galvanising, etc</u>				
112		25 x 50 x 3 x 3mm Thick heavy duty expanded metal mesh covering welded to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
113		30 x 30 x 3mm Angle section front and back perimeter frame	m	25		
		Ditto 0 - 25	m	1		
114		Extra over for mitred L-intersection	No	5		
115		40 x 3mm Flat section vertical and horizontal intermediates and spaces	m	25		
		Ditto 0 - 25	m	1		
116		Extra over for T-intersection	No	5		
117		Hole for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt	No	5		
		<u>The following in hot-dip galvanised mild steel framed and welded burglar bars formed of flat bar or square hollow section frames filled in with flat, square or round bars</u>				
118		30 x 5mm Flat section frame	m	25		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
119		Ditto 0 - 25	m	1		
		40 x 5mm Flat section frame	m	25		
		Ditto 0 - 25	m	1		
120		Extra over for mitred L-intersection	No	5		
121		30 x 5mm Flat section bars	m	25		
		Ditto 0 - 25	m	1		
		40 x 5mm Flat section bars	m	25		
122		Ditto 0 - 25	m	1		
		40 x 5mm Flat section bars	m	25		
		Ditto 0 - 25	m	1		
123		Extra over for T-intersection	No	5		
124		12mm Diameter round bars	m	25		
		Ditto 0 - 25	m	1		
		16mm Diameter round bars	m	25		
125		Ditto 0 - 25	m	1		
		12mm Square bars	m	25		
		Ditto 0 - 25	m	1		
126		16mm Square bars	m	25		
		Ditto 0 - 25	m	1		
		Extra over for T-intersection	No	5		
127		30 x 30 x 3mm Thick square hollow section	m	25		
		Ditto 0 - 25	m	1		
		40 x 40 x 3mm Thick square hollow section	m	25		
128		Ditto 0 - 25	m	1		
		Extra over for mitred L-intersection	No	5		
		Extra over for T-intersection	No	5		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
133		Hole for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt	No	5		
		<u>GALVANISED STEEL MINOR WORK</u>				
		<u>Bolts</u>				
134		High tensile bolts, nuts and washers	kg	5		
		Ditto 0 - 5	kg	1		
135		100mm Long M10 diameter expansion bolt	No	5		
136		125mm Long M12 diameter expansion bolt	No	5		
137		150mm long M16 diameter expansion bolt	No	5		
138		200mm M12 chemical expansion bolt	No	5		
		<u>Corner protectors</u>				
139		50 x 50mm x 3.77kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
140		60 x 60mm x 4.57kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
141		70 x 70mm x 6.38kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
142		Extra over for mitred L-intersection	No	5		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>Hot-dip galvanised steel posts</u>				
143		100 x 100 x 3mm Square tube posts	kg	50		
		Ditto 0 - 50	kg	1		
144		Extra over for flat closed end	No	5		
145		100 x 3mm Thick round hollow section post	kg	50		
		Ditto 0 - 50	kg	1		
146		Extra over for flat closed end	No	5		
147		200 x 200 x 6mm Base plate welded on to foot of post and four times holed for anchor bolts (bolts elsewhere measured)	No	5		
148		150 x 3mm thick x 500mm girth channel shaped bracket eight times holed for bolts (bolts elsewhere measured) and welded to post	No	5		
		<u>Hot-dip galvanised mild steel security ceiling mesh and frames, including all on and off -site welding, cutting, drilling, grinding smooth, touching up with cold galvanising, fixing in position between trusses</u>				
149		50 x 50 x 3mm Angle iron framing holed at 300mm centres and fixed to truss tie beam (truss beam elsewhere measured)	kg	50		
		Ditto 0 - 50	kg	1		
150		25 x 50 x 3mm Flat expanded metal security mesh welded all round to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
		<u>Hot-dip galvanised mild steel fixed screens and side screens, including all on and off -site welding, cutting, drilling, grinding smooth, touching up with cold galvanising, fixing in position to concrete surface bed and brick wall</u>				
151		50 x 50 x 3mm Square hollow section framing	kg	50		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		Ditto 0 - 50	kg	1		
152		50 x 70 x 3mm Cleat welded on and once holed for 8mm bolts (bolts elsewhere measured)	No	5		
153		75 x 75 x 3mm Base plate welded on and twice holed for 8mm bolts (bolts elsewhere measured)	No	5		
154		50 x 50 x 2mm Channel welded to form frame	kg	50		
		Ditto 0 - 50	kg	1		
155		50 x 2mm Flat bar supports	kg	50		
		Ditto 0 - 50	kg	1		
156		25 x 50 x 1.8mm Flat expanded metal security mesh welded all round to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
		<u>Galvanised steel powder coated security gates, fixed to brickwork or concrete</u>				
157		Trellidoor or similar approved single gate with and including slam lock, for opening size 1000 x 2100mm high	No	5		
158		Trellidoor or similar approved, single gate with and including slam lock, for opening size 1000 x 2500mm high	No	5		
159		Trellidoor or similar approved single gate with and including slam lock, for opening size 2000 x 2100mm high	No	5		
160		Trellidoor or similar approved single gate with and including slam lock, for opening size 2000 x 2500mm high	No	5		
161		Trellidoor or similar approved double gate with and including slam lock, for opening size 3000 x 2100mm high	No	5		
162		Trellidoor or similar approved double gate with and including slam lock, for opening size 3000 x 2500mm high	No	5		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>STAINLESS STEEL MINOR WORK</u>				
		<u>Grade 304 stainless steel corner protectors</u>				
163		40 x 40mm x 3mm Angle section corner protectors to vertical corners, plugged on both sides	No	5		
		<u>Grade 316 stainless steel</u>				
164		38mm Tubing three step fully welded stainless steel pool ladder with non-slip treads complete with and fixed into compression anchors	No	5		
		<u>BRASS MINOR WORK</u>				
165		3 x 32mm Flat section water bars fixed in and including groove in concrete	m	25		
		Ditto 0 - 25	m	1		
166		3 x 32mm Flat section frame with 3 x 25 x 150mm long flat section lugs brazed on with ends split and spread at 300mm centres and caulked into and including mortices in concrete in 1.1 cement mortar	m	25		
		Ditto 0 - 25	m	1		
167		Extra over for mitred and L-intersection	No	25		
		<u>PRESSED STEEL DOOR FRAMES</u>				
		<u>1,6mm Thick single rebated frame for half brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
168		Frame for door size 762 x 2032mm	No	2		
		Ditto but galvanised	No	1		
169		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>1,6mm Thick double rebated frame for half brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
170		Frame for door size 762 x 2032mm	No	2		
		Ditto but galvanised	No	1		
171		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		
172		Frame for door size 813 x 2032mm with transom over for fixed fanlight size 813 x 305mm	No	2		
		Ditto but galvanised	No	1		
173		Frame for door size 813 x 2032mm with transom over for bottom hung fanlight size 813 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
174		Frame for double door size 1511 x 2032mm	No	2		
		Ditto but galvanised	No	1		
175		Frame for double door size 1613 x 2032mm	No	2		
		Ditto but galvanised	No	1		
176		Frame for double door size 1511 x 2032mm with transom over for fixed fanlight size 1511 x 305mm	No	2		
		Ditto but galvanised	No	1		
177		Frame for double door size 1613 x 2032mm with transom over for fixed fanlight size 1613 x 305mm with 13 x 13mm glazing beads cut and mitred around and countersunk screwed to steel	No	2		
		Ditto but galvanised	No	1		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
178		Frame for double door size 1511 x 2032mm with transom over for bottom hung fanlight size 1511 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
179		Frame for double door size 1613 x 2032mm with transom over for bottom hung fanlight size 1613 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
		<u>1,6mm Thick double rebated frame for one brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
180		Frame for door size 762 x 2032mm	No	2		
		Ditto but galvanised	No	1		
181		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		
182		Frame for door size 813 x 2032mm with transom over for fixed fanlight size 813 x 305mm	No	2		
		Ditto but galvanised	No	1		
183		Frame for door size 813 x 2032mm with transom over for bottom hung fanlight size 813 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
184		Frame for double door size 1511 x 2032mm	No	2		
		Ditto but galvanised	No	1		
185		Frame for double door size 1613 x 2032mm	No	2		
		Ditto but galvanised	No	1		
186		Frame for double door size 1511 x 2032mm with transom over for fixed fanlight size 1511 x 305mm	No	2		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
187		Ditto but galvanised	No	1		
		Frame for double door size 1613 x 2032mm with transom over for fixed fanlight size 1613 x 305mm with 13 x 13mm glazing beads cut and mitred around and countersunk screwed to steel	No	2		
		Ditto but galvanised	No	1		
188		Frame for double door size 1511 x 2032mm with transom over for bottom hung fanlight size 1511 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
189		Frame for double door size 1613 x 2032mm with transom over for bottom hung fanlight size 1613 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
		<u>PRESSED STEEL CUPBOARD DOOR FRAMES</u>				
190		<u>1,6mm Thick Single rebated cupboard frame complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame type CAS size 673 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
191		Frame type CAL size 825 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
192		Frame type CBS size 1270 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
193		Frame type CBL size 1575 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
194		Frame type CAS size 673 x 2085mm overall	No	2		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
195		Ditto but galvanised	No	1		
		Frame type CAFS size 673 x 2580mm overall	No	2		
Ditto but galvanised		No	1			
Frame type CAFL size 825 x 2580mm overall		No	2			
Ditto but galvanised		No	1			
Frame type CBFS size 1270 x 2580mm overall		No	2			
Ditto but galvanised		No	1			
Frame type CBFL size 1575 x 2580mm overall		No	2			
Ditto but galvanised		No	1			
Frame type CCS coupled together with three cleats size 1943 x 2085mm overall		No	2			
Ditto but galvanised		No	1			
Frame type CCFS coupled together with three cleats size 1943 x 2580mm overall		No	2			
Ditto but galvanised		No	1			
201			Vent type ALU size 900 x 745mm and frame	No	2	
202		Vent type BLU size 1590 x 745mm and frame	No	2		
203		Door type A size 813 x 2032mm and frame	No	2		
<u>GALVANISED PRESSED STEEL TRANSFORMER ROOM DOORS AND FRAMES</u>						
<u>1,6mm Thick door with 1,6mm thick double rebated frame for one brick wall complete with butts, etc and including setting up, building in, filling back of frame with cement mortar, etc</u>						

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
204		Door type F size 1220 x 2440mm and frame	No	2		
205		Door with vent type AV size 813 x 2032mm and frame	No	2		
206		Door with vent type BV size 915 x 2135mm and frame	No	2		
207		Door with vent type CV size 1220 x 2135mm and frame	No	2		
208		Door with vent type H size 915 x 2440mm and frame	No	2		
209		Double door type D size 1830 x 2440mm and frame	No	2		
210		Double door with vent type MV size 1525 x 2135mm and frame	No	2		
211		Double door with vent type YV size 1525 x 2440mm and frame	No	2		
212		Double door with vent type DV size 1830 x 2440mm and frame.	No	2		
		<u>WISPECO SUPERIOR CHROMADEK PRE-PAINTED GALVANISED MILD STEEL ROLL-UP DOORS</u>				
213		Push up operation roller shutter door complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
214		Electrically operated roller shutter door complete with overhead gear, guides, fixing bolts, etc., including electrical connection and commissioning (electrical isolator elsewhere) to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>ROLLERSTYLE PRE-PAINTED ALUMINIUM ROLL-UP DOORS</u>				

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
215		Electrically operated roller shutter door complete with overhead gear, guides, fixing bolts, etc., including electrical connection and commissioning (electrical isolator elsewhere) to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>HOT DIP GALVANISED STEEL ROLLER SHUTTER DOORS WITH CHROMADEK OR OTHER APPROVED PRE-PAINTED FINISH</u>				
216		Push up operation roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 2500 x 2500mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
217		Push up operation roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
218		Chain operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
219		Chain operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 4000 x 4000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
220		Roll-Up crank operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts.	No	2		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
221		Roll-Up crank operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 4000 x 4000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
222		Roll-Up remote controlled electrically operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, operating gear, motor, fixing bolts, etc., to suit plain opening size 5000 x 5000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>STEEL WINDOWS, DOORS, ETC</u>				
		<u>School type windows of residential section complete with NBP2 burglar bars to all sashes, ironmongery and including setting up, building in, filling back of frame with cement mortar, etc</u>				
223		Window type 3-HCH size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
224		Window type 48H size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
225		Window type 9-F/LT size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
226		Window type 1-HCH size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		
227		Window type 2-BH size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		
228		Window type 8-F/LT size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
229		Window type 6-HCH size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
230		Window type 14-BH size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
231		Window type 11-F/LT size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
232		Window type 5-HCH size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
233		Window type 12-BH size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
234		Window type 10-F/LT size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
235		Composite type 6/4 coupled together with standard coupling mullion, size 889 x 1248mm overall	No	2		
		Ditto but galvanised	No	1		
		<u>STEEL RECORDROOM AND STRONGROOM DOORS, VENTILATORS, ETC</u>				
236		Double ended strongroom ventilator size 255 x 255mm with telescopic sleeve, gauze and baffle plates, drop shutter, etc including setting up, building in and caulking all around in 1.1 cement mortar	No	2		
237		Double ended strongroom ventilator size 255 x 255mm with telescopic sleeve, gauze and baffle plates, drop shutter, etc including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	2		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
238		Record room door and frame with a mass of 130kg to suit wall opening size 830 x 1935mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
239		Record room door and frame with a mass of 130kg to wall opening size 830 x 1935mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
240		Category 1 strongroom door and frame with a mass of 450kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
241		Category 1 strongroom door and frame with a mass of 450kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
242		Category 2 light duty strongroom door and frame with a mass of 460kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
243		Category 2 light duty strongroom door and frame with a mass of 460kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
244		Category 2 heavy duty strongroom door and frame with a mass of 480kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
245		Category 2 heavy duty strongroom door and frame with a mass of 480kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>STEEL SECURITY PAYROLL WINDOWS</u>				
		<u>Mutual or similar approved security payroll windows suitable for one brick walls, fixed to brickwork or concrete</u>				
246		Type 1 level G1 pay window size 600 x 800mm high	No	2		
247		Type 1 level G2 pay window size 600 x 800mm high	No	2		
248		Type 1 level G3 pay window size 600 x 800mm high	No	1		
		<u>ANTI-BANDIT DOORS</u>				
		<u>Mutual or similar approved bullet resistant anti-bandit doors with commercial veneer and frames, 5 pin Cisa dead lock, continuous Roton type hinge, aluminium Slambar and D-style pull handles, fixed to brickwork or concrete</u>				
249		Internal type level G1 door and frame size 940 x 2105mm high overall	No	1		
250		External type level G1 door and frame size 940 x 2105mm high overall	No	1		
251		Internal type level G1 door with view panel and frame size 940 x 2105mm high overall	No	1		
252		External type level G1 door with view panel and frame size 940 x 2105mm high overall	No	1		
253		Internal type level G2 door and frame size 940 x 2105mm high overall	No	1		
254		External type level G2 door and frame size 940 x 2105mm high overall	No	1		
255		Internal type level G2 door with view panel and frame size 940 x 2105mm high overall	No	1		
256		External type level G2 door with view panel and frame size 940 x 2105mm high overall	No	1		
257		Internal type level G3 door and frame size 940 x 2105mm high overall	No	1		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
258		External type level G3 door and frame size 940 x 2105mm high overall	No	1		
259		Internal type level G3 door with view panel and frame size 940 x 2105mm high overall	No	1		
260		External type level G3 door with view panel and frame size 940 x 2105mm high overall	No	1		
		<u>NATURAL ANODISED ALUMINIUM WINDOWS, DOORS, ETC BY AAAMSA MEMBERS ONLY AND PROVIDE AAAMSA PERFORMANCE TEST CERTIFICATE</u>				
		<u>Casement pre-glazed side hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
261		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
262		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
263		Window type PT69 size 600 x 900mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
264		Window type PT129 size 1200 x 900mm, ditto	No	10		
265		Window type PT159 size 1500 x 900mm, ditto	No	10		
266		Window type PT159 size 1500 x 900mm, ditto	No	10		
267		Window type PT612 size 600 x 1200mm, ditto	No	10		
268		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
269		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
270		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
271		Window type PT615 size 600 x 1500mm, ditto	No	10		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
272		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
273		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
274		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
275		Window type PT618 size 600 x 1800mm, ditto	No	10		
276		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
277		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
278		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Casement pre-glazed top hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
279		Window type PT66 size 600 x 600mm glazed with 4mm clear float glass	No	10		
280		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
281		Window type PT66 size 600 x 600mm glazed with 4mm Pacific obscure glass	No	10		
282		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
283		Window type PT96 size 900 x 600mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
284		Window type PT69 size 600 x 900mm, ditto	No	10		
285		Window type PT99 size 900 x 900mm, ditto	No	10		
286		Window type PT129 size 1200 x 900mm, ditto	No	10		
287		Window type PT159 size 1500 x 900mm, ditto	No	10		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
288		Window type PT612 size 600 x 1200mm, ditto	No	10		
289		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
290		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
291		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
292		Window type PT615 size 600 x 1500mm, ditto	No	10		
293		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
294		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
295		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
296		Window type PT618 size 600 x 1800mm, ditto	No	10		
297		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
298		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
299		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Palace pre-glazed aluminium sliding doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
300		Door type SD1521OX, size 1500 x 2100mm high overall	No	10		
301		Door type SD1821OX, size 1800 x 2100mm high overall	No	10		
302		Door type SD2121OX, size 2100 x 2100mm high overall	No	10		
303		Door type SD2421OX, size 2400 x 2100mm high overall	No	10		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
304		Door type SD3021OXXO, size 3000 x 2100mm high overall	No	10		
305		Door type SD3621OXXO, size 3600 x 2100mm high overall	No	10		
		<u>Vistafold pre-glazed aluminium frames, doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
306		Frame and door type SFD1821-3 Panel size 1800 x 2100mm high overall	No	10		
307		Frame and door type SFD2121-3 Panel size 2100 x 2100mm high overall	No	10		
308		Frame and door type SFD2421-3 Panel size 2400 x 2100mm high overall	No	10		
309		Frame and door type SFD2721-3 Panel size 2700 x 2100mm high overall	No	10		
310		Frame and door type SFD1824-3 Panel size 1800 x 2400mm high overall	No	10		
311		Frame and door type SFD2124-3 Panel size 2100 x 2400mm high overall	No	10		
312		Frame and door type SFD2424-3 Panel size 2400 x 2400mm high overall	No	10		
313		Frame and door type SFD2724-3 Panel size 2700 x 2400mm high overall	No	10		
314		Frame and door type SFD1827-3 Panel size 1800 x 2700mm high overall	No	10		
315		Frame and door type SFD2127-3 Panel size 2100 x 2700mm high overall	No	10		
316		Frame and door type SFD2427-3 Panel size 2400 x 2700mm high overall	No	10		

WC 024 STELLENBOSCH METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
317		Frame and door type SFD2727-3 Panel size 2700 x 2700mm high overall	No	10		
318		Frame and door type SFD3324-5 Panel size 3300 x 2400mm high overall	No	10		
319		Frame and door type SFD3624-5 Panel size 3600 x 2400mm high overall	No	10		
320		Frame and door type SFD3327-5 Panel size 3300 x 2700mm high overall	No	10		
321		Frame and door type SFD3627-5 Panel size 3600 x 2700mm high overall	No	10		
		<u>POWDER COATED ALUMINIUM WINDOWS, DOORS, ETC BY AAAMSA MEMBERS ONLY AND PROVIDE AAAMSA PERFORMANCE TEST CERTIFICATE</u>				
		<u>Casement pre-glazed side hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
322		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
323		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
324		Window type PT69 size 600 x 900mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
325		Window type PT129 size 1200 x 900mm, ditto	No	10		
326		Window type PT159 size 1500 x 900mm, ditto	No	10		
327		Window type PT159 size 1500 x 900mm, ditto	No	10		
328		Window type PT612 size 600 x 1200mm, ditto	No	10		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
329		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
330		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
331		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
332		Window type PT615 size 600 x 1500mm, ditto	No	10		
333		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
334		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
335		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
336		Window type PT618 size 600 x 1800mm, ditto	No	10		
337		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
338		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
339		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Casement pre-glazed top hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
340		Window type PT66 size 600 x 600mm glazed with 4mm clear float glass	No	10		
341		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
342		Window type PT66 size 600 x 600mm glazed with 4mm Pacific obscure glass	No	10		
343		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
344		Window type PT96 size 900 x 600mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
345		Window type PT69 size 600 x 900mm, ditto	No	10		
346		Window type PT99 size 900 x 900mm, ditto	No	10		
347		Window type PT129 size 1200 x 900mm, ditto	No	10		
348		Window type PT159 size 1500 x 900mm, ditto	No	10		
349		Window type PT612 size 600 x 1200mm, ditto	No	10		
350		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
351		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
352		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
353		Window type PT615 size 600 x 1500mm, ditto	No	10		
354		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
355		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
356		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
357		Window type PT618 size 600 x 1800mm, ditto	No	10		
358		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
359		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
360		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Palace pre-glazed aluminium sliding doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
361		Door type SD1521OX, size 1500 x 2100mm high overall	No	10		
362		Door type SD1821OX, size 1800 x 2100mm high overall	No	10		
363		Door type SD2121OX, size 2100 x 2100mm high overall	No	10		
364		Door type SD2421OX, size 2400 x 2100mm high overall	No	10		
365		Door type SD3021OXXO, size 3000 x 2100mm high overall	No	10		
366		Door type SD3621OXXO, size 3600 x 2100mm high overall	No	10		
		<u>Vistafold pre-glazed aluminium frames, doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
367		Frame and door type SFD1821-3 Panel size 1800 x 2100mm high overall	No	10		
368		Frame and door type SFD2121-3 Panel size 2100 x 2100mm high overall	No	10		
369		Frame and door type SFD2421-3 Panel size 2400 x 2100mm high overall	No	10		
370		Frame and door type SFD2721-3 Panel size 2700 x 2100mm high overall	No	10		
371		Frame and door type SFD1824-3 Panel size 1800 x 2400mm high overall	No	10		
372		Frame and door type SFD2124-3 Panel size 2100 x 2400mm high overall	No	10		
373		Frame and door type SFD2424-3 Panel size 2400 x 2400mm high overall	No	10		
374		Frame and door type SFD2724-3 Panel size 2700 x 2400mm high overall	No	10		

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
375		Frame and door type SFD1827-3 Panel size 1800 x 2700mm high overall	No	10		
376		Frame and door type SFD2127-3 Panel size 2100 x 2700mm high overall	No	10		
377		Frame and door type SFD2427-3 Panel size 2400 x 2700mm high overall	No	10		
378		Frame and door type SFD2727-3 Panel size 2700 x 2700mm high overall	No	10		
379		Frame and door type SFD3324-5 Panel size 3300 x 2400mm high overall	No	10		
380		Frame and door type SFD3624-5 Panel size 3600 x 2400mm high overall	No	10		
381		Frame and door type SFD3327-5 Panel size 3300 x 2700mm high overall	No	10		
382		Frame and door type SFD3627-5 Panel size 3600 x 2700mm high overall	No	10		
		<u>ALUMINIUM LOUVRE UNITS</u>				
		<u>NATURAL ANODISED HORIZONTAL ALUMINIUM LOUVRE UNITS</u>				
		<u>Trox or similar approved fixed louvre units fixed to brickwork or concrete</u>				
383		Standard louvre unit type AGS-T, 400 x 400mm high	No	10		
384		Standard louvre unit type AGS-T, 500 x 500mm high	No	10		
385		Standard louvre unit type AGS-T, 600 x 600mm high	No	10		
		<u>POWDER COATED HORIZONTAL ALUMINIUM LOUVRE UNITS</u>				
		<u>Trox or similar approved fixed louvre units fixed to brickwork or concrete</u>				

WC 024 STELLENBOSCH METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
386		Standard louvre unit type AGS-T, 400 x 400mm high	No	10		
387		Standard louvre unit type AGS-T, 500 x 500mm high	No	10		
388		Standard louvre unit type AGS-T, 600 x 600mm high	No	10		
		<u>SHOWER CUBICLE PANELS AND DOORS</u>				
		<u>Powder coated aluminium shower cubicle panels and doors with frames, sliding gear, pivot hinges, cleats, stops, etc. and 6mm toughened clear safety glass, plugged to tiled walls and sealed with silicone sealant (sizes to be verified on site):</u>				
389		Bi - fold door approximate size 1 000 x 1 800mm high	No	15		
390		Fixed panel approximate size 300 x 1 800mm high	No	15		
391		Sliding door approximate size 960 x 1 800mm high	No	15		
392		Sliding shower door in three leaves to suit plain opening size 900 x 2000mm high	No	15		
Carried to page 59						

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>SECTION NO. 2</u> <u>BILL NO. 13</u> Plant and Equipment <u>Scaffolding</u> Access to works, for working at height inclusive of rigging, scaffolding or any means to accordance with all applicable regulations and safety standards (this item will be priced with each Work Package) CALL OUT Call out fee for supervisor/Artisan to attend to site inspections <u>METALWORK</u> <u>Standard Preambles</u> The "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" obtainable on the Public Works Website: http://www.publicworks.gov.za/ under "Forms & Documents; Consultant's Guidelines"; Item 2.2.1 and 2.2.2 or from the Departmental Project Manager/Leader should be read in support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards Users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system, represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications The Standard Preambles and the Notes in the various trade bills are to apply equally to this section	Days	5		
			No	50		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>Descriptions of bolts, anchors, etc</u> Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres <u>Aluminium doors, windows, etc</u> Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass shall be as described in the headings to window descriptions. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed The following certificates shall be provided prior to commencement of site work: 1. A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2. A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively 3. A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process 4. A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing				

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked 5. A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years				
		<u>GALVANISED STEEL STAIRS</u>				
		<u>Welded stair with balustrades to walls</u>				
1		4.5mm "Vastrap" plate continuous treads, risers and landing	kg	50		
		Ditto 0 - 50	kg	1		
2		200 x 8mm Flat section stringers	kg	50		
		Ditto 0 - 50	kg	1		
3		Extra over for ramp or knee	No	5		
		Ditto 0 - 5	m ²	1		
4		Extra over for L-intersection	No	25		
5		Hole through 8mm steel for bolt	No	25		
6		40 x 8mm Flat section continuous handrails and bottom rails	kg	50	-	
		Ditto 0 - 50	kg	1		
7		Extra over for fanged end	No	25		
8		Extra over for L-intersection	No	25		
9		Extra over for T-intersection	No	25		
10		Extra over for turned down end	No	25		
11		Extra over for ramp or knee	No	25		
12		Square hollow section balusters	kg	50		
		Ditto 0 - 50	kg	1		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
13		Square hollow section standard framed through bottom rail	kg	50		
14		High tensile bolts (class 8.8)	kg	5		
		Ditto 0 - 5	kg	1		
15		12mm Diameter expansion bolt	No	5		
		<u>HANDRAILS</u>				
		<u>Hot-dip galvanised steel welded handrails to walls</u>				
16		50 x 10mm Flat section rails	m	25		
		Ditto 0 - 25	m	1		
17		Extra over for mitred L-intersection	No	25		
18		Extra over for ramp or knee	No	25		
19		Extra over for bend	No	25		
20		50 x 20 x 2.5mm Hollow section continuous rails	m	25		
		Ditto 0 - 25	m	1		
21		Extra over for flat closed end	No	25		
22		Extra over for mitred L-intersection	No	25		
23		Extra over for ramp or knee	No	25		
24		50mm Diameter handrails	m	25		
		Ditto 0 - 25	m	1		
25		Extra over for rounded closed end	No	25		
26		Extra over for ramp or knee	No	25		
27		Extra over for bend	No	25		
28		Bracket of 20mm diameter bar 200mm girth, once bent to and with one end welded to rail and other end with 150mm diameter x 6mm thick plate four holed for bolts and welded on	No	25		

