

CADANGAN MEMBINA DAN MENYIAPKAN 'STORE HARDWARE' DAN STOR MENYIMPAN BAHAN MUDAH TERBAKAR DI HUTAN BANDAR MUTIARA RINI, SKUDAI, JOHOR

SUMMARY OF TENDER			
ITEM	DESCRIPTION	PAGE NO	AMOUNT (RM)
1	BILL NO. 1 - PRELIMINARIES	B1/30	
2	BILL NO. 2 - PILING WORKS (ALL PROVISIONAL)	B2/5	
3	<u>BILL NO. 3 - BUILDING WORKS</u>		
4	BILL NO. 3A - BANGUNAN PENGURUSAN	SUM/B3A/1	
5	BILL NO. 3B - STOR PERTUKANGAN	SUM/B3B/1	
6	BILL NO. 3C - STOR SIMPANAN (A)	SUM/B3C/1	
7	BILL NO. 3D - STOR SIMPANAN (B)	SUM/B3D/1	
8	BILL NO. 3E - RUMAH SAMPAH	SUM/B3E/1	
9	BILL NO. 4 - FURNITURE & ELECTRICAL APPLIANCES	B4/8	
10	BILL NO. 5 - MECHANICAL & ELECTRICAL WORKS	SUM/M&E/1	
11	BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)	B6/SUM/1	
12	BILL NO. 7 - LANDSCAPE WORK	B7/5	
13	BILL NO. 8 - PROVISIONAL SUM	B8/1	545,000.00
TOTAL CARRIED TO FORM OF TENDER			

COMPLETION PERIOD : () WEEKS.

RINGGIT MALAYSIA :

.....
 Signature of Tenderer

.....
 Signature of Witness

Name :

Name :

Address :

.....
 Chop

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Designation :

Designation :

Date :

Date :

BILL NO. 1 - PRELIMINARIES

Item	Description	Amount (RM)
	<p><u>PRELIMINARIES</u></p> <p>Notes :</p> <p>The Preliminary Items as set out herein shall apply to the whole of the Works contained in these Tender Documents and the Contractor must allow for the complying with the same and for any cost incurred in connection therewith.</p> <p>The amounts inserted by the Contractor for such Preliminary Items shall be deemed to apply to the whole of the Works carried out under this Contract.</p> <p>Each Preliminary Item or Clause shall be individually price. Bulk pricing for sections, trades, groups or pages of Preliminary Items or Clauses shall not be accepted and no subsequent claims for loss or expenses and/or profit shall be entertained for failure to comply with this Clause. Where any Preliminary Item or Clause is left unpriced, it shall be deemed that the cost of such Preliminary Items or Clauses have been allowed for elsewhere within these Tender Documents. No subsequent claims arising out of expenses and/ or loss incurred against such unprices Preliminary Item or Clauses shall be entertained.</p> <p>Notwithstanding the above clauses, the S.O. reserves the right to request from the contractor the detailed breakdown of the pricing for Preliminary Items or Clauses or the rates in the Bills of Quantities for examination and approval. The approved detail breakdown pricing shall then be used as a basis for the administration of the Contract.</p> <p>Headings are not comprehensive and do not modify the meaning of the items or clauses in the Preliminary Items and Bills of Quantities.</p> <p>Where Preliminary Items or Clauses or items in the Bills of Quantities are priced but have not been executed on site by the Contractor, the cost of such priced items or clauses or items, in the Bills of Quantities shall accordingly be deducted from the Contract Sum when so instructed by the S.O.</p>	
A	<p><u>Scope of Works</u></p> <p>The works included in this Contract comprise generally the construction and completion of the following works. The scope of works may include but not necessarily be limited to the following:-</p> <ol style="list-style-type: none"> 1 Piling Works (All Provisional) 2 Building Works <ol style="list-style-type: none"> i) Bangunan Pengurusan ii) Stor Pertukangan iii) Stor Simpanan (A) iv) Stor Simpanan (B) v) Rumah Sampah 3 Furniture & Electrical Appliances 4 Mechanical and Electrical Works 5 Infrastructure Works (All Provisional) 6 Landscape Work 7 Provisional Sum 	
B	<p><u>Location Of Site</u></p> <p>The site is located at Hutan Bandar Mutiara Rini, Skudai, Johor as shown Layout Site Plan drawing no: (Ref: MN/005/23/MBIPLHB-01/08)</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Site Survey</u></p> <p>Before commencement of the works, the Contractor shall carry out a joint site survey with the S.O.'s representative to verify the existing ground levels and all formation levels for the purpose of determining the actual volume of earthwork involved. For this purpose the Contractor shall employ a licenced surveyor who shall not only carry out a joint survey but also to provide all the necessary as built drawings for the earthwork involved prior commencement of the work until the final completion of the work. The drawings shall be submitted progressively as and when the work is being done to enable progress payment to be made to the Contractor.</p> <p>Failing to comply with this shall render the levels taken by the S.O. representative to be taken as correct and payment will be made accordingly and no claim in this respect shall be allowed.</p> <p>The Contractor to include for the assistance of a Licensed Surveyor to carry out a Site Survey before work commences, and to assist in establishing boundaries and setting out the Works, if required by the Superintending Officer.</p> <p>The Contractor shall submit to the S.O. two copies of as built drawings layout and the site plan, prepared and signed by a Licensed Surveyor, including all finished levels, to a grid as directed by the S.O. within one month after practical completion.</p> <p>The Contractor to provide permanent setting out marks and bench marks in positions required by the S.O.</p>	
B	<p><u>Visit To Site</u></p> <p>The Contractor will be deemed to have examined and visited the Site, and to have ascertained the nature, character and extent of the Works, local conditions, accessibility of Site, the supply of and conditions affecting labour, materials and goods, and any other matter affecting this Contract.</p> <p>The Contractor's attention is drawn to the fact that no extra payment, extension of time, right to damage or any other concession consequent upon misrepresentation or lack of knowledge will be considered.</p> <p>The Contractor is required to observe regulations pertaining to the safe delivery and unloading of materials, goods and plant, and parking facilities. No materials, goods or plant will be allowed to remain on roads and/or pavements. The Contractor is to ensure that all deliveries are made in such a manner as to cause the least inconvenience in the proper execution of this Contract.</p>	
C	<p><u>Order Of Work</u></p> <p>The work will be proceeded with as expeditiously as possible and in such sections and at such times as may be ordered by the Superintending Officer, or in the absence of such instructions, in the most workman like manner.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Responsibility For The Works</u></p> <p>The Contractor will be held responsible for keeping all persons including those employed by sub-contractors, hauliers and merchants under proper control, and to confine their operations within the boundaries of the Site. He will provide all personnel with proper identification badges and will be held responsible for any damage or theft to adjoining structures, services and thoroughfares caused by reason of the execution of this work or by those employed on the Works.</p> <p>The Contractor will also be held responsible for the care of the Works generally and adjoining structures until its completion and handing over including all work executed and materials and goods deposited on the Site by himself or sub-contractors and suppliers, together with all risks arising from carelessness of operatives, damage or loss by theft, fraud, fire or any other cause, and the Contractor is to make good all such damage or loss.</p>	
B	<p><u>Inspection Of Tender Documents</u></p> <p>Tender Table Document are available for inspection at</p> <p>- As stipulated in the tender notice -</p> <p>.....</p> <p>during office hours on any working day up to and including the final day for submission of Tenders and the Contractor will be deemed to have examined them, as no claims on the grounds of lack of knowledge will be entertained.</p>	
C	<p><u>Drawings</u></p> <p>Drawings will be issued from time to time by the Superintending Officer to the Contractor as the works proceed. All drawings kept on site to be mounted on hardboard.</p>	
D	<p><u>Bills of Quantities</u></p> <p>Quantities in the Bills of Quantities of Jilid I are measured in accordance with the Malaysian Standard Method of Measurement of Building Works (2nd. Edition Metric Edition-2000). Where departure have been made from the standards mentioned, the methods adopted in the Bills shall be adhered to for the purposes of ascertaining the value of all variations and measurements.</p> <p>The description of Materials, the letters B.S. refer to the British Standards as issued by the British Standards Institution, British Standard House, London. The letters C.P. refer to the British Standard Code of Practice. The latest amendment is implied in each case.</p> <p>Materials and workmanship throughout the Works shall be the best of their respective kinds and by 'best' shall be understood that no superior class of specified materials or workmanship is available in Malaysia.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Submission</u></p> <p><u>(i) Manufacturer's Data</u></p> <p>Submit for approval as requested by the Superintending Officer, manufacturer's specifications, installation instruction, general recommendation for the work, including certified laboratory test reports and other data required to show in compliance with these Specifications.</p>	
B	<p><u>(ii) Shop Drawings</u></p> <p>Submit for approval relevant shop drawings as requested by the Superintending Officer.</p>	
C	<p><u>(iii) Samples and/or Sample Panels</u></p> <p>Submit for approval as requested by the Superintending Officer, sample(s) and/or Sample panel(s) of the materials proposed prior to ordering of the materials.</p>	
D	<p><u>(iv) Mock-Up(s)</u></p> <p>Prepare sample installations as required to match specified work(s) in all respects before proceeding with work. Mock-up units approved and accepted by the Superintending Officer will be issued as the Standard of comparison for the work.</p>	
E	<p><u>Specification To All Trades</u></p> <p>Tenderers are advised to read carefully the Specification to all trades. No claim whatsoever, will be allowed in respect of errors in pricing due to brevity of descriptions, which are fully described when read in conjunction with the relevant Specification.</p>	
	<u>Unit of Measurement</u>	
F	<p><u>The units of measurement are according to British Metric Weights and Measures. The following is a key to abbreviations employed :</u></p> <p>Meter Cube - m3 Meter Square - m2 Meter Linear - m Kilogramme - kg Tonnes - TON Numbers - nr Millimeter - mm Centimeter - cm</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Definition Of Terms</u> <u>The following Conventions shall be adopted for these documents :-</u></p> <p>Wherever the terms "Superintending Officer" appears in the Contract Documents, it shall mean "Datuk Bandar Majlis Bandaraya Iskandar Puteri" in the Conditions of Contract and vice versa.</p> <p>Wherever the terms "approved", "direct" or "selected" appears in the Contract Documents will mean the approval, direction or selection by the Superintending Officer. Wherever the term "allowed" appears in the Contract Documents, excepts with reference to P.C. or Provisional Sums or quantities, the cost of the item will be at the risk of the Contractor.</p> <p>Wherever the phrase "as directed" or "under the direction of the Superintending Officer" appears in the contract Documents it shall mean "as the Contractor shall propose and as the Superintending Officer shall approved"</p> <p>Where the Contractor is required under the terms of this Contract to maintain temporary works including providing measures, facilities and buildings, such maintenance will apply from Date of Possession until the issue of the Certificate of Practical Completion of the Works or when directed by the Superintending Officer that such maintenance is no longer the responsibility of the Contractor, the date for such decision not being unreasonable.</p> <p>The term "Current Issue" will mean the latest issue or edition at the date of Tender.</p> <p>The term "The Authorities" will be held to include for all Government, Quasi-Government, Local Authorities or Departments and utility companies which has jurisdiction over any section of the works.</p> <p>Wherever the phrase "in accordance with the manufacturer's instructions" appears in the Contract Documents, the Contractor will be held to have consulted the said manufacturer's latest publications and to have allowed in his, the Contractor's Tender for complying with all instructions, directions and recommendation contained therein.</p> <p>Wherever the terms "making good" appear in the Contract Documents, such making good will be at the Contractor's expense and is to be executed to the entire satisfaction of the Superintending Officer.</p> <p>Wherever the phrase "cart (carting) (remove) off the Site "appears in the Contract Documents, such carting etc. will be held to include for carting materials and goods to dumps to be found by the Contractor, depositing materials and goods thereon, and for paying all charges.</p> <p>The works "as described" and "as specified" where used in these Bills of Quantities mean as described and specified in detail in the Specification.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Abbreviations</u></p> <p>The following abbreviations appearing in these Bills of Quantities and all documents, have their meanings as assigned against them;</p> <p>B.S. - British Standards Specification as issued by the British Standards House, London (The latest amendment).</p> <p>C.P. - British Standard Code of Practice issued by the Council for Code of Practice in Great Britain (The latest amendment).</p> <p>M.S. - Malaysian Standard as issued by the Standard & Industrial Research Institute of Malaysia (The latest amendment).</p> <p>S.O. - Superintending Officer</p> <p>JKR/PWD - Jabatan Kerja Raya / Public Works Department</p>	
B	<p><u>Pricing of Bills of Quantities</u></p> <p>The Bills of Quantities are to be priced using black ink and the sum of the amounts of all items of the Bills of Quantities priced by the tenderer shall truly represent the amount shown in his tender. The rates set down by the Tenderer against each item in the Bills of Quantities shall be the full inclusive rates and prices for the finished work (unless expressly provided to the contrary) and shall be held to include providing and delivering all materials, storage, packing, carriage and cartage, hoisting, all labour, setting, fitting and fixing in position, use of plant, providing suspension, establishment charges, profit and all other labour and everything else necessary for the due and proper completion of each item.</p> <p>Where the tenderer leaves any item blank in the preliminaries or insert only a dash against any item in these Bills of Quantities the value thereof shall be deemed to be included in the prices of rates of other items therein.</p> <p>No unauthorised alteration, addition or note entered in these Bills of Quantities shall modify the printed text.</p> <p>Headings and notes appearing shall not by itself be deemed to be comprehensive and do not modify the meaning of the items in the Bills of Quantities.</p> <p>Any rates found to be overpriced, inconsistently priced, underpriced or erroneously priced shall be subjected to adjustment and rectification before the signing of the contract and the authority to fix a reasonable rates/amount shall be with the S.O. and the amended rates shall be used for computing the progress payments and the measuring of variations.</p> <p>Where item in these Bills of Quantities are marked provisional, the quantity of works shall be remeasured on completion basing on drawings certified as true and correct representation of the completed works by the Superintending Officer.</p> <p>The requirement of the Measurement Amplification and Pricing Factors are to be taken into account when pricing these Bills of Quantities.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Form of Contract</u></p> <p><u>The form of Contract into which the Contractor will be required to enter in connection with this contract shall be the Standard form of Contract (PWD 203A - Rev. 2010)</u></p> <p>The Conditions of the Contract are to be read in conjunction with the Bills of Quantities.</p>	
B	<p><u>Conditions of Contract</u></p> <p>The Contractor shall refer to the Standard Form of Contract for full information and the number and titles of the Clauses together with any additional information are given below and the Contractor is to allow here or in his rates for all expenses involved in complying with the terms of these Clauses.</p>	
C	<u>Clauses No. 1 - Definitions and Interpretation</u>	
D	<u>Clauses No. 2 - Contract Period</u>	
E	<p><u>Clause No. 3 The S.O. and S.O.'s Representative</u></p> <p>Clause No. 3 - S.O's Right to take Action Refer also to Clause 4.1(a) in the APPENDIX TO THE CONDITIONS OF CONTRACT</p>	
F	<u>Clause No. 4 - S.O.'s Right To Take Action</u>	
G	<u>Clause No. 5 - S.O's Instructions</u>	
H	<u>Clause No. 6 - Scope of Contract</u>	
J	<u>Clause No. 7 - Contract Sum</u>	
K	<u>Clause No. 8 - Contract Documents</u>	
L	<u>Clause No. 9 - Representations, Warranties And Undertakings of the Contractor</u>	
M	<u>Clause No. 10 - Obligations of the Contractor</u>	
N	<u>Clause No. 11 - Inspection of Site</u>	
P	<u>Clause No. 12 - Programme of Work</u>	
Q	<p><u>Clause No. 13 - Performance Bond/Performance Guarantee Sum</u></p> <p>Refer also to Clause 13 in the APPENDIX TO THE CONDITIONS OF CONTRACT</p> <p>For due observance and performance of this Contract, the Contractor shall opt for either :-</p> <p>(a) Performance Bond in he form of approved Bank or Insurance Guarantee; OR</p> <p>(b) Performance Bond in the form of Performance Guarantee Sum as stipulated in the Special Provision to the Conditions of Contract</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<u>Clause No. 14 - Indemnity In Respect Of Personal Injuries And Damage To Property</u>	
B	<u>Clause No. 15 - Insurance Against Personal Injuries And Damage To Property</u> Refer also to Clause 15 and 15.1(b) in the APPENDIX TO THE CONDITIONS OF CONTRACT	
C	<u>Clause No. 16 - Idemnities To Government In Respect Of Claims By Workmen</u>	
D	<u>Clause No. 17 - Employees' Social Security Act, 1969</u> Notwithstanding anything to the contrary contained elsewhere in the Contract Documents, the Contractor shall cause all Sub-contractors whether nominated or otherwise to comply with the requirements of the Employees Social Security Act, 1969 as described under Clause 17 of the Conditions of Contract. The Contractor shall be responsible to submit to the S.O., whether demanded or not, the Employer's Code Numbers of the Sub-contractors and Social Security Numbers, or copies of Form 2 or Form 3 if the Social Security Numbers are not yet available, of all employees' employed by them. Refer also to Clause 17 in the APPENDIX TO THE CONDITIONS OF CONTRACT.	
E	<u>Clause No. 18 - Insurance of Works</u> Refer also to Clause 18 and 18(b) in the APPENDIX TO THE CONDITIONS OF CONTRACT.	
F	<u>Clause No. 19 - Setting Out</u> Immediately after taking possession of the site and before commencing work, the Contractor shall employ a licensed surveyor to check the actual levels and dimensions against those shown on the drawings and in the event of any discrepancy, shall immediately notify the S.O. The Contractor shall be responsible for and shall entirely at his own cost amend any errors arising from his own inaccurate setting out.	
G	<u>Clause No. 20 - Unfixed Materials And Goods</u>	
H	<u>Clause No. 21 - Compliance With The Law</u>	
J	<u>Clause No. 22 - Design</u>	
K	<u>Clause No. 23 - Employment of Workmen</u>	
L	<u>Clause No. 24 - Variations</u>	
M	<u>Clause No. 25 - Valuation of Variation</u>	
N	<u>Clause No. 26 - Bill of Quantities</u>	
P	<u>Clause No. 27 - Measurement of Works</u>	
Q	<u>Clause No. 28 - Payment To Contractor and Interim Certificates</u>	
R	<u>Clause No. 29 - Adjustment of Contract Sum</u>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p>Clause No. 30 - <u>Fluctuation of Price</u></p> <p>NOT APPLICABLE</p>	
B	Clause No. 31 - Final Account and Payment Certificate	
C	Clause No. 32 - Effects of S.O.'s Certificates	
D	Clause No. 33 - Deduction From Money Due To Contractor	
E	<p>Clause No. 34 - Prime Cost / Provisional Sums</p> <p>Refer also to Clause 34.4 in the APPENDIX TO THE CONDITIONS OF CONTRACT.</p>	
F	<p>Clause No. 35 - Materials, Goods and Workmanship</p> <p>Materials and workmanship are to be the best of their respective kinds and by "best" shall be understood that no superior class of specified materials or workmanship is available in Malaysia.</p> <p>Materials and Workmanship shall comply with the British Standard and Codes of Practice wherever applicable and shall be approved by the S.O. The Contractor is not to alter or amend any of the descriptions of materials in these Bills of Quantities and except where expressly provided to the contrary, any offers of alternative materials will render the tender liable to disqualifications. Wherever in these Bills of Quantities any goods or materials are specified such are to be considered as being the minimum standard acceptable. In the event of the S.O. allowing the substitution of any of the materials during the course of the Contract, such substitution shall be accompanied by a corresponding deduction in cost unless the S.O. otherwise directs.</p> <p>The materials of Malaysian Origin and/or locally manufactured materials shall be used by the Contractor to the exclusion of imported materials and he shall allow for this special requirement in his tender. The locally manufactured materials are as listed in the 'Senarai Bahan-bahan Binaan Tempatan', Issued by Kumpulan IKRAM Sdn Bhd. (formally known as IKRAM) or those which comply with the relevant Malaysian Standard. Other local materials shall be tested and certified by Kumpulan IKRAM Sdn Bhd for civil engineering materials or approved by Jabatan Kerja Raya Malaysia for other materials before they can be accepted for use in the Works by the S.O. Testing and certification by other testing body may be allowed with the S.O.'s approval. If the Contractor fails to comply with this requirement, the materials supplied shall be rejected and disciplinary action shall be imposed upon the Contractor.</p> <p>The Contractor shall place his orders for specified materials at the earliest possible date after notification of the acceptance of tender or at such times as may be specifically stated elsewhere herein for any particular materials.</p> <p>The Bills of Quantities shall not be used as the basis for ordering any materials.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
	<p><u>Clause No. 35 - Materials, Goods and Workmanship (cont'd)</u></p> <p>If the Contractor fails for any reason to supply any materials which has contractor to supply or if he fails to supply any such materials in sufficient time to enable the Contract to be completed by the date fixed for completion, then in either event the Employer may supply any portion of all such materials. If the Employer supplies such materials, the cost in respect thereof which shall be borne by the Contractor shall be:- EITHER The current market rates OR The actual cost to the Government at the date of supply, plus 25% for overheads and other charges. WHICHEVER IS THE GREATER.</p> <p>The cost to be borne by the Contractor as detailed above shall be deducted from any money due or to become due to the Contractor under this Contract and the Contract Sum shall be adjusted accordingly; provided that any variation order issued by virtue of this clause shall not be taken into account when computing the final amount of this Contract and no claim for loss of profit under clause 13 of the Conditions of Contract shall be deemed to have arisen. No action by the S.O. under this clause shall be deemed in any way to affect or modify the right of the Employer to claim for damages in the event of the Contractor's failure to complete the Works by the date fixed for completion.</p> <p>All costs of instruments, machines, materials sampling, transportation and works for the testing of samples and completed works as required and specified and directed by the S.O. shall be borne by the Contractor. The Contractor shall be responsible for getting all materials including water, electricity, etc. for the test to be carried out in the manner and within the time as required and specified in the Contract.</p> <p>Where the supply of electricity, water, etc for test runs and/ or maintenance purposes are obtainable from Government sources, the Contractor must obtain the approval of the S.O. and supply adequate meters and undertaken to pay off the used electricity, water, etc.</p> <p>The successful Contractor's attention is also drawn to the provision that the importation of mild steel bars is subject to Customs Prohibitive Order (Import). Approval of import licenses from the Ministry of Commence and Industry must be obtained before placing orders with overseas manufacturers and the Contractor shall be solely responsible for complying with this procedure.</p> <p>The successful Contractor's attention is also drawn to the provision that the importation of mild steel bars is subject to Customs Prohibitive Order (Import). Approval of import licenses from the Ministry of Commence and Industry must be obtained before placing orders with overseas manufacturers and the Contractor shall be solely responsible for complying with this procedure.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<u>Clause No. 36 - Inspection and Testing of Materials, Goods and Equipment</u>	
B	<u>Clause No. 37 - Constructional Plant, Equipment, Vehicles and Machineries</u>	
C	<u>Clause No. 38 - Possession of Site</u> Refer also to Clause 38.2 in the APPENDIX TO THE CONDITIONS OF CONTRACT.	
D	<u>Clause No. 39 - Completion of Works</u> Refer also to Clause 39 in the APPENDIX TO THE CONDITIONS OF CONTRACT.	
E	<u>Clause No. 40 - Damages For Non-Completion</u> Refer also to Clause 40 in the APPENDIX TO THE CONDITIONS OF CONTRACT.	
F	<u>Clause No. 41 - Sectional Completion</u>	
G	<u>Clause No. 42 - Partial Occupation/Taking Over By Government</u>	
H	<u>Clause No. 43 - Delay And Extension of Time</u>	
J	<u>Clause No. 44 - Claims For Loss And Expense</u>	
K	<u>Clause No. 45 - Investigation By the Government And Other Persons In Case of Accident, Failure Or Other Event</u>	
L	<u>Clause No. 46 - Access For Works Etc.</u>	
M	<u>Clause No. 47 - Sub-Contract or Assignment</u> Where the Contractor proposes to sub-contract any portion of the Work, the written consent of the S.O. shall not be given where the proposed sub-contractor is not himself a contractor registered with the Pusat Khidmat Kontraktor in the class eligible for similar work up to the value of the proposed sub-contract work unless otherwise specified herein.	
N	<u>Clause No. 48 - Defects After Completion</u> Refer also to Clause 48.1 in the APPENDIX TO THE CONDITIONS OF CONTRACT	
P	<u>Clause No. 49 - Unfulfilled Obligations</u>	
Q	<u>Clause No. 50 - Suspension of Works</u>	
R	<u>Clause No. 51 - Events And Consequences of Default By The Contractor</u>	
S	<u>Clause No. 52 - Termination On National Interest</u>	
T	<u>Clause No. 53 - Termination On Corruption</u>	
U	<u>Clause No. 54 - Payments Upon Suspension And Termination On national Interest</u>	
V	<u>Clause No. 55 - Events And Consequences Of Default By The Government</u>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<u>Clause No. 56 - Certificate of Termination Costs</u>	
B	<u>Clause No. 57 - Surviving Rights</u>	
C	<u>Clause No. 58 - Effect Of Force Majeure</u>	
D	<p><u>Clause No. 59 - Site Agent And Assistants</u></p> <p>Notwithstanding anything herein or elsewhere contained, the Contractor shall appoint a Site Agent to provide all necessary superintendence over the whole site operation for the full duration of the Contract and as long thereafter as the S.O. may consider necessary for the proper fulfilment of the Contractor's obligations under the Contract. He must be competent in English and/or Bahasa Malaysia and be a qualified member of the professional group (viz. Engineer, Architect or Quantity Surveyor) having a comprehensive theoretical background, suitable qualification and relevant experience approved by the S.O.</p> <p>The Site Agent must be constantly on the Works and shall devote the whole of his time to the superintendence of the same. Should the S.O. find him unsuitable for any reason whatsoever, the Contractor shall as soon as practicable after receiving such written notice from the S.O. remove the agent from the Site and shall there after employ another to the approval of the S.O.</p>	
E	<p><u>Clause No. 60 - Nominated Sub-Contractors And/Or Nominated Suppliers</u></p> <p>(1). The Contractor shall be fully responsible for all sub-contractors for any delays or damage thereby occasioned and shall be responsible for the supervision and administration of all sub-contracts in accordance with the Conditions of Contract and shall be required to schedule the execution of the Work with each of the Nominated Sub-contractors. The schedule shall be subject to the approval of the S.O.</p> <p>(2). The Contractor is to price where indicated later in the Bills of Quantities for the following attendance and facilities upon Nominated Sub-Contractors in the execution of the Sub-contract Works:-</p> <p>(a) Ascertaining from Nominated Sub-contractor all particulars relating to their work in regard to sizes of and positions in which chases, holes, mortices etc. are required to be formed or left. The Contractor shall be responsible for any additional cost incurred as a result of any omission on his part in this respect.</p> <p>The Site Agent must be constantly on the Works and shall devote the whole of his time to the superintendence of the same. Should the S.O. find him unsuitable for any reason whatsoever, the Contractor shall as soon as practicable after receiving such written notice from the S.O. remove the agent from the Site and shall there after employ another to the approval of the S.O.</p> <p>(b) Making good of walls, ceiling, floors, roofs etc. and finishes thereto including touching up of all paintwork necessitated, damaged or disturbed by the Nominated Sub-contractor's work;</p> <p>(c) Supplying all setting out informations;</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Clause No. 60 - Nominated Sub-Contractors And/Or Nominated Suppliers(Cont'd)</u></p> <p>(d) Giving all necessary dimensions and taking responsibility for their accuracy;</p> <p>(e) Affording free and full use of standing scaffolding whilst it remains erected on the site;</p> <p>(f) Affording free and full use of storage accommodation for materials, equipment and plant which are for incorporation into the Works and require protection against weather and deterioration, messrooms, sanitary accommodation and welfare facilities;</p> <p>(g) Providing SITE SPACE ONLY for Nominated Sub-contractor's temporary office, workshops, workmen's accommodation and storage of materials, tools, plant and equipment which are not for incorporation into the Works and not requiring protection against weather or deterioration;</p> <p>(h) Providing temporary water supply, electric power supply, artificial lighting and paying all fees and charges for fuel, water and electricity consumed;</p> <p>(i) Liasing with the relevant supply/ service authorities for the expeditious installation of the connections for permanent water and electricity supplies in the Works and making such supplies readily available to the Nominated Sub-Contractors. Paying on behalf of the Government all fees and charges including deposits for such installation and for water and electricity consumed by the Nominated Sub-contractor for the test running and commissioning of Sub-contract Works;</p> <p>(j) Providing competent personal in compliance with the Electrical Inspectorate Regulations 1984 to take responsibility for the operation of electrical installation from time to time the permanent electricity supply is made available until testing, commissioning and handing over of the Works;</p> <p>(k) Protecting, covering, watching and taking full responsibility for all Nominated Sub-contractor's work and unfixed materials and goods intended for use thereon;</p> <p>(l) Removing rubbish and debris off the Site and cleaning the Works internally and externally;</p> <p>(3) <u>The undermentioned items fall within the ambit of Nominated Sub-contractor and he shall include in the Sub-contract or Sum, inter alia, the costs in connection with the same :-</u></p> <p>(a) Unloading, getting in storing and all handling and hoisting of his materials, plant and tools into requires positions;</p> <p>(b) Providing, erecting, maintaining and removing of all his temporary office, workshops and workmen's accomodation including paying all assessment and other charges;</p> <p>(c) Connecting to temporary water and power supplies made available by the Contractor for the execution of the Works, supplying and running distribution pipes, hoses, cables, leads, electrical gear etc. but EXCLUDING payment for water and electricity consumed;</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Clause No. 60 - Nominated Sub-Contractors And/Or Nominated Suppliers(Cont'd)</u></p> <p>(d) Provisions of fuel, gas, steam, oil, lubricants, chemicals and everything else necessary (other than water and electricity) for the test running and commissioning of the Sub-contract Works;</p> <p>(e) Any scaffolding, staging etc. that are required for the Sub-contract Works not covered by item (2) (e) above;</p> <p>(f) Taking full responsible for any loss or damage to his plant, tools equipment and other property not for use or incorporation in the Sub-contract Work; Where attendance additional to that described above is required in connection with any Sub-contract Work contained in the Bills of Quantities, such it to be separately priced where indicated.</p> <p>(4)</p> <p>The works 'FIX ONLY" where used in the Bills in connection with any materials or goods supplied by Nominated Suppliers shall be understood to include :-</p> <p>(a) Taking delivery;</p> <p>(b) Unloading, getting in, storing and protecting ;</p> <p>(c) Taking from store and placing in position including all hoisting etc. required;</p> <p>(d) Assembling and fixing;</p> <p>(e) Returning all chargeable packing, carriage paid and recovering all appropriate credits;</p>	
B	<u>Clause No. 61 - Payment To Nominated Or Sub-Contractor or Suppliers</u>	
C	<u>Clause No. 62 - No Liability of Government To Nominated And/ Or Sub-Contractor Or Supplier</u>	
D	<u>Clause No. 63 - Responsibilities of Contractor To Nominated And/ or Sub-Contractors or Suppliers</u>	
E	<u>Clause No. 64 - Intellectual Property Rights</u>	
F	<u>Clause No. 65 - Antiquities</u>	
G	<u>Clause No. 66 - Arbitration</u>	
H	<u>Clause No. 67 - Notice, Etc</u>	
I	<u>Clause No. 68 - Safety At The Site</u>	
J	<u>Clause No. 69 - Advance Payment</u>	
K	<u>Clause No. 70 - Amendment</u>	
L	<u>Clause No. 71 - Confidentiality</u>	
M	<u>Clause No. 72 - Stamp Duty</u>	
N	<u>Clause No. 73 - Severability</u>	
P	<u>Clause No. 74 - Waiver</u>	
Q	<u>Clause No. 75 - Laws Applicable</u>	
R	<u>Clause No. 76 - Successors Bound</u>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<u>Clause No. 77 - Epidemics And Medical Attendance</u>	
B	<u>Clause No. 78 - Technology Transfer</u>	
C	<u>Clause No. 79 - General Duties And Performance Standard</u>	
D	<u>Clause No. 80 - Restriction And Procedure On use Of Imported Materials And Goods</u>	
E	<u>Clause No. 81 - Time</u>	
	<u>APPENDIX TO THE CONDITIONS OF CONTRACT</u> <u>The Appendix to the Conditions of Contract shall be completed as follows :-</u>	
F	<u>Clause No. 4.1 (a) - Officer(s) empowered to take action on behalf of the Government in respect of Clauses 40 and 43</u>	
G	<u>Clause No. 4.1 (a) - Officer(s) empowered to take action on behalf of the Government in respect of Clauses 51, 52, 53, 58 and 66</u> Datuk Bandar Majlis Bandaraya Iskandar Puteri	
H	<u>Clause No. 13 - Amount of Guarantee for Performance Bond</u> To be computed based on 5% of Contract Sum. Bank/ Insurance Guarantee and Guarantee Number to be submitted by Contractor.	
J	<u>Clause No. 15 - Minimum insurance cover for any one accident or series of accidents arising out of one event</u> To be determined in Letter of Award	
K	<u>Clause No. 15.1(b) - Amount of excess clause</u> Up to Contractor	
L	<u>Clause No. 17 - SOCSO Scheme registration number</u> To be submitted by Contractor	
M	<u>Clause No. 18 - Amount to be added to full value of Contract Sum as the insured sum</u> Policy number and period of insurance to be submitted by Contractor	
N	<u>Clause No. 18(b) - Amount of excess clause</u> Up to Contractor	
P	<u>Clause No. 21.2 - Date of Tender</u> As stipulated in the Tender Notice	
Q	<u>Clause No. 28.1 - Value of work to be executed including materials and goods to be delivered before First Interim Certificate will be issued</u> RM1,000.00	
	TO COLLECTION	