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
29		12mm Expansion bolt	No	5		
30		12mm Expansion anchor with loose bolt	No	5		
31		12mm Chemical anchor with loose bolt	No	5		
		<u>BALUSTRADING</u>				
		<u>Hot-dip galvanised steel welded balustrade</u>				
32		Horizontal balustrade to walkways 1100mm high, of 50 x 10mm flat section continuous top rail and bottom rail, 20 x 20 x 2mm square hollow section intermediate balusters at 150mm centres between top and bottom rails and 50 x 50 x 3mm square hollow section posts at approximately 1000mm centres each with 100 x 100 x 6mm flat section base plate bolted to concrete (bolts elsewhere)	m	25		
		Ditto 0 - 25	m	1		
33		Extra over for L-intersection of horizontal balustrades	No	25		
34		Raking balustrading to staircases 1100mm high, of 50 x 10mm flat section continuous top rail and bottom rail, 20 x 20 x 2mm square hollow section intermediate balusters at 150mm centres between top and bottom rails and 50 x 50 x 3mm square hollow section posts at approximately 1000mm centres each with 100 x 100 x 6mm flat section base plate bolted to concrete (bolts elsewhere)	m	25		
		Ditto 0 - 25	m	1		
35		Extra over for junction of end of horizontal with end of raking balustrades	No	25		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
36		Horizontal balustrade 1100mm high, of 60mm external diameter x 2.5mm thick continuous pipe top and bottom rails, 60mm diameter x 2.5mm thick hollow section posts at approximately 1000mm centres with 100 x 100 x 6mm base plates bolted to concrete (bolts elsewhere) and 16mm diameter intermediate vertical balusters at 150mm centres between top and bottom rails	m	25		
		Ditto 0 - 25	m	1		
37		Extra over for L-intersection of horizontal balustrades	No	25		
38		Raking balustrading 1100mm high, of 60mm external diameter x 2.5mm thick continuous pipe top and bottom rails, 60mm diameter x 2.5mm thick hollow section posts at approximately 1000mm centres with 100 x 100 x 6mm base plates bolted to concrete (bolts elsewhere) and 16mm diameter intermediate vertical balusters at 150mm centres between top and bottom rails	m	25		
		Ditto 0 - 25	m	1		
39		Extra over for junction of end of horizontal with end of raking balustrades	No	25		
40		Horizontal balustrades 1100mm high of 60mm diameter continuous top and bottom rails, 16mm diameter intermediate balusters at approximately 150mm centres between top and bottom rails and 60mm diameter posts at approximately 1000mm centres each with 100 x 100 base plate bolted to concrete	m	25		
41		Extra over for L-intersection of horizontal balustrades	No	25		
42		Raking balustrades 1100mm high of 60mm diameter continuous top and bottom rails, 16mm diameter intermediate balusters at approximately 150mm centres between top and bottom rails and 60mm diameter posts at approximately 1000mm centres each with 100 x 100 base plate bolted to concrete	m	25		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		Ditto 0 - 25	m	1		
43		Extra over for junction of end of horizontal with end of raking balustrades	No	25		
		<u>Hot-dip galvanised steel welded balustrading and handrails</u>				
44		50mm Diameter tubular handrail	m	25		
		Ditto 0 - 25	m	1		
45		Extra over for closed end	No	25		
46		Extra over for ramped end	No	25		
47		Extra over for 90 degree ramped bend between horizontal and raking rail	No	25		
48		30mm Diameter bottom rail, intermediate and end posts	m	25		
		Ditto 0 - 25	m	1		
49		Extra over for split and fanged ends for casting into concrete	No	25		
50		Extra over for cut, scribed and welded T-intersection	No	25		
51		10mm Diameter solid bar infill balusters	m	25		
		Ditto 0 - 25	m	1		
52		Extra for cut, scribed and welded T-intersection with handrail or bottom rail	m	25		
		Ditto 0 - 25	m	1		
53		16mm Diameter solid bar handrail bracket 250mm girth once bent, one end welded to handrail and other end split and fanged for building in	No	25		
54		Set up and build split and fanged end of handrail brackets into brickwork and set in epoxy mortar	No	25		
55		Set up and build split and fanged end of baluster posts into reinforced concrete and set in epoxy mortar	No	25		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>Galvanised mild steel "Mentis" ball type or similar approved balustrading</u>				
56		34,1mm Diameter x 2,5mm thick Handrail tubing	m	25		
		Ditto 0 - 25	m	1		
57		Extra over for slip joint as item 6	No	25		
58		Ditto, 90 degree long radius bend as item 1	No	25		
59		Ditto, 90 degree short radius bend as item 5	No	25		
60		Ditto, 45 degree stairway bend as item 4	No	25		
61		Ditto, 90 degree straight closure as item 2B	No	25		
62		Ditto, 90 degree straight closure as item 2M	No	25		
63		Ditto, but 45 degree angle closure as item 3	No	25		
64		Wall end plate as item 7	No	25		
65		42,9mm Diameter x 3mm thick type MT90 stanchion 1000mm long	No	25		
66		42,9mm Diameter x 3,3mm thick type MS90 stanchion 1140mm long	No	25		
67		42,9mm Diameter x 3,2mm thick type MST30 stanchion 1000mm long	No	25		
68		42,9mm Diameter x 3,4mm thick type MSL30 and MSR30 stanchion 1140mm long	No	25		
69		M16 x 100mm long galvanised mild steel flush expansion bolt including mortice in concrete	No	25		
		<u>Stainless steel grade 304 "Mentis" ball type or similar approved balustrading</u>				
70		31,8mm Diameter x 1,5mm thick handrail tubing	m	25		
		Ditto 0 - 25	m	1		

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
71		Extra over for slip joint as item 6	No	25		
72		Ditto, 90 degree long radius bend as item 1	No	25		
73		Ditto, 90 degree short radius bend as item 5	No	25		
74		Ditto, 45 degree stairway bend as item 4	No	25		
75		Ditto, 90 degree straight closure as item 2B	No	25		
76		Ditto, 90 degree straight closure as item 2M	No	25		
77		Ditto, but 45 degree angle closure as item 3	No	25		
78		Wall end plate as item 7	No	25		
79		42,9mm Diameter x 3mm thick type MT90 stanchion 1000mm long	No	25		
80		42,9mm Diameter x 3,3mm thick type MS90 stanchion 1140mm long	No	25		
81		42,9mm Diameter x 3,2mm thick type MST30 stanchion 1000mm long	No	25		
82		42,9mm Diameter x 3,4mm thick type MSL30 and MSR30 stanchion 1140mm long	No	25		
83		M16 x 100mm long galvanised mild steel flush expansion bolt including mortice in concrete	No	25		
		<u>CAT LADDERS</u>				
		<u>Hot-dip galvanised steel welded cat ladder 500mm wide to tank room</u>				
84		65 x 10mm Flat section stringers	kg	50		
		Ditto 0 - 50	kg	1		
85		Extra over for mitred L-intersection	No	25		
86		Extra over for bend across flat	No	25		
87		Extra over for bend across edge to 150mm internal radius	No	25		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
88		20mm Diameter rungs 500mm long with ends welded to stringers	kg	25		
		Ditto 0 - 50	kg	1		
89		150 x 150 x 6mm Fixing plate twice holed for bolts and welded on	No	25		
90		65 x 6mm Flat section bracket 200mm girth once bent across flat, once holed for bolt and welded on	No	25		
91		12mm Expansion bolt	No	5		
92		12mm Expansion anchor with loose bolt	No	5		
		<u>GATES, SCREENS, ETC</u>				
		<u>Galvanised steel welded screens and gates</u>				
93		50 x 2.5mm Fully galvanised diamond mesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
94		50 x 2.5mm Plastic coated fully galvanised diamond mesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
95		50 x 50 x 3.15mm Fully galvanised weldmesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
96		100mm Diameter (3mm wall thickness) galvanised steel post with a pressed steel mushroom cap and 300 x 300 x 6mm baseplate welded to bottom (cap and baseplate elsewhere)	m	25		
		Ditto 0 - 25	m	1		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
97		75mm Diameter (2mm wall thickness) galvanised steel rails, post and framing welded	m	25		
		Ditto 0 - 25	m	1		
98		Extra over for closed end	No	5		
99		Extra for mitred L-intersection	No	5		
100		Extra over for cut, scribed and welded T-intersection	No	5		
101		300 x 300 x 6mm Base plate four times holed for bolts and welded on	No	5		
102		100mm Diameter pressed steel mushroom welded on	No	5		
		Single gate formed of 40 x 2.5mm thick round hollow section framing, middle rail and diagonal braces, covered with mesh netting (elsewhere), hung on two adjustable ring pivot hinges with tails split and spread and caulked into and including mortices in brickwork or concrete in 1.1 cement mortar or bolted to post and with 100mm pad bolt and keep welded on, size 1000 x 2100mm	No	5		
103		Double gate, each leaf formed of 40 x 2.5mm thick round hollow section framing, middle rail and diagonal braces, covered with mesh netting (elsewhere), each leaf hung on two adjustable ring pivot hinges with tails split and spread and caulked into and including mortices in brickwork or concrete in 1.1 cement mortar or bolted to post, with 254mm tower bolt welded to one leaf and with 203mm pad bolt and keep welded on at meeting stiles, size 2500 x 2100mm high overall.	No	5		
104		<u>Hot-dip galvanised steel framed and welded gates with mitred intersections, etc</u>				

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
105		Single gate formed of 40 x 40 x 3mm thick hollow section perimeter framing and one middle rail, the top and bottom panels each filled with 16mm diameter round vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1000 x 2100mm high overall	No	5		
106		Single gate formed of 40 x 40 x 3mm thick hollow section perimeter framing and two middle rails 150mm apart with 3mm thick plate welded between same, the top and bottom panels each filled with 25 x 25 x 3mm thick square hollow section vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1000 x 2100mm high overall	No	5		
107		Double gate, each leave formed of 40 x 40 x 3mm thick hollow section perimeter framing and one middle rail, the top and bottom panels each filled with 16mm diameter round vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 2000 x 2100mm high overall	No	5		
108		Double gate, each leave formed of 40 x 40 x 3mm thick hollow section perimeter framing and two middle rails 150mm apart with 3mm thick plate welded between same, the top and bottom panels each filled with 25 x 25 x 3mm thick square hollow section vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1800 x 2100mm high overall	No	5		
109		Galvanised steel lock box welded to steel gate including all cutting and welding	No	5		
110		100mm Long heavy duty lockable pad bolt welded on	No	5		
111		Heavy duty hasp and staple welded on	No	5		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>The following in hot-dip galvanised mild steel framed and welded stoneguard cage formed of 30 x 30 x 3mm angle front and back perimeter frame and four 200mm long separating spacers at corners, 40 x 3mm flat section vertical and horizontal intermediates welded to front frame at approximately 400mm centres, 40 x 3mm flat bars welded on diagonally at 300mm centres to top and sides of cage, 25 x 50 x 3 x 3mm thick heavy duty expanded metal mesh welded to front, sides, top and bottom of cage, back angle perimeter frame holed for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt with bolt spot welded to frame on completion including all welding, cutting, drilling and grinding smooth, touching up with cold galvanising, etc</u>				
112		25 x 50 x 3 x 3mm Thick heavy duty expanded metal mesh covering welded to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
113		30 x 30 x 3mm Angle section front and back perimeter frame	m	25		
		Ditto 0 - 25	m	1		
114		Extra over for mitred L-intersection	No	5		
115		40 x 3mm Flat section vertical and horizontal intermediates and spaces	m	25		
		Ditto 0 - 25	m	1		
116		Extra over for T-intersection	No	5		
117		Hole for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt	No	5		
		<u>The following in hot-dip galvanised mild steel framed and welded burglar bars formed of flat bar or square hollow section frames filled in with flat, square or round bars</u>				
118		30 x 5mm Flat section frame	m	25		

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		Ditto 0 - 25	m	1		
119		40 x 5mm Flat section frame	m	25		
		Ditto 0 - 25	m	1		
120		Extra over for mitred L-intersection	No	5		
121		30 x 5mm Flat section bars	m	25		
		Ditto 0 - 25	m	1		
122		40 x 5mm Flat section bars	m	25		
		Ditto 0 - 25	m	1		
123		Extra over for T-intersection	No	5		
124		12mm Diameter round bars	m	25		
		Ditto 0 - 25	m	1		
125		16mm Diameter round bars	m	25		
		Ditto 0 - 25	m	1		
126		12mm Square bars	m	25		
		Ditto 0 - 25	m	1		
127		16mm Square bars	m	25		
		Ditto 0 - 25	m	1		
128		Extra over for T-intersection	No	5		
129		30 x 30 x 3mm Thick square hollow section	m	25		
		Ditto 0 - 25	m	1		
130		40 x 40 x 3mm Thick square hollow section	m	25		
		Ditto 0 - 25	m	1		
131		Extra over for mitred L-intersection	No	5		
132		Extra over for T-intersection	No	5		

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
133		Hole for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt	No	5		
		<u>GALVANISED STEEL MINOR WORK</u>				
		<u>Bolts</u>				
134		High tensile bolts, nuts and washers	kg	5		
		Ditto 0 - 5	kg	1		
135		100mm Long M10 diameter expansion bolt	No	5		
136		125mm Long M12 diameter expansion bolt	No	5		
137		150mm long M16 diameter expansion bolt	No	5		
138		200mm M12 chemical expansion bolt	No	5		
		<u>Corner protectors</u>				
139		50 x 50mm x 3.77kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
140		60 x 60mm x 4.57kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
141		70 x 70mm x 6.38kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
142		Extra over for mitred L-intersection	No	5		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>Hot-dip galvanised steel posts</u>				
143		100 x 100 x 3mm Square tube posts	kg	50		
		Ditto 0 - 50	kg	1		
144		Extra over for flat closed end	No	5		
145		100 x 3mm Thick round hollow section post	kg	50		
		Ditto 0 - 50	kg	1		
146		Extra over for flat closed end	No	5		
147		200 x 200 x 6mm Base plate welded on to foot of post and four times holed for anchor bolts (bolts elsewhere measured)	No	5		
148		150 x 3mm thick x 500mm girth channel shaped bracket eight times holed for bolts (bolts elsewhere measured) and welded to post	No	5		
		<u>Hot-dip galvanised mild steel security ceiling mesh and frames, including all on and off -site welding, cutting, drilling, grinding smooth, touching up with cold galvanising, fixing in position between trusses</u>				
149		50 x 50 x 3mm Angle iron framing holed at 300mm centres and fixed to truss tie beam (truss beam elsewhere measured)	kg	50		
		Ditto 0 - 50	kg	1		
150		25 x 50 x 3mm Flat expanded metal security mesh welded all round to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
		<u>Hot-dip galvanised mild steel fixed screens and side screens, including all on and off -site welding, cutting, drilling, grinding smooth, touching up with cold galvanising, fixing in position to concrete surface bed and brick wall</u>				
151		50 x 50 x 3mm Square hollow section framing	kg	50		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		Ditto 0 - 50	kg	1		
152		50 x 70 x 3mm Cleat welded on and once holed for 8mm bolts (bolts elsewhere measured)	No	5		
153		75 x 75 x 3mm Base plate welded on and twice holed for 8mm bolts (bolts elsewhere measured)	No	5		
154		50 x 50 x 2mm Channel welded to form frame	kg	50		
		Ditto 0 - 50	kg	1		
155		50 x 2mm Flat bar supports	kg	50		
		Ditto 0 - 50	kg	1		
156		25 x 50 x 1.8mm Flat expanded metal security mesh welded all round to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
		<u>Galvanised steel powder coated security gates, fixed to brickwork or concrete</u>				
157		Trellidoor or similar approved single gate with and including slam lock, for opening size 1000 x 2100mm high	No	5		
158		Trellidoor or similar approved, single gate with and including slam lock, for opening size 1000 x 2500mm high	No	5		
159		Trellidoor or similar approved single gate with and including slam lock, for opening size 2000 x 2100mm high	No	5		
160		Trellidoor or similar approved single gate with and including slam lock, for opening size 2000 x 2500mm high	No	5		
161		Trellidoor or similar approved double gate with and including slam lock, for opening size 3000 x 2100mm high	No	5		
162		Trellidoor or similar approved double gate with and including slam lock, for opening size 3000 x 2500mm high	No	5		

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
163		<u>STAINLESS STEEL MINOR WORK</u>				
		<u>Grade 304 stainless steel corner protectors</u>				
		40 x 40mm x 3mm Angle section corner protectors to vertical corners, plugged on both sides	No	5		
164		<u>Grade 316 stainless steel</u>				
		38mm Tubing three step fully welded stainless steel pool ladder with non-slip treads complete with and fixed into compression anchors	No	5		
165		<u>BRASS MINOR WORK</u>				
		3 x 32mm Flat section water bars fixed in and including groove in concrete	m	25		
166		Ditto 0 - 25	m	1		
		3 x 32mm Flat section frame with 3 x 25 x 150mm long flat section lugs brazed on with ends split and spread at 300mm centres and caulked into and including mortices in concrete in 1.1 cement mortar	m	25		
167		Ditto 0 - 25	m	1		
		Extra over for mitred and L-intersection	No	25		
168		<u>PRESSED STEEL DOOR FRAMES</u>				
		<u>1,6mm Thick single rebated frame for half brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame for door size 762 x 2032mm	No	2		
169		Ditto but galvanised	No	1		
		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>1,6mm Thick double rebated frame for half brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
170		Frame for door size 762 x 2032mm	No	2		
		Ditto but galvanised	No	1		
171		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		
172		Frame for door size 813 x 2032mm with transom over for fixed fanlight size 813 x 305mm	No	2		
		Ditto but galvanised	No	1		
173		Frame for door size 813 x 2032mm with transom over for bottom hung fanlight size 813 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
174		Frame for double door size 1511 x 2032mm	No	2		
		Ditto but galvanised	No	1		
175		Frame for double door size 1613 x 2032mm	No	2		
		Ditto but galvanised	No	1		
176		Frame for double door size 1511 x 2032mm with transom over for fixed fanlight size 1511 x 305mm	No	2		
		Ditto but galvanised	No	1		
177		Frame for double door size 1613 x 2032mm with transom over for fixed fanlight size 1613 x 305mm with 13 x 13mm glazing beads cut and mitred around and countersunk screwed to steel	No	2		
		Ditto but galvanised	No	1		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
178		Frame for double door size 1511 x 2032mm with transom over for bottom hung fanlight size 1511 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
179		Frame for double door size 1613 x 2032mm with transom over for bottom hung fanlight size 1613 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
		<u>1,6mm Thick double rebated frame for one brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
180		Frame for door size 762 x 2032mm	No	2		
		Ditto but galvanised	No	1		
181		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		
182		Frame for door size 813 x 2032mm with transom over for fixed fanlight size 813 x 305mm	No	2		
		Ditto but galvanised	No	1		
183		Frame for door size 813 x 2032mm with transom over for bottom hung fanlight size 813 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
184		Frame for double door size 1511 x 2032mm	No	2		
		Ditto but galvanised	No	1		
185		Frame for double door size 1613 x 2032mm	No	2		
		Ditto but galvanised	No	1		
186		Frame for double door size 1511 x 2032mm with transom over for fixed fanlight size 1511 x 305mm	No	2		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
187		Ditto but galvanised	No	1		
		Frame for double door size 1613 x 2032mm with transom over for fixed fanlight size 1613 x 305mm with 13 x 13mm glazing beads cut and mitred around and countersunk screwed to steel	No	2		
		Ditto but galvanised	No	1		
188		Frame for double door size 1511 x 2032mm with transom over for bottom hung fanlight size 1511 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
189		Frame for double door size 1613 x 2032mm with transom over for bottom hung fanlight size 1613 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
		<u>PRESSED STEEL CUPBOARD DOOR FRAMES</u>				
190		<u>1,6mm Thick Single rebated cupboard frame complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame type CAS size 673 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
191		Frame type CAL size 825 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
192		Frame type CBS size 1270 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
193		Frame type CBL size 1575 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
194		Frame type CAS size 673 x 2085mm overall	No	2		

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
195		Ditto but galvanised	No	1		
		Frame type CAFS size 673 x 2580mm overall	No	2		
Ditto but galvanised		No	1			
Frame type CAFL size 825 x 2580mm overall		No	2			
Ditto but galvanised		No	1			
Frame type CBFS size 1270 x 2580mm overall		No	2			
Ditto but galvanised		No	1			
Frame type CBFL size 1575 x 2580mm overall		No	2			
Ditto but galvanised		No	1			
Frame type CCS coupled together with three cleats size 1943 x 2085mm overall		No	2			
Ditto but galvanised		No	1			
Frame type CCFS coupled together with three cleats size 1943 x 2580mm overall		No	2			
Ditto but galvanised		No	1			
<u>GALVANISED PRESSED STEEL TRANSFORMER ROOM DOORS AND FRAMES</u>						
<u>1,6mm Thick door with 1,6mm thick double rebated frame for one brick wall complete with butts, etc and including setting up, building in, filling back of frame with cement mortar, etc</u>						
201		Vent type ALU size 900 x 745mm and frame	No	2		
202		Vent type BLU size 1590 x 745mm and frame	No	2		
203		Door type A size 813 x 2032mm and frame	No	2		

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
204		Door type F size 1220 x 2440mm and frame	No	2		
205		Door with vent type AV size 813 x 2032mm and frame	No	2		
206		Door with vent type BV size 915 x 2135mm and frame	No	2		
207		Door with vent type CV size 1220 x 2135mm and frame	No	2		
208		Door with vent type H size 915 x 2440mm and frame	No	2		
209		Double door type D size 1830 x 2440mm and frame	No	2		
210		Double door with vent type MV size 1525 x 2135mm and frame	No	2		
211		Double door with vent type YV size 1525 x 2440mm and frame	No	2		
212		Double door with vent type DV size 1830 x 2440mm and frame.	No	2		
		<u>WISPECO SUPERIOR CHROMADEK PRE-PAINTED GALVANISED MILD STEEL ROLL-UP DOORS</u>				
213		Push up operation roller shutter door complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
214		Electrically operated roller shutter door complete with overhead gear, guides, fixing bolts, etc., including electrical connection and commissioning (electrical isolator elsewhere) to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>ROLLERSTYLE PRE-PAINTED ALUMINIUM ROLL-UP DOORS</u>				

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
215		Electrically operated roller shutter door complete with overhead gear, guides, fixing bolts, etc., including electrical connection and commissioning (electrical isolator elsewhere) to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>HOT DIP GALVANISED STEEL ROLLER SHUTTER DOORS WITH CHROMADEK OR OTHER APPROVED PRE-PAINTED FINISH</u>				
216		Push up operation roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 2500 x 2500mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
217		Push up operation roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
218		Chain operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
219		Chain operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 4000 x 4000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
220		Roll-Up crank operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts.	No	2		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
221		Roll-Up crank operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 4000 x 4000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
222		Roll-Up remote controlled electrically operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, operating gear, motor, fixing bolts, etc., to suit plain opening size 5000 x 5000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>STEEL WINDOWS, DOORS, ETC</u>				
		<u>School type windows of residential section complete with NBP2 burglar bars to all sashes, ironmongery and including setting up, building in, filling back of frame with cement mortar, etc</u>				
223		Window type 3-HCH size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
224		Window type 48H size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
225		Window type 9-F/LT size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
226		Window type 1-HCH size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		
227		Window type 2-BH size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		
228		Window type 8-F/LT size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
229		Window type 6-HCH size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
230		Window type 14-BH size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
231		Window type 11-F/LT size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
232		Window type 5-HCH size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
233		Window type 12-BH size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
234		Window type 10-F/LT size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
235		Composite type 6/4 coupled together with standard coupling mullion, size 889 x 1248mm overall	No	2		
		Ditto but galvanised	No	1		
		<u>STEEL RECORDROOM AND STRONGROOM DOORS, VENTILATORS, ETC</u>				
236		Double ended strongroom ventilator size 255 x 255mm with telescopic sleeve, gauze and baffle plates, drop shutter, etc including setting up, building in and caulking all around in 1.1 cement mortar	No	2		
237		Double ended strongroom ventilator size 255 x 255mm with telescopic sleeve, gauze and baffle plates, drop shutter, etc including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	2		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
238		Record room door and frame with a mass of 130kg to suit wall opening size 830 x 1935mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
239		Record room door and frame with a mass of 130kg to wall opening size 830 x 1935mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
240		Category 1 strongroom door and frame with a mass of 450kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
241		Category 1 strongroom door and frame with a mass of 450kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
242		Category 2 light duty strongroom door and frame with a mass of 460kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
243		Category 2 light duty strongroom door and frame with a mass of 460kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
244		Category 2 heavy duty strongroom door and frame with a mass of 480kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
245		Category 2 heavy duty strongroom door and frame with a mass of 480kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>STEEL SECURITY PAYROLL WINDOWS</u>				
		<u>Mutual or similar approved security payroll windows suitable for one brick walls, fixed to brickwork or concrete</u>				
246		Type 1 level G1 pay window size 600 x 800mm high	No	2		
247		Type 1 level G2 pay window size 600 x 800mm high	No	2		
248		Type 1 level G3 pay window size 600 x 800mm high	No	1		
		<u>ANTI-BANDIT DOORS</u>				
		<u>Mutual or similar approved bullet resistant anti-bandit doors with commercial veneer and frames, 5 pin Cisa dead lock, continuous Roton type hinge, aluminium Slambar and D-style pull handles, fixed to brickwork or concrete</u>				
249		Internal type level G1 door and frame size 940 x 2105mm high overall	No	1		
250		External type level G1 door and frame size 940 x 2105mm high overall	No	1		
251		Internal type level G1 door with view panel and frame size 940 x 2105mm high overall	No	1		
252		External type level G1 door with view panel and frame size 940 x 2105mm high overall	No	1		
253		Internal type level G2 door and frame size 940 x 2105mm high overall	No	1		
254		External type level G2 door and frame size 940 x 2105mm high overall	No	1		
255		Internal type level G2 door with view panel and frame size 940 x 2105mm high overall	No	1		
256		External type level G2 door with view panel and frame size 940 x 2105mm high overall	No	1		
257		Internal type level G3 door and frame size 940 x 2105mm high overall	No	1		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
258		External type level G3 door and frame size 940 x 2105mm high overall	No	1		
259		Internal type level G3 door with view panel and frame size 940 x 2105mm high overall	No	1		
260		External type level G3 door with view panel and frame size 940 x 2105mm high overall	No	1		
		<u>NATURAL ANODISED ALUMINIUM WINDOWS, DOORS, ETC BY AAAMSA MEMBERS ONLY AND PROVIDE AAAMSA PERFORMANCE TEST CERTIFICATE</u>				
		<u>Casement pre-glazed side hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
261		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
262		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
263		Window type PT69 size 600 x 900mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
264		Window type PT129 size 1200 x 900mm, ditto	No	10		
265		Window type PT159 size 1500 x 900mm, ditto	No	10		
266		Window type PT159 size 1500 x 900mm, ditto	No	10		
267		Window type PT612 size 600 x 1200mm, ditto	No	10		
268		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
269		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
270		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
271		Window type PT615 size 600 x 1500mm, ditto	No	10		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
272		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
273		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
274		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
275		Window type PT618 size 600 x 1800mm, ditto	No	10		
276		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
277		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
278		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Casement pre-glazed top hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
279		Window type PT66 size 600 x 600mm glazed with 4mm clear float glass	No	10		
280		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
281		Window type PT66 size 600 x 600mm glazed with 4mm Pacific obscure glass	No	10		
282		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
283		Window type PT96 size 900 x 600mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
284		Window type PT69 size 600 x 900mm, ditto	No	10		
285		Window type PT99 size 900 x 900mm, ditto	No	10		
286		Window type PT129 size 1200 x 900mm, ditto	No	10		
287		Window type PT159 size 1500 x 900mm, ditto	No	10		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
288		Window type PT612 size 600 x 1200mm, ditto	No	10		
289		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
290		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
291		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
292		Window type PT615 size 600 x 1500mm, ditto	No	10		
293		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
294		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
295		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
296		Window type PT618 size 600 x 1800mm, ditto	No	10		
297		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
298		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
299		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Palace pre-glazed aluminium sliding doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
300		Door type SD1521OX, size 1500 x 2100mm high overall	No	10		
301		Door type SD1821OX, size 1800 x 2100mm high overall	No	10		
302		Door type SD2121OX, size 2100 x 2100mm high overall	No	10		
303		Door type SD2421OX, size 2400 x 2100mm high overall	No	10		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
304		Door type SD3021OXXO, size 3000 x 2100mm high overall	No	10		
305		Door type SD3621OXXO, size 3600 x 2100mm high overall	No	10		
		<u>Vistafold pre-glazed aluminium frames, doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
306		Frame and door type SFD1821-3 Panel size 1800 x 2100mm high overall	No	10		
307		Frame and door type SFD2121-3 Panel size 2100 x 2100mm high overall	No	10		
308		Frame and door type SFD2421-3 Panel size 2400 x 2100mm high overall	No	10		
309		Frame and door type SFD2721-3 Panel size 2700 x 2100mm high overall	No	10		
310		Frame and door type SFD1824-3 Panel size 1800 x 2400mm high overall	No	10		
311		Frame and door type SFD2124-3 Panel size 2100 x 2400mm high overall	No	10		
312		Frame and door type SFD2424-3 Panel size 2400 x 2400mm high overall	No	10		
313		Frame and door type SFD2724-3 Panel size 2700 x 2400mm high overall	No	10		
314		Frame and door type SFD1827-3 Panel size 1800 x 2700mm high overall	No	10		
315		Frame and door type SFD2127-3 Panel size 2100 x 2700mm high overall	No	10		
316		Frame and door type SFD2427-3 Panel size 2400 x 2700mm high overall	No	10		