Item	Description	Amount (RM)
	<u>APPENDIX TO THE CONDITIONS OF CONTRACT (Cont'd)</u>	
A	<u>Clause No. 28.2 - Value of work to be executed including materials and goods to be delivered before each subsequent Interim Certificate will be issued</u> RM1,000.00	
B	<u>Clause No. 28.6 - Period for honouring payment certificate</u> Thirty (30) days Upon S.O Verifications	
C	<u>Clause No. 34.4 - Work covered by PC Sums For which the Contractor will be permitted to tender</u> Not applicable	
D	<u>Clause No. 38.2 - 'Date for Possession' of the Site</u> To be inserted later	
E	<u>Clause No. 39.1 - 'Date for Completion' for whole of the Works</u> To be inserted later	
F	<u>Clause No. 40.2 - Liquidated and Ascertained Damages</u> $\frac{\text{Current BLR \%}}{365 \text{ day}} \times \text{Contract Sum}$	
G	<u>Clause No. 41 - Sectional Completion</u> Not applicable	
H	<u>Clause No. 48.1 - Defects Liability Period</u> Twenty Four (24) months	
J	<u>Clause No. 5.3, 5.4, 15.3, 17.3 and 18.2 - Percentage of on-cost charges</u> 5%	
K	<u>Clause No. 48.2 and 55.2 - Percentage of on-cost charges</u> 10%	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Insurances</u></p> <p>As a condition precedent to the commencement of any Works, the Contractor shall take out at his own expense all the relevant insurance policies as required under this Contract and to produce all Cover Notes and receipt for premiums paid for inspection of the S.O. All insurance policies required under the Contract shall be taken through insurance companies registered in Malaysia and approved by the Employer.</p> <p>The said policies so taken shall be deposited with the S.O. and the Contractor shall maintain them in full force and effect by payment of all premiums from time to time on the first day on which the same ought to be paid and until completion of the Contract and upon demand, the Contractor shall produce to the S.O. the last receipt for payment of such premiums. All excess/deductibles if any, imposed by the Insurance Company shall be fully borne by the Contractor.</p> <p>Nothing in this clause shall be construed to take away or to waive or in any manner to modify the right of the Employer to be indemnified by the Contractor in respect of all compensations, costs and other expenses whatsoever which by reason of the Contractor's default or otherwise become payable by the Employer under the said Legislation or other Law. The insurance policies taken shall also be in the form of a Contractor's All Risks (CAR) Policy if so required by the S.O. instead of providing separate insurance policies for each individual insurance risk.</p> <p>In accordance with and for the purpose of Clause 14, 15, 16 and 18 of the Conditions of Contract, the Contractor shall provide and maintain a Contractor's All Risks (CAR) Policy to be executed in the joint names of the Employer (as the Principle), the Contractor, his Sub-Contractors and Suppliers (whether nominated or otherwise). The policy shall cover the following basic requirements which terms and conditions shall nevertheless be subject to the final approval of the S.O. :-</p> <p>SECTION ONE : THE INSURED PROPERTY - which shall cover the indemnity of the Works in this Contract. Including all variation and temporary works erected or in the course of erection in the performance of the Insured Contract including materials for use in connection therewith belonging to the Insured or for which they are responsibly brought onto the Site for the purpose of the said Contract and for which provisions have been made in the sum insured. To this end, the Insured shall in respect of the above be indemnified against:</p> <p>ALL RISKS – Which is loss of or damage to any item of the above Insured Property whilst at the Site for any cause arising which are not excluded by the usual exclusion clauses of the policy.</p> <p>MAINTENANCE COVER - Which is the legal liability of the Insured within the items of the Defects Liability and Maintenance Conditions of the Insured Contract for loss of or damage to any part of the above Insured Property occurring during the Defects Liability and Maintenance Period of the Contract.</p> <p>AMOUNT TO BE COVERED - Contract Sum plus 10% of the said Contract Sum to cover for Professional Fees.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Contractor's All Risks (CAR) Policy (Cont'd)</u></p> <p>PERIOD OF COVERAGE - From the date of possession of Site up to and including the end of the Defects Liability Period (DLP) plus fourteen (14) days and three (3) months thereafter the aforesaid end of Defects Liability Period of this Contract.</p> <p>SECTION TWO : PUBLIC LIABILITY - under this section of the Contractor's All Risks (CAR) Policy, the indemnity shall cover for the following :</p> <p>BODILY INJURY, ILLNESS OR DISEASE TO PERSONS - The indemnity covers bodily injury to or illness or disease contracted by any person (other than a person employed under a contract of service apprenticeship with the Insured where the injury, illness or disease, arises out of and in the course of such employment) arising of the Works.</p> <p>LOSS OF OR DAMAGE TO PROPERTY - The indemnity covers for loss of or damage to property (other than the Insured Property or property belonging to or held in trust by or in custody or control of the Insured which is already covered under Sections A of the Insured Property) arising of the Works.</p> <p>AMOUNT OF COVERAGE - The sum insured minimum shall be RM 500,000.00 for any one and unlimited as to the number of accidents during the period of insurance.</p> <p>PERIOD OF COVERAGE - From the date of possession of Site up to and including the end of the Defects Liability Period (DLP) plus fourteen (14) days and three (3) months thereafter the aforesaid end of Defects Liability Period of this Contract.</p> <p>For the above items of coverage, i.e. (a) and (b), the Insures shall indemnify any of the Insured against claims made by any other party insured by this Policy as if each of them were insured separately. The Insurers shall also pay all litigation expenses incurred with their consent and all costs and expenses of litigation recovered by any claimant against the Insured.</p> <p><u>NOTE:</u> The above said policy shall be extended to cover the Employer's Representatives, Consultants as well as their representative on Site.</p> <p><u>The Policy shall cover for the following endorsements :-</u> Strike, riot and civil commotion clause; Cross liability clause; Vibration and/or removal or weakening of support; Extended maintenance cover clause; Extra charge of overtime, night work, work on public holidays and express freight Existing property clause; Principle clause; Debris removal clause; Professional fees clause; Maintenance visit cover; Cover for Consultants as Third party; Warranty concerning existing underground cables and pipes</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Contractor's All Risks (CAR) Policy (Cont'd)</u></p> <p>Notwithstanding the above coverage, the Contractor may if he so wishes or deemed necessary to include any other additional coverage against damages and/or loss of the Contractor's plant, equipment and/or tools on Site, damage and/or loss of materials on Site or the like, the cost of which shall be borne by the Contractor and deemed to have been allowed for in the Contractor and deemed to have been allowed for in the Tender. The same shall apply for his Sub-Contractor and Suppliers whether nominated or otherwise.</p>	
B	<p><u>Workmen's Compensation Policy</u></p> <p>This policy has been deleted from the contract unless if requested by S.O.</p>	
C	<p><u>Employees' Social Security Act 1969</u></p> <p>The Contractor will not be required to take out any Workmen's Compensation Insurance Policy if the workers employed in the Works are liable for coverage under the Employees Social Security Act 1969. The Contractor shall register such employees and to contribute under the Social Security Scheme (SOCSSO) and to comply with the provisions of the Act. He shall also submit the Code Number and Insurance Number of all workers involved on site to the S.O. for checking.</p> <p>The Contractor will shall make payment of all contributions from time to time on the first day on which the same ought to be paid and until the completion of the Contract. The Contractor shall also ensure that all his Sub-Contractors and Suppliers whether nominated or otherwise complies with the abovesaid requirements.</p> <p>Upon recruitment the candidates are to be employed on the project in the capacities in which they are indentured as apprentices and shall be paid fair wages and given such other benefits e.g. Workmen's Compensation, E.P.F. Contribution as other workmen in the Contractor's employment enjoy.</p>	
D	<p><u>Statutory Obligations, Notices, Levy, Fees and Charges</u></p> <p>The Contractor shall comply with and give all notices required by an Act of Parliament or any Regulation or Bye-Law of any Local Authority or of any Statutory Undertaking such as Syarikat Air Johor (SAJ), Construction Industry Development Board (CIDB), Tenaga Nasional Berhad, etc. which has any jurisdiction or authorization with regard to the Works.</p> <p>The Contractor also shall pay and indemnify the Employer against liability in respect of any levy, fees or charges (including any rates or taxes) legally demandable under any of the above. Statutory requirements and these shall be deemed to have been considered and included herein this Tender.</p> <p>The Contractor shall comply to Part VIII of the Lembaga Pembangunan Industri Pembinaan Malaysia Act 1994 and the Construction Industry (Levy Collection) Regulation 1996, and shall submit a notification on form CIDB L1/96 to the Lembaga not later than that 14 days after the issuance of the Letter of Acceptance / Letter of Award / or any document that constitutes acceptance of a contract of works, or not less than 14 days before the commencement of the works, whichever date is earlier.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Employment of Local Labour</u></p> <p>All labourers used in connection with the Works shall be employed from within the state or district where the Works is situated. The Contractor shall immediately after taking possession of site, arrange with the local Labour Office, District Officer or Penghulu to effect such employment. In no circumstances will the Contractor be permitted to use imported labourers unless the S.O. is satisfied that they are not available within the state or district concerned, then the Contractor may employ foreign workers only after getting approval of the S.O. If foreign workers are to be employed the Contractors shall be responsible for their entry strictly in accordance with the requirements of the relevant Immigration and regulation. He will also be responsible for obtaining their work permits from relevant Authorities.</p>	
B	<p><u>Contractor's Storage</u></p> <p>Erect in position, approved by the S.O. adequate, secure and watertight temporary buildings for use during the execution of the Contract Works and maintain and remove on completion, including for the following :-</p> <ul style="list-style-type: none"> (i) Cement store which shall have its floor raised at least 300mm above ground level (ii) Shed for bar bending and similar work. (iii) Store for other building materials 	
C	<p><u>First Aid Kit</u></p> <p>The Contractor shall provide at his own cost a complete first aid kit which shall be kept and properly maintained in the Contractor's Site Office. The kit shall be in the charge of either the Contractor's site representative or some other responsible person who shall on the Site during all working hours to ensure that the first aid facilities are available without delay at all times when work is in progress. One (1) no. responsible member of the Contractor's staff shall be trained in simple first aid duties.</p>	
D	<p><u>Programme of Work</u></p> <p>Within fourteen (14) days after the receipt of the Letter of Acceptance the Contractor shall submit to the S.O. a detail programme using the Critical Path Method (CPM) inclusive copies of all data on computer medium and printed hard copies. The programme shall be presented in bar chart form and network diagrams indicating the critical activities and interface dates critical to complete the work on time. The Contractor shall be required to update all information and weekly/ monthly or as when instructed by the S.O. by trained and qualified personnel.</p> <p>The Contractor shall also furnish in writing to the S.O. or S.O.'s Representative particular of the Contractor's method statements for carrying out such works and of the construction plants and temporary works, if any which the contractor intends to supply, use or construct as the case may be. The submission to and approval by the S.O. or the S.O.'s Representative of such programme or the furnishing of such particulars shall not relieve the Contractor of any of his duties or responsibilities under the contract.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Programme of Work (Cont'd)</u></p> <p>For any project in which MBIP furnish the work programme, the Contractor shall provide all necessary resources required as specified in the programme, OR, Contractor may propose improved work programme which shall not exceed the Contract period stipulated, in which case, CPM must also be used, denoting all the critical milestone for successful implementation and completion of the project. Not with standing the above, Contractor shall submit method statements of carrying such works and temporary works, if construct as the case may be.</p> <p>If at any time is should appear to the S.O. that the actual progress of the works does not conform to the approve programme referred to herein before, the Contractor shall submit for approval, a revised programme showing to the modifications to the previously approved programme and additional resources necessary to ensure the completion of the whole works within the time set for completion.</p> <p>For the purpose of implementing the Critical Path Method (CPM) programme for planning, monitoring and control of MICROSOFT PROJECT 2019 or equivalent shall be utilised. The used of this software is also to facilitate transfer of information on the projects from one section to another through internet linking or other conventional means.</p> <p>The S.O. may exercise under the provision of the Contract should the Contractor fail to comply to this requirement.</p>	
B	<p><u>Monthly Report and Progress Photographs</u></p> <p>The Contractor shall prepare and submit to the Consultants Ten (10) sets of monthly reports on the progress of the works by sections and elements or by Trades: the number of workmen employed, materials delivered, weather conditions and progress photograph showing the status of the work taken from suitable angle.</p>	
C	<p><u>Site Meeting</u></p> <p>The Contractor shall make arrangements and allows for all necessary facilities and attendances for weekly, fortnightly, and/or monthly site meetings to be held at the Contractor's site office or elsewhere as directed by the S.O.</p> <p>The S.O. shall chair these meetings, record the proceedings and distribute copiesof the minutes of meetings to all parties concerned whether they are present or absent at the meeting. The minutes is to reach them at least one (1) week before the scheduled date of the next site meeting.</p>	
D	<p><u>Prevention of Pollution and Nuisance</u></p> <p>The Contractor shall take all proper measure to the satisfaction of the S.O. to minimise the spread of dust, noise etc. and to prevent any nuisance arising from carrying out of the Works.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Restriction of Workmen</u></p> <p>The Contractor shall be responsible for restricting all person under his control, including those employed by Sub-contractors, merchant and Haulier to the site of the works and shall take necessary precautions to prevent damage and nuisance of any kind and shall indemnify Government against any claims arising herefrom.</p>	
B	<p><u>Mosquito Prevention</u></p> <p>All excavation and any portion of the site where water stagnates or accumulates shall be kept dry by pumping, bailing or other operations.</p> <p>Allow for taking such precautions may be necessary or desirable for the prevention of breeding of mosquito and pay all charges as may be required by the Local Authority concerned for any measures taken.</p> <p>The Contractor must refrain from dumping or depositing rubbish, spoil, unused materials, empty bottles, cans and other containers capable of collecting liquids which afford breeding places for mosquitoes. He will be held responsible for mosquito nuisance at the site and surroundings arising from non-observance of the provisions of this Clause and will be required to employ whatever mosquito destructive as are necessary entirely at his own cost and expense.</p>	
C	<p><u>Pest Control</u></p> <p>Before any works commences, the Contractor shall check the site thoroughly to determine the presence of pests such as termites, wood borers, cockroaches, rats etc. and shall be responsible in carry out pest control works by engaging a licensed pest control company for that purpose. Such treatment shall be borne entirely by the Contractor.</p> <p>The method of treatment, certificate of approval, guarantee letter and technical brochures etc. shall be submitted to the S.O. for approval and before commencement of the works. The treatment is to be carried out in accordance with the recommendations by the pest control company and to the approval of the S.O.</p> <p>The Contractor shall also secure a guarantee for a period of ten (10) years from the pest control company for the treatment done otherwise the Contractor shall be responsible for the works done.</p>	
D	<p><u>Hoarding</u></p> <p>At the commencement of the Contract within three (3) weeks from the Date of Possession of Site, the Contractor shall provide, erect and maintain adequate metal decking hoarding 2300mm high to the whole site, fencing, warning lights and such other precautionary measures necessary to ensure the safety of the public and others who may be on or in the vicinity of the site, all in accordance with the relevant bye-laws. The Contractor will be held solely responsible for all accidents arising from any negligence in the respect. As shown in the architect detail's drawing no:(Ref: MN/005/23/MBIPLHB-02).</p> <p>On completion of the Contract and within one (1) week of the S.O. so instructing, the entire hoarding, fencing, warning lights and other precautionary measures are to be removed from the site. All salvage materials shall become the property of the Contractor and shall be stored away.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Signboard</u></p> <p>Provide and erect in a prominent position approved by the S.O., a signboard painted and lettered in Bahasa Malaysia to the approval of the S.O. and maintain and dismantle and remove the same on completion all as per architect's detail drawings.</p>	
B	<p><u>Factories And Machinery (Building Operation And Works Of Engineering Construction) Regulations</u></p> <p>The Contractor is to allow for complying with the prevailing Factories and Machinery Acts/ Regulation and amendments and the relevant prevailing legislations concerning fitness, requirements, attendance for operations of machinery and plant.</p> <p>It is the duty of the Contractor to maintain all his plant and machinery in proper and safe operating conditions and to provide and enforce safety measures in his site operations.</p> <p>Overheads Hazards - Every place where persons are required to work or to pass that is normally exposed to falling materials or objects shall be provided with safety helmets and/ or any approved suitable overhead protection and where no one is required to work or to pass but employees who are at work in the vicinity, such areas shall be roped off or otherwise guarded against inadvertent entry.</p> <p>Falling Hazards - Every hole into or through which a person may fall shall be guarded by an effective barrier to prevent falls except where free access is required by work actually in progress.</p> <p>Slipping Hazards - The Contractor shall not suffer or permit any person to use a passageway or a scaffold, platform or other elevated working surfaces, which is in slippery condition. Oil, grease, water and other substances causing slippery footing shall be removed, sanded or covered to provide safe footing.</p> <p>Tripping Hazards - All passageways, platforms and other places of work shall be kept free from accumulation of dirt and debris and from other obstructions that could cause tripping. Sharp projections which could cut any person shall be removed or covered.</p> <p>Electrical Hazards - Before work is begun, the contractor shall ascertain by inquiry or direct observation, or by instruments, where any part of an electric power circuit, exposed or concealed is so located that the performance of the work may bring any person, tool or machine into physical or electrical contact therewith. The contractor shall post and maintain proper warning signs in the official language where such a circuit exists. He shall advise all persons on the site of the location of such line, the hazards involved and the protective measures to be taken and shall, if practicable, de-energize the electric power circuit.</p> <p>Danger and Warning Sign - Simple but effective warning notice in the official language shall be placed in a conspicuous position at all entrances to the site for the whole period the Work is in hand to warn the employees and public of trespassing and danger on site and to dismantle and remove on completion.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Factories And Machinery (Building Operation And Works Of Engineering Construction) Regulations (Cont'd)</u></p> <p>Safety Nets - Install safety nets or screens to external face of scaffolding or external wall, secured to sufficient and adequate anchorages or supports to prevent or catch falling of persons or objects. No safety nets or screens which show signs of wear, damage or deterioration that will materially affect the strength of any portion shall be installed.</p> <p>The Contractor shall also allow for providing competent site safety supervisors and any other requirements to conform with the provision of this Legislation.</p>	
B	<p><u>Superintending Officer's Site Office</u></p> <p>The contractor shall provide for the S.O. or his representatives, the following:-</p> <p>The Contractor shall provide a new relocatable site office. The quality of the site office shall not be less than the usual type and shall be furnished equivalent to the typical presentable site office.</p> <p>The number and size of site office are :</p> <p>i) Meeting Room/ S.O/ Consultant Office - 2 nos size (40' x 10')</p> <p>iii) Toilet cabin 2 nos consist of 1 toilets each</p> <p>The Contractor shall furnish the client with the design and details of the site office together after the tender. The furnishing should include :-</p> <p>i) Table and chair for - 20 person</p> <p>ii) Air conditioner 2hp - 2 no</p> <p>iii) White board - 1 no</p> <p>The details should include the manufacturer's name, floor area, furniture and fitting layout plan together with relevant brochures if any. Unless otherwise shown in the drawings, the office to be sited, positioned and constructed as approved by the S.O.</p> <p>The Contractor shall make proper arrangements for and pay all charges in connection with conservancy. The site office shall comply with local building by-laws. It shall be erected or provided by the Contractor and approved by the S.O. Within one (1) week from the date of possession of site, deodorise and keep clean, alter, shift and adapt from time to time as necessary to S.O's requirements.</p> <p>On completion of works, unless otherwise stated, the site office with all the fittings and furniture shall become the property of the contractor and shall be remove from the site forthwith and the area where they stood reinstated to the conditions approved by the S.O.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Contractor's Office and Accommodation</u></p> <p>The contractor shall provide and maintain a suitable office for himself and his staff in a position to be approved by the S.O.</p> <p>In addition, the Contractor shall provide and maintain temporary accommodation and living facilities. The detail of proposed accommodation shall obtain the S.O.'s and relevant statutory authority approval.</p> <p>Accommodation for workmen shall be provided where required in the proportion of 9.30m² per man, complete with proper kitchens etc., bathing places and latrines, adequate water supply and proper drainage. These facilities shall, in every respect, conform,</p> <p>The Contractor shall make proper arrangements for and pay all charges in connection with conservancy. Sufficient latrine accommodation shall be provided having concrete floors together with all necessary water, drainage and disposal facilities. Separate facilities shall be provided for the use of the Architect and other Employer's representatives</p>	
B	<p><u>Clearing, Cleaning And Making Good On Completion</u></p> <p>Before handing over of the works to the S.O. the Contractor shall scrub all floors, pavings, staircase, etc. and clean out all gutters, gulleys, manholes, sumps and drains. The Contractors shall also cut short grass within the site, and clean all glass panes and leaves every part of the completed works included in this Contract in clean, sound and tidy condition to the approval of the S.O.</p> <p>Ensure that the existing roadside drains bounding the site are clear of any building debris, earth etc. at all times.</p> <p>Remove and clear away from site all temporary buildings, temporary works and temporary installation, upon completion or as and when directed by the S.O.</p> <p>Gather up and clear away all rubbish as it accumulated during the progress of the works and leave the site clean and tidy upon completion.</p>	
C	<p><u>Protection Of Materials And Completion Work</u></p> <p>Provide everything necessary for the proper protection of materials and completed work against inclement weather, carelessness or otherwise and comply all the directions of the Superintending Officers in the respect.</p>	
D	<p><u>Plant And Equipment</u></p> <p>The Contractor shall provide, erect, keep insured, maintain and remove on completion all requisite scaffolding, hoist, ladder, staging, tarpaulines, tools, vehicles, tackles and other plants and apparatus (excluding piling and pile testing equipment), as required by all trades as are necessary for the execution of the Work. Should the Contractor leave this item unpriced, then the cost of all the necessary plants and tools is deemed to be included in the price of each of the items in the Bills of Quantities.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Plant And Equipment (Cont'd)</u></p> <p>All mechanical plant used by the Contractor shall be of such type, size and method of working suitable to the type and nature of the works and site conditions where the work are to be executed. If, in the opinion of the S.O., the plants used is not suitable, he may advise the Contractor to change the plant or method of executing the works. The Contractor shall however, have no cause for claim against the Government on the S.O.'s advise in this matter.</p>	
B	<p><u>As Built Drawings</u></p> <p>The Contractor shall print and forward to the S.O. Two (2) CD-ROMs and seven (7) sets of A1-sized as-built drawings of all architectural, structural and infrastructure works with all services incorporated into the works and design and built items of the buildings and shall include Works on services by his sub-contractors and nominated sub-contractors. The as-built drawings supplied shall be comprehensive and to the satisfaction of the S.O. As to allow for complete understanding of the services as regards to its operation, maintenance, repairs and replacement.</p> <p>Submit also four (4) sets of any operation and maintenance instructions or manuals provided by manufacturers, supplier or subcontractors. These shall be bound up with stout hard covers with name if project embossed on the front cover.</p> <p>All such As-Built Drawings and manuals are to be submitted to the S.O. One (1) month after practical completion of the project or expiry of any extended time thereof. It shall be condition precedent to the release of performance bond that the above submissions are made and accepted by the S.O.</p> <p>All As-built drawings shall be signed and duly stamped by the respective professional Consultants who submission to the S.O.</p> <p>The Contractor shall submit completed record and drawings to Local Authorities if requested, at their own costs.</p> <p>The Contractor shall prepare and submit all as-built drawings and manuals in strict accordance with all requirements as specified under Surat Arahan KPKR Bil. 2/2011 (7)dIm.JKR.KPKR.113.020. 050/03 Jld.1 dated 24 May, 2011.</p>	
C	<p><u>Protection of Public and Private Roads and Properties</u></p> <p>The Contractor shall maintain public and private approach roads, footpaths, kerbs, culvert etc. to the Site clear of mud and debris at all times.</p> <p>The Contractor shall arrange for the conveyance of materials, plants etc. onto and away from the site so as to cause a minimum of damage to existing roads, footpaths, kerbs, culvert etc.</p> <p>Protect, uphold and maintain all pipes, ducts sewers, overhead cables and other services unless earmarked for demolition during the execution of the works.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Protection of Public and Private Roads and Properties (Cont'd)</u></p> <p>The Contractor shall be responsible for any damage caused by his lorries or workmen to public and private approach roads and properties to the Site, including that caused by his Nominated Sub-Contractors and Suppliers. The Contractor shall make good any damage caused at his own expense to the satisfaction of the S.O. or alternately shall bear the cost of making good as a deduction from any money due or to become due under this Contract.</p>	
B	<p><u>Temporary And Permanent Power Supplies</u></p> <p>The Contractors is to provide adequate power supplies for temporary lighting, execution of the works and for testing, test running and balancing of all specialist installation included in this Contract.</p> <p>The Contractor shall liase with the relevant supply/ service authorities for the expeditious installation of the connections for permanent water and electricity supplies in the Works. He shall pay one behalf of the Government, all fees and charges including deposits for such installation and for water and electricity consumed in test running and commissioning of the various electrical and mechanical installation/ works/ services under this Contracts. Such payments made shall be reimbursed to the Contractor on production of receipted bills.</p>	
C	<p><u>Water For The Works</u></p> <p>Provide all water required for the use in the Works including paying all associated costs and fees and providing and removing all temporary plumbing and storage facilities on completion.</p>	
D	<p><u>Temporary Diversion and Relocation of Existing Overhead and Underground Services</u></p> <p>Before commencing any excavation, etc Contractor shall enquire from the various authorities whether any underground services, cables, etc are present on the Site and if so, he shall make arrangements for the disconnection, removal and if necessary, the relocation and reconnection of such services and pay all necessary cost and fees in connection with all temporary diversion and relocation of existing services.</p> <p>If during excavation, the Contractor comes any underground cable, etc he shall immediately stop works and refer to the S.O. for further instructions and make arrangements for the disconnection, etc. The Contractor shall be responsible for making good all damage to the cables, etc and shall indemnify the government against any claims as result of such damage.</p>	
E	<p><u>Temporary Access Tracks</u></p> <p>Provide and maintain all necessary temporary access to and within the Site including culverts, tracks, etc. as long as required and remove and make good on completion to the satisfaction of the S.O. The position where the site access is to be made shall be as indicated on the site plan or as instructed by the S.O. and the Contractor shall make all arrangement and obtain all approval required.</p>	
	TO COLLECTION	

Item	Description	Amount (RM)
A	<p><u>Protection Of Earth Slopes And Drains</u></p> <p>The Contractor shall take all necessary precautions to preserve all earth slopes i.e. slope already existing on the site at the time of the site being handed over to the Contractor and new i.e. new slopes formed and constructed by the Contractor under the Contract.</p> <p>He shall construct adequate temporary water courses and drains and take other necessary steps to prevent slips from occurring. Should slips occur due to the Contractor's neglect to take necessary precautions to preserve the earth slopes, he shall, at his own expense, make good such slips to the entire satisfaction of the S.O.</p> <p>The Contractor shall make daily inspection of the earth slopes and more often if he deems it necessary or if so instructed by the S.O. he shall record the results of his inspections in the site dairy. In the event of the slips occurring or in the opinion of the Contractor, may possible occur, the Contractor shall immediately report to the S.O. who shall give necessary instruction to the Contractor.</p> <p>The Contractor shall be held solely responsible for the sufficiency of the precautions taken by him to preserve the earth slopes and shall be liable for and shall indemnify the Government in respect of any claims or preceedings arising out of his neglect of this provision.</p>	
B	<p><u>Protection Of Environment</u></p> <p>The Contractor shall take necessary precautions to prevent the deposition of any debris, rubbish, silt, waste materials, foul water, chemicals, etc. arising from the carrying out of the Works, into the existing river, streams/ waterways without a written approval from the S.O.</p> <p>The Contractor shall divert existing drains, waterways, etc. encountered during the progress of the Works without disruption it's flow system and susequently reinstate the same to the S.O. approval if the diversion is temporary.</p> <p>The Contractor shall take necessary precaution to ensure tyres of all vehicles leaving the site are free of mud.</p> <p>The Contractor shall not carry out any open burning on the Site without written approval of the S.O.</p> <p>The Contractor shall be held solely responsible for sufficiency of the precaution taken by him to protect the environment and to comply with requirements imposed by the relevant Authorities at his own expense. The Contractor shall be liable for the shall indemnify the Government in respect of any claims or proceeding arising out his neglect of this provision.</p>	
	TO COLLECTION	

BILL NO. 1 - PRELIMINARIES

Item	Description	Amount (RM)
A	<p><u>Site Equipment for Superintending Officer</u></p> <p>Provide within one (1) month of the date of Possession of site new sets of the following, of a standard to be approved by the S.O. for the sole use of MBIP Supervisory Staff, Consultants and official visitors.</p> <p>1). Safety Helmets - 15 Nos 2). Boots - 15 Nos. Pairs 3). Raincoat - 10 Nos. 4). Umbrella - 10 Nos.</p>	
B	<p><u>COVID 19 Prevention</u></p> <p>The contractor to ensure that their construction sites and workers accommodation follow the guidelines and laws to prevent the spread of Covid-19 when working during the Conditional Movement Control Order (CMCO). The contractors are also required to adhere to the standard operating procedure (SOP) set by the authorities (Ministry of Health Malaysia and/or CIDB).</p>	
	TO COLLECTION	
	<p><u>Summary</u></p> <p><u>PRELIMINARIES</u></p> <p>From Page No. B1/1</p> <p>From Page No. B1/2</p> <p>From Page No. B1/3</p> <p>From Page No. B1/4</p> <p>From Page No. B1/5</p> <p>From Page No. B1/6</p> <p>From Page No. B1/7</p> <p>From Page No. B1/8</p> <p>From Page No. B1/9</p> <p>From Page No. B1/10</p> <p>From Page No. B1/11</p> <p>From Page No. B1/12</p>	
	TO COLLECTION	

BILL NO. 1 - PRELIMINARIES

[illegible]

**BILL NO. 2 - PILING WORKS (ALL
PROVISIONAL)**

BILL NO. 2 - PILING WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>PILING WORKS</u></p> <p><u>Notes:</u> The Contractor is deemed to have visited the site and refer to tender drawings while preparing the tender.</p> <p>The Contractor shall take note that the quantities of works in respect of Piling Works are Provisional Quantities. The amount to be paid to the Contractor in respect of the said work upon completion of this Contract shall be ascertained by REMEASUREMENT as they are actually executed.</p> <p>Prices for piles shall include for all necessary formwork including forming of chamfered corners, reinforcement, lifting toggles, pile shoes or extension base plates and extension car plates, mortises for centering bars etc all as shown on the drawings.</p> <p>Prices for handling, transporting, pitching and driving of piles by Hydraulic Hammer Piling Machines System unless otherwise stated shall be deemed to include the provision of all necessary piling equipment and other plant on site and dismantling and removing the same on completion of the piling work.</p> <p>Piling shall commence from general formation level. Prices for driving shall include for moving of pile frames about the site, raising or lowering them and e-driving of heaved piles.</p> <p>Prices for testing of piles shall be deemed to include the provision of all pile testing equipment on site and dismantling and removing the same on completion of the piling work.</p> <p>Where piles for pile substitution of the Engineer's designed piles with piles obtained from manufacturer's of the same is approved by the S.O., the prices herein shall apply to the approved substitute.</p> <p>The rates set down by the Contractor against each item in the Provisional Bills of Quantities, after adjustment if necessary by the S.O. to his reasonableness, shall become the basis of valuation for interim payments and variation works.</p> <p>The Contractor shall be deemed to have read the provisions in Specifications in regard to Piling Works. All piles supplied shall be in accordance to JKR standard specifications.</p> <p>The Contractor shall also note that the prices inserted against the items for provision, mobilisation and de-mobilisation of all necessary equipment, plant, tools and ancillaries are on lump sum basis and are not adjustable whatsoever.</p>				
	TO COLLECTION				

BILL NO. 2 - PILING WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>PILING WORKS....Cont'd</u></p> <p><u>Notes....(Cont'd)</u> The pay length for supply of piles shall be the total length ordered by the S.O. The pay length for driving shall be from the toe of the pile up to the ground level.</p> <p>The Contractor's prices shall be deemed to include for driving piles from any other level than the existing ground level.</p> <p>Piles shall be driven to the required set or otherwise directed by the S.O.</p> <p>The rates shall include for handling, transporting, pitching and driving piles in singly and or in cluster.</p> <p>The rates shall include for all items as described in the Specifications including wastage, carting away remaining materials, etc.</p> <p><u>The rates for piles and piling are to include for:</u> All labour and materials for the complete pile inclusive of wastage.</p> <p>All necessary excavation works incidental to piling works.</p> <p>Normal wet weather delays.</p> <p>Replacement of damaged piles and piles which failed under tests.</p> <p>Standing time for equipment and labour due to all the foregoing circumstances.</p> <p>Staging and platform for installation of piles on embankments and slopes.</p> <p>Driving through whatever soil strata or material encountered except rock, which is measured separately.</p> <p>Take all measures to secure the supply of pile so that there should not be any shortage of piles upon starting of piling works on site.</p> <p><u>GENERALLY</u></p> <p>A Allow for the provision of all temporary works including staging etc. for piles to be installed on slopes, edges of building platforms and the like.</p> <p>B Allow for the protection, maintenance and removal of all existing services, pipes, chutes, sewers, manholes, mains, underground and overhead cables, street lights etc. during the execution of the Works.</p>				
	TO COLLECTION				

BILL NO. 2 - PILING WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>PILING WORKS....Cont'd</u>				
	<u>EQUIPMENT AND PLANT</u>				
A	Allow for provision of all necessary piling equipment (Hydraulic Hammer Piling Machines System), plant, cranes, tools and ancillary equipment and for their transportation to site, at various formation levels, handling, assembling, erecting, dismantling and removal on	ITEM			
B	Allow for moving and handling piling equipment, plant, cranes, tools and ancillary equipment about the site as often and whenever necessary for the execution of the whole piling operation etc. including all idling time and any excavation and earthwork support for the movement of the piling frames plant, equipment and tools and any necessary filling in and compaction including the provision of any hardstanding and platform and staging required for moving the piling equipment, plant, cranes, tools and ancillary equipment from differing levels of the site.	ITEM			
	<u>PILING RECORDS</u>				
C	Allow for preparation and submission eight (8) copies of piling records including load testing, duly signed by the Contractor and Superintending Officer (S.O.) or his appointed representative and deliver to the Superintending Officer (S.O.) as the work proceeds.	ITEM			
D	Allow for the submission of piling setting out drawings as described duly signed by licensed surveyor before proceeding with other works.	ITEM			
	<u>As-Built Drawings</u>				
E	Allow for the submission of as-built drawings of all piles installed, prepared endorsed by a registered Surveyor, in one (1) soft copy (auto-cad format) and eight (8) hard copies to the Superintending Officer (S.O.) upon completion of piling works for statutory submission purpose. As-built survey plan by approved licensed surveyor shall be submitted progressively and the final complete survey drawing shall be submitted immediately	ITEM			
	<u>Removal of Obstructions</u>				
F	Allow for all necessary excavation works and/or removal of obstructions incidental to piling at any depth including all costs on standing item for equipment and labour due to such obstructions the base of the excavation shall be thoroughly cleaned before placing concrete.	ITEM			
TO COLLECTION					