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
317		Frame and door type SFD2727-3 Panel size 2700 x 2700mm high overall	No	10		
318		Frame and door type SFD3324-5 Panel size 3300 x 2400mm high overall	No	10		
319		Frame and door type SFD3624-5 Panel size 3600 x 2400mm high overall	No	10		
320		Frame and door type SFD3327-5 Panel size 3300 x 2700mm high overall	No	10		
321		Frame and door type SFD3627-5 Panel size 3600 x 2700mm high overall	No	10		
		<u>POWDER COATED ALUMINIUM WINDOWS, DOORS, ETC BY AAAMSA MEMBERS ONLY AND PROVIDE AAAMSA PERFORMANCE TEST CERTIFICATE</u>				
		<u>Casement pre-glazed side hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
322		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
323		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
324		Window type PT69 size 600 x 900mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
325		Window type PT129 size 1200 x 900mm, ditto	No	10		
326		Window type PT159 size 1500 x 900mm, ditto	No	10		
327		Window type PT159 size 1500 x 900mm, ditto	No	10		
328		Window type PT612 size 600 x 1200mm, ditto	No	10		

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
329		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
330		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
331		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
332		Window type PT615 size 600 x 1500mm, ditto	No	10		
333		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
334		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
335		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
336		Window type PT618 size 600 x 1800mm, ditto	No	10		
337		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
338		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
339		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Casement pre-glazed top hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
340		Window type PT66 size 600 x 600mm glazed with 4mm clear float glass	No	10		
341		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
342		Window type PT66 size 600 x 600mm glazed with 4mm Pacific obscure glass	No	10		
343		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
344		Window type PT96 size 900 x 600mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
345		Window type PT69 size 600 x 900mm, ditto	No	10		
346		Window type PT99 size 900 x 900mm, ditto	No	10		
347		Window type PT129 size 1200 x 900mm, ditto	No	10		
348		Window type PT159 size 1500 x 900mm, ditto	No	10		
349		Window type PT612 size 600 x 1200mm, ditto	No	10		
350		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
351		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
352		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
353		Window type PT615 size 600 x 1500mm, ditto	No	10		
354		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
355		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
356		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
357		Window type PT618 size 600 x 1800mm, ditto	No	10		
358		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
359		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
360		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Palace pre-glazed aluminium sliding doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
361		Door type SD1521OX, size 1500 x 2100mm high overall	No	10		
362		Door type SD1821OX, size 1800 x 2100mm high overall	No	10		
363		Door type SD2121OX, size 2100 x 2100mm high overall	No	10		
364		Door type SD2421OX, size 2400 x 2100mm high overall	No	10		
365		Door type SD3021OXXO, size 3000 x 2100mm high overall	No	10		
366		Door type SD3621OXXO, size 3600 x 2100mm high overall	No	10		
		<u>Vistafold pre-glazed aluminium frames, doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
367		Frame and door type SFD1821-3 Panel size 1800 x 2100mm high overall	No	10		
368		Frame and door type SFD2121-3 Panel size 2100 x 2100mm high overall	No	10		
369		Frame and door type SFD2421-3 Panel size 2400 x 2100mm high overall	No	10		
370		Frame and door type SFD2721-3 Panel size 2700 x 2100mm high overall	No	10		
371		Frame and door type SFD1824-3 Panel size 1800 x 2400mm high overall	No	10		
372		Frame and door type SFD2124-3 Panel size 2100 x 2400mm high overall	No	10		
373		Frame and door type SFD2424-3 Panel size 2400 x 2400mm high overall	No	10		
374		Frame and door type SFD2724-3 Panel size 2700 x 2400mm high overall	No	10		

WC 025 BREEDE VALLEY - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
375		Frame and door type SFD1827-3 Panel size 1800 x 2700mm high overall	No	10		
376		Frame and door type SFD2127-3 Panel size 2100 x 2700mm high overall	No	10		
377		Frame and door type SFD2427-3 Panel size 2400 x 2700mm high overall	No	10		
378		Frame and door type SFD2727-3 Panel size 2700 x 2700mm high overall	No	10		
379		Frame and door type SFD3324-5 Panel size 3300 x 2400mm high overall	No	10		
380		Frame and door type SFD3624-5 Panel size 3600 x 2400mm high overall	No	10		
381		Frame and door type SFD3327-5 Panel size 3300 x 2700mm high overall	No	10		
382		Frame and door type SFD3627-5 Panel size 3600 x 2700mm high overall	No	10		
		<u>ALUMINIUM LOUVRE UNITS</u>				
		<u>NATURAL ANODISED HORIZONTAL ALUMINIUM LOUVRE UNITS</u>				
		<u>Trox or similar approved fixed louvre units fixed to brickwork or concrete</u>				
383		Standard louvre unit type AGS-T, 400 x 400mm high	No	10		
384		Standard louvre unit type AGS-T, 500 x 500mm high	No	10		
385		Standard louvre unit type AGS-T, 600 x 600mm high	No	10		
		<u>POWDER COATED HORIZONTAL ALUMINIUM LOUVRE UNITS</u>				
		<u>Trox or similar approved fixed louvre units fixed to brickwork or concrete</u>				

WC 025 BREEDE VALLEY - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
386		Standard louvre unit type AGS-T, 400 x 400mm high	No	10		
387		Standard louvre unit type AGS-T, 500 x 500mm high	No	10		
388		Standard louvre unit type AGS-T, 600 x 600mm high	No	10		
		<u>SHOWER CUBICLE PANELS AND DOORS</u>				
		<u>Powder coated aluminium shower cubicle panels and doors with frames, sliding gear, pivot hinges, cleats, stops, etc. and 6mm toughened clear safety glass, plugged to tiled walls and sealed with silicone sealant (sizes to be verified on site):</u>				
389		Bi - fold door approximate size 1 000 x 1 800mm high	No	15		
390		Fixed panel approximate size 300 x 1 800mm high	No	15		
391		Sliding door approximate size 960 x 1 800mm high	No	15		
392		Sliding shower door in three leaves to suit plain opening size 900 x 2000mm high	No	15		
Carried to page 59						

WC 026 LANGEBERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>SECTION NO. 2</u> <u>BILL NO. 13</u> Plant and Equipment <u>Scaffolding</u> Access to works, for working at height inclusive of rigging, scaffolding or any means to accordance with all applicable regulations and safety standards (this item will be priced with each Work Package) CALL OUT Call out fee for supervisor/Artisan to attend to site inspections <u>METALWORK</u> <u>Standard Preambles</u> The "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" obtainable on the Public Works Website: http://www.publicworks.gov.za/ under "Forms & Documents; Consultant's Guidelines"; Item 2.2.1 and 2.2.2 or from the Departmental Project Manager/Leader should be read in support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards Users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system, represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications The Standard Preambles and the Notes in the various trade bills are to apply equally to this section	Days	5		
			No	50		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>Descriptions of bolts, anchors, etc</u> Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres <u>Aluminium doors, windows, etc</u> Doors and windows shall comply with AAAMSA design criteria Glazing shall comply with SAGGA regulations. Glass shall be as described in the headings to window descriptions. Glass thickness shall comply with SAGGA regulations irrespective of thicknesses shown on the schedules/drawings Doors and windows shall be supplied with protective tape and plastic and shall be removed only once surrounding trades have been completed The following certificates shall be provided prior to commencement of site work: 1. A copy of the relevant AAAMSA Performance Test Certificate from the manufacturer/contractor supplying the architectural aluminium product 2. A Certificate of Conformance confirming that anodising or powder coating has been processed in accordance with SANS 999 and SANS 1796 respectively 3. A powder guarantee of not less than 15 years issued by the powder manufacturer. The specific conditions contained in this guarantee shall form part of the powder coating process 4. A Certificate of Conformance confirming that glazing has been installed in accordance with SANS 0137, ensuring that safety glazing				

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		materials have been installed in the mandatory areas and that each individual pane of safety glazing materials has been permanently marked 5. A warranty from the manufacturer of the laminated safety glass and/or hermetically sealed glazing units guaranteeing the products against delamination and colour degradation for a period of not less than five years				
		<u>GALVANISED STEEL STAIRS</u>				
		<u>Welded stair with balustrades to walls</u>				
1		4.5mm "Vastrap" plate continuous treads, risers and landing	kg	50		
		Ditto 0 - 50	kg	1		
2		200 x 8mm Flat section stringers	kg	50		
		Ditto 0 - 50	kg	1		
3		Extra over for ramp or knee	No	5		
		Ditto 0 - 5	m ²	1		
4		Extra over for L-intersection	No	25		
5		Hole through 8mm steel for bolt	No	25		
6		40 x 8mm Flat section continuous handrails and bottom rails	kg	50	-	
		Ditto 0 - 50	kg	1		
7		Extra over for fanged end	No	25		
8		Extra over for L-intersection	No	25		
9		Extra over for T-intersection	No	25		
10		Extra over for turned down end	No	25		
11		Extra over for ramp or knee	No	25		
12		Square hollow section balusters	kg	50		
		Ditto 0 - 50	kg	1		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
13		Square hollow section standard framed through bottom rail	kg	50		
14		High tensile bolts (class 8.8)	kg	5		
		Ditto 0 - 5	kg	1		
15		12mm Diameter expansion bolt	No	5		
		<u>HANDRAILS</u>				
		<u>Hot-dip galvanised steel welded handrails to walls</u>				
16		50 x 10mm Flat section rails	m	25		
		Ditto 0 - 25	m	1		
17		Extra over for mitred L-intersection	No	25		
18		Extra over for ramp or knee	No	25		
19		Extra over for bend	No	25		
20		50 x 20 x 2.5mm Hollow section continuous rails	m	25		
		Ditto 0 - 25	m	1		
21		Extra over for flat closed end	No	25		
22		Extra over for mitred L-intersection	No	25		
23		Extra over for ramp or knee	No	25		
24		50mm Diameter handrails	m	25		
		Ditto 0 - 25	m	1		
25		Extra over for rounded closed end	No	25		
26		Extra over for ramp or knee	No	25		
27		Extra over for bend	No	25		
28		Bracket of 20mm diameter bar 200mm girth, once bent to and with one end welded to rail and other end with 150mm diameter x 6mm thick plate four holed for bolts and welded on	No	25		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
29		12mm Expansion bolt	No	5		
30		12mm Expansion anchor with loose bolt	No	5		
31		12mm Chemical anchor with loose bolt	No	5		
		<u>BALUSTRADING</u>				
		<u>Hot-dip galvanised steel welded balustrade</u>				
32		Horizontal balustrade to walkways 1100mm high, of 50 x 10mm flat section continuous top rail and bottom rail, 20 x 20 x 2mm square hollow section intermediate balusters at 150mm centres between top and bottom rails and 50 x 50 x 3mm square hollow section posts at approximately 1000mm centres each with 100 x 100 x 6mm flat section base plate bolted to concrete (bolts elsewhere)	m	25		
		Ditto 0 - 25	m	1		
33		Extra over for L-intersection of horizontal balustrades	No	25		
34		Raking balustrading to staircases 1100mm high, of 50 x 10mm flat section continuous top rail and bottom rail, 20 x 20 x 2mm square hollow section intermediate balusters at 150mm centres between top and bottom rails and 50 x 50 x 3mm square hollow section posts at approximately 1000mm centres each with 100 x 100 x 6mm flat section base plate bolted to concrete (bolts elsewhere)	m	25		
		Ditto 0 - 25	m	1		
35		Extra over for junction of end of horizontal with end of raking balustrades	No	25		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
36		Horizontal balustrade 1100mm high, of 60mm external diameter x 2.5mm thick continuous pipe top and bottom rails, 60mm diameter x 2.5mm thick hollow section posts at approximately 1000mm centres with 100 x 100 x 6mm base plates bolted to concrete (bolts elsewhere) and 16mm diameter intermediate vertical balusters at 150mm centres between top and bottom rails	m	25		
		Ditto 0 - 25	m	1		
37		Extra over for L-intersection of horizontal balustrades	No	25		
38		Raking balustrading 1100mm high, of 60mm external diameter x 2.5mm thick continuous pipe top and bottom rails, 60mm diameter x 2.5mm thick hollow section posts at approximately 1000mm centres with 100 x 100 x 6mm base plates bolted to concrete (bolts elsewhere) and 16mm diameter intermediate vertical balusters at 150mm centres between top and bottom rails	m	25		
		Ditto 0 - 25	m	1		
39		Extra over for junction of end of horizontal with end of raking balustrades	No	25		
40		Horizontal balustrades 1100mm high of 60mm diameter continuous top and bottom rails, 16mm diameter intermediate balusters at approximately 150mm centres between top and bottom rails and 60mm diameter posts at approximately 1000mm centres each with 100 x 100 base plate bolted to concrete	m	25		
41		Extra over for L-intersection of horizontal balustrades	No	25		
42		Raking balustrades 1100mm high of 60mm diameter continuous top and bottom rails, 16mm diameter intermediate balusters at approximately 150mm centres between top and bottom rails and 60mm diameter posts at approximately 1000mm centres each with 100 x 100 base plate bolted to concrete	m	25		

WC 026 LANGE BERG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		Ditto 0 - 25	m	1		
43		Extra over for junction of end of horizontal with end of raking balustrades	No	25		
		<u>Hot-dip galvanised steel welded balustrading and handrails</u>				
44		50mm Diameter tubular handrail	m	25		
		Ditto 0 - 25	m	1		
45		Extra over for closed end	No	25		
46		Extra over for ramped end	No	25		
47		Extra over for 90 degree ramped bend between horizontal and raking rail	No	25		
48		30mm Diameter bottom rail, intermediate and end posts	m	25		
		Ditto 0 - 25	m	1		
49		Extra over for split and fanged ends for casting into concrete	No	25		
50		Extra over for cut, scribed and welded T-intersection	No	25		
51		10mm Diameter solid bar infill balusters	m	25		
		Ditto 0 - 25	m	1		
52		Extra for cut, scribed and welded T-intersection with handrail or bottom rail	m	25		
		Ditto 0 - 25	m	1		
53		16mm Diameter solid bar handrail bracket 250mm girth once bent, one end welded to handrail and other end split and fanged for building in	No	25		
54		Set up and build split and fanged end of handrail brackets into brickwork and set in epoxy mortar	No	25		
55		Set up and build split and fanged end of baluster posts into reinforced concrete and set in epoxy mortar	No	25		

WC 026 LANGE BERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
56		<u>Galvanised mild steel "Mentis" ball type or similar approved balustrading</u>				
		34,1mm Diameter x 2,5mm thick Handrail tubing	m	25		
57		Ditto 0 - 25	m	1		
		Extra over for slip joint as item 6	No	25		
58		Ditto, 90 degree long radius bend as item 1	No	25		
		Ditto, 90 degree short radius bend as item 5	No	25		
59		Ditto, 45 degree stairway bend as item 4	No	25		
		Ditto, 90 degree straight closure as item 2B	No	25		
60		Ditto, 90 degree straight closure as item 2M	No	25		
		Ditto, but 45 degree angle closure as item 3	No	25		
61		Wall end plate as item 7	No	25		
		42,9mm Diameter x 3mm thick type MT90 stanchion 1000mm long	No	25		
62		42,9mm Diameter x 3,3mm thick type MS90 stanchion 1140mm long	No	25		
		42,9mm Diameter x 3,2mm thick type MST30 stanchion 1000mm long	No	25		
63		42,9mm Diameter x 3,4mm thick type MSL30 and MSR30 stanchion 1140mm long	No	25		
		M16 x 100mm long galvanised mild steel flush expansion bolt including mortice in concrete	No	25		
64		<u>Stainless steel grade 304 "Mentis" ball type or similar approved balustrading</u>				
		31,8mm Diameter x 1,5mm thick handrail tubing	m	25		
70		Ditto 0 - 25	m	1		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
71		Extra over for slip joint as item 6	No	25		
72		Ditto, 90 degree long radius bend as item 1	No	25		
73		Ditto, 90 degree short radius bend as item 5	No	25		
74		Ditto, 45 degree stairway bend as item 4	No	25		
75		Ditto, 90 degree straight closure as item 2B	No	25		
76		Ditto, 90 degree straight closure as item 2M	No	25		
77		Ditto, but 45 degree angle closure as item 3	No	25		
78		Wall end plate as item 7	No	25		
79		42,9mm Diameter x 3mm thick type MT90 stanchion 1000mm long	No	25		
80		42,9mm Diameter x 3,3mm thick type MS90 stanchion 1140mm long	No	25		
81		42,9mm Diameter x 3,2mm thick type MST30 stanchion 1000mm long	No	25		
82		42,9mm Diameter x 3,4mm thick type MSL30 and MSR30 stanchion 1140mm long	No	25		
83		M16 x 100mm long galvanised mild steel flush expansion bolt including mortice in concrete	No	25		
		<u>CAT LADDERS</u>				
		<u>Hot-dip galvanised steel welded cat ladder 500mm wide to tank room</u>				
84		65 x 10mm Flat section stringers	kg	50		
		Ditto 0 - 50	kg	1		
85		Extra over for mitred L-intersection	No	25		
86		Extra over for bend across flat	No	25		
87		Extra over for bend across edge to 150mm internal radius	No	25		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
88		20mm Diameter rungs 500mm long with ends welded to stringers	kg	25		
		Ditto 0 - 50	kg	1		
89		150 x 150 x 6mm Fixing plate twice holed for bolts and welded on	No	25		
90		65 x 6mm Flat section bracket 200mm girth once bent across flat, once holed for bolt and welded on	No	25		
91		12mm Expansion bolt	No	5		
92		12mm Expansion anchor with loose bolt	No	5		
		<u>GATES, SCREENS, ETC</u>				
		<u>Galvanised steel welded screens and gates</u>				
93		50 x 2.5mm Fully galvanised diamond mesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
94		50 x 2.5mm Plastic coated fully galvanised diamond mesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
95		50 x 50 x 3.15mm Fully galvanised weldmesh covering in approximately 2500mm high panels tied with 2mm galvanised binding wire at 300mm centres to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
96		100mm Diameter (3mm wall thickness) galvanised steel post with a pressed steel mushroom cap and 300 x 300 x 6mm baseplate welded to bottom (cap and baseplate elsewhere)	m	25		
		Ditto 0 - 25	m	1		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
97		75mm Diameter (2mm wall thickness) galvanised steel rails, post and framing welded	m	25		
		Ditto 0 - 25	m	1		
98		Extra over for closed end	No	5		
99		Extra for mitred L-intersection	No	5		
100		Extra over for cut, scribed and welded T-intersection	No	5		
101		300 x 300 x 6mm Base plate four times holed for bolts and welded on	No	5		
102		100mm Diameter pressed steel mushroom welded on	No	5		
103		Single gate formed of 40 x 2.5mm thick round hollow section framing, middle rail and diagonal braces, covered with mesh netting (elsewhere), hung on two adjustable ring pivot hinges with tails split and spread and caulked into and including mortices in brickwork or concrete in 1.1 cement mortar or bolted to post and with 100mm pad bolt and keep welded on, size 1000 x 2100mm	No	5		
104		Double gate, each leaf formed of 40 x 2.5mm thick round hollow section framing, middle rail and diagonal braces, covered with mesh netting (elsewhere), each leaf hung on two adjustable ring pivot hinges with tails split and spread and caulked into and including mortices in brickwork or concrete in 1.1 cement mortar or bolted to post, with 254mm tower bolt welded to one leaf and with 203mm pad bolt and keep welded on at meeting stiles, size 2500 x 2100mm high overall.	No	5		
		<u>Hot-dip galvanised steel framed and welded gates with mitred intersections, etc</u>				

WC 026 LANGE BERG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
105		Single gate formed of 40 x 40 x 3mm thick hollow section perimeter framing and one middle rail, the top and bottom panels each filled with 16mm diameter round vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1000 x 2100mm high overall	No	5		
106		Single gate formed of 40 x 40 x 3mm thick hollow section perimeter framing and two middle rails 150mm apart with 3mm thick plate welded between same, the top and bottom panels each filled with 25 x 25 x 3mm thick square hollow section vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1000 x 2100mm high overall	No	5		
107		Double gate, each leave formed of 40 x 40 x 3mm thick hollow section perimeter framing and one middle rail, the top and bottom panels each filled with 16mm diameter round vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 2000 x 2100mm high overall	No	5		
108		Double gate, each leave formed of 40 x 40 x 3mm thick hollow section perimeter framing and two middle rails 150mm apart with 3mm thick plate welded between same, the top and bottom panels each filled with 25 x 25 x 3mm thick square hollow section vertical bars at 70mm centres with two 70 x 16mm bullet hinges with 200 x 150mm fixing plate four times holed welded on, size 1800 x 2100mm high overall	No	5		
109		Galvanised steel lock box welded to steel gate including all cutting and welding	No	5		
110		100mm Long heavy duty lockable pad bolt welded on	No	5		
111		Heavy duty hasp and staple welded on	No	5		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>The following in hot-dip galvanised mild steel framed and welded stoneguard cage formed of 30 x 30 x 3mm angle front and back perimeter frame and four 200mm long separating spacers at corners, 40 x 3mm flat section vertical and horizontal intermediates welded to front frame at approximately 400mm centres, 40 x 3mm flat bars welded on diagonally at 300mm centres to top and sides of cage, 25 x 50 x 3 x 3mm thick heavy duty expanded metal mesh welded to front, sides, top and bottom of cage, back angle perimeter frame holed for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt with bolt spot welded to frame on completion including all welding, cutting, drilling and grinding smooth, touching up with cold galvanising, etc</u>				
112		25 x 50 x 3 x 3mm Thick heavy duty expanded metal mesh covering welded to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
113		30 x 30 x 3mm Angle section front and back perimeter frame	m	25		
		Ditto 0 - 25	m	1		
114		Extra over for mitred L-intersection	No	5		
115		40 x 3mm Flat section vertical and horizontal intermediates and spaces	m	25		
		Ditto 0 - 25	m	1		
116		Extra over for T-intersection	No	5		
117		Hole for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt	No	5		
		<u>The following in hot-dip galvanised mild steel framed and welded burglar bars formed of flat bar or square hollow section frames filled in with flat, square or round bars</u>				
118		30 x 5mm Flat section frame	m	25		

WC 026 LANGE BERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
119		Ditto 0 - 25	m	1		
		40 x 5mm Flat section frame	m	25		
		Ditto 0 - 25	m	1		
120		Extra over for mitred L-intersection	No	5		
121		30 x 5mm Flat section bars	m	25		
122		Ditto 0 - 25	m	1		
		40 x 5mm Flat section bars	m	25		
		Ditto 0 - 25	m	1		
123		Extra over for T-intersection	No	5		
124		12mm Diameter round bars	m	25		
125		Ditto 0 - 25	m	1		
		16mm Diameter round bars	m	25		
		Ditto 0 - 25	m	1		
126		12mm Square bars	m	25		
127		Ditto 0 - 25	m	1		
		16mm Square bars	m	25		
		Ditto 0 - 25	m	1		
128		Extra over for T-intersection	No	5		
129		30 x 30 x 3mm Thick square hollow section	m	25		
130		Ditto 0 - 25	m	1		
		40 x 40 x 3mm Thick square hollow section	m	25		
		Ditto 0 - 25	m	1		
131		Extra over for mitred L-intersection	No	5		
132		Extra over for T-intersection	No	5		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
133		Hole for and bolted to brick wall with and including 8 x 100mm long flush bolt type expansion bolt	No	5		
		<u>GALVANISED STEEL MINOR WORK</u>				
		<u>Bolts</u>				
134		High tensile bolts, nuts and washers	kg	5		
		Ditto 0 - 5	kg	1		
135		100mm Long M10 diameter expansion bolt	No	5		
136		125mm Long M12 diameter expansion bolt	No	5		
137		150mm long M16 diameter expansion bolt	No	5		
138		200mm M12 chemical expansion bolt	No	5		
		<u>Corner protectors</u>				
139		50 x 50mm x 3.77kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
140		60 x 60mm x 4.57kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
141		70 x 70mm x 6.38kg/m Channel section corner protectors in varying lengths with 16mm diameter bent lugs each 300mm girth welded on at 300mm centres, including embedding in concrete	kg	50		
		Ditto 0 - 50	kg	1		
142		Extra over for mitred L-intersection	No	5		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>Hot-dip galvanised steel posts</u>				
143		100 x 100 x 3mm Square tube posts	kg	50		
		Ditto 0 - 50	kg	1		
144		Extra over for flat closed end	No	5		
145		100 x 3mm Thick round hollow section post	kg	50		
		Ditto 0 - 50	kg	1		
146		Extra over for flat closed end	No	5		
147		200 x 200 x 6mm Base plate welded on to foot of post and four times holed for anchor bolts (bolts elsewhere measured)	No	5		
148		150 x 3mm thick x 500mm girth channel shaped bracket eight times holed for bolts (bolts elsewhere measured) and welded to post	No	5		
		<u>Hot-dip galvanised mild steel security ceiling mesh and frames, including all on and off -site welding, cutting, drilling, grinding smooth, touching up with cold galvanising, fixing in position between trusses</u>				
149		50 x 50 x 3mm Angle iron framing holed at 300mm centres and fixed to truss tie beam (truss beam elsewhere measured)	kg	50		
		Ditto 0 - 50	kg	1		
150		25 x 50 x 3mm Flat expanded metal security mesh welded all round to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
		<u>Hot-dip galvanised mild steel fixed screens and side screens, including all on and off -site welding, cutting, drilling, grinding smooth, touching up with cold galvanising, fixing in position to concrete surface bed and brick wall</u>				
151		50 x 50 x 3mm Square hollow section framing	kg	50		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		Ditto 0 - 50	kg	1		
152		50 x 70 x 3mm Cleat welded on and once holed for 8mm bolts (bolts elsewhere measured)	No	5		
153		75 x 75 x 3mm Base plate welded on and twice holed for 8mm bolts (bolts elsewhere measured)	No	5		
154		50 x 50 x 2mm Channel welded to form frame	kg	50		
		Ditto 0 - 50	kg	1		
155		50 x 2mm Flat bar supports	kg	50		
		Ditto 0 - 50	kg	1		
156		25 x 50 x 1.8mm Flat expanded metal security mesh welded all round to frame	m ²	5		
		Ditto 0 - 5	m ²	1		
		<u>Galvanised steel powder coated security gates, fixed to brickwork or concrete</u>				
157		Trellidoor or similar approved single gate with and including slam lock, for opening size 1000 x 2100mm high	No	5		
158		Trellidoor or similar approved, single gate with and including slam lock, for opening size 1000 x 2500mm high	No	5		
159		Trellidoor or similar approved single gate with and including slam lock, for opening size 2000 x 2100mm high	No	5		
160		Trellidoor or similar approved single gate with and including slam lock, for opening size 2000 x 2500mm high	No	5		
161		Trellidoor or similar approved double gate with and including slam lock, for opening size 3000 x 2100mm high	No	5		
162		Trellidoor or similar approved double gate with and including slam lock, for opening size 3000 x 2500mm high	No	5		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
163		<u>STAINLESS STEEL MINOR WORK</u>				
		<u>Grade 304 stainless steel corner protectors</u>				
		40 x 40mm x 3mm Angle section corner protectors to vertical corners, plugged on both sides	No	5		
164		<u>Grade 316 stainless steel</u>				
		38mm Tubing three step fully welded stainless steel pool ladder with non-slip treads complete with and fixed into compression anchors	No	5		
165		<u>BRASS MINOR WORK</u>				
		3 x 32mm Flat section water bars fixed in and including groove in concrete	m	25		
166		Ditto 0 - 25	m	1		
		3 x 32mm Flat section frame with 3 x 25 x 150mm long flat section lugs brazed on with ends split and spread at 300mm centres and caulked into and including mortices in concrete in 1.1 cement mortar	m	25		
167		Ditto 0 - 25	m	1		
		Extra over for mitred and L-intersection	No	25		
168		<u>PRESSED STEEL DOOR FRAMES</u>				
		<u>1,6mm Thick single rebated frame for half brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame for door size 762 x 2032mm	No	2		
169		Ditto but galvanised	No	1		
		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>1,6mm Thick double rebated frame for half brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
170		Frame for door size 762 x 2032mm	No	2		
		Ditto but galvanised	No	1		
171		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		
172		Frame for door size 813 x 2032mm with transom over for fixed fanlight size 813 x 305mm	No	2		
		Ditto but galvanised	No	1		
173		Frame for door size 813 x 2032mm with transom over for bottom hung fanlight size 813 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
174		Frame for double door size 1511 x 2032mm	No	2		
		Ditto but galvanised	No	1		
175		Frame for double door size 1613 x 2032mm	No	2		
		Ditto but galvanised	No	1		
176		Frame for double door size 1511 x 2032mm with transom over for fixed fanlight size 1511 x 305mm	No	2		
		Ditto but galvanised	No	1		
177		Frame for double door size 1613 x 2032mm with transom over for fixed fanlight size 1613 x 305mm with 13 x 13mm glazing beads cut and mitred around and countersunk screwed to steel	No	2		
		Ditto but galvanised	No	1		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
178		Frame for double door size 1511 x 2032mm with transom over for bottom hung fanlight size 1511 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
179		Frame for double door size 1613 x 2032mm with transom over for bottom hung fanlight size 1613 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
180		<u>1,6mm Thick double rebated frame for one brick wall complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame for door size 762 x 2032mm	No	2		
		Ditto but galvanised	No	1		
181		Frame for door size 813 x 2032mm	No	2		
		Ditto but galvanised	No	1		
182		Frame for door size 813 x 2032mm with transom over for fixed fanlight size 813 x 305mm	No	2		
		Ditto but galvanised	No	1		
183		Frame for door size 813 x 2032mm with transom over for bottom hung fanlight size 813 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
184		Frame for double door size 1511 x 2032mm	No	2		
		Ditto but galvanised	No	1		
185		Frame for double door size 1613 x 2032mm	No	2		
		Ditto but galvanised	No	1		
186		Frame for double door size 1511 x 2032mm with transom over for fixed fanlight size 1511 x 305mm	No	2		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
187		Ditto but galvanised	No	1		
		Frame for double door size 1613 x 2032mm with transom over for fixed fanlight size 1613 x 305mm with 13 x 13mm glazing beads cut and mitred around and countersunk screwed to steel	No	2		
		Ditto but galvanised	No	1		
188		Frame for double door size 1511 x 2032mm with transom over for bottom hung fanlight size 1511 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
189		Frame for double door size 1613 x 2032mm with transom over for bottom hung fanlight size 1613 x 305mm and prepared to receive fanlight opener	No	2		
		Ditto but galvanised	No	1		
		<u>PRESSED STEEL CUPBOARD DOOR FRAMES</u>				
190		<u>1,6mm Thick Single rebated cupboard frame complete with butt hinges and including setting up, building in, filling back of frame with cement mortar, etc</u>				
		Frame type CAS size 673 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
191		Frame type CAL size 825 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
192		Frame type CBS size 1270 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
193		Frame type CBL size 1575 x 2085mm overall	No	2		
		Ditto but galvanised	No	1		
194		Frame type CAS size 673 x 2085mm overall	No	2		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
195		Ditto but galvanised	No	1		
		Frame type CAFS size 673 x 2580mm overall	No	2		
196		Ditto but galvanised	No	1		
		Frame type CAFL size 825 x 2580mm overall	No	2		
197		Ditto but galvanised	No	1		
		Frame type CBFS size 1270 x 2580mm overall	No	2		
198		Ditto but galvanised	No	1		
		Frame type CBFL size 1575 x 2580mm overall	No	2		
199		Ditto but galvanised	No	1		
		Frame type CCS coupled together with three cleats size 1943 x 2085mm overall	No	2		
200		Ditto but galvanised	No	1		
		Frame type CCFS coupled together with three cleats size 1943 x 2580mm overall	No	2		
		Ditto but galvanised	No	1		
		<u>GALVANISED PRESSED STEEL TRANSFORMER ROOM DOORS AND FRAMES</u>				
		<u>1,6mm Thick door with 1,6mm thick double rebated frame for one brick wall complete with butts, etc and including setting up, building in, filling back of frame with cement mortar, etc</u>				
201		Vent type ALU size 900 x 745mm and frame	No	2		
202		Vent type BLU size 1590 x 745mm and frame	No	2		
203		Door type A size 813 x 2032mm and frame	No	2		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
204		Door type F size 1220 x 2440mm and frame	No	2		
205		Door with vent type AV size 813 x 2032mm and frame	No	2		
206		Door with vent type BV size 915 x 2135mm and frame	No	2		
207		Door with vent type CV size 1220 x 2135mm and frame	No	2		
208		Door with vent type H size 915 x 2440mm and frame	No	2		
209		Double door type D size 1830 x 2440mm and frame	No	2		
210		Double door with vent type MV size 1525 x 2135mm and frame	No	2		
211		Double door with vent type YV size 1525 x 2440mm and frame	No	2		
212		Double door with vent type DV size 1830 x 2440mm and frame.	No	2		
		<u>WISPECO SUPERIOR CHROMADEK PRE-PAINTED GALVANISED MILD STEEL ROLL-UP DOORS</u>				
213		Push up operation roller shutter door complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
214		Electrically operated roller shutter door complete with overhead gear, guides, fixing bolts, etc., including electrical connection and commissioning (electrical isolator elsewhere) to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>ROLLERSTYLE PRE-PAINTED ALUMINIUM ROLL-UP DOORS</u>				

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
215		Electrically operated roller shutter door complete with overhead gear, guides, fixing bolts, etc., including electrical connection and commissioning (electrical isolator elsewhere) to suit clear opening size 2400 x 2255mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>HOT DIP GALVANISED STEEL ROLLER SHUTTER DOORS WITH CHROMADEK OR OTHER APPROVED PRE-PAINTED FINISH</u>				
216		Push up operation roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 2500 x 2500mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
217		Push up operation roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
218		Chain operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
219		Chain operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 4000 x 4000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
220		Roll-Up crank operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 3000 x 3000mm fixed in position and including mortices in brickwork or concrete for fixing bolts.	No	2		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
221		Roll-Up crank operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, fixing bolts, etc., to suit clear opening size 4000 x 4000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
222		Roll-Up remote controlled electrically operated roller shutter door formed of slats of suitable width and thickness and complete with overhead gear, guides, operating gear, motor, fixing bolts, etc., to suit plain opening size 5000 x 5000mm fixed in position and including mortices in brickwork or concrete for fixing bolts	No	2		
		<u>STEEL WINDOWS, DOORS, ETC</u>				
		<u>School type windows of residential section complete with NBP2 burglar bars to all sashes, ironmongery and including setting up, building in, filling back of frame with cement mortar, etc</u>				
223		Window type 3-HCH size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
224		Window type 48H size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
225		Window type 9-F/LT size 889 x 457mm	No	2		
		Ditto but galvanised	No	1		
226		Window type 1-HCH size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		
227		Window type 2-BH size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		
228		Window type 8-F/LT size 1143 x 457mm	No	2		
		Ditto but galvanised	No	1		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
229		Window type 6-HCH size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
230		Window type 14-BH size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
231		Window type 11-F/LT size 889 x 854mm	No	2		
		Ditto but galvanised	No	1		
232		Window type 5-HCH size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
233		Window type 12-BH size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
234		Window type 10-F/LT size 1143 x 854mm	No	2		
		Ditto but galvanised	No	1		
235		Composite type 6/4 coupled together with standard coupling mullion, size 889 x 1248mm overall	No	2		
		Ditto but galvanised	No	1		
		<u>STEEL RECORDROOM AND STRONGROOM DOORS, VENTILATORS, ETC</u>				
236		Double ended strongroom ventilator size 255 x 255mm with telescopic sleeve, gauze and baffle plates, drop shutter, etc including setting up, building in and caulking all around in 1.1 cement mortar	No	2		
237		Double ended strongroom ventilator size 255 x 255mm with telescopic sleeve, gauze and baffle plates, drop shutter, etc including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	2		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
238		Record room door and frame with a mass of 130kg to suit wall opening size 830 x 1935mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
239		Record room door and frame with a mass of 130kg to wall opening size 830 x 1935mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
240		Category 1 strongroom door and frame with a mass of 450kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
241		Category 1 strongroom door and frame with a mass of 450kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
242		Category 2 light duty strongroom door and frame with a mass of 460kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		
243		Category 2 light duty strongroom door and frame with a mass of 460kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
244		Category 2 heavy duty strongroom door and frame with a mass of 480kg to suit wall opening size 830 x 1940mm high including setting up, building in and caulking all around in 1.1 cement mortar	No	1		
245		Category 2 heavy duty strongroom door and frame with a mass of 480kg to suit wall opening size 830 x 1940mm high including building into opening in concrete wall and caulking all around in dry mix 20MPa concrete (6mm stone)	No	1		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>STEEL SECURITY PAYROLL WINDOWS</u>				
		<u>Mutual or similar approved security payroll windows suitable for one brick walls, fixed to brickwork or concrete</u>				
246		Type 1 level G1 pay window size 600 x 800mm high	No	2		
247		Type 1 level G2 pay window size 600 x 800mm high	No	2		
248		Type 1 level G3 pay window size 600 x 800mm high	No	1		
		<u>ANTI-BANDIT DOORS</u>				
		<u>Mutual or similar approved bullet resistant anti-bandit doors with commercial veneer and frames, 5 pin Cisa dead lock, continuous Roton type hinge, aluminium Slambar and D-style pull handles, fixed to brickwork or concrete</u>				
249		Internal type level G1 door and frame size 940 x 2105mm high overall	No	1		
250		External type level G1 door and frame size 940 x 2105mm high overall	No	1		
251		Internal type level G1 door with view panel and frame size 940 x 2105mm high overall	No	1		
252		External type level G1 door with view panel and frame size 940 x 2105mm high overall	No	1		
253		Internal type level G2 door and frame size 940 x 2105mm high overall	No	1		
254		External type level G2 door and frame size 940 x 2105mm high overall	No	1		
255		Internal type level G2 door with view panel and frame size 940 x 2105mm high overall	No	1		
256		External type level G2 door with view panel and frame size 940 x 2105mm high overall	No	1		
257		Internal type level G3 door and frame size 940 x 2105mm high overall	No	1		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
258		External type level G3 door and frame size 940 x 2105mm high overall	No	1		
259		Internal type level G3 door with view panel and frame size 940 x 2105mm high overall	No	1		
260		External type level G3 door with view panel and frame size 940 x 2105mm high overall	No	1		
		<u>NATURAL ANODISED ALUMINIUM WINDOWS, DOORS, ETC BY AAAMSA MEMBERS ONLY AND PROVIDE AAAMSA PERFORMANCE TEST CERTIFICATE</u>				
		<u>Casement pre-glazed side hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
261		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
262		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
263		Window type PT69 size 600 x 900mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
264		Window type PT129 size 1200 x 900mm, ditto	No	10		
265		Window type PT159 size 1500 x 900mm, ditto	No	10		
266		Window type PT159 size 1500 x 900mm, ditto	No	10		
267		Window type PT612 size 600 x 1200mm, ditto	No	10		
268		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
269		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
270		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
271		Window type PT615 size 600 x 1500mm, ditto	No	10		

WC 026 LANGE BERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
272		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
273		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
274		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
275		Window type PT618 size 600 x 1800mm, ditto	No	10		
276		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
277		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
278		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Casement pre-glazed top hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
279		Window type PT66 size 600 x 600mm glazed with 4mm clear float glass	No	10		
280		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
281		Window type PT66 size 600 x 600mm glazed with 4mm Pacific obscure glass	No	10		
282		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
283		Window type PT96 size 900 x 600mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
284		Window type PT69 size 600 x 900mm, ditto	No	10		
285		Window type PT99 size 900 x 900mm, ditto	No	10		
286		Window type PT129 size 1200 x 900mm, ditto	No	10		
287		Window type PT159 size 1500 x 900mm, ditto	No	10		

WC 026 LANGE BERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
288		Window type PT612 size 600 x 1200mm, ditto	No	10		
289		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
290		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
291		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
292		Window type PT615 size 600 x 1500mm, ditto	No	10		
293		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
294		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
295		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
296		Window type PT618 size 600 x 1800mm, ditto	No	10		
297		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
298		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
299		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Palace pre-glazed aluminium sliding doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
300		Door type SD1521OX, size 1500 x 2100mm high overall	No	10		
301		Door type SD1821OX, size 1800 x 2100mm high overall	No	10		
302		Door type SD2121OX, size 2100 x 2100mm high overall	No	10		
303		Door type SD2421OX, size 2400 x 2100mm high overall	No	10		

WC 026 LANGEORG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
304		Door type SD3021OXXO, size 3000 x 2100mm high overall	No	10		
305		Door type SD3621OXXO, size 3600 x 2100mm high overall	No	10		
		<u>Vistafold pre-glazed aluminium frames, doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
306		Frame and door type SFD1821-3 Panel size 1800 x 2100mm high overall	No	10		
307		Frame and door type SFD2121-3 Panel size 2100 x 2100mm high overall	No	10		
308		Frame and door type SFD2421-3 Panel size 2400 x 2100mm high overall	No	10		
309		Frame and door type SFD2721-3 Panel size 2700 x 2100mm high overall	No	10		
310		Frame and door type SFD1824-3 Panel size 1800 x 2400mm high overall	No	10		
311		Frame and door type SFD2124-3 Panel size 2100 x 2400mm high overall	No	10		
312		Frame and door type SFD2424-3 Panel size 2400 x 2400mm high overall	No	10		
313		Frame and door type SFD2724-3 Panel size 2700 x 2400mm high overall	No	10		
314		Frame and door type SFD1827-3 Panel size 1800 x 2700mm high overall	No	10		
315		Frame and door type SFD2127-3 Panel size 2100 x 2700mm high overall	No	10		
316		Frame and door type SFD2427-3 Panel size 2400 x 2700mm high overall	No	10		

WC 026 LANGE BERG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
317		Frame and door type SFD2727-3 Panel size 2700 x 2700mm high overall	No	10		
318		Frame and door type SFD3324-5 Panel size 3300 x 2400mm high overall	No	10		
319		Frame and door type SFD3624-5 Panel size 3600 x 2400mm high overall	No	10		
320		Frame and door type SFD3327-5 Panel size 3300 x 2700mm high overall	No	10		
321		Frame and door type SFD3627-5 Panel size 3600 x 2700mm high overall	No	10		
		<u>POWDER COATED ALUMINIUM WINDOWS, DOORS, ETC BY AAAMSA MEMBERS ONLY AND PROVIDE AAAMSA PERFORMANCE TEST CERTIFICATE</u>				
		<u>Casement pre-glazed side hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
322		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
323		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
324		Window type PT69 size 600 x 900mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		
325		Window type PT129 size 1200 x 900mm, ditto	No	10		
326		Window type PT159 size 1500 x 900mm, ditto	No	10		
327		Window type PT159 size 1500 x 900mm, ditto	No	10		
328		Window type PT612 size 600 x 1200mm, ditto	No	10		

WC 026 LANGE BERG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
329		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
330		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
331		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
332		Window type PT615 size 600 x 1500mm, ditto	No	10		
333		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
334		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
335		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
336		Window type PT618 size 600 x 1800mm, ditto	No	10		
337		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
338		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
339		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Casement pre-glazed top hung aluminium windows complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around with silicone, etc</u>				
340		Window type PT66 size 600 x 600mm glazed with 4mm clear float glass	No	10		
341		Window type PT69 size 600 x 900mm glazed with 4mm clear float glass	No	10		
342		Window type PT66 size 600 x 600mm glazed with 4mm Pacific obscure glass	No	10		
343		Window type PT69 size 600 x 900mm glazed with 4mm Pacific obscure glass	No	10		
344		Window type PT96 size 900 x 600mm glazed with 6,38mm intruderprufe normal strength clear laminated glass	No	10		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
345		Window type PT69 size 600 x 900mm, ditto	No	10		
346		Window type PT99 size 900 x 900mm, ditto	No	10		
347		Window type PT129 size 1200 x 900mm, ditto	No	10		
348		Window type PT159 size 1500 x 900mm, ditto	No	10		
349		Window type PT612 size 600 x 1200mm, ditto	No	10		
350		Window type PT1212 size 1200 x 1200mm, ditto	No	10		
351		Window type PT1512 size 1500 x 1200mm, ditto	No	10		
352		Window type PT1812 size 1800 x 1200mm, ditto	No	10		
353		Window type PT615 size 600 x 1500mm, ditto	No	10		
354		Window type PT1215 size 1200 x 1500mm, ditto	No	10		
355		Window type PT1515 size 1500 x 1500mm, ditto	No	10		
356		Window type PT1815 size 1800 x 1500mm, ditto	No	10		
357		Window type PT618 size 600 x 1800mm, ditto	No	10		
358		Window type PT1218 size 1200 x 1800mm, ditto	No	10		
359		Window type PT1518 size 1500 x 1800mm, ditto	No	10		
360		Window type PT1818 size 1800 x 1800mm, ditto	No	10		
		<u>Palace pre-glazed aluminium sliding doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				

WC 026 LANGE BERG - METALWORKS

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
361		Door type SD1521OX, size 1500 x 2100mm high overall	No	10		
362		Door type SD1821OX, size 1800 x 2100mm high overall	No	10		
363		Door type SD2121OX, size 2100 x 2100mm high overall	No	10		
364		Door type SD2421OX, size 2400 x 2100mm high overall	No	10		
365		Door type SD3021OXXO, size 3000 x 2100mm high overall	No	10		
366		Door type SD3621OXXO, size 3600 x 2100mm high overall	No	10		
		<u>Vistafold pre-glazed aluminium frames, doors, sidelights, etc complete with ironmongery and including setting up, building in, filling back of frame with cement mortar, sealing around same with silicone, etc</u>				
367		Frame and door type SFD1821-3 Panel size 1800 x 2100mm high overall	No	10		
368		Frame and door type SFD2121-3 Panel size 2100 x 2100mm high overall	No	10		
369		Frame and door type SFD2421-3 Panel size 2400 x 2100mm high overall	No	10		
370		Frame and door type SFD2721-3 Panel size 2700 x 2100mm high overall	No	10		
371		Frame and door type SFD1824-3 Panel size 1800 x 2400mm high overall	No	10		
372		Frame and door type SFD2124-3 Panel size 2100 x 2400mm high overall	No	10		
373		Frame and door type SFD2424-3 Panel size 2400 x 2400mm high overall	No	10		
374		Frame and door type SFD2724-3 Panel size 2700 x 2400mm high overall	No	10		

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
375		Frame and door type SFD1827-3 Panel size 1800 x 2700mm high overall	No	10		
376		Frame and door type SFD2127-3 Panel size 2100 x 2700mm high overall	No	10		
377		Frame and door type SFD2427-3 Panel size 2400 x 2700mm high overall	No	10		
378		Frame and door type SFD2727-3 Panel size 2700 x 2700mm high overall	No	10		
379		Frame and door type SFD3324-5 Panel size 3300 x 2400mm high overall	No	10		
380		Frame and door type SFD3624-5 Panel size 3600 x 2400mm high overall	No	10		
381		Frame and door type SFD3327-5 Panel size 3300 x 2700mm high overall	No	10		
382		Frame and door type SFD3627-5 Panel size 3600 x 2700mm high overall	No	10		
		<u>ALUMINIUM LOUVRE UNITS</u>				
		<u>NATURAL ANODISED HORIZONTAL ALUMINIUM LOUVRE UNITS</u>				
		<u>Trox or similar approved fixed louvre units fixed to brickwork or concrete</u>				
383		Standard louvre unit type AGS-T, 400 x 400mm high	No	10		
384		Standard louvre unit type AGS-T, 500 x 500mm high	No	10		
385		Standard louvre unit type AGS-T, 600 x 600mm high	No	10		
		<u>POWDER COATED HORIZONTAL ALUMINIUM LOUVRE UNITS</u>				
		<u>Trox or similar approved fixed louvre units fixed to brickwork or concrete</u>				

WC 026 LANGEORG - METALWORKS						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
386		Standard louvre unit type AGS-T, 400 x 400mm high	No	10		
387		Standard louvre unit type AGS-T, 500 x 500mm high	No	10		
388		Standard louvre unit type AGS-T, 600 x 600mm high	No	10		
		<u>SHOWER CUBICLE PANELS AND DOORS</u>				
		<u>Powder coated aluminium shower cubicle panels and doors with frames, sliding gear, pivot hinges,cleats, stops, etc. and 6mm toughened clear safety glass, plugged to tiled walls and sealed with silicone sealant (sizes to be verified on site):</u>				
389		Bi - fold door approximate size 1 000 x 1 800mm high	No	15		
390		Fixed panel approximate size 300 x 1 800mm high	No	15		
391		Sliding door approximate size 960 x 1 800mm high	No	15		
392		Sliding shower door in three leaves to suit plain opening size 900 x 2000mm high	No	15		
Carried to page 59						

WC 022 WITZENBERG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>SECTION NO. 2</u> <u>BILL NO. 17</u> <u>GLAZING</u> <u>Standard Preambles</u> The "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" obtainable on the Public Works Website: http://www.publicworks.gov.za/ under "Forms & Documents; Consultant's Guidelines"; Item 2.2.1 and 2.2.2 or from the Departmental Project Manager/Leader should be read in support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards Users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system, represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications The Standard Preambles and the Notes in the various trade bills are to apply equally to this section <u>Float glass</u> The term "float glass" is used for monolithic annealed glass <u>Laminated glass</u> Laminated glass to have polyvinyl butyral (PVB) interlayer(s) <u>GLAZING TO STEEL WITH PUTTY</u> <u>4mm Clear float glass</u>				
1		Panes not exceeding 0,1m ²	m ²	1		
2		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 022 WITZENBERG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
3		Panes exceeding 0,5m ² and not exceeding 2m ² <u>4mm Obscure glass</u>	m ²	1		
4		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
5		Panes exceeding 0,5m ² and not exceeding 2m ² <u>6.38mm Normal strength (NS) clear laminated safety glass</u>	m ²	1		
6		Panes not exceeding 0,1m ²	m ²	1		
7		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
8		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
9		Panes exceeding 2m ² and not exceeding 4m ² <u>6mm Clear toughened safety glass</u>	m ²	2		
10		Panes not exceeding 0,1m ²	m ²	1		
11		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
12		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1	-	
13		Panes exceeding 2m ² and not exceeding 4m ² <u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>	m ²	2		
14		Panes not exceeding 0,1m ²	m ²	1		
15		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
16		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
17		Panes exceeding 2m ² and not exceeding 4m ² <u>7.52mm High impact (HI) clear laminated safety glass</u>	m ²	2		
18		Panes not exceeding 0,1m ²	m ²	1		

WC 022 WITZENBERG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
19		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
20		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
21		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
22		Panes not exceeding 0,1m ²	m ²	1		
23		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
24		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
25		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>GLAZING TO ALUMINIUM WITH CLIP-ON BEADS</u>				
		<u>4mm Clear float glass</u>				
26		Panes not exceeding 0,1m ²	m ²	1		
27		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
28		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
29		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
30		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>6.38mm Normal strength (NS) clear laminated safety glass</u>				
31		Panes not exceeding 0,1m ²	m ²	1		
32		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
33		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
34		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		