BILL NO. 2 - PILING WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>PILING WORKS....Cont'd</u> <u>STOR PERTUKANGAN</u> <u>Precast Concrete Square Pile</u> Supply, delivery and unload of approved precast concrete square piles complete with shoes, splice joints, all necessary components to the satisfaction of the S.O (extension joints measured separately) :-				
	200mm x 200mm piles				
A	6.0m long initial complete with head and cross fin shoes	NO	32		
B	Pile extensions, exceeding 3.0m length ; (6.0m long - 32 Nos.)	NO	64		
	Handle, transport and pitch precast concrete square pile as described:				
	200mm x 200mm piles				
C	6.0m long initial complete with head and cross fin shoes	NO	32		
D	Pile extensions, exceeding 3.0m length ; (6.0m long - 32 Nos.)	NO	64		
	Drive (Hydraulic Hammer Piling Machines System) (initial/extension) pile to the required set approved by the S.O. approval.				
E	200mm x 200mm piles ; total driven length	M	576		
	Fillet weld connection between edges of mild steel extension cap and base plate including two coats of bituminous paint to all exposed fillet welds surfaces.				
F	12mm x 12mm thick ; 800mm girth	NO	64		
	Cut of pile heads to required cut-off level as directed by the Engineer including trimming, stripping, dressing for key, straightening and hacking concrete from pile to expose reinforcement and cleaning, bending as necessary in position for pile cap connection and cutting reinforcement for incorporation into supported structure and remove pile heads and debris from site.				
G	200mm x 200mm piles	NO	32		

H	Prepare surfaces of 200mm x 200mm precast concrete square pile head as required to receive pile cap in accordance to Engineer's drawings or manufacturer's specification all to S.O.'s approval.	NO	32		
	TO COLLECTION				

BILL NO. 2 - PILING WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>PILING WORKS....Cont'd</u> <u>TESTING FOR WORKING PILE</u> <u>Load Test</u> Provide all equipments, kentledge, etc for maintain load test up to twice the working load as required including extra costs. The test pile formed part of the sub-structure. The test should be carried out 14 days after finish drive.				
A	Initial maintain load test on 200mm X 200mm diameter precast concrete pile driven to length as specified in the drawing at location directed by the S.O. (40 tonnes)	NO	1		
B	Subsequent maintain load test on 200mm X 200mm diameter precast concrete pile driven to length as specified in the drawing at location directed by the S.O. (40 tonnes)	NO	1		
	<u>Pile Driving Analysis (PDA)</u>				
C	Provide Pile Driving Analysis (PDA) integrity test using sonic logging method and providing all necessary materials, equipments, labour, records and submission of records.	NO	5		
	TO COLLECTION				
	<u>COLLECTION</u> From Page B2/1 From Page B2/2 From Page B2/3 From Page B2/4 From Page B2/5				
	TOTAL CARRIED TO SUMMARY OF TENDER				

BILL NO. 3A - BANGUNAN PENGURUSAN

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 1 - SUBSTRUCTURE</u> <u>EXCAVATION WORK</u> Excavate to reduce levels commencing from formation level, trim, level, grade and compact bottom of excavation and get out and remove excavated material to contractor's own dump not exceeding 1.00m deep.				
A	Ground slab	M3	54		
B	Apron slab	M3	7		
	Excavate trenches starting from reduced level; including backfill with approved excavated material, compaction in layers and disposal of surplus excavated material where directed within the site not exceeding 1.00m deep				
C	Ground beam	M3	14		
	Excavate pit starting from reduced level; including backfill with approved excavated material, compaction in layers and disposal of surplus excavated material where directed within the site not exceeding 2.00m deep.				
D	Pad footing	M3	71		
	Bed of hardcore consisting of hard dry broken bricks or stones, spread or leveled, well consolidated, watered and well blinded with sand				
E	Under Ground slab ; 150mm thick	M2	166		
F	Under Apron slab ; 150mm thick	M2	52		
	<u>CONCRETE WORK</u> <u>50mm Thick concrete (Grade 15) as described blinding:</u>				
G	Under pad footing	M3	3		
H	Under ground beam	M3	1		
J	Under ground slab	M3	9		
K	Under apron slab	M3	3		
	TO COLLECTION				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SUBSTRUCTURE (Cont'd)</u>				
	<u>CONCRETE WORK (Cont'd)</u>				
	Reinforced concrete (Grade 30) as described (formwork and reinforcement measured separately) in :				
A	Pad footing	M3	14		
B	Column Stump (Provisional)	M3	2		
C	Ground beam	M3	13		
D	Ground slab	M3	21		
	Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :				
E	Apron slab	M3	7		
	<u>Class F1 formwork as described to:</u>				
F	Sides of pad footing	M2	35		
G	Sides of column stump (Provisional)	M2	23		
H	Sides of ground beam	M2	178		
J	Edges of ground slab ; not exceeding 250mm thick	M2	200		
K	Edges of apron slab ; not exceeding 250mm thick	M	107		
	<u>Mild steel (250 N/mm2) rod reinforcement as described:</u>				
	In column stump (Provisional)				
L	6mm Diameter rod as links, stirrups or binders	KG	30		
M	10mm Diameter rod as links, stirrups or binders	KG	40		
	In ground beam				
N	6mm Diameter rod as links, stirrups or binders	KG	240		
P	10mm Diameter rod as links, stirrups or binders	KG	185		
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u>				
	In pad footing				
Q	6mm Diameter rod as links, stirrups or binders	KG	60		
R	12mm Diameter rod	KG	800		
	TO COLLECTION				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SUBSTRUCTURE (Cont'd)</u>				
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u>				
	In column stump (Provisional)				
A	12mm Diameter rod	KG	50		
B	16mm Diameter rod	KG	188		
C	20mm Diameter rod	KG	75		
	In ground beam				
D	12mm Diameter rod	KG	403		
E	16mm Diameter rod	KG	133		
F	20mm Diameter rod	KG	441		
	<u>BRC steel fabric reinforcement; lapping at joints (measured nett-no allowance made for laps)</u>				
	In ground slab				
G	Reference A193/A7 ; 3.02kg/m2	M2	100		
H	Reference A252/A8 ; 3.95kg/m2	M2	40		
J	Reference A353/A10 ; 6.17kg/m2	M2	35		
K	Reference B283/B6 ; 3.73kg/m2	M2	230		
L	Reference B385/B7 ; 4.53kg/m2	M2	28		
	In apron slab				
N	Reference A193/A7 ; 3.02kg/m2	M2	100		
	<u>0.25mm thick approved polythene sheet (heavy duty) as described damp proof membrane laid on ground slab and beam and well lapped at joint (measured nett-no allowance made for laps) as described</u>				
P	Under ground beam	M2	25		
Q	Under ground slab	M2	170		
R	Under apron slab	M2	55		
	TO COLLECTION				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>SUBSTRUCTURE (Cont'd)</u></p> <p><u>ANTI-TERMITE TREATMENT</u></p> <p>The termite treatment application shall be carried by termite control company approved by S.O.</p> <p>Method of treatment shall be submitted to the S.O. for approval. All relevant documents, certificates of approval, guarantee letters, brochures and technical catalogues shall be submitted to the S.O.before commencement of works</p> <p>The Contractor shall be held responsible on all work done by the termite control company</p>				
A	<p>The Contractor and specialist firm shall guarantee the effectiveness of anti-termite treatment for a period of five (5) years and undertake to carry re-treatment without charge should infestation of sub-terranean termites occur at any time during the warranty period</p> <p>Carry out anti-termite treatment in accordance with the specifications as described to :</p>	ITEM			
B	Under ground beam	M2	25		
C	Under ground slab	M2	166		
D	Under apron	M2	55		
	<p><u>Perimeter Drain</u></p> <p>Precast concrete (grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3) :</p>				
E	<p>230mm diameter half round channel cast in 610mm length laid to fall; grouted and pointed in cement and sand (1:3) including all necessary excavation, formwork, 225mm thick concrete base (grade 25), 75mm thick mass concrete bedding, 100mm wide kerb, one brickwall complete with plastering to all exposed surfaces and forming bend, stopped end, junctions, weepholes, cascades, etc</p> <p><u>Concrete Cover</u></p> <p>Supply and install in position 300mm x 50mm thick concrete (Grade 25) with one layer BRC A7 and loose aid 25mm diameter hole at 100mm centre to centre as per architect drawings.</p>	M	45		
F	Concrete cover slab	M	15		
	TO COLLECTION				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>COLLECTION:</u></p> <p>From Page 3A/1/1</p> <p>From Page 3A/1/2</p> <p>From Page 3A/1/3</p> <p>From Page 3A/1/4</p>				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 2 - FRAME</u></p> <p><u>REINFORCED INSITU CONCRETE WORK</u></p> <p>Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :</p>				
A	Column	M3	5		
B	Stiffener (Provisional)	M3	1		
	<u>Class F1 formwork as described to:</u>				
C	Sides of column	M2	64		
D	Sides of stiffener (Provisional)	M2	14		
	<u>Mild steel (250 N/mm2) rod reinforcement as described :</u>				
	In column				
E	6mm Diameter rod as links, stirrups or binders	KG	102		
F	10mm Diameter rod as links, stirrups or binders	KG	117		
	In stiffener (Provisional)				
G	6mm Diameter rod as links, stirrups or binders	KG	30		
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u>				
	In column				
H	12mm Diameter rod	KG	75		
J	16mm Diameter rod	KG	356		
	In stiffener (Provisional)				
K	12mm Diameter rod	KG	57		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
<u>ELEMENT 3 - ROOF</u>					
<u>REINFORCED INSITU CONCRETE WORK</u>					
Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :					
A	Roof beam	M3	11		
<u>Class F1 formwork as described to:</u>					
Sides and soffit and the like ; horizontal including strutting not exceeding 3.00m high					
B	Roof beam	M2	150		
<u>Mild steel (250 N/mm2) rod reinforcement as described :</u>					
In roof beam					
C	6mm Diameter rod as links, stirrups or binders	KG	228		
<u>High tensile (460 N/mm2) rod reinforcement as described :</u>					
In roof beam					
D	12mm Diameter rod	KG	460		
<u>MILD STEEL ROOF STRUCTURE</u>					
Supply and install in position approved square hollow sections (SHS) steel frame, rectangular hollow sections (RHS) steel frame and steel plate BS 4360 Grade 43A, all fabricated, fillet welded together, hoisting and fixing including all necessary accessories, bolt and nuts, anchor bolt, mild steel plate, anti rust painting, 20mm thick non shrink cement grout, labour, materials and in shop and site connection with all shop drawings and S.O approval and as per Engineer's detail drawing no: PMRM/2023/MNA/11/FB-04.					
100mm x 50mm x 4.0mm thk x 8.86 kg/m					
E	Truss 1	KG	75		
F	Truss 2	KG	384		
G	Truss 2a	KG	256		
H	Truss 3	KG	71		
J	100mm x 100mm x 4.0mm thk x 12.00kg/m ; Column	KG	181		
TO COLLECTION					

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF ... (Cont'd)</u> <u>MILD STEEL ROOF STRUCTURE ... (Cont'd)</u> Supply and install in position approved square hollow sections (SHS) steel frame, rectangular hollow sections (RHS) steel frame and steel plate BS 4360 Grade 43A, all fabricated, fillet welded together, hoisting and fixing including all necessary accessories, bolt and nuts, anchor bolt, mild steel plate, anti rust painting, 20mm thick non shrink cement grout, labour, materials and in shop and site connection with all shop drawings and S.O approval and as per Engineer's detail drawing no: PMRM/2023/MNA/11/FB-04.				
A	100mm x 75mm x 4.0mm thk x 10.20kg/m	KG	111		
B	50mm x 50mm x 4.0mm thk x 5.72kg/m	KG	117		
	Mild Steel Plate				
C	10mm thick	KG	215		
D	8mm thick	KG	100		
	Purlin				
E	100mm x 50mm x 16mm x 1.6mm thick x 2.88 kg/m	KG	606		
	Prepare and apply 2 coat zinc chromate primer, 2 coat micaceous oxide and finishing coat gloss finish as described as per S.O approval.				
F	General surfaces of steel roof structure	KG	2,116		
	<u>Metal Decking Roof</u> Supply and install in position approved Zinalume roofing system metal roofing sheet 0.42mm thick base metal thickness complete with roof cladding in AZ100 clean colorbond XRW and steel grade G550 including pierced fastened (AS3566 Class 3), one layer of double sided aluminium foil insulation, 50mm thick x 50kg/m3 rockwool insulation with self drilling screws with hex, washer head and epdm seal as described laid and fixed interlocking to steel purlins with and accessories all in accordance with the manufacturer's instructions (measured nett-no allowance made for laps) and all as per Architect's drawing no: MN/005/23/MBIPLHB/02/08.				
G	Roof coverings at 5° pitch ; 0.47mm thick	M2	243		
	TO COLLECTION				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF ... (Cont'd)</u> <u>Aluminium Composite Panel</u> Supply and install in position approved 6mm thick Aluminium composite panel complete with end cap, pipe penetration with self drilling screws with hex, washer head and epdm seal as described laid on and fixed interlocking to steel purlins with and accessories all in accordance with the manufacturer's instructions (measured nett-no allowance made for laps) and all as per Architect's detail drawings no: MN/005/23/MBIPLHB/26.				
A	Roof coverings; sloping pitch at 1 degrees <u>Fascia Board</u>	M2	19		
B	Supply and fix in position 230mm x 25mm thick Zinalume fascia board - roof eave cap including finishing works to architect's approval and manufacturer's detail. Preparing; priming; applying one undercoat; two finishing coat of synthetic enamel paint on woodwork	M	67		
C	General surfaces of fascia board exceeding 300mm but not exceeding 400mm girth <u>Galvanised iron (G.I) gutter</u> Supply and install approved galvanised iron gutter complete with external bracket, joiner, and stopper, spouthead rubber ring, holding down strap, bend and accessories complying all to manufacturer's specification and instruction and all as per Architect's detail drawings no: MN/005/23/MBIPLHB/02/08.	M	67		
D	300mm wide x 400mm high gutter complete with mild steel support and fixing to fascia board and mild steel bracket. <u>ROOF PLUMBING</u> Supply and install approved UPVC rectangular rainwater downpipe complete with holding down strap and accessories complying all to manufacturer's specifications and instruction:	M	20		
	150mm diameter				
E	Pipe fixed to wall including bracket	M	12		
F	Pipe embedded under apron including concrete base and excavation	M	7		
	TO COLLECTION				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF ... (Cont'd)</u> <u>ROOF PLUMBING</u> Supply and install approved UPVC rectangular rainwater downpipe complete with holding down strap and accessories complying all to manufacturer's specifications and instruction: <hr/> 150mm diameter				
A	Extra for swan neck 1.50m long	NO	3		
B	Extra for bend	NO	9		
C	Dome grating or debris trap	NO	3		
	TO COLLECTION				
	<u>COLLECTION</u> From Page 3A/3/1 From Page 3A/3/2 From Page 3A/3/3 From Page 3A/3/4				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 4 - WALL</u></p> <p><u>EXTERNAL</u></p> <p>Common clay bricks in cement mortar (1:3) with plasticiser as described in :</p>				
A	115mm thck brickwall reinforced with and including 57mm wide x 22 gauge approved steel fabric reinforcement as described at every fourth course well lapped	M2	167		
B	Extra Over for 25mm thick PVC groove line	M	40		
C	Extra Over for 50mm thick PVC groove line	M	18		
	200mm x 200mm thick precast concrete ventilation block in cement mortar (1:3) with plasticiser as described as per Architect's drawing no: MN/005/23/MBIPLHB-13.				
D	Overall size 2250mm x 600mm high	M2	3		
E	Overall size 1800mm x 600mm high	M2	2		
F	Overall size 2700mm x 600mm high	M2	3		
	Approved bitumen damp proof course complying with BS 743 and weighing not less than 3.79kg per metre square in one layer well lapped at joints and laid on and including 19mm of cement mortar (1:3) and coated on upper surfaces with bitumen (measured nett - no allowance made for laps)				
G	On half brick thick	M	52		
	Mild steel bonding ties as described 450mm girth on end cast into concrete and the other end built into brickwall including forming perforation in formwork				
H	6mm Diameter	NO	80		
	<u>Coping and capping</u>				
J	To construct approved 150mm wide x 100mm thick reinforced concrete (Grade 25) coping at wall complete with plastering and painting including all necessary accessories, approved waterproofing or equivalent, formwork, reinforcement and 12mm diameter PVC edging with water throating and painting all as per Architect's drawing no.MN/005/23/MBIPLHB-03/08.	M	33		
	TO COLLECTION				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>WALL.....Cont'd</u> <u>INTERNAL</u> Common clay bricks in cement mortar (1:3) with plasticiser as described in :				
A	115mm thck brickwall reinforced with and including 57mm wide x 22 gauge approved steel fabric reinforcement as described at every fourth course well lapped Approved bitumen damp proof course complying with BS 743 and weighing not less than 3.79kg per metre square in one layer well lapped at joints and laid on and including 19mm of cement mortar (1:3) and coated on upper surfaces with bitumen (measured nett - no allowance made for laps)	M2	158		
B	On half brick thick Mild steel bonding ties as described 450mm girth on end cast into concrete and the other end built into brickwall including forming perforation in formwork	M	44		
C	6mm Diameter <u>Toilet Cubical System Partition</u>	NO	108		
D	Supply and install in position approved 12mm thick compact laminates 'MAICA' model VEMO or approved equivalent high pressure laminates 'HPL' Toilet Cubical Panel System complete with all necessary nylon accessories (Gravity hinge, thumbturn, door knob, adjustable foot & coat hook) and Aluminium door jamb, top-rail & u-channel and Stainless Steel L- bracket complete fixed to wall and density water resistant phenolic core board with melamine finish on both sides cubicle panel and fixing in position all to manufacturer's instructions complete with heavy duty hinges, lockset and all necessary accessories, connection and all as per to manufacturer's specification and Architect detail drawings: MN/005/23/MBIPLHB-02/08 and S.O approval. Supply and lay concrete kerb Grade 25 including all necessary accessories, formwork, matt homogenous tiles, screeding, reinforcement and to matching as per Architect's detail drawing no; MN/005/23/MBIPLHB-15.	M2	33		
E	125mm high x 100mm thick reinforced concrete kerb	M	7		
	TO COLLECTION				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>COLLECTION</u></p> <p>From Page 3A/4/1</p> <p>From Page 3A/4/2</p>				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>ELEMENT 5 - WINDOW</u>				
	Precast concrete (Grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3)				
	Lintol reinforced with and including 4 Nos 10mm diameter high tensile roads and 6mm diameter mild steel stirrups at 125mm centres				
	125mm x 225mm high	M	15		
	<u>Aluminium Works</u>				
	Supply and install complete in position the following natural anodised aluminium composite frame complete with and 6mm thick clear glass infilling panels and aluminium window frame 1.2mm thick complete with lock glazing beads and gaskets and accessories including approved weather strips, building in or cutting and pinning lugs, bracings, bedding frames in cement mortar (1:3) and pointing in silicone sealant to Architect's approval and all as per Architect's drawing no: MN/005/23/MBIPLHB-04.				
B	Casement window				
	Overall size 600mm x 2400mm high (Type W1)	NO	6		
	Fixed glass window				
C	Overall size 6700mm x 2400mm high comprising of comprising of 11 nos fixed glass panel each size 610mm x 2400mm high with 6mm thick tempered clear glass. (Type W3)	NO	1		
	Top hung window				
D	Overall size 1200mm x 600mm high comprising of comprising of 2 nos top hung panel each size 600mm x 600mm high frosted glass. (Type W2)	NO	5		

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>ELEMENT 6 - DOOR</u>				
	Precast concrete (Grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3) :				
	Lintol reinforced with and including 4 Nos 10mm diameter high tensile rods and 6mm diameter mild steel stirrups at 125mm centres				
	125mm x 225mm high	M	19		
	<u>Metal door frame</u>				
	Supply and fix in position 125mm x 25mm x 1.0mm thick preformed metal door frame zinc coated and prepainted from approved source complete in position with approved 37mm architraves, 6mm thick steel ties, rubber buffers, striker, plate, spreader bar and fix complete with approved mortar infill and groove line; with sound insulation all as per manufacturer's detail and specification and to S.O.'s approval and Architect's detail drawing no; MN/005/23/MBIPLHB-04.				
B	Single leaf door				
	Overall size 900mm x 2100mm high (Type D3)	NO	7		
C	Overall size 1000mm x 2100mm high (Type D2)	NO	4		
	Double leaf door				
D	Overall size 1800mm x 2100mm high (Type D1)	NO	1		
	<u>Solid Timber Door</u>				
	<u>Wrot pressure treated Grade A timber as described in :</u>				
	Supply and install complete in position timber solid door complete with selected high pressure laminate, intermediate rails, hardwood timber panel and lipped all round with hardwood edging strips and hanging on butts hinges all in accordance with manufacturer's specification and Architect's detail drawing no : MN/005/23/MBIPLHB-04. (ironmongery and painting measured separately)				
	Single leaf door				
E	Overall size 1000mm x 2100mm high (Type D2)	NO	4		
	Double leaf door				
F	Overall size 1800mm x 2100mm high (Type D1)	NO	1		
TO COLLECTION					

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>DOOR (Cont'd)</u> <u>Flush Door</u> <u>Wrot pressure treated Grade A timber as described in :</u> Supply and install complete in position flush door complete with selected high pressure laminate, intermediate rails, hardwood timber panel and lipped all round with hardwood edging strips and hanging on butts hinges all in accordance with manufacturer's specification and Architect's detail drawing : MN/005/23/MBIPLHB-04. (ironmongery and painting measured separately)	NO	7		
	Single leaf door				
	Overall size 900mm x 2100mm high (Type D3)				
	To supply and install approved 12mm thick compact laminates 'MAICA' model VEMO or approved equivalent high pressure laminates 'HPL' Toilet Cubical Panel System complete with all necessary nylon accessories (Gravity hinge, thumbturn, door knob, adjustable foot & coat hook) and Aluminium door jamb, top-rail & u-channel and Stainless Steel L- bracket with melamine resin impregnated decorative paper on both sides complete with pair of heavy duty aluminium door frames, stainless steel ironmongery including painting, lockset with indicators, hinges, with rubber bumpers and all the necessary fittings and fixings in accordance with manufacturer's specification and Architect's approval all as per Architect's detail drawing no: MN/005/23/MBIPLHB-12.				
	Single leaf door				
B	Overall size 800mm x 2050mm high. (Type D4)	NO	6		
C	<u>IRONMONGERY</u> Supply and fix the following ironmongery approved equivalent as specified or other equal and approved with and including requisite matching screws and Architect's detail drawing no: MN/005/23/MBIPLHB-04.	NO			
	<u>Lockset</u>				
	Approved stainless adjustable latch entrance function lever set steel lockset.				
	Approved stainless brandywine entrance tubular lock steel lockset.				
E	Approved steel indicator lock	NO	6		
TO COLLECTION					