WC 022 WITZENBERG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>6mm Clear toughened safety glass</u>				
35		Panes not exceeding 0,1m ²	m ²	1		
36		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
37		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
38		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
39		Panes not exceeding 0,1m ²	m ²	1		
40		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
41		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
42		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>7.52mm High impact (HI) clear laminated safety glass</u>				
43		Panes not exceeding 0,1m ²	m ²	1		
44		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
45		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
46		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
47		Panes not exceeding 0,1m ²	m ²	1		
48		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
49		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
50		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		

WC 022 WITZENBERG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>GLAZING TO WOOD WITH PUTTY</u>				
		<u>4mm Clear float glass</u>				
51		Panes not exceeding 0,1m ²	m ²	1		
52		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
53		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
54		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
55		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>6.38mm Normal strength (NS) clear laminated safety glass</u>				
56		Panes not exceeding 0,1m ²	m ²	1		
57		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
58		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
59		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>GLAZING TO WOOD WITH PINNED-ON BEADS (BEADS ELSEWHERE)</u>				
		<u>4mm Clear float glass</u>				
60		Panes not exceeding 0,1m ²	m ²	1		
61		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
62		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
63		Panes not exceeding 0,1m ²	m ²	1		
64		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 022 WITZENBERG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
65		Panes exceeding 0,5m ² and not exceeding 2m ² <u>6.38mm Normal strength (NS) clear laminated safety glass</u>	m ²	1		
66		Panes not exceeding 0,1m ²	m ²	1		
67		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
68		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
69		Panes exceeding 2m ² and not exceeding 4m ² <u>Sundries</u>	m ²	2		
70		Polished edges to 4mm float glass	m	10		
71		Polished edges to 6.38mm laminated glass	m	10		
72		Butt joints to 6mm toughened glass including polished edges and silicone sealant	m	10		
73		Butt joints to 6.38mm laminated glass including polished edges and silicone sealant <u>Clear sandblast translucent embossed vinyl film installed in accordance with manufacturer's instructions</u>	m	10		
74		Panes not exceeding 0,1m ²	m ²	1		
75		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
76		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
77		Panes exceeding 2m ² and not exceeding 4m ² <u>POLYCARBONATE SHEETING TO EXISTING STEEL WINDOWS WITH SILICONE SEALANT</u> <u>Clean out rebates and remove glass splinters in existing windows and fit 2mm thick polycarbonate sheet:</u>	m ²	2		
78		Panes not exceeding 0,1m ²	m ²	1		

WC 022 WITZENBERG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
79		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
80		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
81		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>Clean out rebates and remove glass splinters in existing windows and fit 3mm thick polycarbonate sheet:</u>				
82		Panes not exceeding 0,1m ²	m ²	1		
83		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
84		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
85		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>POLYCARBONATE SHEETING RIVETED TO EXISTING STEEL WINDOWS / DOORS</u>				
		<u>Clean out rebates and remove glass splinters in existing windows and fix 2mm thick polycarbonate sheet with rivets and sealing with silicone all round edges:</u>				
86		Panes not exceeding 0,1m ²	m ²	1		
87		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
88		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
89		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>Clean out rebates and remove glass splinters in existing windows and fit 3mm thick polycarbonate sheet with rivets and sealing with silicone all round edges:</u>				
90		Panes not exceeding 0,1m ²	m ²	1		
91		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 022 WITZENBERG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
92		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
93		Panes exceeding 2m ² and not exceeding 4m ² <u>Clean out rebates and remove glass splinters in existing windows and fix 6mm Lexan Polycarbonate clear translucent sheet with rivets and sealing with silicone all round edges</u>	m ²	2		
94		Panes not exceeding 0,1m ²	m ²	1		
95		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
96		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
97		Panes exceeding 2m ² and not exceeding 4m ² <u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u> <u>5mm Silvered float glass copper backed mirrors with polished edges, fixed with double sided adhesive tape and silicone</u>	m ²	2		
98		Mirror 600 x 600mm high	No	2		
99		Mirror 600 x 900mm high	No	2		
100		Mirror 600 x 1200mm high <u>5mm Silvered float glass copper backed mirrors with polished edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>	No	2		
101		Mirror 600 x 600mm high with four screws	No	2		
102		Mirror 600 x 900mm high with four screws	No	2		
103		Mirror 800 x 1200mm high with six screws	No	2		
Carried to page 59						

WC 023 DRAKENSTEIN - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>SECTION NO. 2</u> <u>BILL NO. 17</u> <u>GLAZING</u> <u>Standard Preambles</u> The "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" obtainable on the Public Works Website: http://www.publicworks.gov.za/ under "Forms & Documents; Consultant's Guidelines"; Item 2.2.1 and 2.2.2 or from the Departmental Project Manager/Leader should be read in support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards Users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system, represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications The Standard Preambles and the Notes in the various trade bills are to apply equally to this section <u>Float glass</u> The term "float glass" is used for monolithic annealed glass <u>Laminated glass</u> Laminated glass to have polyvinyl butyral (PVB) interlayer(s) <u>GLAZING TO STEEL WITH PUTTY</u> <u>4mm Clear float glass</u>				
1		Panes not exceeding 0,1m ²	m ²	1		
2		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 023 DRAKENSTEIN - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
3		Panes exceeding 0,5m ² and not exceeding 2m ² <u>4mm Obscure glass</u>	m ²	1		
4		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
5		Panes exceeding 0,5m ² and not exceeding 2m ² <u>6.38mm Normal strength (NS) clear laminated safety glass</u>	m ²	1		
6		Panes not exceeding 0,1m ²	m ²	1		
7		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
8		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
9		Panes exceeding 2m ² and not exceeding 4m ² <u>6mm Clear toughened safety glass</u>	m ²	2		
10		Panes not exceeding 0,1m ²	m ²	1		
11		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
12		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1	-	
13		Panes exceeding 2m ² and not exceeding 4m ² <u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>	m ²	2		
14		Panes not exceeding 0,1m ²	m ²	1		
15		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
16		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
17		Panes exceeding 2m ² and not exceeding 4m ² <u>7.52mm High impact (HI) clear laminated safety glass</u>	m ²	2		
18		Panes not exceeding 0,1m ²	m ²	1		

WC 023 DRAKENSTEIN - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
19		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
20		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
21		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
22		Panes not exceeding 0,1m ²	m ²	1		
23		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
24		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
25		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>GLAZING TO ALUMINIUM WITH CLIP-ON BEADS</u>				
		<u>4mm Clear float glass</u>				
26		Panes not exceeding 0,1m ²	m ²	1		
27		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
28		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
29		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
30		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>6.38mm Normal strength (NS) clear laminated safety glass</u>				
31		Panes not exceeding 0,1m ²	m ²	1		
32		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
33		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
34		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		

WC 023 DRAKENSTEIN - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>6mm Clear toughened safety glass</u>				
35		Panes not exceeding 0,1m ²	m ²	1		
36		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
37		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
38		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
39		Panes not exceeding 0,1m ²	m ²	1		
40		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
41		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
42		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>7.52mm High impact (HI) clear laminated safety glass</u>				
43		Panes not exceeding 0,1m ²	m ²	1		
44		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
45		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
46		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
47		Panes not exceeding 0,1m ²	m ²	1		
48		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
49		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
50		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		

WC 023 DRAKENSTEIN - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>GLAZING TO WOOD WITH PUTTY</u>				
		<u>4mm Clear float glass</u>				
51		Panes not exceeding 0,1m ²	m ²	1		
52		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
53		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
54		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
55		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>6.38mm Normal strength (NS) clear laminated safety glass</u>				
56		Panes not exceeding 0,1m ²	m ²	1		
57		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
58		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
59		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>GLAZING TO WOOD WITH PINNED-ON BEADS (BEADS ELSEWHERE)</u>				
		<u>4mm Clear float glass</u>				
60		Panes not exceeding 0,1m ²	m ²	1		
61		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
62		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
63		Panes not exceeding 0,1m ²	m ²	1		
64		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 023 DRAKENSTEIN - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
65		Panes exceeding 0,5m ² and not exceeding 2m ² <u>6.38mm Normal strength (NS) clear laminated safety glass</u>	m ²	1		
66		Panes not exceeding 0,1m ²	m ²	1		
67		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
68		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
69		Panes exceeding 2m ² and not exceeding 4m ² <u>Sundries</u>	m ²	2		
70		Polished edges to 4mm float glass	m	10		
71		Polished edges to 6.38mm laminated glass	m	10		
72		Butt joints to 6mm toughened glass including polished edges and silicone sealant	m	10		
73		Butt joints to 6.38mm laminated glass including polished edges and silicone sealant <u>Clear sandblast translucent embossed vinyl film installed in accordance with manufacturer's instructions</u>	m	10		
74		Panes not exceeding 0,1m ²	m ²	1		
75		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
76		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
77		Panes exceeding 2m ² and not exceeding 4m ² <u>POLYCARBONATE SHEETING TO EXISTING STEEL WINDOWS WITH SILICONE SEALANT</u> <u>Clean out rebates and remove glass splinters in existing windows and fit 2mm thick polycarbonate sheet:</u>	m ²	2		
78		Panes not exceeding 0,1m ²	m ²	1		

WC 023 DRAKENSTEIN - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
79		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
80		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
81		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>Clean out rebates and remove glass splinters in existing windows and fit 3mm thick polycarbonate sheet:</u>				
82		Panes not exceeding 0,1m ²	m ²	1		
83		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
84		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
85		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>POLYCARBONATE SHEETING RIVETED TO EXISTING STEEL WINDOWS / DOORS</u>				
		<u>Clean out rebates and remove glass splinters in existing windows and fix 2mm thick polycarbonate sheet with rivets and sealing with silicone all round edges:</u>				
86		Panes not exceeding 0,1m ²	m ²	1		
87		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
88		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
89		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>Clean out rebates and remove glass splinters in existing windows and fit 3mm thick polycarbonate sheet with rivets and sealing with silicone all round edges:</u>				
90		Panes not exceeding 0,1m ²	m ²	1		
91		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 023 DRAKENSTEIN - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
92		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
93		Panes exceeding 2m ² and not exceeding 4m ² <u>Clean out rebates and remove glass splinters in existing windows and fix 6mm Lexan Polycarbonate clear translucent sheet with rivets and sealing with silicone all round edges</u>	m ²	2		
94		Panes not exceeding 0,1m ²	m ²	1		
95		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
96		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
97		Panes exceeding 2m ² and not exceeding 4m ² <u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u> <u>5mm Silvered float glass copper backed mirrors with polished edges, fixed with double sided adhesive tape and silicone</u>	m ²	2		
98		Mirror 600 x 600mm high	No	2		
99		Mirror 600 x 900mm high	No	2		
100		Mirror 600 x 1200mm high <u>5mm Silvered float glass copper backed mirrors with polished edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>	No	2		
101		Mirror 600 x 600mm high with four screws	No	2		
102		Mirror 600 x 900mm high with four screws	No	2		
103		Mirror 800 x 1200mm high with six screws	No	2		
Carried to page 59						

WC 024 STELLENBOSCH - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>SECTION NO. 2</u> <u>BILL NO. 17</u> <u>GLAZING</u> <u>Standard Preambles</u> The "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" obtainable on the Public Works Website: http://www.publicworks.gov.za/ under "Forms & Documents; Consultant's Guidelines"; Item 2.2.1 and 2.2.2 or from the Departmental Project Manager/Leader should be read in support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards Users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system, represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications The Standard Preambles and the Notes in the various trade bills are to apply equally to this section <u>Float glass</u> The term "float glass" is used for monolithic annealed glass <u>Laminated glass</u> Laminated glass to have polyvinyl butyral (PVB) interlayer(s) <u>GLAZING TO STEEL WITH PUTTY</u> <u>4mm Clear float glass</u>				
1		Panes not exceeding 0,1m ²	m ²	1		
2		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 024 STELLENBOSCH - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
3		Panes exceeding 0,5m ² and not exceeding 2m ² <u>4mm Obscure glass</u>	m ²	1		
4		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
5		Panes exceeding 0,5m ² and not exceeding 2m ² <u>6.38mm Normal strength (NS) clear laminated safety glass</u>	m ²	1		
6		Panes not exceeding 0,1m ²	m ²	1		
7		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
8		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
9		Panes exceeding 2m ² and not exceeding 4m ² <u>6mm Clear toughened safety glass</u>	m ²	2		
10		Panes not exceeding 0,1m ²	m ²	1		
11		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
12		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1	-	
13		Panes exceeding 2m ² and not exceeding 4m ² <u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>	m ²	2		
14		Panes not exceeding 0,1m ²	m ²	1		
15		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
16		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
17		Panes exceeding 2m ² and not exceeding 4m ² <u>7.52mm High impact (HI) clear laminated safety glass</u>	m ²	2		
18		Panes not exceeding 0,1m ²	m ²	1		

WC 024 STELLENBOSCH - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
19		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
20		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
21		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
22		Panes not exceeding 0,1m ²	m ²	1		
23		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
24		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
25		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>GLAZING TO ALUMINIUM WITH CLIP-ON BEADS</u>				
		<u>4mm Clear float glass</u>				
26		Panes not exceeding 0,1m ²	m ²	1		
27		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
28		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
29		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
30		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>6.38mm Normal strength (NS) clear laminated safety glass</u>				
31		Panes not exceeding 0,1m ²	m ²	1		
32		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
33		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
34		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		

WC 024 STELLENBOSCH - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>6mm Clear toughened safety glass</u>				
35		Panes not exceeding 0,1m ²	m ²	1		
36		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
37		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
38		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
39		Panes not exceeding 0,1m ²	m ²	1		
40		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
41		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
42		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>7.52mm High impact (HI) clear laminated safety glass</u>				
43		Panes not exceeding 0,1m ²	m ²	1		
44		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
45		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
46		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
47		Panes not exceeding 0,1m ²	m ²	1		
48		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
49		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
50		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		

WC 024 STELLENBOSCH - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>GLAZING TO WOOD WITH PUTTY</u>				
		<u>4mm Clear float glass</u>				
51		Panes not exceeding 0,1m ²	m ²	1		
52		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
53		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
54		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
55		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>6.38mm Normal strength (NS) clear laminated safety glass</u>				
56		Panes not exceeding 0,1m ²	m ²	1		
57		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
58		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
59		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>GLAZING TO WOOD WITH PINNED-ON BEADS (BEADS ELSEWHERE)</u>				
		<u>4mm Clear float glass</u>				
60		Panes not exceeding 0,1m ²	m ²	1		
61		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
62		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
63		Panes not exceeding 0,1m ²	m ²	1		
64		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 024 STELLENBOSCH - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
65		Panes exceeding 0,5m ² and not exceeding 2m ² <u>6.38mm Normal strength (NS) clear laminated safety glass</u>	m ²	1		
66		Panes not exceeding 0,1m ²	m ²	1		
67		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
68		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
69		Panes exceeding 2m ² and not exceeding 4m ² <u>Sundries</u>	m ²	2		
70		Polished edges to 4mm float glass	m	10		
71		Polished edges to 6.38mm laminated glass	m	10		
72		Butt joints to 6mm toughened glass including polished edges and silicone sealant	m	10		
73		Butt joints to 6.38mm laminated glass including polished edges and silicone sealant <u>Clear sandblast translucent embossed vinyl film installed in accordance with manufacturer's instructions</u>	m	10		
74		Panes not exceeding 0,1m ²	m ²	1		
75		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
76		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
77		Panes exceeding 2m ² and not exceeding 4m ² <u>POLYCARBONATE SHEETING TO EXISTING STEEL WINDOWS WITH SILICONE SEALANT</u> <u>Clean out rebates and remove glass splinters in existing windows and fit 2mm thick polycarbonate sheet:</u>	m ²	2		
78		Panes not exceeding 0,1m ²	m ²	1		

WC 024 STELLENBOSCH - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
79		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
80		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
81		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>Clean out rebates and remove glass splinters in existing windows and fit 3mm thick polycarbonate sheet:</u>				
82		Panes not exceeding 0,1m ²	m ²	1		
83		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
84		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
85		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>POLYCARBONATE SHEETING RIVETED TO EXISTING STEEL WINDOWS / DOORS</u>				
		<u>Clean out rebates and remove glass splinters in existing windows and fix 2mm thick polycarbonate sheet with rivets and sealing with silicone all round edges:</u>				
86		Panes not exceeding 0,1m ²	m ²	1		
87		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
88		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
89		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>Clean out rebates and remove glass splinters in existing windows and fit 3mm thick polycarbonate sheet with rivets and sealing with silicone all round edges:</u>				
90		Panes not exceeding 0,1m ²	m ²	1		
91		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 024 STELLENBOSCH - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
92		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
93		Panes exceeding 2m ² and not exceeding 4m ² <u>Clean out rebates and remove glass splinters in existing windows and fix 6mm Lexan Polycarbonate clear translucent sheet with rivets and sealing with silicone all round edges</u>	m ²	2		
94		Panes not exceeding 0,1m ²	m ²	1		
95		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
96		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
97		Panes exceeding 2m ² and not exceeding 4m ² <u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u> <u>5mm Silvered float glass copper backed mirrors with polished edges, fixed with double sided adhesive tape and silicone</u>	m ²	2		
98		Mirror 600 x 600mm high	No	2		
99		Mirror 600 x 900mm high	No	2		
100		Mirror 600 x 1200mm high <u>5mm Silvered float glass copper backed mirrors with polished edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>	No	2		
101		Mirror 600 x 600mm high with four screws	No	2		
102		Mirror 600 x 900mm high with four screws	No	2		
103		Mirror 800 x 1200mm high with six screws	No	2		
Carried to page 59						

WC 025 BREEDEVALLEY - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>SECTION NO. 2</u> <u>BILL NO. 17</u> <u>GLAZING</u> <u>Standard Preambles</u> The "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" obtainable on the Public Works Website: http://www.publicworks.gov.za/ under "Forms & Documents; Consultant's Guidelines"; Item 2.2.1 and 2.2.2 or from the Departmental Project Manager/Leader should be read in support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards Users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system, represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications The Standard Preambles and the Notes in the various trade bills are to apply equally to this section <u>Float glass</u> The term "float glass" is used for monolithic annealed glass <u>Laminated glass</u> Laminated glass to have polyvinyl butyral (PVB) interlayer(s) <u>GLAZING TO STEEL WITH PUTTY</u> <u>4mm Clear float glass</u>				
1		Panes not exceeding 0,1m ²	m ²	1		
2		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 025 BREEDEVALLEY - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
3		Panes exceeding 0,5m ² and not exceeding 2m ² <u>4mm Obscure glass</u>	m ²	1		
4		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
5		Panes exceeding 0,5m ² and not exceeding 2m ² <u>6.38mm Normal strength (NS) clear laminated safety glass</u>	m ²	1		
6		Panes not exceeding 0,1m ²	m ²	1		
7		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
8		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
9		Panes exceeding 2m ² and not exceeding 4m ² <u>6mm Clear toughened safety glass</u>	m ²	2		
10		Panes not exceeding 0,1m ²	m ²	1		
11		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
12		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1	-	
13		Panes exceeding 2m ² and not exceeding 4m ² <u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>	m ²	2		
14		Panes not exceeding 0,1m ²	m ²	1		
15		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
16		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
17		Panes exceeding 2m ² and not exceeding 4m ² <u>7.52mm High impact (HI) clear laminated safety glass</u>	m ²	2		
18		Panes not exceeding 0,1m ²	m ²	1		

WC 025 BREEDEVALLEY - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
19		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
20		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
21		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
22		Panes not exceeding 0,1m ²	m ²	1		
23		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
24		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
25		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>GLAZING TO ALUMINIUM WITH CLIP-ON BEADS</u>				
		<u>4mm Clear float glass</u>				
26		Panes not exceeding 0,1m ²	m ²	1		
27		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
28		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
29		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
30		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>6.38mm Normal strength (NS) clear laminated safety glass</u>				
31		Panes not exceeding 0,1m ²	m ²	1		
32		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
33		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
34		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		

WC 025 BREEDEVALLEY - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>6mm Clear toughened safety glass</u>				
35		Panes not exceeding 0,1m ²	m ²	1		
36		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
37		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
38		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
39		Panes not exceeding 0,1m ²	m ²	1		
40		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
41		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
42		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>7.52mm High impact (HI) clear laminated safety glass</u>				
43		Panes not exceeding 0,1m ²	m ²	1		
44		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
45		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
46		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
47		Panes not exceeding 0,1m ²	m ²	1		
48		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
49		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
50		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		

WC 025 BREEDEVALLEY - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>GLAZING TO WOOD WITH PUTTY</u>				
		<u>4mm Clear float glass</u>				
51		Panes not exceeding 0,1m ²	m ²	1		
52		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
53		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
54		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
55		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>6.38mm Normal strength (NS) clear laminated safety glass</u>				
56		Panes not exceeding 0,1m ²	m ²	1		
57		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
58		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
59		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>GLAZING TO WOOD WITH PINNED-ON BEADS (BEADS ELSEWHERE)</u>				
		<u>4mm Clear float glass</u>				
60		Panes not exceeding 0,1m ²	m ²	1		
61		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
62		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
63		Panes not exceeding 0,1m ²	m ²	1		
64		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 025 BREEDEVALLEY - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
65		Panes exceeding 0,5m ² and not exceeding 2m ² <u>6.38mm Normal strength (NS) clear laminated safety glass</u>	m ²	1		
66		Panes not exceeding 0,1m ²	m ²	1		
67		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
68		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
69		Panes exceeding 2m ² and not exceeding 4m ² <u>Sundries</u>	m ²	2		
70		Polished edges to 4mm float glass	m	10		
71		Polished edges to 6.38mm laminated glass	m	10		
72		Butt joints to 6mm toughened glass including polished edges and silicone sealant	m	10		
73		Butt joints to 6.38mm laminated glass including polished edges and silicone sealant <u>Clear sandblast translucent embossed vinyl film installed in accordance with manufacturer's instructions</u>	m	10		
74		Panes not exceeding 0,1m ²	m ²	1		
75		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
76		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
77		Panes exceeding 2m ² and not exceeding 4m ² <u>POLYCARBONATE SHEETING TO EXISTING STEEL WINDOWS WITH SILICONE SEALANT</u> <u>Clean out rebates and remove glass splinters in existing windows and fit 2mm thick polycarbonate sheet:</u>	m ²	2		
78		Panes not exceeding 0,1m ²	m ²	1		

WC 025 BREEDEVALLEY - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
79		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
80		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
81		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>Clean out rebates and remove glass splinters in existing windows and fit 3mm thick polycarbonate sheet:</u>				
82		Panes not exceeding 0,1m ²	m ²	1		
83		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
84		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
85		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>POLYCARBONATE SHEETING RIVETED TO EXISTING STEEL WINDOWS / DOORS</u>				
		<u>Clean out rebates and remove glass splinters in existing windows and fix 2mm thick polycarbonate sheet with rivets and sealing with silicone all round edges:</u>				
86		Panes not exceeding 0,1m ²	m ²	1		
87		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
88		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
89		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>Clean out rebates and remove glass splinters in existing windows and fit 3mm thick polycarbonate sheet with rivets and sealing with silicone all round edges:</u>				
90		Panes not exceeding 0,1m ²	m ²	1		
91		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 025 BREEDEVALLEY - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
92		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
93		Panes exceeding 2m ² and not exceeding 4m ² <u>Clean out rebates and remove glass splinters in existing windows and fix 6mm Lexan Polycarbonate clear translucent sheet with rivets and sealing with silicone all round edges</u>	m ²	2		
94		Panes not exceeding 0,1m ²	m ²	1		
95		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
96		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
97		Panes exceeding 2m ² and not exceeding 4m ² <u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u> <u>5mm Silvered float glass copper backed mirrors with polished edges, fixed with double sided adhesive tape and silicone</u>	m ²	2		
98		Mirror 600 x 600mm high	No	2		
99		Mirror 600 x 900mm high	No	2		
100		Mirror 600 x 1200mm high <u>5mm Silvered float glass copper backed mirrors with polished edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>	No	2		
101		Mirror 600 x 600mm high with four screws	No	2		
102		Mirror 600 x 900mm high with four screws	No	2		
103		Mirror 800 x 1200mm high with six screws	No	2		
Carried to page 59						

WC 026 LANGEORG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>SECTION NO. 2</u> <u>BILL NO. 17</u> <u>GLAZING</u> <u>Standard Preambles</u> The "Construction Works: Specifications: General Specification (PW371-A) Edition 2.0" and "Construction Works: Specifications: General Specification (PW371-B) Edition 2.0" obtainable on the Public Works Website: http://www.publicworks.gov.za/ under "Forms & Documents; Consultant's Guidelines"; Item 2.2.1 and 2.2.2 or from the Departmental Project Manager/Leader should be read in support and extend the abbreviated bills of quantities descriptions by inter alia referring to SANS construction standards Users are to ensure that the abbreviated descriptions when read in conjunction with the applicable measuring system, represents the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications The Standard Preambles and the Notes in the various trade bills are to apply equally to this section <u>Float glass</u> The term "float glass" is used for monolithic annealed glass <u>Laminated glass</u> Laminated glass to have polyvinyl butyral (PVB) interlayer(s) <u>GLAZING TO STEEL WITH PUTTY</u> <u>4mm Clear float glass</u>				
1		Panes not exceeding 0,1m ²	m ²	1		
2		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 026 LANGEORG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
3		Panes exceeding 0,5m ² and not exceeding 2m ² <u>4mm Obscure glass</u>	m ²	1		
4		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
5		Panes exceeding 0,5m ² and not exceeding 2m ² <u>6.38mm Normal strength (NS) clear laminated safety glass</u>	m ²	1		
6		Panes not exceeding 0,1m ²	m ²	1		
7		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
8		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
9		Panes exceeding 2m ² and not exceeding 4m ² <u>6mm Clear toughened safety glass</u>	m ²	2		
10		Panes not exceeding 0,1m ²	m ²	1		
11		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
12		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1	-	
13		Panes exceeding 2m ² and not exceeding 4m ² <u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>	m ²	2		
14		Panes not exceeding 0,1m ²	m ²	1		
15		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
16		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
17		Panes exceeding 2m ² and not exceeding 4m ² <u>7.52mm High impact (HI) clear laminated safety glass</u>	m ²	2		
18		Panes not exceeding 0,1m ²	m ²	1		

WC 026 LANGE BERG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
19		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
20		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
21		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
22		Panes not exceeding 0,1m ²	m ²	1		
23		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
24		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
25		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>GLAZING TO ALUMINIUM WITH CLIP-ON BEADS</u>				
		<u>4mm Clear float glass</u>				
26		Panes not exceeding 0,1m ²	m ²	1		
27		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
28		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
29		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
30		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>6.38mm Normal strength (NS) clear laminated safety glass</u>				
31		Panes not exceeding 0,1m ²	m ²	1		
32		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
33		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
34		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		

WC 026 LANGEORG - GLAZING						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>6mm Clear toughened safety glass</u>				
35		Panes not exceeding 0,1m ²	m ²	1		
36		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
37		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
38		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
39		Panes not exceeding 0,1m ²	m ²	1		
40		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
41		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
42		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>7.52mm High impact (HI) clear laminated safety glass</u>				
43		Panes not exceeding 0,1m ²	m ²	1		
44		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
45		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
46		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>6.76mm High penetration resistance (HPR) clear laminated safety glass</u>				
47		Panes not exceeding 0,1m ²	m ²	1		
48		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
49		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
50		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		

WC 026 LANGEORG - GLAZING						
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		<u>GLAZING TO WOOD WITH PUTTY</u>				
		<u>4mm Clear float glass</u>				
51		Panes not exceeding 0,1m ²	m ²	1		
52		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
53		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
54		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
55		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>6.38mm Normal strength (NS) clear laminated safety glass</u>				
56		Panes not exceeding 0,1m ²	m ²	1		
57		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
58		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
59		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>GLAZING TO WOOD WITH PINNED-ON BEADS (BEADS ELSEWHERE)</u>				
		<u>4mm Clear float glass</u>				
60		Panes not exceeding 0,1m ²	m ²	1		
61		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
62		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
		<u>4mm Obscure glass</u>				
63		Panes not exceeding 0,1m ²	m ²	1		
64		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 026 LANGEORG - GLAZING

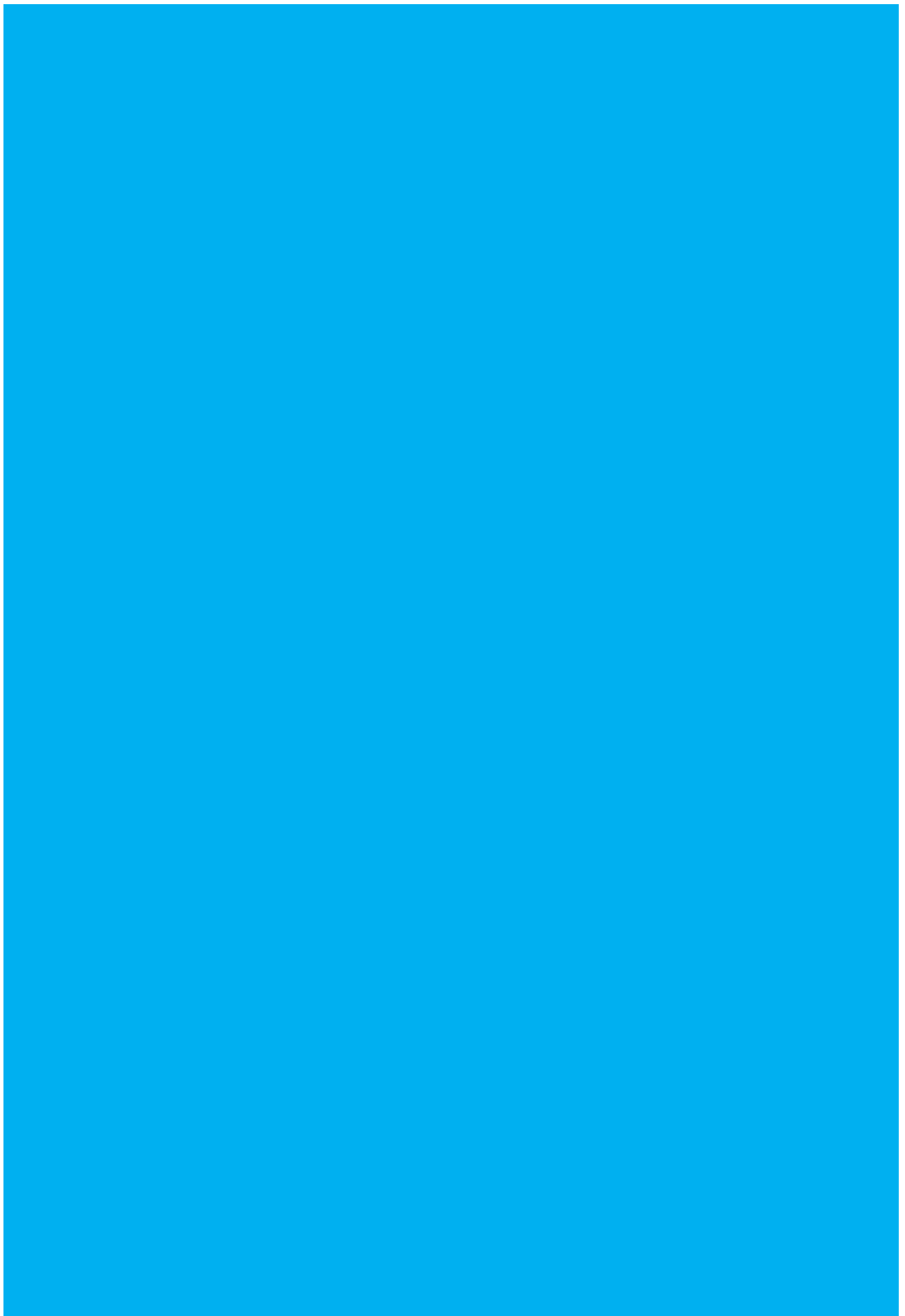
ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
65		Panes exceeding 0,5m ² and not exceeding 2m ² <u>6.38mm Normal strength (NS) clear laminated safety glass</u>	m ²	1		
66		Panes not exceeding 0,1m ²	m ²	1		
67		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
68		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
69		Panes exceeding 2m ² and not exceeding 4m ² <u>Sundries</u>	m ²	2		
70		Polished edges to 4mm float glass	m	10		
71		Polished edges to 6.38mm laminated glass	m	10		
72		Butt joints to 6mm toughened glass including polished edges and silicone sealant	m	10		
73		Butt joints to 6.38mm laminated glass including polished edges and silicone sealant <u>Clear sandblast translucent embossed vinyl film installed in accordance with manufacturer's instructions</u>	m	10		
74		Panes not exceeding 0,1m ²	m ²	1		
75		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
76		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
77		Panes exceeding 2m ² and not exceeding 4m ² <u>POLYCARBONATE SHEETING TO EXISTING STEEL WINDOWS WITH SILICONE SEALANT</u> <u>Clean out rebates and remove glass splinters in existing windows and fit 2mm thick polycarbonate sheet:</u>	m ²	2		
78		Panes not exceeding 0,1m ²	m ²	1		

WC 026 LANGE BERG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
79		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
80		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
81		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>Clean out rebates and remove glass splinters in existing windows and fit 3mm thick polycarbonate sheet:</u>				
82		Panes not exceeding 0,1m ²	m ²	1		
83		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
84		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
85		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>POLYCARBONATE SHEETING RIVETED TO EXISTING STEEL WINDOWS / DOORS</u>				
		<u>Clean out rebates and remove glass splinters in existing windows and fix 2mm thick polycarbonate sheet with rivets and sealing with silicone all round edges:</u>				
86		Panes not exceeding 0,1m ²	m ²	1		
87		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
88		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
89		Panes exceeding 2m ² and not exceeding 4m ²	m ²	2		
		<u>Clean out rebates and remove glass splinters in existing windows and fit 3mm thick polycarbonate sheet with rivets and sealing with silicone all round edges:</u>				
90		Panes not exceeding 0,1m ²	m ²	1		
91		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		

WC 026 LANGEORG - GLAZING

ITEM NO	PAY REF	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
92		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
93		Panes exceeding 2m ² and not exceeding 4m ² <u>Clean out rebates and remove glass splinters in existing windows and fix 6mm Lexan Polycarbonate clear translucent sheet with rivets and sealing with silicone all round edges</u>	m ²	2		
94		Panes not exceeding 0,1m ²	m ²	1		
95		Panes exceeding 0,1m ² and not exceeding 0,5m ²	m ²	1		
96		Panes exceeding 0,5m ² and not exceeding 2m ²	m ²	1		
97		Panes exceeding 2m ² and not exceeding 4m ² <u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u> <u>5mm Silvered float glass copper backed mirrors with polished edges, fixed with double sided adhesive tape and silicone</u>	m ²	2		
98		Mirror 600 x 600mm high	No	2		
99		Mirror 600 x 900mm high	No	2		
100		Mirror 600 x 1200mm high <u>5mm Silvered float glass copper backed mirrors with polished edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>	No	2		
101		Mirror 600 x 600mm high with four screws	No	2		
102		Mirror 600 x 900mm high with four screws	No	2		
103		Mirror 800 x 1200mm high with six screws	No	2		
Carried to page 59						



PART C.3.1: DESCRIPTION OF WORKS

1. BACKGROUND

Cape Winelands District Municipality have various buildings located all over their area of jurisdiction that must be repaired and maintained as required. Cape Winelands District Municipality seek to appoint a service providers through a competitive tendering process to provide complete Metalwork and Glazing services.

2. PURPOSE OF TENDER

The purpose is to request a formal tender for services concerned with Metalwork and Glazing of Buildings over the area of jurisdiction of the CWDM for the period ending 30 June 2028.

3. LOCATION OF WORK

MUNICIPAL AREA	ADDRESS
WC022: WITZENBERG	CWDM Office/Fire Station, 27 Munnik Street, Ceres. CWDM Roads Depot/Mechanical Workshop, R46, Ceres.
WC 023: DRAKENSTEIN	CWDM Office, 194 Main Street, Paarl. CWDM Roads Depot/Mechanical Workshop, Heide Street, Paarl. CWDM Nieuwedrift Fire Station, Boland Road, Farm 486, Paarl.
WC 024: STELLENBOSCH	CWDM Office, 46 Alexander Street, Stellenbosch. CWDM Office, 29 du Toit Street, Stellenbosch. CWD Office, c/o Bird and Langenhoven Street. CWDM Fire Station, Erf 123 Papegaairandweg, Stellenbosch. CWDM Stores, Drukkerslaan, Stellenbosch. CWDM Roads Depot/Mechanical Workshop, Drukkerslaan, Stellenbosch.
WC 025: BREEDE VALLEY	CWDM Office, 51 Trappes Street, Worcester. CWDM Roads Depot/Mechanical Workshop, c/o Louis Lange and Schönland Street, Worcester. CWDM Fire Station/Training Centre, Eerste Begin Plaas, Stainwell/ Roché Road, Farm 306/36, Worcester.
WC 026: LANGEORG	CWDM Office, 40 van Reenen Street, Robertson CWDM Roads Depot/Mechanical Workshop/Fire Station, Constitution Street, Robertson. CWDM Office, 56A Bad Street, Montagu.

4. SCOPE OF WORKS

4.1. BREAKDOWN REPAIR AND MAINTENANCE

- 4.1.1. The work comprises of the rendering of services concerned with the repair, maintenance, to buildings in Glazing and metal works building trades.
- 4.1.2. All repair work shall carry a guarantee period of a minimum of six (6) months from the date of installation.

4.2. CALLOUTS

- 4.2.1. One (1) callout charge shall be allowed per call logged with the Service Provider to assess a reported breakdown and to determine the requirements for the repair work.

The callout rate must allow for the necessary travel, labour, equipment, supervision, overheads, profit, etc., and must be built into the callout unit rate as per the Pricing Schedule per area

4.3. DIRECT LABOUR

- 4.3.1. The tendered rates shall include full compensation for all costs for salaries and wages, use and maintenance of tools and equipment, sick pay, leave pay, holidays with pay and financial charges of any description incurred by the service provider and his subcontractors, as well as for all insurance, accommodation, travelling, travelling time, supervision, overheads, profit, obligations, risks and any other emoluments and incidentals necessary for labour to execute the required work.
- 4.3.2. Normal office working hours are from 07h45 – 16h30 from Mondays to Thursdays, and from 07h45 to 15h15 on Fridays. When workers arrive on site to carry out work related to this contract, the municipal representative on this project must sign the Service Provider's job card to note the time of arrival and the time of exit on completion of the work. Each claim for payment for work done must be accompanied by a signed Service Provider's job card reflecting the actual time spent on site. No claim for payment will be processed without the signed job card attached.

4.4. MATERIAL

- 4.4.1. Each claim for parts bought for a specific job must be for the net cost of those items. Each invoice for a request for payment for work done must be submitted together with a quotation, invoice, or pro-forma invoice from the supplier as proof of purchase. The percentage (%) mark-up on material as per the Pricing Schedule shall include the service provider's handling cost, profit, and other charges in respect of the provisional procurement cost for material.
- 4.4.2. Items ex stock must be limited to sundry material or consumables used to perform repair and maintenance work, and a detailed description of sundry material or consumables must be reflected on the invoice for a request for payment for work done. The cost for sundry material and consumables used for the works must be included in the mark-up percentage on material as described in Item 4.4.1. above.
- 4.4.3. All parts replaced must be installed to manufacturer's specifications and shall carry a guarantee of a minimum period of six (6) months from date of installation. All parts replaced will remain the property of the CWDM and **must be handed in**.

4.5. EQUIPMENT, MATERIAL AND CONSUMABLES

- 4.5.1. All necessary human resources capacity, equipment, and material for the successful execution of the above is to be provided by the service provider:
 - 4.5.1.1. Adequate stock of all consumables required for the proper execution of the work.
 - 4.5.1.2. Tools and testing equipment.
 - 4.5.1.3. Lifting equipment/scaffolding.
 - 4.5.1.4. Core drilling equipment.
 - 4.5.1.5. Appropriate transport for all deployed teams.
 - 4.5.1.6. Access to specialised equipment.

- 4.5.2. Restrictions on how the Service Provider provides the service is listed below, but not limited to the following:
- 4.5.2.1. The Service Provider will strictly control all his staff that is deployed on site.
- 4.5.2.2. The Service Provider is to strictly control all its working activities on site.
- 4.5.2.3. All sub-contractors used by the Service Provider must be approved by the Municipality and may be subject to any vetting process as may be required.
- 4.5.2.4. Service Provider to provide Compliance Certificates on the completion of work where required.
- 4.5.3. Should the Municipality require a programme showing the key activities for any requested work, the successful contractor must illustrate the following:
- 4.5.3.1. The start and finish dates for each of the activities, and
- 4.5.3.2. The order and timing of activities which the Service Provider plans to provide the Municipality with.
- 4.6. KEY PERSONNEL**
- 4.6.1. Experienced Artisans to perform repairs, and maintenance work. Proof of experience must be submitted with the returnable schedules. Refer to Schedule 6A on pages 21, 22 and 23.
- 4.6.2. Key personnel shall be expected to operate away from their company premises as the demands of the anticipated contract requires.
- 4.7. APPLICABLE KEY PERFORMANCE INDICATORS (KPIs)**
- 4.7.1. Work/ services rendered within time frames specified.
- 4.7.2. Work/ services rendered as per rates awarded the pricing schedule.
- 4.7.3. Acceptable standard and quality of work delivered
- 4.8. TURN-AROUND TIMES AND RESPONSIBILITY**
- 4.8.1. The Contractor shall respond to callouts within 48 hours and works must be undertaken within 5 days.. Emergencies pertaining to the facilities, a maximum of 5 hours from being notified.
- 4.8.2. Emergency breakdown Maintenance, a maximum of 24 hours from being notified.
- 4.8.3. If the Service Provider does not meet these requirements (Emergency calls) Cape Winelands District Municipality will engage the services of another service provider and the cost will be passed on to the appointed Service Provider. For this purpose, the appointed Service Provider shall maintain a continuous telephone service where staff can be reached twenty-four hours per day, seven days a week.
- 4.9. REPORTING LINES**
- 4.9.1. The successful Service Provider will perform its services under control and management of the manager of the relevant department. No instructions are to be

taken from any Councillor or other employee from the Cape Winelands District Municipality other than the appointed manager.

4.10. RISKS

- 4.10.1. In the event of the successful Service Provider being unable to perform its duties under this appointment, or if in the opinion of the Municipality the progress of work, or the quality thereof is not satisfactory, the Municipality shall be entitled to cancel the contract. The Service Provider will however first be granted the opportunity to rectify his mistakes within a mutually agreed time frame and quality of work expected.
- 4.10.2. Where any damage is caused due to negligence by the Service Provider, the Service Provider shall be held responsible and shall make good such damage at his/her own expense to the satisfaction of the Municipality, and with the minimum disruption of services.
- 4.10.3. Where the municipality is forced to carry out any repairs due to the Service Provider's activities, the cost will be billed to the appointed Service Provider.
- 4.10.4. All electrical work must be carried out by a qualified electrician registered with the Department of Employment and Labour.

4.11. REMUNERATION

- 4.11.1. No payments will be made in advance
- 4.11.2. No payments will be made for material on site.
- 4.11.3. Any invoice for remuneration are to be inclusive of Value Added Tax where applicable.
- 4.11.4. Payment for services rendered is payable within 30 days on receipt of invoice issued MONTHLY.

OCCUPATIONAL HEALTH & SAFETY SPECIFICATION

FOR



TABLE OF CONTENTS

SCOPE AND DESCRIPTION OF PROJECT	
DEFINITIONS	
APPLICABLE LEGISLATION	
NOTIFICATION OF CONSTRUCTION	
RESPONSIBILITIES	
REGISTRATION WITH THE WORKMEN'S COMPENSATION OR LICENSED INSURER	
MANDATORY AGREEMENT	
ASSIGNED PERSON IN TERMS OF OCCUPATIONAL HEALTH & SAFETY ACT OF 1993 & APPLICABLE REGULATIONS	
HEALTH AND SAFETY DOCUMENTATION	
RISK ASSESSMENT	
SAFE WORK PROCEDURES	
METHOD STATEMENT	
FALL PROTECTION PLAN	
OCCUPATIONAL HEALTH & SAFETY FILE	
HEALTH AND SAFETY REPRESENTATIVES	
HEALTH & SAFETY TRAINING	
FIRE PREVENTION AND PROTECTION	
EMERGENCY PREPAREDNESS	
INCIDENTS/ACCIDENTS REPORTING AND INVESTIGATION	
PERSONAL PROTECTIVE EQUIPMENT	
FALL PROTECTION (WORKING IN ELEVATED POSITIONS)	
RISK ASSESSMENT FOR CONSTRUCTION WORK	
STRUCTURES	
TEMPORARY WORK	
EXCAVATIONS	
DEMOLITION WORK	
SCAFFOLDING	
CRANES	
LIFTING EQUIPMENT, TACKLE, MATERIAL HOIST AND CRANES	
CONSTRUCTION VEHICLES & MOBILE PLANT	
ELECTRICAL INSTALLATIONS AND MACHINERY ON CONSTRUCTION SITES	
USE AND TEMPORARY STORAGE OF FLAMMABLE LIQUIDS ON CONSTRUCTION SITES	330
HOUSEKEEPING AND GENERAL SAFEGUARDING ON CONSTRUCTION SITES	
STACKING AND STORAGE ON CONSTRUCTION SITES	
FIRE PRECAUTIONS ON CONSTRUCTION SITES	
CONSTRUCTION EMPLOYEES' FACILITIES	
LADDERS	

PRESSURE EQUIPMENT

PUBLIC SAFETY AND SECURITY

NIGHT WORK

HIRED PLANT AND MACHINERY

ROAD CONSTRUCTION WORK

TRAFFIC MANAGEMENT PLAN

LIQUOR, DRUGS, DANGEROUS WEAPONS, FIREARMS

INTERNAL/EXTERNAL AUDITS

Work Stoppage

INTRODUCTION

In terms of the Construction Regulation 5(1) b the client, is required to compile a Health & Safety specification for any intended project and provide such specification to any prospective contractor and designers. The contractor, on appointment shall submit a Health & Safety plan which shall address the requirements of this specification.

This specification objective is to ensure that the contractor(s) entering into a contract with CWDM achieve an acceptable level of OH&S performance. This document forms an integral part of Project Information and the contract. Principle and other contractors should make it part of any contract that they may have with their contractors and /or suppliers.

Compliance with this document does not absolve the client from complying with minimum legal requirements and the client remains responsible for the health & safety of his employees and those of his mandatories. Cape Winelands District Municipality-reserves the right to audit, monitor and where necessary regulate the site work activities of any principal contractor or appointed subcontractor as per Construction Regulation 5(1) (o) and section 5 of this document.

SCOPE AND DESCRIPTION OF PROJECT

Client:	
Principle Contractor:	
Sub-contractor/(s):	
Project Location:	
Project Duration:	
Project Description:	
Project Equipment:	
Existing Services / Structures:	
Total Number of Workers:	

DEFINITIONS

The definitions as listed in the OHS Act and Construction Regulations 84 of 7 February 2014 shall apply. Therefore, all references to the old Construction Regulations will change to the new Construction Regulations.

Client: means any person for whom construction work is being performed.

Principal Contractor: means an employer appointed by the client to perform construction work.

Contractor: means an employer who performs construction work;

Construction work: means any work in connection with,

- the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work;

Competent person: means a person who,

- a) has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and
- b) is familiar with the Act and with the applicable regulations made under the Act;

Designer: means

- (a) competent person who
 - i.) prepares a design;
 - ii.) checks and approves a design; or
 - iii.) arranges for any person at work under his or her control to prepare a design
 - iv.) including an employee of that person where he/she is the employer or
 - v.) designs temporary work, including its components,
- (b) an architect or engineer contributing to, or having overall responsibility for a design;
- (c) a building services engineer designing details for fixed plant;
- (d) a surveyor specifying articles or drawing up specifications.
- (e) A Contractor carrying out design work as part of a design and building project; or
- (f) an interior designer, shopfitter or landscape architect;

Fall prevention equipment means equipment used to prevent persons from falling from a fall risk position, including personal equipment, a body harness, lanyards, lifelines or physical equipment such as guardrails, screens, barricades, anchorages or similar equipment;

Fall arrest equipment means equipment used to arrest a person in a fall, including personal equipment such as body harness, lanyards, deceleration devices, lifelines or similar equipment.

Hazard: means a source of or exposure to danger

Hazard identification: means the identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed

Risk assessment means the process contemplated in paragraph 10 of the specifications.

Excavation work: means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping.

Ergonomics: means the application of scientific information concerning humans to the design of objects, systems and the environment for human use in order to optimise human well-being and overall system performance.

APPLICABLE LEGISLATION

This document is to be read and understood in conjunction with the following, inter- alia:

- (a) Occupational Health and Safety Act 85 of 1993 (OHS Act)
- (b) National Building Regulation Act 103 of 1977
- (c) Construction Regulations, 2014
- (d) SANS codes referred to by the OHS Act.
- (e) Contract Documents
- (f) Basic Conditions of Employment Act 75 of 1997
- (g) National Environmental Management Act 107 of 1998
- (h) National Environmental Management: Waste Management Act 59 of 2008
- (i) National Water Act 36 of 1998
- (j) Compensation for Occupational Injuries and Diseases (COID) Act No. 130 of 1993
- (k) Road Traffic Act 29 of 1989
- (l) The Constitution of the Republic of South Africa Act 108 of 1996

APPLICATION FOR CONSTRUCTION WORK

The intended construction work falls within the scope of “construction work” as defined in the Construction Regulations, 2014 made under the Occupational Health and Safety Act 1993, as amended (“OHS Act”)

PERMIT TO WORK

Where the construction works;

- (i) Exceeds 180 days;
- (ii) Involves more than 1800 person days of construction work; or
- (iii) The works contract is equal to or exceeds R13 Million or Construction Industry Development Board grading level 6 CSIR as the client, must at least 30 days prior to construction work; apply to the DoL for a construction work permit in the form of CR Annexure 1.

NOTIFICATION OF CONSTRUCTION

(Construction Regulation 4)

The Principal Contractor who intends to carry out any construction work must at least 7 days before that work is to be carried out notify the provincial director in writing in a form similar to Annexure 2 if the intended construction work will—

- (a) include excavation work;
- (b) include working at a height where there is risk of falling;
- (c) include the demolition of a structure; or
- (d) Include the use of explosives to perform construction work.

RESPONSIBILITIES

DUTIES OF CLIENT

(Construction Regulation 5)

a client must-

- (a) prepare a baseline risk assessment for an intended construction work project;
- (b) prepare a suitable, sufficiently documented and coherent site-specific health and safety specification for the intended construction work based on the baseline risk assessment contemplated in paragraph (a);
- (c) provide the designer with the health and safety specification contemplated in paragraph (b);
- (d) ensure that the designer takes the prepared health and safety specification into consideration during the design stage;
- (e) ensure that the designer carries out all responsibilities contemplated in regulation 6;
- (f) include the health and safety specification in the tender documents;
- (g) ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures;
- (h) ensure that the principal contractor to be appointed has the necessary competencies and HSE Resources to carry out the construction work safely;
- (i) take reasonable steps to ensure co-operation between all contractors appointed by the client to enable each of those contractors to comply with these Regulations;
- (j) ensure before any work commences on a site that every principal contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993);
- (k) appoint every principal contractor in writing for the project or part thereof on the construction site;
- (l) discuss and negotiate with the principal contractor the contents of the principal contractor's health and safety plan contemplated in regulation 7(1), and must thereafter finally approve that plan for implementation;
- (m) ensure that a copy of the principal contractor's health and safety plan is available on request to an employee, inspector or contractor;
- (n) take reasonable steps to ensure that each contractor's health and safety plan contemplated in regulation 7(1)(a) is implemented and maintained;
- (o) ensure that periodic health and safety audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days;
- (p) ensure that a copy of the health and safety audit report contemplated in paragraph is provided to the principal contractor within seven days after the audit;
- (q) stop any contractor from executing a construction activity which poses a threat to the health and safety of persons which is not in accordance with the client's health and safety specifications and the principal contractor's health and safety plan for the site;
- (r) where changes are brought about to the design or construction work, make sufficient health and safety information and appropriate HSE Resources available to the principal contractor to execute the work safely; and
- (s) Ensure that the health and safety file contemplated in regulation 7(1) (b) is kept and maintained by the principal contractor.

DUTIES OF THE PRINCIPAL CONTRACTOR AND CONTRACTOR

(Construction Regulation 7)

The Principal Contractor must:

- (a) Provide and demonstrate to the client a suitable, sufficiently documented and coherent site-specific health and safety plan, based on the client's documented health and safety specifications. The plan must be applied from the date of commencement of and for the

duration of the construction work and which must be reviewed and updated by the Principal Contractor as work progresses;

- (b) Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and this specification, which must be made available on request to an inspector, the client, the client's agent or Contractor; and
- (c) On appointing any other Contractor, in order to ensure compliance with the provisions of the Act—
 - i.) Provide contractors who are tendering to perform construction work for the Principal Contractor, with the relevant sections of the health and safety specifications pertaining to the construction work which has to be performed;
 - ii.) Ensure that potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;
 - iii.) Ensure that no contractor is appointed to perform construction work unless the Principal Contractor is reasonably satisfied that the contractor that he/she intends to appoint, has the necessary competencies and resources to perform the construction work safely;
 - iv.) Ensure prior to work commencing on the site that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;
 - v.) Appoint each contractor in writing for the part of the project on the construction site;
 - vi.) Take reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site;
 - vii.) Ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the Contractor and Principal Contractor, but at least once every 30 days;
 - viii.) Stop any contractor from executing construction work which is not in accordance with the client's health and safety specifications and the Principal Contractor's health and safety plan or which poses a threat to the health and safety of persons;
 - ix.) Where changes are brought about to the design and construction, make available sufficient health and safety information and appropriate resources to the contractor to execute the work safely; and
 - x.) Discuss and negotiate with the contractor the contents of the health and safety plan and must thereafter finally approve that plan for implementation;
- (d) Ensure that a copy of his or her health and safety plan, as well as the contractor's health and safety plan is available on request to an employee, an Inspector, a Contractor, the Client or the Client's Agent;
- (e) Hand over a consolidated health and safety file to the client upon completion of the construction work and must, in addition to the documentation include a record of all drawings, designs, materials used and other similar information concerning the completed structure;
- (f) In addition to the documentation required in the health and safety file, include and make available a comprehensive and updated list of all the Contractors on site accountable to the Principal Contractor, the agreements between the parties and the type of work being done; and
- (g) Ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

The Principal Contractor must take reasonable steps to ensure co-operation between all contractors appointed by the Principal Contractor to enable each of those contractors to comply with this specification.