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>DOOR (Cont'd)</u> <u>IRONMONGERY (Cont'd)</u> Supply and fix the following ironmongery approved equivalent as specified or other equal and approved with and including requisite matching screws and Architect's detail drawing no : MN/005/23/MBIPLHB-04.				
	<u>Butt hinges</u>				
A	Approved stainless steel hinges	NO	39		
	<u>Accessories</u>				
B	Approved surface mounted door closer	NO	1		
C	Approved hat and coat hook door mounted with white rubber buffer or equivalent	NO	6		
	Prepare and apply one coats of 'Nippon Woodshield Exterior' or other approved equivalent varnish paint finish with low VOC and all in accordance to manufacturer's instruction and S.O approval.				
D	Genarel surfaces of door	M2	51		
	Prepare, knot prime stop under coat by one coat of zinc chromate / red oxide primer or other equivalent and two coats of synthetic enamel paint finish				
E	Surfacing of frame but not exceeding 300mm girth	M	63		
	TO COLLECTION				
	<u>COLLECTION</u> From Page 3A/6/1 From Page 3A/6/2 From Page 3A/6/3				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
<u>ELEMENT 7 - FLOOR FINISHES</u>					
<u>EXTERNAL</u>					
25mm Thick cement and sand (1:3) as described paving trowelled smooth:					
A	General surfaces of floor	M2	14		
B	General surfaces of apron slab	M2	50		
<u>INTERNAL</u>					
25mm Thick cement and sand (1:3) including approved waterproofing compound as described screed to receive tiling (measured seperately)					
C	General surfaces of floor	M2	114		
Prepare and apply approved Sikatop seal-107 waterproofing system or other approved equivalent with a layer insulation foam and separation felt including all turn-ups 300mm high at junctions and complete with all necessary accessories laid in strict accordance to manufacturer's with ten (10) years guarantee (measured nett-no allowance for laps) all in accordance to manufacturer's specification and Architect detail drawings and S.O approval.					
D	General surfaces of floor	M2	36		
Supply and lay approved semiglazed homogenous tiles , laid to pattern and colour bedded, jointed and pointed on cement and sand (1:3) screed (measured separately) as per Architect's drawing no: MN/005/23/MBIPLHB-02/08.					
600mm x 600mm x 7mm thick (Type HT1)					
E	To floor	M2	87		
Drop with rounded edge					
F	25mm high	M	4		
G	50mm high	M	9		
H	100mm high	M	1		
Skirting with rounded top					
J	100mm high	M	46		
TO COLLECTION					

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>FLOOR FINISHES (Cont'd)</u>				
	<u>INTERNAL(Cont'd)</u>				
	Supply and lay approved semiglazed homogenous tiles , laid to pattern and colour bedded, jointed and pointed on cement and sand (1:3) screed (measured separately) as per Architect's drawing no: MN/005/23/MBIPLHB-02/08.				
	300mm x 300mm x 7mm thick (Type HT2)				
A	To floor	M2	9		
	Supply and lay approved unpolished ceramic tiles , laid to pattern and colour bedded, jointed and pointed on cement and sand (1:3) screed (measured separately) as per Architect's drawing no: MN/005/23/MBIPLHB-02/08.				
	300mm x 300mm x 7mm thick (Type CT)				
B	To floor	M2	18		
	Drop with rounded edge				
C	25mm high	M	2		
D	50mm high	M	2		
E	75mm high	M	4		
	Skirting with rounded top				
F	100mm high	M	23		
	Supply and lay approved unpolished non-slip ceramic tiles, laid to pattern and colour bedded, jointed and pointed on cement and sand (1:3) screed (measured separately) as per Architect's drawing no: MN/005/23/MBIPLHB-02/08.				
	150mm x 150mm x 7mm thick				
G	To floor	M2	35		
	Drop with rounded edge				
H	25mm high	M	2		
	Skirting with rounded top				
J	100mm high	M	11		
	TO COLLECTION				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>FLOOR FINISHES (Cont'd)</u> <u>INTERNAL (Cont'd)</u> Supply and lay approved carpet roll laid to approved pattern with an approved adhesive on existing cement and sand paving, machine turf & loop pile type carpet, comes with 8mm thick rubber/PU underlay and naplock alum. strip of approved manufacturer, design, pattern and all in accordance to manufacturer's specification and Architect detail drawings no: MN/005/23/MBIPLHB-02/08.				
A	General surfaces of floor	M2	17		
	TO COLLECTION				
	<u>COLLECTION</u> From Page 3A/7/1 From Page 3A/7/2 From Page 3A/7/3				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 8 - WALL FINISHES</u>				
	<u>INTERNAL</u>				
	19mm Thick cement and sand (1:6) as described plastering finished with a steel float and pvc corner edge:				
A	General surfaces of wall and column	M2	482		
	20mm thick cement and sand (1:6) as described backing screed to received tiling (measured separately)				
B	General surfaces of wall and column	M2	97		
	Supply and lay glazed ceramic tiles including of pvc strip bedded on screed (measured separately) and pointed in neat tinted cement to:				
	300mm x 300mm x 6mm thick				
C	General surfaces of wall and column	M2	97		
	Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of emulsion paint as described to manufacturer's instruction and S.O approval.				
D	General surfaces of wall and column	M2	482		
	<u>EXTERNAL</u>				
	19mm thick cement and sand (1:6) as described plastering finished with a steel trowelled and pvc corner edge :				
E	General surfaces of wall and column	M2	167		
	Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of weathershield bond as described to manufacturer's instruction and S.O approval.				
F	General surfaces of wall and column	M2	167		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 9 - CEILING FINISHES</u></p> <p><u>INTERNAL</u></p> <p><u>Mineral Fibre Board Ceiling</u></p> <p>Approved mineral fibre board as described set out symmetrically in 1200mm x 600mm sheet fixed to and including suspended concealed tee system with main runners tees and angle mouldings; and forming openings for light fittings, access panel, air conditioning grille outlets, trimming around column, etc; the whole suspended with galvanised wire hangers at 0.60m centres (painting measured separately): all as per Architect's drawings no MN/005/23/MBIPLHB-09.</p>				
A	<p>Mineral fibre plaster ceiling board ; exceeding 3.50m high but not exceeding 5.00m high</p> <p>Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of emulsion paint as described to manufacturer's instruction and S.O approval.</p>	M2	141		
B	<p>General surfaces of mineral plaster ceiling board</p> <p><u>EXTERNAL</u></p> <p><u>Fibrous Plaster Ceiling</u></p> <p>Supply and install in position approved 'Boral Unispan' or other approved equivalent 1220mm x 2440mm x 9.5mm thick fibrous plasterboards ceiling linings with moisture resistant set out symmetrically from centre of room fixed with self-drilling screws to and ceiling batten including aluminium support system rawlbolted to concrete soffit and bolted to roof members complete with grid Metal-Tee suspended system fixed onto secondary channels at 600mm centres, connection clip, primary channels at 600mm centres, and using wafer head drywall screws to ceiling hangers at 1000mm centres, trimming and extra framing around light fittings, diffusers and the like; but joint; jointing and finishing with gypsum plaster skim to give a flush seamless surface ready, etc. and all in accordance to manufacturer's specification instructions and Architect detail drawings no: MN/005/23/MBIPLHB/09. (painting measured separately)</p>	M2	141		
C	<p>Fixed moisture resistant fibrous plaster ceiling board; exceeding 3.50m high but not exceeding 5.00m high.</p>	M2	92		
	TO COLLECTION				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>CEILING FINISHES (Cont'd)</u> Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of weathershield bond as described to manufacturer's instruction and S.O approval.	M2	92		
	General surfaces of fibrous plaster ceiling board				
	TO COLLECTION				
	<u>COLLECTION</u> From Page 3A/9/1 From Page 3A/9/2				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 10 - PLUMBING & SANITARY</u></p> <p><u>SANITARY FITTINGS</u></p> <p>Supply and install the following sanitary fittings and accessories including storing, assembling, bedding, plugging and screwing with matching screws, cutting and pinning or building in brackets, jointing and connection to services and to soil and waste pipe making good all work disturbed all as per Architect's drawings no MN/005/23/MBIPLHB-15.</p> <p><u>Water Closet</u></p> <p>A Approved water closet single flush 6 litres low levels vitreous china concealed cisterns / flush valve system and P-trap, seat and cover.</p> <p><u>Squatting Pan</u></p> <p>B Approved squatting pan with integral tread plates including high level cistern, internal fitting (high levels 6L), loose P trap and PVC inlet connector.</p> <p>C Approved 150mm x 150mm stainless steel floor trap with insect trap</p> <p><u>Basin</u></p> <p>D Approved wall hung basin in white colour complete with PVC bottle trap, waste , plug and chain.</p> <p>E Approved table top basin in white colour complete with PVC bottle trap, waste, plug and chain.</p> <p>F Approved Chromed finishes handicapped fixed Straight Grab Rail.</p> <p>G Approved Chromed finishes handicapped Folding Grab Rail.</p> <p><u>Shower Arm</u></p> <p>H Approved ABS chromed 7" shower arm c/w flange and single function shower rose 3mm with accessories.</p> <p>J Approved hand bidet metallic silver or equivalent</p> <p>K Approved water tap chrome finish</p>				
	TO COLLECTION				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>PLUMBING & SANITARY INSTALLATION (Cont'd)</u> <u>SANITARY FITTINGS (Cont'd)</u> Supply and install the following sanitary fittings and accessories including storing, assembling, bedding, plugging and screwing with matching screws, cutting and pinning or building in brackets, jointing and connection to services and to soil and waste pipe making good all work disturbed all as per Architect's drawings no MN/005/23/MBIPLHB-15.				
A	Approved wall mounted ablution tap with swivel spout & flange	NO	3		
B	Approved brass pillar mounted sink tap with ear spout.	NO	1		
C	Approved stainless steel kitchen sink double bowl c/w big waste (900mm x 500mm x 230mm) c/w 40mm PVC bottle trap, stainless steel top waste and plug.	NO	1		
	Approved 6mm thick mirror with 5mm thick plywood backing with 12mm wide aluminium framed all round and plugged and stainless steel screwed to wall with chromium plated loose domed headed screwed				
D	Overall size 1100mm x 600mm high	NO	5		
	<u>TESTING OF THE INSTALLATION</u>				
E	On completion of the Plumbing and Sanitary Installation test all apparatus, piping and fittings, make good.	ITEM			
	TO COLLECTION				
	<u>COLLECTION</u> From Page 3B/10/1 From Page 3B/10/2				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3A - BANGUNAN PENGURUSAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 11 - SUNDRIES</u>				
	<u>Counter Top</u>				
A	Construct and complete overall size 4900mm x 600mm x 900mm high reinforced concrete L-shape counter top slab complete with polished concrete finishes including all necessary, reinforcement, formwork, bedded, jointed and jointed with matching coloured cement mortar with, (1:3) cement and sand screed and including all other item to ensure complete construction of counter top and all to the entire satisfaction of the S.O approval and all as per Architect detail drawings no; MN/005/23/MBIPLHB-17.	NO	1		
B	Approved 2000mm x 830mm x 310mm height of stainless steel wall mounted cloth hanger all as per Architect detail drawings no; MN/005/23/MBIPLHB-03/08.	NO	1		
	<u>Rainwater Harvesting System (SPAH)</u>				
C	Rain water Harvesting System c/w 350 gallons HDPE water tank including rain water filler collector, concrete plinth, filter collector, first flush diverter, wisy smoothing inlet, multisiphon overflow unit, tank top, up valve, 100mm diameter rainwater pipe system, piping system, connection, support, bracket, signage (non-potable water), garden tap, water quality testing, anti-vermin netting, and all acessories to manufacturer's specification.	NO	1		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3A - BANGUNAN PENGURUSAN			
SUMMARY			
ITEM	ELEMENT	FROM PAGE	AMOUNT (RM)
1	SUBSTRUCTURE	3A/1/5	-
2	FRAME	3A/2/1	-
3	ROOF	3A/3/4	-
4	WALL	3A/4/3	-
5	WINDOW	3A/5/1	-
6	DOOR	3A/6/3	-
7	FLOOR FINISHES	3A/7/3	-
8	WALL FINISHES	3A/8/1	-
9	CEILING FINISHES	3B/9/2	-
10	PLUMBING AND SANITARY INSTALLATION	3A/10/2	-
11	SUNDRIES	3A/11/1	-
TOTAL CARRIED TO SUMMARY OF TENDER			-

BILL NO. 3B - STOR PERTUKANGAN

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 1 - SUBSTRUCTURE</u> <u>EXCAVATION WORK</u> Excavating to reduce level; commencing from formation level; cart away, deposit, spread and level where directed within the site not exceeding 1.00m deep.				
A	Ground slab	M3	118		
B	Apron slab	M3	4		
	Excavate trenches starting from reduced level; including backfill with approved excavated material, compaction in layers and disposal of surplus excavated material where directed within the site not exceeding 1.00m deep.				
C	Ground beam	M3	20		
	Excavate pit starting from reduced level; including backfill with approved excavated material, compaction in layers and disposal of surplus excavated material where directed within the site not exceeding 2.00mm deep.				
D	Pile Cap	M3	19		
	Bed of hardcore consisting of hard dry broken bricks or stones, spread or leveled, well consolidated, watered and well blinded with sand as described.				
E	150mm Thick ; under ground slab	M2	336		
F	150mm Thick ; under apron slab	M2	25		
	<u>PLAIN INSITU CONCRETE WORK</u>				
	<u>50mm Thick Concrete (Grade 15) as described blinding:</u>				
G	Under pile cap	M3	13		
H	Under ground beam	M3	2		
J	Under ground slab	M3	17		
K	Under apron slab	M3	1		
	Reinforced concrete (Grade 30) as described (formwork and reinforcement measured separately) in :				
L	Pile cap	M3	5		
M	Column Stump (Provisional)	M3	4		
	TO COLLECTION				

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SUBSTRUCTURE ... (Cont'd)</u>				
	Reinforced concrete (Grade 30) as described (formwork and reinforcement measured separately) in :				
A	Ground beam	M3	19		
B	Ground slab	M3	50		
	Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :				
C	Apron slab	M3	4		
	<u>Class F1 formwork as described to:</u>				
D	Sides of pile cap	M2	30		
E	Sides of column stump (Provisional)	M2	40		
F	Sides of ground beam	M2	160		
G	Edges of ground slab ; not exceeding 250mm thick	M2	200		
H	Edges of apron slab ; not exceeding 250mm thick	M	100		
	<u>Mild steel (250 N/mm2) rod reinforcement as described :</u>				
	In column stump (Provisional)				
J	10mm Diameter rod as links, stirrups or binders	KG	225		
	In ground beam				
K	6mm Diameter rod as links, stirrups or binders	KG	252		
L	10mm Diameter rod as links, stirrups or binders	KG	617		
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u>				
	In pile cap				
M	6mm Diameter rod	KG	35		
N	12mm Diameter rod	KG	211		
P	16mm Diameter rod	KG	160		
Q	20mm Diameter rod	KG	131		
	In column stump (Provisional)				
R	16mm Diameter rod	KG	104		
S	20mm Diameter rod	KG	426		
	TO COLLECTION				

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SUBSTRUCTURE ... (Cont'd)</u>				
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u>				
	In ground beam				
A	12mm Diameter rod	KG	634		
B	16mm Diameter rod	KG	448		
C	20mm Diameter rod	KG	1410		
	<u>BRC steel fabric reinforcement; lapping at joints (measured nett-no allowance made for laps)</u>				
	In ground slab				
D	Reference A252/A8 ; 3.95kg/m2	M2	224		
E	Reference A393/A10 ; 6.17kg/m2	M2	112		
F	Reference B385/B7 ; 4.53kg/m2	M2	324		
G	Reference B503/B8 ; 5.92kg/m2	M2	89		
	In apron slab				
H	Reference A7 ; 3.02 kg/m2	M2	75		
	<u>0.25mmThick approved polythene sheet moisture barrier (heavy duty) as described damp proof membrane laid on ground slab and beam and well lapped at joint (measured nett-no allowance made for laps)</u>				
J	Ground slab	M2	336		
K	Apron slab	M2	25		
	<u>ANTI-TERMITE TREATMENT (ALL PROVISIONAL)</u>				
	The termite treatment application shall be carried by termite control company approved by S.O.				
	Method of treatment shall be submitted to the S.O. for approval. All relevant documents, certificates of approval, guarantee letters, brochures and technical catalogues shall be submitted to the S.O.before commencement of works				
	The Contractor shall be held responsible on all work done by the termite control company				
L	The Contractor and specialist firm shall guarantee the effectiveness of anti-termite treatment for a period of five (5) years andundertake to carry re-treatment without charge should infestation of sub-terranean termites occur at any time during the warranty period	ITEM			
	TO COLLECTION				

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SUBSTRUCTURE ... (Cont'd)</u> <u>ANTI-TERMITE TREATMENT ... (Cont'd)</u> Carry out anti-termite treatment in accordance with the specifications as described to :				
A	Under ground slab	M2	336		
B	Under apron slab	M2	25		
	<u>Perimeter Drain</u> Precast concrete (grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3) :				
C	230mm diameter half round channel cast in 610mm length laid to fall; grouted and pointed in cement and sand (1:3) including all necessary excavation, formwork, 225mm thick concrete base (grade 25), 75mm thick mass concrete bedding, 100mm wide kerb, one brickwall complete with plastering to all exposed surfaces and forming bend, stopped end, junctions, weepholes, cascades, etc	M	33		
	TO COLLECTION				
	<u>COLLECTION:</u> From Page 3B/1/1 From Page 3B/1/2 From Page 3B/1/3 From Page 3B/1/4				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 2 - FRAME</u></p> <p><u>REINFORCED INSITU CONCRETE WORK</u></p> <p>Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :</p>				
A	Column	M3	22		
B	450mm x 600mm reinforced concrete corbel	M3	1		
	<u>Class F1 formwork as described to:</u>				
C	Sides of column	M2	180		
D	Sides of reinforced concrete corbel	M2	10		
	<u>Mild steel (250 N/mm2) rod reinforcement as described :</u>				
	In column				
E	10mm Diameter rod as links, stirrups or binders	KG	1666		
	In reinforced concrete corbel				
F	10mm Diameter rod as links, stirrups or binders	KG	63		
G	12mm Diameter rod as ties	KG	45		
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u>				
	In column				
H	16mm Diameter rod	KG	69		
J	20mm Diameter rod	KG	1875		
	In reinforced concrete corbel				
K	20mm Diameter rod	KG	473		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
<u>ELEMENT 3 - ROOF</u>					
<u>REINFORCED INSITU CONCRETE WORK</u>					
Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :					
A	Roof Beam	M3	21		
<u>Class F1 formwork as described to:</u>					
Sides and soffit and the like ; horizontal including strutting not exceeding 3.00m high					
B	Roof beam	M2	187		
<u>Mild steel (250 N/mm2) rod reinforcement as described :</u>					
In roof beam					
C	6mm Diameter rod as links, stirrups or binders	KG	460		
<u>High tensile (460 N/mm2) rod reinforcement as described :</u>					
In roof beam					
D	12mm Diameter rod	KG	300		
E	16mm Diameter rod	KG	574		
F	20mm Diameter rod	KG	262		
<u>MILD STEEL ROOF STRUCTURE</u>					
Supply and install in position approved rectangular hollow sections (RHS) steel frame, square hollow sections (SHS) and steel plate BS 4360 Grade 43A, all fabricated, fillet welded together, hoisting and fixing including all necessary accessories, bolt and nuts, anchor bolt, mild steel plate, anti rust painting, 20mm thick non shrink cement grout, labour, materials and in shop and site connection with all shop drawings and S.O approval and as per Engineer's detail drawing no; PMRM/2023/MNA/11/PH-05					
Roof Truss No. 1					
G	100mm x 50mm x 4mm thick x 8.86 kg/m	KG	1,310		
H	50mm x 50mm x 3.0mm thick x 4.39 kg/m	KG	420		
Roof Truss No. 2					
J	50mm x 50mm x 3.0mm thick x 4.39 kg/m	KG	1,549		
TO COLLECTION					

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF ... (Cont'd)</u> <u>MILD STEEL ROOF STRUCTURE ... (Cont'd)</u> Supply and install in position approved rectangular hollow sections (RHS) steel frame, square hollow sections (SHS) and steel plate BS 4360 Grade 43A, all fabricated, fillet welded together, hoisting and fixing including all necessary accessories, bolt and nuts, anchor bolt, mild steel plate, anti rust painting, 20mm thick non shrink cement grout, labour, materials and in shop and site connection with all shop drawings and S.O approval and as per Engineer's detail drawing no; PMRM/2023/MNA/11/PH-05				
A	SHS Welded 100mm x 100mm 4.00mm thick x 12.00kg/m	KG	600		
B	RHS Welded 200mm x 100mm 4.00mm thick x 18.00kg/m	KG	450		
C	Purlin 100mm x 50mm x 1.6mm thick x 2.88 kg/m	KG	1,175		
D	40mm x 80mm x 3.0mm thick x 5.34 kg/m	KG	684		
E	I Beam 200mm x 150mm x 29.9 kg/m	KG	496		
F	200mm x 200mm x 41.4 kg/m	KG	205		
G	CHS Strut Welded 50mm diameter x 5.0mm thick x 6.82 kg/m	KG	82		
H	Mild Steel Plate 10mm thick	KG	200		
J	8mm thick	KG	100		
K	Prepare and apply 2 coat zinc chromate primer, 2 coat micaceous oxide and finishing coat gloss finish as described as per S.O approval. General surfaces of steel roof structure	KG	7,271		
	TO COLLECTION				

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF.....Cont'd</u> <u>Metal Decking Roof</u> Supply and install in position approved Zinalume roofing system metal roofing sheet 0.42mm thick base metal thickness complete with roof cladding in AZ100 clean colorbond XRW and steel grade G550 including pierced fastened (AS3566 Class 3), one layer of double sided aluminium foil insulation, 50mm thick x 50kg/m3 rockwool insulation with self drilling screws with hex, washer head and epdm seal as described laid and fixed interlocking to steel purlins with and accessories all in accordance with the manufacturer's instructions (measured nett-no allowance made for laps) and all as per Architect's drawing no MN/005/23/MBIPLHB-04/08.				
A	Roof coverings at 5° pitch ; 0.47mm thick	M2	480		
B	Extra for transparent roof ; sloping pitch at 5 degrees Approved 20 gauge galvanised iron flashing and fixing as described (measured nett- no allowance made for laps) Flashing; once bent with one end fixed into party wall and the other end dressed over roof tile	M2	90		
C	1850mm (average) girth; working to curve profile. <u>Aluminium Composite Panel</u> Supply and install in position approved 6mm thick Aluminium composite panel complete with end cap, pipe penetration with self drilling screws with hex, washer head and epdm seal as described laid on and fixed interlocking to steel purlins with and accessories all in accordance with the manufacturer's instructions (measured nett-no allowance made for laps) and all as per Architect's detail drawings no: MN/005/23/MBIPLHB-04/08.	M	48.00		
D	Roof coverings; sloping pitch at 1 degrees <u>Fascia Board</u>	M2	185		
E	Supply and fix in position 230mm x 25mm thick Zinalume fascia board - roof eave cap including finishing works to architect's approval and manufacturer's detail. Preparing; priming; applying one undercoat; two finishing coat of synthetic enamel paint on woodwork	M	89		
F	General surfaces of fascia board exceeding 300mm but not exceeding 400mm girth	M	89		
	TO COLLECTION				

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF.....Cont'd</u> <u>Galvanised iron (G.I) gutter</u> Supply and install approved galvanised iron gutter complete with external bracket, joiner, and stopper, spouthead rubber ring, holding down strap, bend and accessories complying all to manufacturer's specification and instruction and all as per Architect's detail drawings no: MN/005/23/MBIPLHB-30				
A	350mm wide x 400mm high gutter complete with mild steel support and fixing to fascia board and mild steel bracket. <u>ROOF PLUMBING</u> Approved UPVC rainwater downpipe complete with holding down strap complying all to manufacturer's specifications and instruction: 150mm Diameter	M	36		
B	Pipe fixed to wall including bracket	M	42		
C	Pipe embedded under apron including concrete base and excavation	M	21		
D	Extra for swan neck 1.50m long	NO	4		
E	Extra for swan neck 0.90m long	NO	2		
F	Extra for bend	NO	18		
G	Dome grating or debris trap	NO	6		
	TO COLLECTION				
	<u>COLLECTION</u> From Page 3B/3/1 From Page 3B/3/2 From Page 3B/3/3 From Page 3B/3/4				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>ELEMENT 4 - WALL</u>				
	<u>EXTERNAL</u>				
	Common clay bricks in cement mortar (1:3) with plasticiser as described in :				
	114mm half brickwall reinforced with and including 57mm wide x 22 gauge approved steel fabric reinforcement as described at every fourth course well lapped	M2	40		
B	Approved bitumen damp proof course complying with BS 743 and weighing not less than 3.79kg per metre square in one layer well lapped at joints and laid on and including 19mm of cement mortar (1:3) and coated on upper surfaces with bitumen (measured nett - no allowance made for laps)				
	On half brick thick	M	35		
C	Mild steel bonding ties as described 450mm girth on end cast into concrete and the other end built into brickwall including forming perforation in formwork				
	6mm Diameter	NO	25		
TOTAL CARRIED TO SUMMARY					

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<p><u>ELEMENT 5 - DOOR</u></p> <p>Precast concrete (Grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3) :</p> <p>Lintol reinforced with and including 4 Nos 10mm diameter high tensile rods and 6mm diameter mild steel stirrups at 125mm centres</p> <p>125mm x 225mm high</p>	M	6		
	<p><u>BRC Fencing Door</u></p> <p>Supply and install complete in position the following BRC fencing double leaf door panel all as per Architect's drawing no MN/005/23/MBIPLHB-06.</p>				
	<p>Overall size 2800mm x 3000mm high (Type D1)</p> <p><u>Roller Shutter.</u></p> <p>Supply and install complete in position SKB (LB-10) aluminium roller shutter complete with guide rail, roller shutter blades and motorised box gear including all necessary frame, casing, bearing collar, bracket, NPD motor operator, shaft roller, ironmongery, fittings and accessories fixings to wall all in accordance with manufacturer's specification and S.O approval and all as per Architect's drawings no MN/005/23/MBIPLHB-06.</p>				
B	Overall size 7000mm x 6000mm high (Type RS1)	NO	3		
TOTAL CARRIED TO SUMMARY					

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
<u>ELEMENT 6 - FLOOR FINISHES</u>					
<u>EXTERNAL</u>					
25mm Thick cement and sand (1:3) as described paving trowelled smooth:					
A	General surfaces of apron slab	M2	40		
Prepare and apply approved Sikatop seal-107 waterproofing system or other approved equivalent with a layer insulation foam and separation felt including all turn-ups 300mm high at junctions and complete with all necessary accessories laid in strict accordance to manufacturer's with ten (10) years guarantee (measured nett-no allowance for laps) all in accordance to manufacturer's specification and Architect detail drawings and S.O approval.					
B	General surfaces of apron slab	M2	40		
<u>INTERNAL</u>					
<u>Polyurethane Flooring (Floor Hardener)</u>					
Prepare and apply floor hardener machine power float finish with non-ferrous monolithic surface floor hardener all in accordance with the manufacturer's instructions and all as per Architect's detail drawings no: MN/005/23/MBIPLHB-06/08.					
C	To floor	M2	336		
Drop with rounded edge					
D	100mm high	M	45		
<u>Steel Chequered Plate</u>					
E		M2	4		
Supply and install 200mm x 7000mm x 5mm thick steel chequered plate sloping at 34 degrees including cleaning and raised surface to provide anti-slip, anti-corrosion and rust and accessories all in accordance with the manufacturer's instructions and all as per Architect's detail drawings no: MN/005/23/MBIPLHB-04/08.					
F		M2	14		
Supply and install 400mm x 5000mm x 5mm thick steel chequered plate sloping at 16 degrees including cleaning and raised surface to provide anti-slip, anti-corrosion and rust and accessories all in accordance with the manufacturer's instructions and all as per Architect's detail drawings no: MN/005/23/MBIPLHB-04/08.					
TOTAL CARRIED TO SUMMARY					

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
<u>ELEMENT 7 - WALL FINISHES</u>					
<u>EXTERNAL</u>					
19mm Thick cement and sand (1:6) as described plastering finished with a steel float and pvc corner edge:					
A	General surfaces of wall and column	M2	40		
Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of weathershield bond as described to manufacturer's instruction and S.O approval.					
B	General surfaces of wall and column	M2	40		
<u>Metal Wall Cladding</u>					
C	Supply and install in position approved metal wall cladding complete with metal wall sheet 0.42mm thick base metal thickness (0.47mm TCT) in AZ100 (I-Deck762) clean colorbond XRW, 200mm x 100mm rectangular hollow section frame and 100mm diameter circular gollow section bracing welded together including all necessary accessories, mild steel plate, bold and nuts, gusset plate and anti rust painting all in accordance with the manufacturer's instructions (measured nett-no allowance made for laps) and all as per Architect's detail drawing no ; MN/005/23/MBIPLHB-21-23A.	M2	350		
<u>Aluminium Louvers</u>					
D	Supply and install in position 40mm thick bronze anodised aluminium louvers window comprising of 40mm x 25mm x 25mm x 2.5mm rectangular hollow section 'C' channel vertical support, 25mm x 23mm x 2.5mm rectangular hollow section horizontal tie, 75mm x 75mm x 2.0mm thick mild steel plate screwed to wall and vertical blade support clamp with 60mm x 15mm louver blade including all necessary accessories, anti vermin nylon netting, fixing, jointing welded together and all in accordance to manufacturer's specification and Architect detail drawings no ; MN/005/23/MBIPLHB-21-23A.	M2	60		
TO COLLECTION					

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>WALL FINISHES ... (Cont'd)</u>				
	<u>Poly Corrugated Transparent Sheet</u>				
A	Supply and install selected poly corrugated transparent sheet (slanting at 9 degrees) complete with 200mm x 100mm rectangular hollow section frame and 100mm diameter circular gollow section bracing welded together including all necessary accessories, mild steel plate, bold and nuts, gusset plate and anti rust painting as per manufacturer's detail and specification and to S.O.'s approval and architect detail's drawing ; MN/005/23/MBIPLHB-21-23A.	M2	35		
	<u>Fibre Cement Plank</u>				
B	Supply and install in position approved 100mm thick fibre cement plank partition as described or other approved equivalent comprising of 123.8mm x 36mm x 1.5mm thick rigidised galvanised steel gypframe C-stud and 125mm x 30mm x 1.5mm thick steel track with screw fasten (U-Shaped profile) complete with in filed insulation material of single layer gyproc baseline laid staggered to opposite layer, 12mm thick fibre cement plank partition and scew and fixed to bothsides of framing system including all necessary all jointing are secured with gyproc paper tape and finished with protop joint compound for seamless surface and the like all in accordance to manufacturer's specification and Architect detail drawings and S.O approval. (painting measured separately)	M2	75		
	TO COLLECTION				
	<u>COLLECTION</u>				
	From Page 3B/7/1				
	From Page 3B/7/2				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3B - STOR PERTUKANGAN					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 8 - SUNDRIES</u>				
	<u>Reinforced Concrete Scupper Drain</u>				
A	Supply and construct in position 250mm wide x 100mm depth reinforced concrete (Grade 25) scupper drain including all necessary accessories, formwork, reinforcement, finishes, plaster and painting all as per Architects detail drawings no; MN/005/23/MBIPLHB-04/08.	M	30		
	<u>Heavy Duty Steel Grating</u>				
B	Galvanised heavy duty steel gratings constructed of 25mm x 8mm thick flat at 50mm centres , 50mm x 5.0mm thick heavy plate at 35mm centres and including 50mm x 50mm x 5 thick angle frame complete with heavy duty steel angle fixed with fish tail to drain wall including all necessary welding and painting all as per Architect detail drawing. ; MN/005/23/MBIPLHB-04/08.	M	30		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3B - STOR PERTUKANGAN			
SUMMARY			
ITEM	ELEMENT	FROM PAGE	AMOUNT (RM)
1	SUBSTRUCTURE	3B/1/4	-
2	FRAME	3B/2/1	-
3	ROOF	3B/3/4	-
4	WALL	3B/4/1	-
5	DOOR	3B/5/1	-
6	FLOOR FINISHES	3B/6/1	-
7	WALL FINISHES	3B/7/2	-
8	SUNDRIES	3B/8/1	-
TOTAL CARRIED TO SUMMARY OF TENDER			-

BILL NO. 3C - STOR SIMPANAN (A)

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 1 - SUBSTRUCTURE</u></p> <p><u>EXCAVATION WORK</u></p> <p>Excavate to reduce levels commencing from formation level, trim, level, grade and compact bottom of excavation and get out and remove excavated material to contractor's own dump not exceeding 1.00m deep.</p>				
A	Ground slab	M3	72		
B	Apron slab	M3	3		
	Excavate trenches starting from reduced level; including backfill with approved excavated material, compaction in layers and disposal of surplus excavated material where directed within the site not exceeding 1.00m deep				
C	Ground beam	M3	13		
	Excavate pit starting from reduced level; including backfill with approved excavated material, compaction in layers and disposal of surplus excavated material where directed within the site not exceeding 2.00m deep.				
D	Pad footing	M3	118		
	Bed of hardcore consisting of hard dry broken bricks or stones, spread or leveled, well consolidated, watered and well blinded with sand				
E	Under Ground slab ; 150mm thick	M2	204		
F	Under Apron slab ; 150mm thick	M2	12		
	<p><u>CONCRETE WORK</u></p> <p><u>50mm Thick concrete (Grade 15) as described blinding:</u></p>				
G	Under pad footing	M3	4		
H	Under ground beam	M3	1		
J	Under ground slab	M3	10		
K	Under apron slab	M3	1		
	TO COLLECTION				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SUBSTRUCTURE (Cont'd)</u>				
	<u>CONCRETE WORK (Cont'd)</u>				
	Reinforced concrete (Grade 30) as described (formwork and reinforcement measured separately) in :				
A	Pad footing	M3	26		
B	Column Stump (Provisional)	M3	1		
C	Ground beam	M3	12		
D	Ground slab	M3	31		
	Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :				
E	Apron slab	M3	3		
	<u>Class F1 formwork as described to:</u>				
F	Sides of pad footing	M2	49		
G	Sides of column stump (Provisional)	M2	22		
H	Sides of ground beam	M2	166		
J	Edges of ground slab ; not exceeding 250mm thick	M2	150		
K	Edges of apron slab ; not exceeding 250mm thick	M	70		
	<u>Mild steel (250 N/mm2) rod reinforcement as described:</u>				
	In column stump (Provisional)				
L	6mm Diameter rod as links, stirrups or binders	KG	20		
M	10mm Diameter rod as links, stirrups or binders	KG	50		
	In ground beam				
N	6mm Diameter rod as links, stirrups or binders	KG	197		
P	10mm Diameter rod as links, stirrups or binders	KG	305		
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u>				
	In pad footing				
Q	6mm Diameter rod as links, stirrups or binders	KG	72		
R	12mm Diameter rod	KG	1,427		
	TO COLLECTION				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SUBSTRUCTURE (Cont'd)</u>				
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u>				
	In column stump (Provisional)				
A	12mm Diameter rod	KG	42		
B	16mm Diameter rod	KG	135		
	In ground beam				
C	12mm Diameter rod	KG	321		
D	16mm Diameter rod	KG	310		
E	20mm Diameter rod	KG	424		
	<u>BRC steel fabric reinforcement; lapping at joints (measured nett-no allowance made for laps)</u>				
	In ground slab				
F	Reference A252/A8 ; 3.95kg/m2	M2	119		
G	Reference A393/A10 ; 6.17kg/m2	M2	85		
H	Reference B385/B7 ; 4.53kg/m2	M2	210		
J	Reference B503/B8 ; 5.92kg/m2	M2	54		
	In apron slab				
K	Reference A193/A7 ; 3.02kg/m2	M2	48		
	<u>0.25mm thick approved polythene sheet (heavy duty) as described damp proof membrane laid on ground slab and beam and well lapped at joint (measured nett-no allowance made for laps) as described</u>				
L	Under ground beam	M2	21		
M	Under ground slab	M2	204		
N	Under apron slab	M2	21		
	TO COLLECTION				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>SUBSTRUCTURE (Cont'd)</u></p> <p><u>ANTI-TERMITE TREATMENT</u></p> <p>The termite treatment application shall be carried by termite control company approved by S.O.</p> <p>Method of treatment shall be submitted to the S.O. for approval. All relevant documents, certificates of approval, guarantee letters, brochures and technical catalogues shall be submitted to the S.O.before commencement of works</p> <p>The Contractor shall be held responsible on all work done by the termite control company</p>				
A	<p>The Contractor and specialist firm shall guarantee the effectiveness of anti-termite treatment for a period of five (5) years and undertake to carry re-treatment without charge should infestation of sub-terranean termites occur at any time during the warranty period</p> <p>Carry out anti-termite treatment in accordance with the specifications as described to :</p>	ITEM			
B	Under ground beam	M2	21		
C	Under ground slab	M2	204		
D	Under apron	M2	21		
	<p><u>Perimeter Drain</u></p> <p>Precast concrete (grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3) :</p>				
E	<p>230mm diameter half round channel cast in 610mm length laid to fall; grouted and pointed in cement and sand (1:3) including all necessary excavation, formwork, 225mm thick concrete base (grade 25), 75mm thick mass concrete bedding, 100mm wide kerb, one brickwall complete with plastering to all exposed surfaces and forming bend, stopped end, junctions, weepholes, cascades, etc</p> <p><u>Concrete Cover</u></p> <p>Supply and install in position 300mm x 50mm thick concrete (Grade 25) with one layer BRC A7 and loose aid 25mm diameter hole at 100mm centre to centre as per architect drawings.</p>	M	15		
F	Concrete cover slab	M	5		
	TO COLLECTION				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>COLLECTION:</u></p> <p>From Page 3C/1/1</p> <p>From Page 3C/1/2</p> <p>From Page 3C/1/3</p> <p>From Page 3C/1/4</p>				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 2 - FRAME</u></p> <p><u>REINFORCED INSITU CONCRETE WORK</u></p> <p>Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :</p>				
A	Column	M3	3		
B	Stiffener (Provisional)	M3	1		
	<u>Class F1 formwork as described to:</u>				
C	Sides of column	M2	39		
D	Sides of stiffener (Provisional)	M2	16		
	<u>Mild steel (250 N/mm2) rod reinforcement as described :</u>				
	In column				
E	10mm Diameter rod as links, stirrups or binders	KG	208		
	In stiffener (Provisional)				
F	6mm Diameter rod as links, stirrups or binders	KG	32		
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u>				
	In column				
G	16mm Diameter rod	KG	234		
	In stiffener (Provisional)				
H	12mm Diameter rod	KG	64		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
<u>ELEMENT 3 - ROOF</u>					
<u>REINFORCED INSITU CONCRETE WORK</u>					
Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :					
A	Roof beam	M3	12		
<u>Class F1 formwork as described to:</u>					
Sides and soffit and the like ; horizontal including strutting not exceeding 3.00m high					
B	Roof beam	M2	160		
<u>Mild steel (250 N/mm2) rod reinforcement as described :</u>					
In roof beam					
C	6mm Diameter rod as links, stirrups or binders	KG	251		
D	10mm Diameter rod as links, stirrups or binders	KG	45		
<u>High tensile (460 N/mm2) rod reinforcement as described :</u>					
In roof beam					
E	12mm Diameter rod	KG	230		
F	16mm Diameter rod	KG	280		
G	20mm Diameter rod	KG	534		
<u>MILD STEEL ROOF STRUCTURE</u>					
Supply and install in position approved universal beam, square hollow sections (SHS) steel frame, rectangular hollow sections (RHS) steel frame and steel plate BS 4360 Grade 43A, all fabricated, fillet welded together, hoisting and fixing including all necessary accessories, bolt and nuts, anchor bolt, mild steel plate, anti rust painting, 20mm thick non shrink cement grout, labour, materials and in shop and site connection with all shop drawings and S.O approval and as per Engineer's detail drawing no: PMRM/2023/MNA/11/ST-04.					
H	100mm x 50mm x 4.0mm thk x 8.86 kg/m, Truss 1	KG	966		
J	100mm x 50mm x 4.0mm thk x 8.86 kg/m, Truss 2	KG	82		
K	100mm x 100mm x 4.0mm thk x 12.00 kg/m, SHS Short Column Welded	KG	274		
TO COLLECTION					

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF ... (Cont'd)</u> <u>MILD STEEL ROOF STRUCTURE ... (Cont'd)</u> Supply and install in position approved universal beam, square hollow sections (SHS) steel frame, rectangular hollow sections (RHS) steel frame and steel plate BS 4360 Grade 43A, all fabricated, fillet welded together, hoisting and fixing including all necessary accessories, bolt and nuts, anchor bolt, mild steel plate, anti rust painting, 20mm thick non shrink cement grout, labour, materials and in shop and site connection with all shop drawings and S.O approval and as per Engineer's detail drawing no: PMRM/2023/MNA/11/ST-04.				
A	200mm x 150mm x 4.0mm thk x 29.9 kg/m, I Beam	KG	437		
B	150mm x 100mm x 3.0mm thk x 11.58 kg/m, RHS Post	KG	94		
	Mild Steel Plate				
C	10mm thick	KG	520		
D	8mm thick	KG	150		
	Purlin				
E	100mm x 50mm x 16mm x1.6mm x 2.88 kg/m.	KG	846		
F	40mm x 80mm x 3.0mm x 5.34 kg/m.	KG	428		
	Prepare and apply 2 coat zinc chromate primer, 2 coat micaceous oxide and finishing coat gloss finish as described as per S.O approval.				
G	General surfaces of steel roof structure	KG	3,797		
	<u>Metal Decking Roof</u> Supply and install in position approved Zinalume roofing system metal roofing sheet 0.42mm thick base metal thickness complete with roof cladding in AZ100 clean colorbond XRW and steel grade G550 including pierced fastened (AS3566 Class 3), one layer of double sided aluminium foil insulation, 50mm thick x 50kg/m3 rockwool insulation with self drilling screws with hex, washer head and epdm seal as described laid and fixed interlocking to steel purlins with and accessories all in accordance with the manufacturer's instructions (measured nett-no allowance made for laps) and all as per Architect's drawing no MN/005/23/MBIPLHB-07/08.				
H	Roof coverings at 5° pitch; 0.47mm thick	M2	248		
J	Extra for transparent roof ; sloping pitch at 5 degrees	M2	44		
	TO COLLECTION				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF ... (Cont'd)</u> <u>Aluminium Composite Panel</u> Supply and install in position approved 6mm thick Aluminium composite panel complete with end cap, pipe penetration with self drilling screws with hex, washer head and epdm seal as described laid on and fixed interlocking to steel purlins with and accessories all in accordance with the manufacturer's instructions (measured nett-no allowance made for laps) and all as per Architect's detail drawings no: MN/005/23/MBIPLHB-07/08.				
A	Roof coverings; sloping pitch at 1 degrees <u>Fascia Board</u>	M2	96		
B	Supply and fix in position 230mm x 25mm thick Zincalume fascia board - roof eave cap including finishing works to architect's approval and manufacturer's detail. Preparing; priming; applying one undercoat; two finishing coat of synthetic enamel paint on woodwork	M	80		
C	General surfaces of fascia board exceeding 300mm but not exceeding 400mm girth <u>Galvanised iron (G.I) gutter</u> Supply and install approved galvanised iron gutter complete with external bracket, joiner, and stopper, spouthead rubber ring, holding down strap, bend and accessories complying all to manufacturer's specification and instruction and all as per Architect's detail drawings no: MN/005/23/MBIPLHB-07/08.	M	80		
D	300mm wide x 400mm high gutter complete with mild steel support and fixing to fascia board and mild steel bracket. <u>ROOF PLUMBING</u> Supply and install approved UPVC rectangular rainwater downpipe complete with holding down strap and accessories complying all to manufacturer's specifications and instruction:	M	35		
	150mm diameter				
E	Pipe fixed to wall including bracket	M	16		
F	Pipe embedded under apron including concrete base and excavation	M	10		
G	Extra for swan neck 1.50m long	NO	4		
H	Extra for bend	NO	12		
	TO COLLECTION				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF ... (Cont'd)</u> <u>ROOF PLUMBING</u> Supply and install approved UPVC rectangular rainwater downpipe complete with holding down strap and accessories complying all to manufacturer's specifications and instruction: <hr/> 150mm diameter				
A	Dome grating or debris trap	NO	4		
	TO COLLECTION				
	<u>COLLECTION</u> From Page 3C/3/1 From Page 3C/3/2 From Page 3C/3/3 From Page 3C/3/4				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 4 - WALL</u>				
	<u>INTERNAL</u>				
	Common clay bricks in cement mortar (1:3) with plasticiser as described in :				
A	115mm thck brickwall reinforced with and including 57mm wide x 22 gauge approved steel fabric reinforcement as described at every fourth course well lapped Approved bitumen damp proof course complying with BS 743 and weighing not less than 3.79kg per metre square in one layer well lapped at joints and laid on and including 19mm of cement mortar (1:3) and coated on upper surfaces with bitumen (measured nett - no allowance made for laps)	M2	66		
B	On half brick thick Mild steel bonding ties as described 450mm girth on end cast into concrete and the other end built into brickwall including forming perforation in formwork	M	14		
C	6mm Diameter <u>EXTERNAL</u>	NO	32		
	Common clay bricks in cement mortar (1:3) with plasticiser as described in :				
D	115mm thck brickwall reinforced with and including 57mm wide x 22 gauge approved steel fabric reinforcement as described at every fourth course well lapped	M2	197		
E	Extra Over for 25mm thick PVC groove line Approved bitumen damp proof course complying with BS 743 and weighing not less than 3.79kg per metre square in one layer well lapped at joints and laid on and including 19mm of cement mortar (1:3) and coated on upper surfaces with bitumen (measured nett - no allowance made for laps)	M	58		
F	On half brick thick Mild steel bonding ties as described 450mm girth on end cast into concrete and the other end built into brickwall including forming perforation in formwork	M	24		
G	6mm Diameter	NO	32		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3C - STOR SIMPANAN (A)										
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)					
A	<u>ELEMENT 5 - WINDOW</u> Precast concrete (Grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3) Lintol reinforced with and including 4 Nos 10mm diameter high tensile roads and 6mm diameter mild steel stirrups at 125mm centres 125mm x 225mm high <u>Aluminium Works</u> Supply and install complete in position the following natural anodised aluminium composite frame complete with and 6mm thick clear glass infilling panels and aluminium window frame 1.2mm thick complete with lock glazing beads and gaskets and accessories including approved weather strips, building in or cutting and pinning lugs, bracings, bedding frames in cement mortar (1:3) and pointing in silicone sealant to Architect's approval and all as per Architect's drawing no MN/005/23/MBIPLHB-07. Casement window	M	12							
	B					Overall size 600mm x 1500mm high comprising of 1 nos of top hung window glass panel size 600mm x 400mm high and 1 no of casement window panel size 600mm x 1100mm high. (Type W1) Top hung clear glass window	NO	2		
	C					Overall size 4800mm x 600mm high comprising of 8 nos top hung panel each size 600mm x 600mm high (Type W2)	NO	2		
	TOTAL CARRIED TO SUMMARY									