No contractor may allow or permit any employee or visitor to enter the site, unless that employee or visitor has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry and must ensure all have the necessary personal protective equipment.

The Contractor must prior to performing any construction work:

- (a) Provide and demonstrate to the Principal Contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the client's health and safety specification. The aforementioned plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the contractor as work progresses;
- (b) Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and this specification, and which must be made available on request to an Inspector, the Client, the Client's Agent or the Principal Contractor;
- (c) Before appointing another contractor to perform construction work, be reasonably satisfied that the contractor that he/she intends to appoint has the necessary competencies and resources to perform the construction work safely;
- (d) Co-operate with the Principal Contractor as far as is necessary ensuring all comply with the provisions of the Act; and
- (e) As far as is reasonably practicable, promptly provide the contractor with any information which might affect the health and safety of any person at work carrying out construction work on the site, any person who might be affected by the work of such a person at work, or which might justify a review of the health and safety plan.

Where the contractor appoints another contractor to perform construction work, the duties determined in **section 5** of this document applies to the contractor as if he/she were the Principal Contractor.

A Contractor must at all times keep records of the health and safety induction training and such records must be made available on request to an inspector, the client, the client's agent or the principal contractor.

A Contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

MANAGEMENT AND SUPERVISION OF CONSTRUCTION WORK

(Construction Regulation 8)

The Principal Contractor must in writing appoint one full-time competent person as the Construction Manager with the duty of managing all the construction work on a single site, including the duty of ensuring Occupational Health and Safety compliance, and in the absence of the Construction Manager an alternate must be appointed by the Principal Contractor.

The Principal Contractor must upon having considered the size of the project, in writing appoint one or more assistant Construction Managers for different sections thereof: Provided that the designation of any such person does not relieve the Construction Manager of any personal accountability for failing in his or her management duties in terms of this regulation.

No Construction Manager appointed under paragraph 6 above may manage any construction work on or in any construction site other than the site in respect of which he/she has been appointed.

A Contractor must, after consultation with the client and having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part-time construction health and safety officer in writing to assist in the control of all health and safety related aspects on the site.

No Contractor may appoint a Construction Health and Safety Officer to assist in the control of health and safety related aspects on the site unless he/she is reasonably satisfied that the construction health and safety officer that he/she intends to appoint has necessary competencies and resources to assist the Principal Contractor

A Construction Manager must in writing appoint Construction Supervisors responsible for construction activities and ensuring Occupational Health and Safety compliance on the construction site.

A Contractor must, upon having considered the size of the project, in writing appoint one or more competent employees for different sections thereof to assist the Construction Supervisor contemplated in **paragraph 6** above, and every such employee has, to the extent clearly defined by the Principal Contractor in the letter of appointment, the same duties as the Construction Supervisor: Provided that the designation of any such employee does not relieve the Construction Supervisor of any personal accountability for failing in his or her supervisory duties in terms of this section in the specification.

No Construction Supervisor appointed under paragraph 6 above may supervise any construction work on or in any construction site other than the site in respect of which he/she has been appointed: Provided that if a sufficient number of competent employees have been appropriately designated on all the relevant construction sites, the appointed Construction Supervisor may supervise more than one site.

REGISTRATION WITH THE WORKMEN'S COMPENSATION OR LICENSED INSURER

The Principal Contractor(s) must ensure that CWDM is provided with a valid letter of good standing, including a registration number with the Compensation for Occupational Injury and Diseases Fund or an alternative scheme approved in writing by the Commissioner to the COID Fund, at least 10 days prior commencement of construction work. It must remain the Principal Contractor's responsibility to furnish Cape Winelands District Municipality with a valid letter of good standing or keep a copy available for perusal by a Client, Client Representatives or any other person authorised thereto.

MANDATARY AGREEMENT

A duly signed mandatar form also referred to as 'OHS Act section 37.2' must be obtained from CWDM Safety Department. It must be signed and returned to CWDM by the Principal Contractor at least 10 days prior to commencement of construction work. The Principal Contractor must ensure that all its contractors have completed a similar document, and a proof of such signed documents is submitted to CWDM for reference purposes.

ASSIGNED PERSON IN TERMS OF OCCUPATIONAL HEALTH & SAFETY ACT OF 1993 & APPLICABLE REGULATIONS

A written letter of appointment must be forwarded to CWDM duly signed by responsible persons at least 3 days' prior commencement of construction work for the following duties:

The competency of each member must be provided and should include knowledge, training, experience & qualifications specific to the appointment. (where applicable)

(Further appointments could become necessary as the project progresses and as per the requirements of OHS Act 85/1993)

- (a) Person assigned duties in terms of the 16.2 appointees of the Act
- (b) Construction Manager CR8(1)
- (c) Assistant Construction Manager CR8(2) - *where applicable*
- (d) Full-time or part-time Construction Safety Officer CR8(5)
- (e) Construction Supervisor CR8(7))
- (f) Assistant Construction Supervisor CR8(8) - *where applicable*
- (g) Risk Assessor CR9(1)
- (h) Fall Protection Developer/Planner CR10(1) - *where applicable*
- (i) Temporary Works Designer CR11(1) - *where applicable*
- (j) Temporary Works Supervisor CR11(2) - *where applicable*
- (k) Excavation Supervisor CR13(1) a) - *where applicable*
- (l) Demolition Work Supervisor and Controller CR14(1) - *where applicable*
- (m) Scaffolding Supervisor CR16(1) - *where applicable*
- (n) Scaffolding Team leader CR16(1) - *where applicable*
- (o) Scaffolding Inspector CR16(1) - *where applicable*
- (p) Scaffolding Erector CR16(1) - *where applicable*
- (q) Construction Vehicles and Mobile Plant Operator CR23(1)d(i) - *where applicable*
- (r) Temporary Electrical Installations Controller CR24(c) - *where applicable*
- (s) Portable Electrical Equipment Supervisor CR24(d) - *where applicable*
- (t) Fire Equipment Inspector CR29(h) - *where applicable*
- (u) First Aider GSR3(4) -- *where applicable*
- (v) Stacking Supervisor (CR28(a)) (GSR2(a))
- (w) Gas Cutting/Welding Supervisor (GSR9(a) - *where applicable*
- (x) Ladder Supervisor and Inspector (GSR13(a) - *where applicable*
- (y) Lifting Machine Inspector (DMR18(7) - *where applicable*
- (z) Lifting Tackle Inspector (DMR18(10)e) - *where applicable*
- (aa) Lifting Machine Supervisor (DMR18(11) - *where applicable*
- (bb) Supervisor of Machinery (GMR1) - *where applicable*
- (cc) Safety Representatives (OHS Act Sec.17 - *where applicable*
- (dd) Hazardous Chemical Substances Controller/Co-ordinator HCSR10 - *where applicable*
- (ee) Incident Investigator (GAR9(2))

HEALTH AND SAFETY DOCUMENTATION

The Principal Contractor must provide and demonstrate to CWDM a suitable, sufficiently documented and coherent site-specific health and safety plan, based on CWDM's documented health and safety specifications. The health and safety plan must include but not limited to the following during tendering process, before commencement of construction work and during construction:

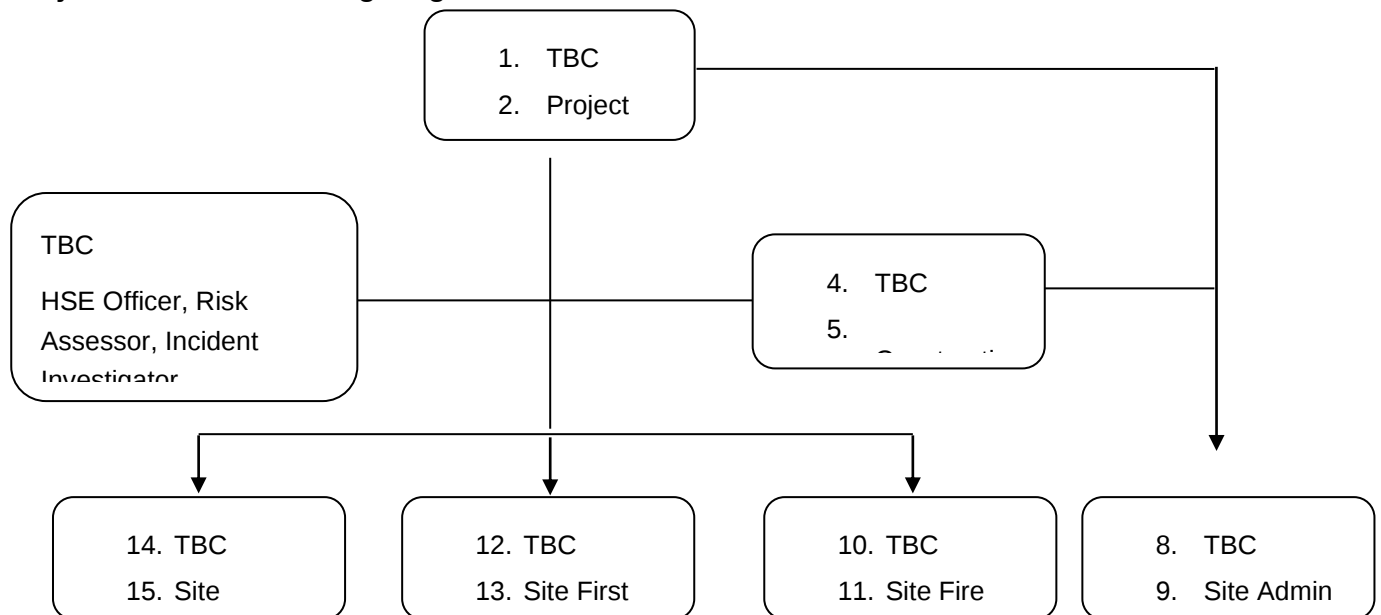
Principal Contractor's Health & Safety Policy

The Principal Contractor must provide a health & safety policy signed by the Chief Executive Officer (CEO) which outlines Principal Contractor's commitment towards health and safety

Health and Safety Organogram

The Principal Contractor must provide a health & safety organogram which outlines related appointments in terms of the OHS Act and applicable Regulations. Contact numbers should also be provided for easy reference.

Project HSE Structure Organogram



RISK ASSESSMENT

(Construction Regulation 9)

A Contractor must, before the commencement of any construction work and during such construction work, have risk assessments performed by a competent person appointed in writing, which risk assessments form part of the health and safety plan to be applied on the site, and must include—

- (a) the identification of the risks and hazards to which persons may be exposed to;
- (b) an analysis and evaluation of the risks and hazards identified based on a documented method;
- (c) a documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- (d) a monitoring plan; and
- (e) a review plan.

A Contractor must ensure that:

- (f) as far as is reasonably practicable, ergonomic related hazards are analyzed, evaluated and addressed in the risk assessment
- (g) that all employees under his or her control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures and or control measures before any work commences, and thereafter at the times determined in the risk assessment monitoring and review plan of the relevant site
- (h) Principal Contractor must ensure that all Contractors are informed regarding any hazard that is stipulated in the risk assessment before any work commences, and thereafter at the times that may be determined in the risk assessment monitoring and review plan of the relevant site
- (i) consult with the health and safety committee or, if no health and safety committee exist, with a representative trade union or representative group of employees, on the monitoring and review of the risk assessments of the relevant site
- (j) copies of the risk assessments of the relevant site are available on site for inspection by an inspector, the client, the client's agent, any Principal Contractor, any employee, a representative trade union, a health and safety representative or any member of the health and safety committee

- (k) review the relevant risk assessment—
 - i. where changes are affected to the design and or construction that result in a change to the risk profile; or
 - ii. when an incident has occurred.

All risk assessments are to be conducted by a competent person as appointed under the paragraph and regulation of this document. The plan must include a declaration in this regard, or the risk assessment must contain the signature(s) of this appointed persons.

Risk assessments are to highlight **safety, and health and environmental risks/ hazards associated with the project activities / tasks**

SAFE WORK PROCEDURES

A Safe Work Procedure must be developed by each contractor for all construction work activities. Cape Winelands District Municipality may also request site specific Safe Work Procedures for all work during the Project. High risk activities introduced by contractors must be documented in their HSE Plan and/or associated Safe Work Procedure.

Safe Work Method Statement requirement list;

- (a) Description of work
- (b) Sequence of operations
- (c) Controls and monitoring
- (d) Plant inspection
- (e) Operator training
- (f) List of proposed Hazardous Chemical Substances to be used with MSDS's
- (g) Safety of public, visitors, Landowners and their workers, third parties.
- (h) Environmental controls (if required)
- (i) First Aid requirements
- (j) Emergency Procedures
- (k) Prescribed PPE for the task at hand
- (l) Notification of HSE, local authority and Environmental Agencies (if required)
- (m) Permit requirements (if required)
- (n) Person responsible for risk control implementation.
- (o) Training attendance register attached to all Risk assessment
- (p) Communication and acceptance by staff

METHOD STATEMENT

Where risks are high, more detailed planning is needed to manage the hazards and control those risks. the method statement will plan out the work in a logical sequence, providing information on the controls and precautions (that you identified in the risk assessments) required at each step. For example, the risk assessment might say that supervision is required for the task. The method statement will then go into further details about who will be the supervisor, their contact details and qualifications etc.

Your method statement doesn't have to be a lengthy document, but it should contain all the information you need to communicate how to do the work safely. The information should be clear and concise. At times it can be helpful to include drawings or pictures in your method statement to explain something and reduce confusion.

The method statement shall contain information about a task or activity such as:

- (a) The specific activity the method statement is for
- (b) A description of the work
- (c) Start date and duration of the task
- (d) Hours of work
- (e) The hazards associated with the site and environment
- (f) References to other documents such as risk assessments that apply to the task
- (g) PPE requirements
- (h) Management arrangements
- (i) Monitoring arrangements
- (j) Emergency procedure

FALL PROTECTION PLAN

(Construction Regulation 10)

A Contractor must

- (a) designate a competent person to be responsible for the preparation of a fall protection plan;
- (b) ensure that the fall protection plan contemplated above is implemented, amended where and when necessary and maintained as required; and
- (c) take steps to ensure continued adherence to the fall protection plan.

The Fall Protection Plan must include

- (a) a risk assessment of all work carried out from a fall risk position and the procedures and methods used to address all the risks identified per location;
- (b) the processes for the evaluation of the employees' medical fitness necessary to work at a fall risk position and the records thereof;
- (c) a programme for the training of employees working from a fall risk position and the records thereof;
- (d) the procedure addressing the inspection, testing and maintenance of all fall protection equipment; and
- (e) a rescue plan detailing the necessary procedure, personnel and suitable equipment required to affect a rescue of a person in the event of a fall incident to ensure that the rescue procedure is implemented immediately following the incident.

A Contractor must ensure that:

- (a) **The Construction Manager** appointed under **Construction Regulation 8(1)** is in possession of the most recently updated version of the fall protection plan.
- (b) all unprotected openings in floors, edges, slabs, hatchways and stairways are adequately guarded, fenced or barricaded or that similar means are used to safeguard any person from falling through such openings;
- (c) no person is required to work in a fall risk position, unless such work is performed safely as contemplated in above;
- (d) fall prevention and fall arrest equipment are
 - (i) approved as suitable and of sufficient strength for the purpose for which they are being used, having regard to the work being carried out and the load, including any person, they are intended to bear; and
 - (ii) securely attached to a structure or plant, and the structure or plant and the means of attachment thereto are suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and any person who could fall; and
- (e) fall arrest equipment is used only where it is not reasonably practicable to use fall prevention equipment

OCCUPATIONAL HEALTH & SAFETY FILE

(Construction Regulation 7)

The Occupational Health and Safety File

The Principal Contractor will keep an Occupational Health and Safety File on site containing the following documents (where applicable) as a minimum:

- Accident/Incident Register. (Annexure 1 of the General Admin Regulations)
- Health and safety Representatives Inspections Register.
- Mobile Plant Inspection.
- Mobile Plant Inspection maintenance or service history (last 3 month)
- Daily Inspection of Vehicles.
- Vehicle maintenance or service history (last 3 months)
- Demolition Inspection Register.
- Electrical Installations, Equipment & Appliances. (including Portable Electrical Tools)
- Excavations Inspection.
- Fall Protection Inspection Register.
- First Aid Box Contents.
- Fire Equipment Inspection & Maintenance.
- Hazardous Chemical Substances Record (MSDS)
- Ladder Inspections.
- Lifting Equipment Register.
- Machinery Safety Inspection Register. (incl. machine guards, lockouts etc.)
- Scaffolding Inspections.
- Stacking & Storage Inspection.
- Inspection of Structures.
- Inspection of Pressure Equipment.
- Welding Equipment Inspections.
- Company Policies (H&S, smoking, drugs & alcohol abuse, etc.)
- Staff medical fitness tests or records
- Staff copy of ID
- Staff induction records
- Staff PPE issue records (current issue for project)
- Valid staff competency certificates
- Valid equipment certificates (where applicable)
- Valid Letter of good standing (COIDA)
- Valid Third-party insurance certificate
- Project specific organogram
- Risk Assessments
- Method Statements
- Safe work Procedures
- All other applicable records.

HEALTH AND SAFETY REPRESENTATIVES

The Principal Contractor must ensure that Health and Safety Representative(s) is/are elected and delegated in writing and necessary training has been provided by a competent person where there are more than 20 employees at the workplace. A proof of training certificate must be provided to CWDM.

Health and Safety Representatives must conduct monthly inspections by completing a checklist developed by the Principal Contractor. Safety defects noted must be recorded and reported to the supervisor for remedial action. Health and Safety Representative Inspection findings must be made available to CWDM for reference for audits purposes.

Health and Safety Representatives and their reports must form part of the safety committee which must meet on a monthly basis.

The Principal Contractor must hold health and safety committee meetings on site. Minutes of such meetings and action taken by management must be kept on file and made available to CWDM for reference purposes. Members of the committee must receive proper training and a proof of such training must be made available.

The Committee must consider, at least, the Following Agenda:

- Opening & Welcome
- Present/ Apologies/ Absent
- Minutes of previous Meeting
- Matters Arising from the previous Minutes
- OH&S Reps Reports
- Incident Reports & Investigations
- Incident /Injury Statistics
- Other Matters
- Endorsement of Registers and other statutory documents by a representative of the Principal Contractor
- Close/Next Meeting

The Principal Contractor must ensure that CWDM Safety Department is invited to such meetings. These meetings do not substitute for Principal Contractor's Site meetings.

HEALTH & SAFETY TRAINING

Environmental, Health and Safety Induction

The Principal Contractor must conduct an induction training session prior commencement of construction work. An attendance register must be kept in the Principal Contractor's health and safety file.

Induction Conducted by the Principal Contractor and Competent Person

A manual /copy of such training must be provided to CWDM for reference purposes. As determined by the risk assessment. The Principal Contractor must ensure that all employees under his/her control are trained by a competent person and a proof of such training is kept on file for reference.

Toolbox Talks

The Principal Contractor must ensure that employees attend a formal Toolbox Talk to be held at least once a week. Toolbox Talks must cover a wide variety of topics related to health and safety. An attendance register must be completed by employees who attended such talks. The register must indicate the topic covered presenter, date and signatures of employees attended. Records for Toolbox Talks must be kept in a health and safety file and be made available to CWDM for perusal.

First Aid Training

The Principal Contractor must appoint competent First Aider(s) in writing where more than 10 employees are employed. A letter of appointment must be kept on file for reference made available to CWDM Safety. Duly designated First Aider(s) must have attended training at an accredited institution prior commencement of construction work and a proof of certificate be submitted to CWDM for reference.

The Principal Contractor must ensure that the first aid box(s) is/are controlled by qualified First Aider(s) and kept fully stocked with necessary first aid contents related to the hazards and risks

identified. A first aid box(s) must be accessible, and location of such box(s) is clearly displayed on site.

FIRE PREVENTION AND PROTECTION

The Principal Contractor must ensure that adequate fire equipment is provided in strategic places (that is, where there is a mobile distribution board, flammable liquids, pressure equipment, confined spaces, hot work). The Principal Contractor must ensure that such equipment is inspected by a competent

person on a monthly basis and such inspections are recorded on a register. The Principal Contractor must ensure that all fire equipment is serviceable, and person(s) have been properly trained on how to use the equipment. A proof of such training must be provided prior commencement of construction work.

EMERGENCY PREPAREDNESS

The Principal Contractor must provide CWDM with an emergency plan and procedure which will include, but not limited to emergencies such as fire, bomb threat, civil unrest, medical treatment, environmental incidents, accidents to employees and other persons other than their employees.

Emergency procedure must be communicated to employees and a proof of such training must be kept on file for reference. A list of emergency contact numbers must be conspicuously displayed on site for ease reference. An evacuation plan must be displayed in strategic places.

The Principal Contractor must provide CWDM Safety with a full record of any incidents which may occur on site.

INCIDENTS/ACCIDENTS REPORTING AND INVESTIGATION

The Principal Contractor must ensure that all incidents/accidents (this includes near miss, first aid cases and section 24 cases) are reported by employees immediately to the Construction Manager for further investigation and remedial action. The Principal Contractor must ensure that all OHS Act section 24 incidents/accidents are reported to the Department of Labour immediately and preliminary investigation is conducted by a competent person within seven days.

If construction work will be finished within 3 days after occurrence, an investigation must be conducted before such construction work is completed. Proof of such investigation must be submitted to CWDM immediately or within 24 hours after investigation.

All incidents are to be reported within 4 hours of the occurrence to Cape Winelands District Municipality respective representative

PERSONAL PROTECTIVE EQUIPMENT

The Principal Contractor must ensure that personal protective equipment or clothing needs analysis is conducted and incorporated into the risk assessment. Records must be provided by the Principal Contractor prior to the commencement of construction work. The Principal Contractor must ensure that personal protective equipment or clothing is provided to personnel. The Principal Contractor must ensure that no personnel are allowed to work on site without necessary personal protective equipment or clothing. The Principal Contractor must ensure that PPE is kept in good working order and clearly stipulate procedures to be followed when PPE is lost or stolen, worn or damaged. CWDM will remove any person from the construction site who is working without necessary personal protective equipment and/or clothing.

The following minimum PPE shall be used at all times;

- Reflector vests
- Dust Masks (where applicable)
- Safety Glasses
- Steel toe safety boots
- Overall

All staff shall be trained on the use and limitations of PPE before commencement of the project.

FALL PROTECTION (WORKING IN ELEVATED POSITIONS)

(Construction Regulation 10)

A pre-emptive Risk Assessment will be required for any work to be carried out above two metres from the ground or any floor level and will be classified as "Work in Elevated Positions".

As far as is practicable, any person working in an elevated position will work from a platform, ladder or other device that is at least as safe as if he/she is working at ground level and whilst working in this position be wearing and using a full body harness that will be worn to prevent the person falling from the platform, ladder or other device utilised.

This safety harness will be, as far as is possible, secured to a point away from the edge over which the person might fall and the double lanyard must be of such a length that the person will not be able to move over the edge.

In addition, any platform, slab, deck or surface forming an edge over which a person may fall must be fitted with guard rails at two different heights as prescribed in SABS 085' Code of Practice for the Design, **Erection, Use and Inspection of Access Scaffolding**

Workers working in elevated positions must be trained to do this safely and without risk. Proof of training must be maintained on the contractors site safety file. Medical certificates of fitness for all employees working in elevated positions must be available on site. This must be issued by an Occupational Health Practitioner.

Where work on roofs is carried out, the Risk Assessment must take into account the possibility of persons falling through fragile material, skylights, soffits and openings in the roof, steel support work trusses and purlins so designed as to support the roof structure.

Working overhead

Articles falling from heights can cause serious injuries. Employees working overhead shall ensure that materials and tools are properly secured to prevent articles falling.

"Men Working Above" signs shall be displayed in the appropriate places.

Where there is danger of falling material, fence off the area in danger and erect safety signage warning of "Falling Objects".

Material shall not be thrown from aloft but shall be lowered in a safe manner - use a securely fixed rope to lower it.

Roofing and cladding work

Safe access must be provided for gaining access on to the roofs. The Contractor must provide ladders, scaffolds or a man cage, cherry picker or scissor lift for this purpose.

A lifeline, consisting of a steel wire rope, the diameter calculated to suit the span and the number of persons attached to it, is to be erected on the ridge of the structure, using a safety block/ self-retracting life retracting life line (To be erected and placed on register and checked daily by a competent person).

No work will be permitted during rain or when wind speeds exceed 30 Km/h. - This is only a guide it will also depend on risk assessment and working conditions.

The responsible person will enforce this with the delegated authority on Site.

Bundles of roof sheeting stacked on the roof must conform to the following:

- Only sufficient bundles to be stacked on the roof to meet immediate needs. Other bundles to remain stacked on the ground until required. Method statement to be provided.
- Bundles of sheeting to be secured by means of 20mm steel strapping applied with a strapping tool.
- Securely tied to the rafters so as to prevent sheets being blown from the roof during high winds.
- No material may be stored on the roof over weekends and holiday breaks

Edge protection

The Principal Contractor must ensure that all exposed edges and floor openings are guarded and demarcated at all times until permanent protection has been erected. Guardrails used for edge protection must be 500mm and 900mm apart (double railing) above the platform/ floor surface.

The Principal Contractors fall protection plan must include the procedure to be followed regarding the management of edge protection and penetration.

RISK ASSESSMENT FOR CONSTRUCTION WORK

(Construction Regulation 9)

Every Contractor performing Construction work shall, before the commencement of any construction work and during such work, have a Risk Assessment performed by a competent person, appointed in writing, and the Risk Assessment shall form part of the OH&S Plan.

Each activity must define individual tasks associated with that identified activity. These and all associated hazards must be identified and listed in the risk assessment. This ensures that critical tasks and associated hazards are not missed.

The Risk Assessment must include:

- The identification of the risks and hazards to which persons may be exposed to
- The analysis and evaluation of the risks and hazards identified
- A documented plan and applicable safe work procedures (SWP) to mitigate, reduce or control the risks and hazards that have been identified
- A monitoring plan and
- A review plan

A Contractor must ensure that:

- As far as is reasonably practicable ergonomic related hazards are analysed, evaluated and addressed.
- All employees under his/her control are informed, instructed and trained by a competent person regarding any hazards
- A Principal Contractor must ensure all Contractors are informed regarding any hazard as stipulated in the risk assessment before any work commences.

- Consult with health and safety committee on monitoring and review risk assessment on site.
- Ensure a copy of risk assessments is available for inspection.
- Review relevant risk assessments where changes are affected to the design or construction that result in a change to the risk profile or when an incident occurred.

N.B. A risk assessment will be performed for all unplanned work and submitted to CWDM for approval prior to work commencing.