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>ELEMENT 6 - DOOR</u>				
	Precast concrete (Grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3) :				
	Lintol reinforced with and including 4 Nos 10mm diameter high tensile rods and 6mm diameter mild steel stirrups at 125mm centres				
	125mm x 225mm high	M	39		
B	<u>Metal door frame</u>				
	Supply and fix in position 125mm x 25mm x 1.0mm thick preformed metal door frame zinc coated and prepainted from approved source complete in position with approved 37mm architraves, 6mm thick steel ties, rubber buffers, striker, plate, spreader bar and fix complete with approved mortar infill and groove line; with sound insulation all as per manufacturer's detail and specification and to S.O.'s approval and Architect's detail drawing no; MN/005/23/MBIPLHB-07.				
C	Single leaf door				
	Overall size 1000mm x 2100mm high (Type D1)	NO	4		
D	Double leaf door				
	Overall size 1625mm x 2050mm high (Type D2)	NO	1		
D	<u>Solid Timber Door</u>				
	Wrot pressure treated Grade A timber as described in :				
	Supply and install complete in position timber solid door complete with selected high pressure laminate, 10mm thick glass panel, selected sand blaster sticker comprising of stiles, top, bottom, intermediate rails, hardwood timber panel and lipped all round with hardwood edging strips and hanging on butts hinges all in accordance with manufacturer's specification and Architect's detail drawing :MN/005/23/MBIPLHB-07. (ironmongery and painting measured separately)				
	Single leaf door				
D	Overall size 1000mm x 2100mm high (Type D1)	NO	4		
TO COLLECTION					

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>DOOR (Cont'd)</u> <u>METAL DOOR INCLUDING FIX LOUVERS</u> Supply and install complete in position the following metal door with fix louvers door complete with metal frames of approved sizes with all other necessary ironmongery and accessories including fixing to concrete or brickwork or cutting and pinning lugs, bedding, glazing beads, gaskets and grouting frames in cement mortar (1:3) all in accordance with manufacturer's specification and Architect's approval all as per Architect's detail drawing no:MN/005/23/MBIPLHB-07.				
A	Double leaf door Overall size 1625mm x 2050mm high (Type D2) <u>Roller Shutter.</u> Supply and install complete in position SKB (LB-10) aluminium roller shutter complete with guide rail, roller shutter blades and motorised box gear including all necessary frame, casing, bearing collar, bracket, NPD motor operator, shaft roller, ironmongery, fittings and accessories fixings to wall all in accordance with manufacturer's specification and S.O approval and all as per Architect's drawings no MN/005/23/MBIPLHB-07/08.	NO	1		
B	Overall size 5000mm x 2300mm high (Type RS1) <u>IRONMONGERY</u> Supply and fix the following ironmongery approved equivalent as specified or other equal and approved with and including requisite matching screws and Architect's detail drawing.	NO	6		
C	<u>Lockset</u> Approved stainless adjustable latch entrance function lever set steel lockset.	NO	4		
D	Approved stainless brandywine entrance tubular lock steel lockset.	NO	1		
E	<u>Butt hinges</u> Approved stainless steel butt hinges	NO	18		
F	<u>Accessories</u> Approved surface mounted door closer	NO	4		
	TO COLLECTION				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>DOOR (Cont'd)</u> Prepare and apply one coats of 'Nippon Woodshield Exterior' or other approved equivalent varnish paint finish with low VOC and all in accordance to manufacturer's instruction and S.O approval.	M2	24		
	Door Prepare, knot prime stop under coat by one coat of zinc chromate / red oxide primer or other equivalent and two coats of synthetic enamel paint finish				
B	Surfacing of frame but not exceeding 300mm girth	M	28		
	TO COLLECTION				
	<u>COLLECTION</u> From Page 3C/6/1 From Page 3C/6/2 From Page 3C/6/3				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 7 - FLOOR FINISHES</u> <u>EXTERNAL</u> 25mm Thick cement and sand (1:3) as described paving trowelled smooth:				
A	General surfaces of floor	M2	14		
B	General surfaces of apron slab	M2	21		
	Drop with rounded edge				
C	100mm high	M	30		
	<u>INTERNAL</u> 25mm Thick cement and sand (1:3) as described paving trowelled smooth:				
D	General surfaces of floor	M2	6		
	<u>Polyurethane Flooring (Floor Hardener)</u> Prepare and apply floor hardener machine power float finish with non-ferrous monolithic surface floor hardener.				
E	General surfaces of floor	M2	187		
	<u>Steel Chequered Plate</u>				
F	Supply and install 400mm x 5000mm x 5mm thick steel chequered plate sloping at 16 degrees including cleaning and raised surface to provide anti-slip, anti-corrosion and rust and accessories all in accordance with the manufacturer's instructions and all as per Architect's detail drawings no: MN/005/23/MBIPLHB-06/08.	M2	6		
	<u>Steel Chequered Plate</u>				
G	Supply and install 200mm x 5000mm x 5mm thick steel chequered plate sloping at 34 degrees including cleaning and raised surface to provide anti-slip, anti-corrosion and rust and accessories all in accordance with the manufacturer's instructions and all as per Architect's detail drawings no: MN/005/23/MBIPLHB-06/08.	M2	3		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 8 - WALL FINISHES</u>				
	<u>EXTERNAL</u>				
	19mm Thick cement and sand (1:6) as described plastering finished with a steel float and pvc corner edge:				
A	General surfaces of wall and column	M2	197		
	20mm thick cement and sand (1:6) as described backing screed to received tiling (measured separately)				
B	General surfaces of wall and column	M2	3		
	Supply and lay glazed ceramic tiles including of pvc strip bedded on screed (measured separately) and pointed in neat tinted cement to:				
	300mm x 300mm x 6mm thick.				
C	General surfaces of wall and column	M2	3		
	Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of weathershield bond as described to manufacturer's instruction and S.O approval.				
D	General surfaces of wall and column	M2	197		
	<u>INTERNAL</u>				
	19mm thick cement and sand (1:6) as described plastering finished with a steel trowelled and pvc corner edge :				
E	General surfaces of wall and column	M2	329		
	Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of emulsion paint as described to manufacturer's instruction and S.O approval.				
F	General surfaces of wall and column	M2	329		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 9 - CEILING FINISHES</u></p> <p><u>INTERNAL</u></p> <p><u>Mineral Fibre Board Ceiling</u></p> <p>Approved mineral fibre board as described set out symmetrically in 1200mm x 600mm sheet fixed to and including suspended concealed tee system with main runners tees and angle mouldings; and forming openings for light fittings, access panel, air conditioning grille outlets, trimming around column, etc; the whole suspended with galvanised wire hangers at 0.60m centres (painting measured separately): all as per Architect's drawings no MN/005/23/MBIPLHB-10.</p>				
A	<p>Mineral fibre plaster ceiling board ; exceeding 3.50m high but not exceeding 5.00m high</p> <p>Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of emulsion paint as described to manufacturer's instruction and S.O approval.</p>	M2	204		
B	<p>General surfaces of mineral plaster ceiling board</p> <p><u>EXTERNAL</u></p> <p><u>Fibrous Plaster Ceiling</u></p> <p>Supply and install in position approved 'Boral Unispan' or other approved equivalent 1220mm x 2440mm x 9.5mm thick fibrous plasterboards ceiling linings with moisture resistant set out symmetrically from centre of room fixed with self-drilling screws to and ceiling batten including aluminium support system rawlbolted to concrete soffit and bolted to roof members complete with grid Metal-Tee suspended system fixed onto secondary channels at 600mm centres, connection clip, primary channels at 600mm centres, and using wafer head drywall screws to ceiling hangers at 1000mm centres, trimming and extra framing around light fittings, diffusers and the like; but joint; jointing and finishing with gypsum plaster skim to give a flush seamless surface ready, etc. and all in accordance to manufacturer's specification instructions and Architect detail drawings no: MN/005/23/MBIPLHB/10. (painting measured separately)</p>	M2	204		
C	<p>Fixed moisture resistant fibrous plaster ceiling board; exceeding 3.50m high but not exceeding 5.00m high.</p> <p>Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of weathershield bond as described to manufacturer's instruction and S.O approval.</p>	M2	87		
D	<p>General surfaces of fibrous plaster ceiling board</p>	M2	87		
TOTAL CARRIED TO SUMMARY					

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 11 - SUNDRIES</u>				
	<u>Reinforced Concrete Scupper Drain</u>				
A	Supply and construct in position 250mm wide x 100mm depth reinforced concrete (Grade 25) scupper drain including all necessary accessories, formwork, reinforcement, finishes, plaster and painting all as per Architects detail drawings no; MN/005/23/MBIPLHB-06/08.	M	30		
	<u>Heavy Duty Steel Grating</u>				
B	Galvanised heavy duty steel gratings constructed of 25mm x 8mm thick flat at 50mm centres , 50mm x 5.0mm thick heavy plate at 35mm centres and including 50mm x 50mm x 5 thick angle frame complete with heavy duty steel angle fixed with fish tail to drain wall including all necessary welding and painting all as per Architect detail drawing. ; MN/005/23/MBIPLHB-06/08.	M	30		
	<u>Counter Top</u>				
C	Construct and complete overall size 2600mm x 600mm x 900mm high reinforced concrete counter top slab complete with polished concrete finishes including all necessary, reinforcement, formwork, bedded, jointed and jointed with matching coloured cement mortar with, (1:3) cement and sand screed and including all other item to ensure complete construction of counter top and all to the entire satisfaction of the S.O approval and all as per Architect detail drawings no; MN/005/23/MBIPLHB-18.	M2	1		
	<u>Metal Storage Rack- Store (Steel)</u>				
D	To supply and install metal storage rack (heavy-duty) 9000m x 6000m x 2800m high with necessary accessories to Manufacturer's detail, Designer approval and Ref. Drawing No. MN/005/23/MBIPLHB-06/08.	NO	3		
	<u>Metal Storage Cabinet- Store (Machine)</u>				
E	To supply and install metal storage cabinet 9000m x 2500m x 2100m high with necessary accessories to Manufacturer's detail, Designer approval and Ref. Drawing No. MN/005/23/MBIPLHB-06/08.	NO	3		
	<u>Stand' Rack- Store (Timber/Polycarbonate)</u>				
F	To supply and install 'Stand' Rack 450m x 2400m x 2700m high with necessary accessories to Manufacturer's detail, Designer approval and Ref. Drawing No. MN/005/23/MBIPLHB-06/08.	NO	4		
	TO COLLECTION				

BILL NO. 3C - STOR SIMPANAN (A)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>SUNDRIES (Cont'd)</u> <u>Open Shelves- Store (Timber/Polycarbonate)</u> To supply and install Open shelves 1200m x 2400m x 2800m high with necessary accessories to Manufacturer's detail, Designer approval and Ref. Drawing No. MN/005/23/MBIPLHB-06/08.	NO	2		
	TO COLLECTION				
	<u>COLLECTION</u> From Page 3C/11/1 From Page 3C/11/2				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3C - STOR SIMPANAN (A)			
SUMMARY			
ITEM	ELEMENT	FROM PAGE	AMOUNT (RM)
1	SUBSTRUCTURE	3C/1/4	-
2	FRAME	3C/2/1	-
3	ROOF	3C/3/4	-
4	WALL	3C/4/1	-
5	WINDOW	3C/5/1	-
6	DOOR	3C/6/3	-
7	FLOOR FINISHES	3C/7/1	-
8	WALL FINISHES	3C/8/1	-
9	CEILING FINISHES	3C/9/1	-
10	PLUMBING AND SANITARY INSTALLATION	3C/10/1	-
11	SUNDRIES	3C/11/2	-
TOTAL CARRIED TO SUMMARY OF TENDER			-

BILL NO. 3D - STOR SIMPANAN (B)

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 1 - SUBSTRUCTURE</u></p> <p>Excavate to reduce levels commencing from formation level, trim, level, grade and compact bottom of excavation and get out and remove excavated material to contractor's own dump not exceeding 1.00m deep.</p>				
A	Ground slab	M3	3		
B	Apron slab	M3	6		
	Excavate trenches starting from reduced level; including backfill with approved excavated material, compaction in layers and disposal of surplus excavated material where directed within the site not exceeding 1.00m deep				
C	Ground beam	M3	1		
	Excavate pit starting from reduced level; including backfill with approved excavated material, compaction in layers and disposal of surplus excavated material where directed within the site not exceeding 2.00m deep.				
D	Pad footing	M3	3		
	Bed of hardcore consisting of hard dry broken bricks or stones, spread or leveled, well consolidated, watered and well blinded with sand				
E	Under Ground slab ; 150mm thick	M2	9		
F	Under Apron slab ; 150mm thick	M2	17		
G	Under Ground beam ; 150mm thick	M2	2		
	<u>50mm Thick concrete (Grade 15) as described blinding:</u>				
H	Under pad footing	M3	0.1		
J	Under ground beam	M3	0.1		
K	Under ground slab	M3	1		
L	Under apron slab	M3	1		
	Reinforced concrete (Grade 30) as described (formwork and reinforcement measured separately) in :				
M	Pad footing	M3	1		
N	Ground beam	M3	1		
P	Column Stump (Provisional)	M3	0.5		
	TO COLLECTION				

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SUBSTRUCTURECont'd</u>				
	Reinforced concrete (Grade 30) as described (formwork and reinforcement measured separately) in :				
A	Ground slab	M3	1		
B	Apron slab	M3	2		
	<u>Class F1 formwork as described to:</u>				
C	Sides of pad footing	M2	3		
D	Sides of column stump (Provisional)	M2	4		
E	Sides of ground beam	M2	14		
F	Edges of ground slab ; not exceeding 250mm thick	M	15		
G	Edges of apron slab ; not exceeding 250mm thick	M	20		
	<u>Mild steel (250 N/mm2) rod reinforcement as described:</u>				
	In column stump (Provisional)				
H	6mm Diameter rod as links, stirrups or binders	KG	6		
	In ground beam				
J	6mm Diameter rod as links, stirrups or binders	KG	25		
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u>				
	In pad footing				
K	6mm Diameter rod as links, stirrups or binders	KG	5		
L	12mm Diameter rod	KG	36		
	In column stump (Provisional)				
M	12mm Diameter rod	KG	21		
	In ground beam				
N	12mm Diameter rod	KG	67		
	<u>BRC steel fabric reinforcement; lapping at joints (measured nett-no allowance made for laps)</u>				
	In ground slab				
P	Reference A142/A6 ; 2.22kg/m2	M2	9		
Q	Reference A193/A7 ; 3.02kg/m2	M2	9		
	TO COLLECTION				

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SUBSTRUCTURECont'd</u>				
	BRC steel fabric reinforcement; lapping at joints (measured nett-no allowance made for laps)				
A	In ground slab Reference B283/B6 ; 3.73kg/m2	M2	16		
B	In apron slab Reference A142/A7 ; 3.02kg/m2	M2	30		
	0.25mm thick approved polythene sheet (heavy duty) as described damp proof membrane laid on ground slab and beam and well lapped at joint (measured nett-no allowance made for laps) as described				
C	Under ground beam	M2	2		
D	Under ground slab	M2	9		
E	Under apron slab	M2	17		
	<u>ANTI-TERMITE TREATMENT</u>				
	The termite treatment application shall be carried by termite control company approved by S.O.				
	Method of treatment shall be submitted to the S.O. for approval. All relevant documents, certificates of approval, guarantee letters, brochures and technical catalogues shall be submitted to the S.O.before commencement of works				
	The Contractor shall be held responsible on all work done by the termite control company				
F	The Contractor and specialist firm shall guarantee the effectiveness of anti-termite treatment for a period of five (5) years and undertake to carry re-treatment without charge should infestation of sub-terranean termites occur at any time during the warranty period	ITEM			
	Carry out anti-termite treatment in accordance with the specifications as described to :				
G	Under ground beam	M2	2		
H	Under ground slab	M2	9		
J	Under apron	M2	17		
	TO COLLECTION				

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>SUBSTRUCTURECont'd</u> <u>Perimeter Drain</u> Precast concrete (Grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3) : as per Architect's drawing no; MNA/005/23/MBIPLHB-08/08	M	19		
	230mm diameter half round precast concrete drain laid to fall; grouted and pointed in cement and sand (1:3) including all necessary excavation, formwork, lean concrete, one brickwall complete with plastering to all exposed surfaces and forming bend, stopped end, junctions, weepholes, cascades, etc				
	TO COLLECTION				
	<u>COLLECTION:</u> From Page 3D/1/1 From Page 3D/1/2 From Page 3D/1/3 From Page 3D/1/4				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 2 - FRAME</u></p> <p><u>REINFORCED INSITU CONCRETE WORK</u></p> <p>Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :</p>				
A	<p>Column</p> <p><u>Class F1 formwork as described to:</u></p>	M3	1		
B	<p>Sides of column</p> <p><u>Mild steel (250 N/mm2) rod reinforcement as described :</u></p> <p>In column</p>	M2	9		
C	<p>6mm Diameter rod as links, stirrups or binders</p> <p><u>High tensile (460 N/mm2) rod reinforcement as described :</u></p> <p>In column</p>	KG	17		
D	<p>12mm Diameter rod</p>	KG	51		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 3 - ROOF</u></p> <p><u>REINFORCED INSITU CONCRETE WORK</u></p> <p>Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :</p>				
A	<p>Roof beam</p> <p><u>Class F1 formwork as described to:</u></p> <p>Sides and soffit and the like ; horizontal including strutting not exceeding 5.00m high</p>	M3	1		
B	<p>Roof beam</p> <p><u>Mild steel (250 N/mm2) rod reinforcement as described :</u></p> <p>In roof beam</p>	M2	13		
C	<p>6mm Diameter rod as links, stirrups or binders</p> <p><u>High tensile (460 N/mm2) rod reinforcement as described :</u></p> <p>In roof beam</p>	KG	20		
D	<p>12mm Diameter rod</p> <p><u>ROOF TRUSSESS</u></p> <p><u>FABRICATED LIGHT WEIGHT STEEL ROOF TRUSSES</u></p> <p>The Contractor shall deemed to have thoroughly acquainted himself with these requirements and allow for such additional cost due to the extra members and fixings required as no claim on this shall be allowed. The Contractor shall also deemed to have understood and complied with the requirement specified in JKR-20600-022-2001.</p> <p>The Contractor shall note that he shall be solely responsible for the adequacy and the sufficiency of the steel roof trusses.</p> <p>Rates for the steel roof trusses and the rafters shall include for all necessary materials fabricating, transportation, delivery to site, hoisting and fixing in position, all fixing accessories including holding down bolt or ram setting, all ancillary item and temporary works for the complete installation of the steel roof trusses. The cost also includes design fees, testing for compliance, quality assurance and control, trademark or name.</p>	KG	53		
	TO COLLECTION				

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF.....Cont'd</u> <u>FABRICATED LIGHT WEIGHT STEEL ROOF TRUSSES</u> <u>.....Cont'd</u> The contractor shall design, fabricate and deliver to site and furnish at his expense all necessary materials, tools, hoist, staging, temporary bracing etc. for the safe and proper erection of the lightweight steel roof trusses or other equivalent complete with rafter, top and bottom chords, bracings and tie down, struts, bearer, truss connectors, strapa, wall plates, connections, 50mm x 50mm steel purlins (lipped channel) hoisting and fixing approximately 3900mm high above ground floor level including all necessary paintings, labour material, appliances in shop and site connection all as shown and described in Engineer's drawings and to be approved by S.O prior to erection and installation on site as per Architect's and Engineer's detail drawing no:MN/005/23/MBIPLHB-08/08.				
A	Pitch roof with and including of all necessary supports as indicated based on relevant drawings and as specified, (measured flat on plan). Sloping, pitch 5 degrees. (Approximately 23 M2) <u>ROOF FINISHES</u> <u>Metal Decking Roof</u> Supply and install in position approved Zinalume roofing system metal roofing sheet 0.42mm thick base metal thickness complete with roof cladding in AZ100 clean colorbond XRW and steel grade G550 including pierced fastened (AS3566 Class 3), one layer of double sided aluminium foil insulation, 50mm thick x 50kg/m3 rockwool insulation with self drilling screws with hex, washer head and epdm seal as described laid and fixed interlocking to steel purlins with and accessories all in accordance with the manufacturer's instructions (measured nett-no allowance made for laps) and all as per Architect's drawing no MN/005/23/MBIPLHB-08/08	ITEM			
B	Roof coverings; sloping pitch at 5 degrees; 0.47mm thick <u>Fascia Board</u>	M2	23		
C	Supply and fix in position 230mm x 25mm thick Zinalume fascia board including finishing works to architect's approval Preparing; priming; applying one undercoat; two finishing coat of synthetic enamel paint on woodwork	M	19		
D	General surfaces of fascia board exceeding 300mm but not exceeding 400mm girth	M	19		
	TO COLLECTION				