STRUCTURES

(Construction Regulation 11)

The Contractor will ensure that in terms of Construction Regulation 11 the following is adhered to:

- That the structure on/in which works are to be performed has been inspected by a certified structural engineer declaring the structure to be safe for construction/demolition/renovations work processes.
- Steps are taken to ensure that no structure becomes unstable or poses a threat of collapse due to demolition and construction work being performed on it, or in the vicinity of it.
- No structure is overloaded to the extent where it becomes unsafe; if uncertainty arises then the structural engineer is to be consulted.
- He/she has received from the designer the following information:
- Information on known or anticipated hazards relating to the construction/demolition work and the relevant information required for the safe execution of the construction/demolition work.
- A geo-scientific report (where applicable).
- The loading the structure is designed to bear.
- The methods and sequence of the construction/demolition process.
- All drawings pertaining to the design are on site and available for inspection.

The structural engineer shall carry out inspections at appropriate and sufficient intervals with visual evidence (before, during and after) of the construction work involving the design of the relevant structure to ensure compliance with the design and record the results of these inspections in writing.

TEMPORARY WORK

(Construction Regulation 12)

Temporary work must be carried out under the supervision of a competent person designated in writing.

Temporary works structures must be so designed, erected, supported, braced and maintained such that it will be able to support any vertical or lateral loads that may be applied.

No load is to be imposed onto the structure that the structure is not designed to carry.

Temporary works must be erected in accordance with the structural design drawings for that temporary works and, if there is any uncertainty, the designer must be consulted before proceeding with the erection/use of the temporary works.

All design drawings pertaining to the temporary works must be kept available on site.

All equipment used in the erection of temporary works must be checked by a competent person before use.

The foundation or base upon which temporary works is erected must be able to bear the weight and keep the structure stable.

Employees erecting temporary works must be trained in the safe work procedures for the erection, moving and dismantling of temporary works.

Safe access/egress (and emergency escape) must be provided for workers.

A competent person must inspect temporary works structures that have been erected before, during and after pouring of concrete or the placing of any other load and thereafter daily until the temporary works is stripped.

The results of all inspections must be recorded in a register kept on site.

The temporary works must be left in place until the concrete has reached sufficient strength to bear its own weight plus any additional weight that may be imposed upon it and not until the designated competent person has authorised its stripping in writing.

Any damaged temporary works must be repaired/rectified immediately Deck panels must be secured against displacement.

The contractor must ensure that no employee is exposed or required to work on slippery and dangerous surfaces.

Person's health must be protected when use is made of solvents, oils or other similar substances.

Ensuring that the OEL (Occupational Exposure Limit) for any substances that they may be exposed to does not exceed the legal limits and that the necessary PPE is used.

EXCAVATIONS

(Construction Regulation 13)

The Principal Contractor must ensure excavation work is conducted under supervision of a competent person who has been appointed in writing. A letter of appointment must be provided to CWDM Safety prior commencement of work. A risk assessment outlining safe work procedures to be adhered to if excavation is more than 1.0m deep must be provided to CWDM prior commencement of work. The Principal Contractor must ensure that no person works in an excavation which is not adequately braced or shored.

The Principal Contractor must ensure that every excavation including bracing and shoring are inspected daily prior each shift starts, and such records are kept on site for reference.

The Principal Contractor must ensure that all precautionary measure as stipulated for confined spaces as stated in the General Safety Regulation of OHS Act 85/1993 are complied with when entering any excavation. The Principal Contractor must ensure that warning signs are conspicuously displayed where excavation work involves the use of explosives and a method statement developed by a competent person is provided to CWDM prior commencement.

The Principal Contractor must ensure that safe and convenient means of access is provided to every excavation when required. Such access must not be further than 6m from the point where any worker within the excavation is working.

The Principal Contractor must communicate, train and enforce safe work procedures pertaining to excavation work to his/her employees.

No material/equipment/vehicle to be within 3m of the excavation edges.

All excavations must be on register and inspected daily before work commences & after inclement weather by the contractors appointed competent person, declared safe and his findings noted in the said register. All excavation must be barricaded and display the required danger sign.

DEMOLITION WORK

(Construction Regulation 13)

The Principal Contractor must ensure that a detailed structural engineering survey is conducted by a competent person and a method statement on the procedure to be followed is provided to CWD Safety. The Principal Contractor must ensure that demolition work is conducted under the supervision of a competent person appointed in writing.

The Principal Contractor must ensure that safety precautionary measures stipulated in Asbestos Regulations is adhered to if demolition work involves asbestos material and that asbestos work is conducted under the supervision of a registered Asbestos Principal Contractor.

SCAFFOLDING

(Construction Regulation 16)

Access Scaffolding must be erected, used and maintained safely in accordance with Construction Regulation 16 and SA Bureau of Standards Code of Practice, SANS 10085/1 entitled, "The Design, Erection, and Use & Inspection of Access Scaffolding.

Detailed consideration must be given to all scaffolding to ensure that it is properly planned to meet the working requirements, designed to carry the necessary loadings and maintained in a sound condition. It must also be ensured that there is sufficient material available to erect the scaffolding properly.

For example:

- Guard rails and toe boards shall be provided on all outer edges of all scaffolding where a person or an object is working in an elevated position.
- Ladders to be staggered every 2m inside scaffold frame with safe landing platform and a trap door fitted on the working platform.

Scaffolding may only be erected, altered or dismantled by a person who has the appropriate training and experience in this type of work or under the supervision of such a person

Specific attention must be given to the appointment of Scaffolding Inspectors and Scaffolding Erectors who shall not be the same person. The continuous inspection of scaffolding structures must be recorded on the applicable Scaffold register.

Tagging/Signs reflecting the status of the scaffold must be used and fixed to the structure at all times. (Safe to use / Scaffold not Safe)

On completion of the erection, the Supplier will inspect the structure and will ensure it is in sound working order and complies with all statutory regulations. The Supplier will then issue a Handover Certificate,

Drawings, design and specifications shall be signed by a registered professional engineer.

An inspection of the completed scaffold shall also be inspected by the registered professional engineer for approval prior to use. Should any additional load i.e. a hoist or be added to the scaffold at a later stage, the professional engineer must approve the modification.

CRANES

(Construction Regulation 22)

A Crane permit must be obtained from CWDM and submitted before erection of crane.

A contractor must, in addition to compliance with the Driven Machinery Regulations, 1988 ensure that where tower cranes are used—

- (a) they are designed and erected under the supervision of a competent person;
- (b) a relevant risk assessment and method statement are developed and applied;
- (c) the effects of wind forces on the crane are taken into consideration and that a wind speed device is fitted that provides the operator with an audible warning when the wind speed exceeds the design engineer's specification;
- (d) the bases for the tower cranes and tracks for rail-mounted tower cranes are firm, level and secured;
- (e) the mobile crane operators are competent to carry out the work safely; and
- (f) the mobile crane operators have a medical certificate of fitness to work in such an environment, issued by an occupational health practitioner in the form of Annexure 3.

Mobile or truck mounted crane near power lines

No mobile cranes are to be used near overhead power lines until the relevant Cape Winelands District Municipality representative has been notified and provided safe access conditions.

Mobile cranes shall be effectively earthed when working in the vicinity of electrical wires. Assume that all-electrical equipment and wires are live and avoid them.

Crane requirements

The following shall apply to any mobile crane used on site, including truck mounted cranes on delivery vehicles:

- Lifts in excess of 2 tons will only be conducted by a Qualified and appointed Rigger.
- Lifts less than 2 tons may be conducted by a person with a Basic Rigging and slinging certificate.
- All lifts in excess of 5 tons shall only be conducted after a detailed lift plan have been developed with a safe work method statement and risk assessment.
- All lift plans are subject to CWDM approval.
- Each crane shall have (in the cab or operating area), the following legal documents on site at all times:
 - (a) The latest and up-to-date load certificate of the crane;
 - (b) A record of the 6-monthly inspection of the crane by a registered inspector;
 - (c) The crane operator(s) current crane license;
 - (d) The crane operator(s) medical certificate of fitness issued by an occupational medical practitioner;
 - (e) The inspection registers or certification of 3-monthly inspection of all lifting equipment used with the crane;
 - (f) All Lifting gear will be colour coded on a quarterly basis and recorded on register,
- Where applicable, the method statement for the erection, maintenance, inspections and dismantling of the crane shall include a detailed lifting plan.
- The method statement for safe use of the crane, shall include the method of communication, the protection of fall zones and the method of determining whether the weather permits safe crane work.
- Any fixed crane's load test certificates shall be included in the HSE file.
- All lifting equipment and gear used on site shall be identified, SWL-indicated and listed in a register contained in the HSE file.
- A template inspection register of the lifting gear shall be included in the HSE Plan.

- That all lifting machines are load tested and inspected as required in Driven Machinery Regulation 18 and that the records thereof are either with the machine or in the contractor's HSE file.

LIFTING EQUIPMENT, TACKLE, MATERIAL HOIST AND CRANES

The Principal Contractor must ensure that all lifting equipment and tackle are inspected before use and a monthly register is completed by a competent person. Proof of such inspections must be recorded and kept on file for reference. The Principal Contractor must ensure that a safe working load is conspicuously displayed on lifting equipment and tackle and service certificate is provided prior commencement of work. The Principal Contractor must ensure operators are properly trained on how to operate the above-mentioned equipment and a proof of competency is provided prior commencement of work.

The Principal Contractor must provide information on procedures to be followed in the case of:

- (a) Malfunctioning of equipment; and
- (b) Discovery of a suspected defect in the equipment

The Principal Contractor must ensure that safety measures stipulated in Driven Machinery Regulation and Construction Regulation with regard to below mentioned equipment are adhered to at all times.

- Where man-lift equipment is used, the principal contractor shall ensure compliance with Driven Machinery Regulation 18 and that competent persons are appointed in writing to ensure:
- That all scissors lifts, cherry pickers, forklift with man-cages or any other lifting machine used to lift personnel are used only by a trained and competent operator in possession of a competency certificate issued by and accredited provider who holds a valid accreditation issued by an authorised body, in terms of the SAQA Act, and who is approved by the Chief Inspector, in terms the Driven Machinery Regulation 18.
- That all lifting machines are load tested and inspected as required in Driven Machinery Regulation 18 and that the records thereof are either with the machine or in the principal contractor's HSE file

CONSTRUCTION VEHICLES & MOBILE PLANT

(Construction Regulation 13)

Construction Vehicles and Mobile Plant may be inspected by CWDM prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment will be required to comply with this specification as well as the OHS Act and Regulations.

Construction Vehicles and Mobile Plant to be:

- of acceptable design and construction
- maintained in good working order
- used in accordance with their design and intention for which they were designed
- Operated/driven by trained, licensed competent and authorised operators/drivers. No unauthorised persons to be allowed to drive or operate Construction Vehicles and Mobile Plant.
- Operators and drivers of Construction Vehicles and Mobile Plant must be in possession of a valid medical certificate declaring the operator/driver physically and psychologically fit to operate or drive Construction Vehicles and Mobile Plant.
- fitted with adequate signalling devices to make movement safe including reversing
- excavations and other openings must be provided with sufficient barriers to prevent Construction Vehicles and Mobile Plant from falling into same

- Provided with roll-over protection, appropriate seat fitted which shall be used during Construction Vehicles and Mobile Plant operations.
- inspected daily before start-up by the driver/operator/user and the findings recorded in a register/loSG/SLook
- Construction Vehicles and Mobile Plant to be fitted with two head and two taillights whilst operating under poor visibility conditions, in addition they shall be equipped with 'hazard warning' lights, which must be used whenever the Construction Vehicles and Mobile Plant is on site.
- No loose tools, material etc. is allowed in the driver/operator's compartment/cabin nor in the compartment in which any other persons are transported
- Construction Vehicles and Mobile Plant used for transporting persons must have seats firmly secured and sufficient for the number of persons being transported
- Operators to be issued with Personal Protective Equipment as required and identified by the Risk Assessments
- Only licensed and road worthy vehicles will be allowed on the public roads

No person may ride on a Construction Vehicles and Mobile Plant except in a safe place provided by the manufacturer for this purpose

The construction site must be organized to facilitate the movement of Construction Vehicles and Mobile Plant so that pedestrians and other vehicles are not endangered. Traffic routes are to be suitable, sufficient in number and adequately demarcated

Construction Vehicles and Mobile Plant left unattended after hours adjacent to roads and areas where there is traffic movement must be fitted with lights reflectors or barricades to prevent moving traffic coming into contact with the parked Construction Vehicles and Mobile Plant.

In addition, Construction Vehicles and Mobile Plant left unattended after hours must be parked with all buckets, booms etc. fully lowered, the emergency brakes engaged and, where necessary, the wheels chocked, the transmission in neutral and the motor switched off and the ignition key removed and stored safely

Workers employed adjacent to, or on public roads must wear reflective safety vests

All Construction Vehicles and Mobile Plant inspection records must be kept in the OH&S File.

ELECTRICAL INSTALLATIONS AND MACHINERY ON CONSTRUCTION SITES

(Construction Regulation 24)

The Principal Contractor must, in addition to compliance with the Electrical Installation Regulations, 2009, and the Electrical Machinery Regulations, 1988, promulgated by Government Notice No. R. 1593 of 12 August 1988, ensure that—

- before construction commences and during the progress thereof, adequate steps are taken to ascertain the presence of and guard against danger to workers from any electrical cable or apparatus which is under, over or on the site;
- all parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;
- the control of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing for that purpose;
- all temporary electrical installations used by the contractor are inspected at least once a week by a competent person and the inspection findings are recorded in a register kept on the construction site; and
- all electrical machinery is inspected by the authorized operator or user on a daily basis using a relevant checklist prior to use and the inspection findings are recorded in a register kept on the construction site.

The Principal Contractor must ensure that prior notice is given to CWDM Maintenance Department of any work involving electrical installation. The Principal Contractor must ensure that a lock-out procedure is adhered to by his/her employees whenever required. The Principal Contractor must ensure that safety measures stipulated in the Electrical Installation Regulations, Machinery Regulations, General Machinery Regulations and Construction Regulations are adhered to at all times.

All electrical installations (new, temporary, alterations) shall be inspected and approved by competent person that is registered to provide a Certificate of Compliance (CoC)

USE AND TEMPORARY STORAGE OF FLAMMABLE LIQUIDS ON CONSTRUCTION SITES

(Construction Regulation 25)

The Principal Contractor to ensure that:

- No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapours being present.
- No flammable substance is used or applied e.g. in spray painting, unless in a room or cabinet or other enclosure specially designed and constructed for that purpose, unless due to imposed controls that the ventilation provided is sufficient to ensure that the Lower Explosive Limit and Lower Fire Limit are not exceeded. Furthermore, that the risk assessments are reviewed to ensure that all the related hazards have been addressed and that adequate P.P.E. is provided.
- The workplace is effectively ventilated. Where this cannot be achieved:
- Employees must wear suitable respiratory equipment
- No smoking or other sources of ignition is allowed into the area
- The area is conspicuously demarcated as "flammable materials"
- Flammables stored on a construction site are stored in a well-ventilated, reasonably fire-resistant container approved by the local Fire Department, cage or room that is kept locked with access control measures in place and sufficient firefighting equipment installed and fire prevention methods practised e.g. proper housekeeping
- Flammables stored in a permanent flammables store are stored so that no fire or explosion is caused i.e.: stored in a locked well-ventilated reasonably fire-resistant container, cage or room conspicuously demarcated as "Flammable Store -No Smoking or Naked Lights"
- Adequate and suitable firefighting equipment installed around the flammables store and marked with the prescribed signs
- All electrical switches and fittings to be of a flameproof design, or where necessary, intrinsically safe.
- Any work done with tools in a flammables store or work areas to be of a non-sparking nature
- No Class A combustibles such as paper, cardboard, wood, plastic, straw etc. to be stored together with Flammables
- The flammable store to be designed and constructed so that in the event of spillage of liquids in the store, it will contain the full quantity + 10% of the amount liquid stored.
- Where the use of Bulk Storage facilities is contemplated, the contractor must ensure compliance to the local Authority bylaws.
- A sign indicating the capacity of the store to be displayed on the door
- Containers (including empty containers) to be kept closed to prevent fumes/vapours from escaping and accumulating in low lying areas
- Metal containers to be bonded to earth whilst decanting to prevent build-up of static electricity
- Welding and other flammable gases to be stored and segregated as to type of gas and empty and full cylinders
- All permanently installed storage facilities to comply with SANS 10089.

Principle Contractor shall ensure:

The safe use, storage, emergency procedures and safe disposal of hazardous substance. Material Safety Data Sheets (MSDS) shall be supplied with all hazardous materials.

Principal Contractor for recording on the site HCS Register.

Flammable substances must be:

Clearly labelled and stored in suitably sealed containers

When substances are transferred/decanted to a second container, the second container will be clearly labelled with the name and safety risk (e.g. flammable, toxic etc.)

Decanted in bunded areas or drip tray's

Neutralised, contained and suitably disposed of if spilt (if safe to do so). A general emergency spill kit is located at each site office

Emergency Procedures in case of Larger Spills

OBJECTIVES	PROCEDURE	REQUIREMENTS
Isolate the spillage to minimise danger to workers	- Erect a barricade around the spillage. - Evacuate the area if there is danger of fire or fumes. - Notify the fire team. - Treat affected person/s.	- Warning notices, e.g. flammable liquids. - Ropes or chevron tape to barricade the spillage. - PPE to protect persons erecting the barricade. - Assistance from security to secure barricades and keeps people away. - Fire Team.
Confined Spillage	- Isolate the spillage - Prevent or minimise the entry of chemicals into the storm water system or sewage system	- Shovels - Sand or stone dust. - PPE
Clean up spillage	- If the spillage is a fluid, pump the spillage into a suitable container for disposal. - If the spillage is a solid, sweep it up and shovel it into a suitable container for disposal.	- Pumps - Labour - Suitable container - PPE
Disposal	Refer to the MSDS or the suppliers	Refer to the MSDS or the suppliers.
Neutralise any material that cannot be cleaned up	Treat spillage with a suitable neutralising agent; refer to MSDS or supplier	- A supply of a suitable neutralising agent in ready-to- use form. - PPE - A suitable means of testing whether neutralisation has been effective.

HOUSEKEEPING AND GENERAL SAFEGUARDING ON CONSTRUCTION SITES

(Construction Regulation 27)

The Principal Contractor must ensure that suitable housekeeping is continuously implemented on each construction site, including—

- (a) the proper storage of materials and equipment;
- (b) the removal of scrap, waste and debris at appropriate intervals;
- (c) ensuring that materials required for use, are not placed on the site so as to obstruct means of access to and egress from workplaces and passageways;
- (d) ensuring that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals;
- (e) ensuring that construction sites in built-up areas adjacent to a public way are suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorized persons; and
- (f) ensuring that a catch platform or net is erected above an entrance or passageway or above a place where persons work or pass under, or fencing off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe in the case of danger or possibility of persons being struck by falling objects.

The Principal Contractor must ensure that safety precautionary measures stipulated in Environmental Regulations for Workplaces and Construction Regulations and Construction Environmental Specification are adhered to at all times.

STACKING AND STORAGE ON CONSTRUCTION SITES

(Construction Regulation 28)

The Principal Contractor must ensure contractor must ensure that:

- (a) a competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
- (b) adequate storage areas are provided;
- (c) there are demarcated storage areas; and
- (d) storage areas are kept neat and under control a competent person is appointed in writing with a duty of supervising all stacking and storage on a construction work or site. A proof of such appointment must be provided prior commencement of construction work. The Principal Contractor must ensure that stacking is conducted under supervision and good housekeeping is maintained at all times.

FIRE PRECAUTIONS ON CONSTRUCTION SITES

(Construction Regulation 29)

The Principal Contractor must ensure that:

- (a) all appropriate measures are taken to avoid the risk of fire;
- (b) sufficient and suitable storage is provided for flammable liquids, solids and gases;
- (c) smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- (d) in confined spaces and other places in which flammable gases, vapours or dust can cause danger—
 - (i) only suitably protected electrical installations and equipment, including portable lights, are used;
 - (ii) there are no flames or similar means of ignition;
 - (iii) there are conspicuous notices prohibiting smoking;
 - (iv) oily rags, waste and other substances liable to ignite are without delay removed to a safe place; and
 - (v) adequate ventilation is provided;
- (e) combustible materials do not accumulate on the construction site;

- (f) welding, flame cutting, and other hot work are done only after appropriate precautions have been taken to reduce the risk of fire.
- (g) suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned, and that such equipment is maintained in a good working order.
- (h) the fire equipment contemplated in paragraph (g) is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof.
- (i) a sufficient number of workers are trained in the use of fire- extinguishing equipment.
- (j) where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire.
- (k) the means of escape is kept clear at all times.
- (l) there is an effective evacuation plan providing for all—
 - (i) persons to be evacuated speedily without panic.
 - (ii) persons to be accounted for; and
 - (iii) plant and processes to be shut down; and
 - (m) a siren is installed and sounded in the event of a fire.

Good housekeeping plays a major role in fire prevention.

- All contractors shall every second week arrange a group effort and perform a site wide clean-up operation.
- All flammable and combustible material must be removed daily.
- The minimum amount of flammable liquids (petrol, thinners, paint, oils, greases, etc.) must be brought on to Site and stored securely.
- All required safety signs must be posted if any work is carried out with any flammable, combustible materials i.e. No smoking! No naked flames and no unauthorized entry.
- Supervisors to do constant and regular inspections to ensure adherence of procedures.
- Ensure that fire risk is assessed in all Issue Based Risk Assessments.

CONSTRUCTION EMPLOYEES' FACILITIES

(Construction Regulation 30)

A Contractor must provide at or within reasonable access of every construction site, the following clean, hygienic and maintained facilities:

- (a) Shower facilities after consultation with the employees or employees' representatives, or at least one shower facility for every 15 persons.
- (b) at least one sanitary facility for each sex and for every 30 workers.
- (c) changing facilities for each sex; and
- (d) sheltered eating areas.

A Contractor must provide reasonable and suitable living accommodation for the workers at construction sites who are far removed from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available.

LADDERS

The Principal Contractor must ensure that all ladders are numbered, inspected before use and monthly inspections are recorded in a register. The Principal Contractor must ensure that a competent person who carries the above inspections is appointed in writing.

PRESSURE EQUIPMENT

The Principal Contractor must ensure that pressure equipment is identified, numbered and entered in a register. Furthermore he/she must ensure that inspections are carried out and certificates of testing are available and kept on file as per the Regulations.

PUBLIC SAFETY AND SECURITY

The Principal Contractor must ensure that notices and signs are conspicuously displayed at the entrance and along the perimeter fence indicating “No Unauthorized Entry”, “Visitors to report to office”, “helmet and safety shoes” etc.

Health and safety signage must be well maintained throughout the project. This must entail cleaning, inspection and replacement of missing or damaged signage.

Furthermore, the Principal Contractor must ensure that:

- a) Nets, canopies, fans etc. are provided to protect the public passing or entering the site
- b) A security guard is provided where necessary and provided with a way of communication and an access control measures or register is in place
- c) All visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site.

NIGHT WORK

The Principal Contractor must ensure that necessary arrangements have been made with CWDM before conducting any night work and that there is adequate lighting for any work to be conducted and failure to do so will result in work being stopped.

Requirements for night work shall be:

- Written authorisation from CWDM, Client and affected Landowners.
- Approved Method Statement and Risk Assessment.
- Approved Fatigue management plan.
- Sufficient supervisory staff from CWDM and contractor.
- Sufficient portable lights.
- Sufficient Welfare facilities.
- Sufficient transport for the staff
- Notification to DOL

HIRED PLANT AND MACHINERY

The Principal Contractor must ensure that any hired plant and/or machinery brought to site is inspected by a competent person before use and records confirming that it is safe for use are provided prior usage of such equipment. Such plant or machinery complies at all times with the requirements of the Occupational Health & Safety Act.

The Principal Contractor must ensure that hired operators receive induction prior commencement of work and that said hired operators have proof of competency.

The Principal Contractor must provide information on procedures to be followed in the case of:

- (a) Malfunctioning of equipment; and
- (b) Discovery of a suspected defect in the equipment

ROAD CONSTRUCTION WORK

The Principal Contractor must ensure that construction work conducted on the public road all necessary caution signage, cones, flag man etc. are provided

The caution signage to be conspicuously displayed to warn the drivers of any construction work ahead must be provided at least at 75 m away from the cones; flag man; actual construction works etc.

TRAFFIC MANAGEMENT PLAN

Contractors to develop and implement Traffic Management Plan to reduce traffic congestion and motor vehicle accidents.

Vehicle safety extends to traveling to and from site. Contractors must:

- All drivers will be in a possession of a valid PDP for transportation of passengers and goods.
- Employees shall not be transported to and onto site in the back of LDV's or on trucks, only in approved construction vehicles, taxis or busses.
- Be vigilant for wildlife at dawn, dusk, after a dry spell, during fog (refer to safety alerts)
- Respect other road users. Reduce speed when faced with oncoming traffic, especially on narrow roads, without line delineation or when approaching heavy vehicles.
- Reduce speed when faced with wet conditions, poor road surface conditions such as loose surface material or where potholes are apparent (report poor road surface to the Principal Contractor)
- No employees will be allowed to be transported on the back of any vehicles that is not designed by the vehicle manufacturer for that intended purpose.
- Passengers, goods, tools and equipment shall not be transported together in the back of vehicles.
- Drivers and operators will be appropriately licensed or have proof of competency.
- Always follow instructions by flagman controlling traffic

LIQUOR, DRUGS, DANGEROUS WEAPONS, FIREARMS

The Principal Contractor must ensure that no person is allowed on site that appears to be under the influence of intoxicating liquor or drugs.

The Principal Contractor must encourage his/her workforce to disclose the medication that poses a health and safety threat towards his/her fellow employees. No person must be allowed to enter the site and work if the side effects of such medication do constitute a threat to the health or safety of the person concerned or others at such workplace.

No dangerous weapons or firearms allowed on the construction site.

INTERNAL/EXTERNAL AUDITS

The Principal Contractor must conduct monthly safety, health and environment audits and such records must be kept on site. The Principal Contractor must ensure that corrective measures are taken to ensure compliance.

CWDM must conduct monthly audits and defects noted must be reported to the relevant Principal Contractor for remedial action. Inspections must be conducted by CWDM and non-conformances noted must be recorded and provided to the relevant Principal Contractor for remedial action.

The Principal Contractor must ensure that all necessary documents stipulated in this document are kept on the health and safety file and made available when requested.

WORK STOPPAGE

In the event of a work stoppage, based on HSE deficiencies, CWDM Representative will instruct the Principal Contractor to immediately remove the workforce from the work area and correct the HSE deficiencies by allowing only the people in the area that are competent to make the area safe.

The Principal Contractor shall ensure no other work is being performed during this time. Should the estimated time from the outset to make the area safe be longer than four hours or where life

threatening/imminent danger situations exist, then the area will be barricaded off and a sign placed with the wording “**Unsafe Area — Authorized Access Only**”.

Before the workforce is allowed back in the area, the Principal Contractor shall ensure the area is inspected by CWDM HSE officer, and / or CWDM representative. The corrective actions taken shall be evaluated. The Principal Contractor shall wait until CWDM HSE officer, and / or CWDM Representative declares the area safe for work.