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF.....Cont'd</u> Supply and install approved UPVC gutter complete with external bracket, joiner, and stopper, spouthead rubber ring, holding down strap, bend and accessories complying all to manufacturer's specification and instruction:				
A	250mm wide x 300mm high gutter including fixing to fascia board and mild steel bracket to manufacturer's instruction and all as per drawing no; MN/005/23/MBIPLHB-08/08	M	5		
	Supply and install aproproved 110mm diameter UPVC rainwater downpipe incased complete with holding down strap and accessories complying all to manufacturer's specifications and instruction:				
B	Pipe fixed to wall including bracket	M	6		
C	Pipe embedded under ground slab including concrete base and excavation	M	2		
D	Extra for swan neck 0.95m long	NO	2		
E	Extra for bend	NO	6		
F	Dome grating or debris trap	NO	2		
	TO COLLECTION				
	<u>COLLECTION</u> From Page 3D/3/1 From Page 3D/3/2 From Page 3D/3/3				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 4 - WALL</u></p> <p><u>EXTERNAL</u></p> <p>Common clay bricks in cement mortar (1:3) with plasticiser as described in :</p>				
A	<p>115mm thick brickwall reinforced with and including 57mm wide x 22 gauge approved steel fabric reinforcement as described at every fourth course well lapped</p> <p>200mm x 200mm thick precast concrete ventilation block in cement mortar (1:3) with plasticiser as described as per Architect's drawing no; MN/005/23/MBIPLHB-08/08</p>	M2	29		
B	<p>Overall size 400mm x 1000mm high</p> <p>Approved bitumen damp proof course complying with BS 743 and weighing not less than 3.79kg per metre square in one layer well lapped at joints and laid on and including 19mm of cement mortar (1:3) and coated on upper surfaces with bitumen (measured nett - no allowance made for laps)</p>	M2	4		
C	<p>On half brick thick</p> <p>Mild steel bonding ties as described 450mm girth on end cast into concrete and the other end built into brickwall including forming perforation in formwork</p>	M	12		
D	6mm Diameter	NO	16		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>ELEMENT 5 - DOOR</u>				
	Precast concrete (Grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3) :				
	Lintol reinforced with and including 4 Nos 10mm diameter high tensile rods and 6mm diameter mild steel stirrups at 125mm centres				
	125mm x 225mm high	M	2		
B	<u>Metal door frame</u>				
	Supply and fix in position 125mm x 25mm x 1.0mm thick preformed metal door frame zinc coated and prepainted from approved source complete in position with approved 37mm architraves, 6mm thick steel ties, rubber buffers, striker, plate, spreader bar and fix complete with approved mortar infill and groove line; with sound insulation all as per manufacturer's detail and specification and to S.O.'s approval and Architect's detail drawing no; MNA/005/23/MBIPLHB-08.				
	Double leaf door				
C	Overall size 1800mm x 2100mm high	NO	1		
	<u>Wrot pressure treated Grade A timber as described in :</u>				
	Supply and install complete in position timber solid door complete with selected high pressure laminate, 10mm thick glass panel, selected sand blaster sticker comprising of stiles, top, bottom, intermediate rails, hardwood timber panel and lipped all round with hardwood edging strips and hanging on butts hinges all in accordance with manufacturer's specification and Architect's detail drawing no ; MNA/005/23/MBIPLHB-08. (ironmongery and painting measured separately)				
D	Double leaf door				
	Overall size 1800mm x 2100mm high	NO	1		
	<u>IRONMONGERY</u>				
D	Supply and fix the following ironmongery approved equivalent as specified or other equal and approved with and including requisite matching screws and Architect's detail drawing no ; MNA/005/23/MBIPLHB-08.				
	<u>Lockset</u>				
	Approved stainless steel adjustable latch entrance function lever set	NO	1		
TO COLLECTION					

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>DOOR.....Cont'd</u> <u>IRONMONGERY.....Cont'd</u> Supply and fix the following ironmongery approved equivalent as specified or other equal and approved with and including requisite matching screws and Architect's detail drawing ; MNA/005/23/MBIPLHB-08.	NO	6		
	<u>Butt hinges</u> Approved epoxy coated butt hinges (127mm x 89mm x 2.5mm thick)				
	Prepare and apply one coats of 'Nippon Woodshield Exterior' or other approved equivalent varnish paint finish with low VOC and all in accordance to manufacturer's instruction and S.O approval.				
B	Door Prepare, knot prime stop under coat by one coat of zinc chromate / red oxide primer or other equivalent and two coats of synthetic enamel paint finish.	M2	8		
C	Surfacing of frame but not exceeding 300mm girth	M	6		
TO COLLECTION					
	<u>COLLECTION</u> From Page 3D/5/1 From Page 3D/5/2				
TOTAL CARRIED TO SUMMARY					

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>ELEMENT 6 - FLOOR FINISHES</u> <u>EXTERNAL</u> 25mm Thick cement and sand (1:3) as described paving trowelled smooth:	M2	17		
	General surface of apron slab				
	<u>INTERNAL</u> 25mm Thick cement and sand (1:3) as described paving trowelled smooth:				
B	General surfaces of floor	M2	9		
	Drop with rounded edge				
C	50mm high	M	2		
TOTAL CARRIED TO SUMMARY					

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 7 - WALL FINISHES</u> <u>EXTERNAL</u> 19mm Thick cement and sand (1:6) as described plastering finished with a steel float and pvc corner edge :				
A	General surfaces of wall and column	M2	30		
B	Extra Over for 25mm wide PVC groove line	M	22		
	Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of weathershield bond as described to manufacturer's instruction and S.O approval.				
C	General surfaces of wall and column	M2	30		
D	General surfaces of precast concrete ventilation block	M2	4		
	<u>INTERNAL</u> 19mm thick cement and sand (1:6) as described plastering finished with a steel trowelled and pvc corner edge :				
E	General surfaces of wall and column	M2	30		
	Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of emulsion paint as described to manufacturer's instruction and S.O approval.				
F	General surfaces of wall and column	M2	30		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3D - STOR SIMPANAN (B)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 8 - CEILING FINISHES</u></p> <p><u>EXTERNAL</u></p> <p><u>Fibrous Plaster Ceiling</u></p> <p>Supply and install in position approved 'Boral Unispan' or other approved equivalent 1220mm x 2440mm x 9.5mm thick fibrous plasterboards ceiling linings with moisture resistant set out symmetrically from centre of room fixed with self-drilling screws to and ceiling battens including aluminium support system rawbolted to concrete soffit and bolted to roof members complete with grid Metal-Tee suspended system fixed onto secondary channels at 600mm centres, connection clip, primary channels at 600mm centres, and using wafer head drywall screws to ceiling hangers at 1000mm centres, trimming and extra framing around light fittings, diffusers and the like; but joint; jointing and finishing with gypsum plaster skim to give a flush seamless surface ready, etc. and all in accordance to manufacturer's specification instructions and Architect detail drawings no: MN/005/23/MBIPLHB/11. (painting measured separately)</p>				
A	<p>Fixed moisture resistant fibrous plaster ceiling board; not exceeding 3.00m high.</p> <p>Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of weathershield bond as described to manufacturer's instruction and S.O approval.</p>	M2	14		
B	<p>General surfaces of fibrous plaster ceiling board</p> <p><u>INTERNAL</u></p> <p><u>Mineral Fibre Board Ceiling</u></p> <p>Approved mineral fibre board as described set out symmetrically in 1200mm x 600mm sheet fixed to and including suspended concealed tee system with main runners tees and angle mouldings; and forming openings for light fittings, access panel, air conditioning grille outlets, trimming around column, etc; the whole suspended with galvanised wire hangers at 0.60m centres (painting measured separately): all as per Architect's drawings no MN/005/23/MBIPLHB-11.</p>	M2	14		
C	<p>Mineral fibre plaster ceiling board; not exceeding 3.00m high</p> <p>Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of emulsion paint as described to manufacturer's instruction and S.O approval.</p>	M2	9		
D	<p>General surfaces of mineral plaster ceiling board</p>	M2	9		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3D - STOR SIMPANAN (B)			
SUMMARY			
ITEM	ELEMENT	FROM PAGE	AMOUNT (RM)
1	SUBSTRUCTURE	3D/1/4	-
2	FRAME	3D/2/1	-
3	ROOF	3D/3/3	-
4	WALL	3D/4/1	-
5	DOOR	3D/5/2	-
6	FLOOR FINISHES	3D/6/1	-
7	WALL FINISHES	3D/7/1	-
8	CEILING FINISHES	3D/8/1	-
TOTAL CARRIED TO SUMMARY OF TENDER			-

BILL NO. 3E - RUMAH SAMPAH

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 1 - SUBSTRUCTURE</u> Excavate to reduce levels commencing from formation level, trim, level, grade and compact bottom of excavation and get out and remove excavated material to contractor's own dump not exceeding 1.00m deep.				
A	Ground slab	M3	3		
B	Apron slab	M3	6		
	Excavate trenches starting from reduced level; including backfill with approved excavated material, compaction in layers and disposal of surplus excavated material where directed within the site not exceeding 1.00m deep				
C	Ground beam	M3	1		
	Excavate pit starting from reduced level; including backfill with approved excavated material, compaction in layers and disposal of surplus excavated material where directed within the site not exceeding 2.00m deep.				
D	Pad footing	M3	3		
	Bed of hardcore consisting of hard dry broken bricks or stones, spread or leveled, well consolidated, watered and well blinded with sand				
E	Under Ground slab ; 150mm thick	M2	9		
F	Under Apron slab ; 150mm thick	M2	17		
G	Under Ground beam ; 150mm thick	M2	2		
	<u>50mm Thick concrete (Grade 15) as described blinding:</u>				
H	Under pad footing	M3	0.2		
J	Under ground beam	M3	0.2		
K	Under ground slab	M3	1		
L	Under apron slab	M3	1		
	Reinforced concrete (Grade 30) as described (formwork and reinforcement measured separately) in :				
M	Pad footing	M3	1		
N	Ground beam	M3	1		
P	Column Stump (Provisional)	M3	0.5		
	TO COLLECTION				

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SUBSTRUCTURECont'd</u>				
	Reinforced concrete (Grade 30) as described (formwork and reinforcement measured separately) in :				
A	Ground slab	M3	1		
B	Apron slab	M3	2		
	<u>Class F1 formwork as described to:</u>				
C	Sides of pad footing	M2	3		
D	Sides of column stump (Provisional)	M2	3		
E	Sides of ground beam	M2	11		
F	Edges of ground slab ; not exceeding 250mm thick	M	15		
G	Edges of apron slab ; not exceeding 250mm thick	M	20		
	<u>Mild steel (250 N/mm2) rod reinforcement as described:</u>				
	In column stump (Provisional)				
H	6mm Diameter rod as links, stirrups or binders	KG	6		
	In ground beam				
J	6mm Diameter rod as links, stirrups or binders	KG	20		
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u>				
	In pad footing				
K	6mm Diameter rod as links, stirrups or binders	KG	5		
L	12mm Diameter rod	KG	36		
	In column stump (Provisional)				
M	12mm Diameter rod	KG	24		
	In ground beam				
N	12mm Diameter rod	KG	53		
	<u>BRC steel fabric reinforcement; lapping at joints (measured nett-no allowance made for laps)</u>				
	In ground slab				
P	Reference A393/A10 ; 6.17kg/m2	M2	9		
	TO COLLECTION				

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SUBSTRUCTURECont'd</u>				
	<u>BRC steel fabric reinforcement; lapping at joints (measured nett-no allowance made for laps)</u>				
	In ground slab				
A	Reference B283/B6 ; 3.73kg/m2	M2	12		
	In apron slab				
B	Reference A193/A7 ; 3.02kg/m2	M2	34		
	<u>0.25mm thick approved polythene sheet (heavy duty) as described damp proof membrane laid on ground slab and beam and well lapped at joint (measured nett-no allowance made for laps) as described</u>				
C	Under ground beam	M2	2		
D	Under ground slab	M2	9		
E	Under apron slab	M2	17		
	<u>ANTI-TERMITE TREATMENT</u>				
	The termite treatment application shall be carried by termite control company approved by S.O.				
	Method of treatment shall be submitted to the S.O. for approval. All relevant documents, certificates of approval, guarantee letters, brochures and technical catalogues shall be submitted to the S.O.before commencement of				
	The Contractor shall be held responsible on all work done by the termite control company				
F	The Contractor and specialist firm shall guarantee the effectiveness of anti-termite treatment for a period of five (5) years and undertake to carry re-treatment without charge should infestation of sub-terranean termites occur at any time during the warranty period	ITEM			
	<u>Carry out anti-termite treatment in accordance with the specifications as described to :</u>				
G	Under ground beam	M2	2		
H	Under ground slab	M2	9		
J	Under apron	M2	17		
	TO COLLECTION				

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>SUBSTRUCTURECont'd</u> <u>Perimeter Drain</u> Precast concrete (Grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3) : as per Architect's drawing no; MNA/005/23/MBIPLHB-08/08	M	19		
	230mm diameter half round precast concrete drain laid to fall; grouted and pointed in cement and sand (1:3) including all necessary excavation, formwork, lean concrete, one brickwall complete with plastering to all exposed surfaces and forming bend, stopped end, junctions, weepholes, cascades, etc				
	TO COLLECTION				
	<u>COLLECTION:</u> From Page 3E/1/1 From Page 3E/1/2 From Page 3E/1/3 From Page 3E/1/4				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>ELEMENT 2 - FRAME</u> <u>REINFORCED INSITU CONCRETE WORK</u> Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :				
	Column	M3	1		
	<u>Class F1 formwork as described to:</u>				
	Sides of column	M2	9		
C	<u>Mild steel (250 N/mm2) rod reinforcement as described :</u> In column 6mm Diameter rod as links, stirrups or binders	KG	17		
	<u>High tensile (460 N/mm2) rod reinforcement as described :</u> In column 12mm Diameter rod	KG	53		
TOTAL CARRIED TO SUMMARY					

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 3 - ROOF</u></p> <p><u>REINFORCED INSITU CONCRETE WORK</u></p> <p>Reinforced concrete (Grade 25) as described (formwork and reinforcement measured separately) in :</p>				
A	<p>Roof beam</p> <p><u>Class F1 formwork as described to:</u></p> <p>Sides and soffit and the like ; horizontal including strutting not exceeding 5.00m high</p>	M3	1		
B	<p>Roof beam</p> <p><u>Mild steel (250 N/mm2) rod reinforcement as described :</u></p> <p>In roof beam</p>	M2	13		
C	<p>6mm Diameter rod as links, stirrups or binders</p> <p><u>High tensile (460 N/mm2) rod reinforcement as described :</u></p> <p>In roof beam</p>	KG	20		
D	<p>12mm Diameter rod</p> <p><u>ROOF TRUSSESS</u></p> <p><u>FABRICATED LIGHT WEIGHT STEEL ROOF TRUSSES</u></p> <p>The Contractor shall deemed to have thoroughly acquainted himself with these requirements and allow for such additional cost due to the extra members and fixings required as no claim on this shall be allowed. The Contractor shall also deemed to have understood and complied with the requirement specified in JKR-20600-022-2001.</p> <p>The Contractor shall note that he shall be solely responsible for the adequacy and the sufficiency of the steel roof trusses.</p> <p>Rates for the steel roof trusses and the rafters shall include for all necessary materials fabricating, transportation, delivery to site, hoisting and fixing in position, all fixing accessories including holding down bolt or ram setting, all ancillary item and temporary works for the complete installation of the steel roof trusses. The cost also includes design fees, testing for compliance, quality assurance and control, trademark or name.</p>	KG	53		
	TO COLLECTION				

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>ROOF.....Cont'd</u> <u>FABRICATED LIGHT WEIGHT STEEL ROOF TRUSSES</u> <u>.....Cont'd</u> The contractor shall design, fabricate and deliver to site and furnish at his expense all necessary materials, tools, hoist, staging, temporary bracing etc. for the safe and proper erection of the lightweight steel roof trusses or other equivalent complete with rafter, top and bottom chords, bracings and tie down, struts, bearer, truss connectors, strapa, wall plates, connections, 50mm x 50mm steel purlins (lipped channel) hoisting and fixing approximately 3900mm high above ground floor level including all necessary paintings, labour material, appliances in shop and site connection all as shown and described in Engineer's drawings and to be approved by S.O prior to erection and installation on site as per Architect's and Engineer's detail drawing no:MN/005/23/MBIPLHB-08/08.	ITEM			
	Pitch roof with and including of all necessary supports as indicated based on relevant drawings and as specified, (measured flat on plan). Sloping, pitch 5 degrees. (Approximately 23 M2) <u>ROOF FINISHES</u> <u>Metal Decking Roof</u> Supply and install in position approved Zincalume roofing system metal roofing sheet 0.42mm thick base metal thickness complete with roof cladding in AZ100 clean colorbond XRW and steel grade G550 including pierced fastened (AS3566 Class 3), one layer of double sided aluminium foil insulation, 50mm thick x 50kg/m3 rockwool insulation with self drilling screws with hex, washer head and epdm seal as described laid and fixed interlocking to steel purlins with and accessories all in accordance with the manufacturer's instructions (measured nett-no allowance made for laps) and all as per Architect's drawing no MN/005/23/MBIPLHB-08/08				
	Roof coverings; sloping pitch at 5 degrees ; 0.47mm thick <u>Fascia Board</u>		M2	23	
	Supply and fix in position 230mm x 25mm thick Zincalume fascia board including finishing works to architect's Preparing; priming; applying one undercoat; two finishing coat of synthetic enamel paint on woodwork		M	20	
D	General surfaces of fascia board exceeding 300mm but not exceeding 400mm girth	M	20		
TO COLLECTION					

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROOF.....Cont'd</u>				
	Supply and install approved UPVC gutter complete with external bracket, joiner, and stopper, spouthead rubber ring, holding down strap, bend and accessories complying all to manufacturer's specification and instruction:				
A	250mm wide x 300mm high gutter including fixing to fascia board and mild steel bracket to manufacturer's instruction and all as per drawing no; MN/005/23/MBIPLHB-08/08.	M	5		
	Supply and install aprooved 110mm diameter UPVC rainwater downpipe incased complete with holding down strap and accessories complying all to manufacturer's specifications and instruction:				
B	Pipe fixed to wall including bracket	M	6		
C	Pipe embedded under ground slab including concrete base and excavation	M	2		
D	Extra for swan neck 0.95m long	NO	2		
E	Extra for bend	NO	6		
F	Dome grating or debris trap	NO	2		
	TO COLLECTION				
	<u>COLLECTION</u>				
	From Page 3E/3/1				
	From Page 3E/3/2				
	From Page 3E/3/3				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>ELEMENT 4 - WALL</u> <u>EXTERNAL</u> Common clay bricks in cement mortar (1:3) with plasticiser as described in :				
	115mm thick brickwall reinforced with and including 57mm wide x 22 gauge approved steel fabric reinforcement as described at every fourth course well lapped 200mm x 200mm thick precast concrete ventilation block in cement mortar (1:3) with plasticiser as described as per Architect's drawing no; MN/005/23/MBIPLHB-08/08.	M2	32		
	Overall size 1200mm x 450mm high Approved bitumen damp proof course complying with BS 743 and weighing not less than 3.79kg per metre square in one layer well lapped at joints and laid on and including 19mm of cement mortar (1:3) and coated on upper surfaces with bitumen (measured nett - no allowance made for laps)	M2	1		
	On half brick thick Mild steel bonding ties as described 450mm girth on end cast into concrete and the other end built into brickwall including forming perforation in formwork	M	12		
D	6mm Diameter	NO	16		
TOTAL CARRIED TO SUMMARY					

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<p><u>ELEMENT 5 - DOOR</u></p> <p>Precast concrete (Grade 25) as described including all moulds, finishing fair on exposed faces and hoisting, fixing, bedding, jointing and pointing in cement mortar (1:3) :</p> <hr/> <p>Lintol reinforced with and including 4 Nos 10mm diameter high tensile rods and 6mm diameter mild steel stirrups at 125mm centres</p> <p>125mm x 225mm high</p>	M	2		
	<p><u>Roller Shutter.</u></p> <p>Supply and install complete in position aluminium roller shutter complete with guide rail, roller shutter blades and motorised box gear including all necessary frame, casing, bearing collar, bracket, NPD motor operator, shaft roller, ironmongery, fittings and accessories fixings to wall all in accordance with manufacturer's specification and S.O approval and all as per Architect's drawings no MN/005/23/MBIPLHB-08/08.</p> <hr/> <p>Overall size 1800mm x 2100mm high (Type RS1)</p>				
B		NO	1		
TOTAL CARRIED TO SUMMARY					

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<u>ELEMENT 6 - FLOOR FINISHES</u>				
	<u>EXTERNAL</u>				
	25mm Thick cement and sand (1:3) as described paving trowelled smooth:				
A	General surface of apron slab	M2	17		
B	<u>INTERNAL</u>				
	20mm Thick cement and sand (1:3) including approved waterproofing compound as described screed to receive tiling (measured separately):				
	General surfaces of floor	M2	9		
C	Supply and lay approved non-slip ceramic tiles, laid to pattern and colour bedded, jointed and pointed on cement and sand (1:3) screed (measured separately) as per Architect's drawing no; MN/005/23/MBIPLHB-08/08.				
	150mm x 150mm x 7mm thick				
	To floor	M2	9		
TOTAL CARRIED TO SUMMARY					

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 7 - WALL FINISHES</u></p> <p><u>EXTERNAL</u></p> <p>19mm Thick cement and sand (1:6) as described plastering finished with a steel float and pvc corner edge:</p> <p>A General surfaces of wall and column M2 33</p> <p>B Extra Over for 25mm wide PVC groove line M 18</p> <p>Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of weathershield bond as described to manufacturer's instruction and S.O approval.</p> <p>C General surfaces of wall and column M2 33</p> <p>D General surfaces of precast concrete ventilation block M2 1</p> <p><u>INTERNAL</u></p> <p>19mm thick cement and sand (1:6) as described plastering finished with a steel trowelled and pvc corner edge:</p> <p>E General surfaces of wall and column M2 16</p> <p>Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of emulsion paint as described to manufacturer's instruction and S.O approval.</p> <p>F General surfaces of wall and column M2 16</p> <p>20mm thick cement and sand (1:6) as described backing screed to received tiling (measured separately)</p> <p>G General surfaces of wall and column M2 20</p> <p>Supply and lay approved glazed ceramic tiles including of pvc strip bedded on screed (measured separately) and pointed in neat tinted cement to all as per Architect's drawing no; MN/005/23/MBIPLHB-08/08.</p> <p>600mm x 300mm x 6mm thick</p> <p>H General surfaces of wall and column M2 20</p>				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
<u>ELEMENT 8 - CEILING FINISHES</u>					
<u>EXTERNAL</u>					
Supply and install in position approved 'Boral Unispan' or other approved equivalent 1220mm x 2440mm x 9.5mm thick fibrous plasterboards ceiling linings with moisture resistant set out symmetrically from centre of room fixed with self-drilling screws to and ceiling batten including aluminium support system rawbolted to concrete soffit and bolted to roof members complete with grid Metal-Tee suspended system fixed onto secondary channels at 600mm centres, connection clip, primary channels at 600mm centres, and using wafer head drywall screws to ceiling hangers at 1000mm centres, trimming and extra framing around light fittings, diffusers and the like; but joint; jointing and finishing with gypsum plaster skim to give a flush seamless surface ready, etc. and all in accordance to manufacturer's specification instructions and Architect detail drawings no: MN/005/23/MBIPLHB/09. (painting measured separately)					
A	Fixed moisture resistant fibrous plaster ceiling board; not exceeding 3.00m high.	M2	14		
Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of weathershield bond as described to manufacturer's instruction and S.O approval.					
B	Surface of fixed ceiling	M2	14		
<u>INTERNAL</u>					
<u>Mineral Fibre Board Ceiling</u>					
Approved mineral fibre board as described set out symmetrically in 1200mm x 600mm sheet fixed to and including suspended concealed tee system with main runners tees and angle mouldings; and forming openings for light fittings, access panel, air conditioning grille outlets, trimming around column, etc; the whole suspended with galvanised wire hangers at 0.60m centres (painting measured separately): all as per Architect's drawings no MN/005/23/MBIPLHB-11.					
C	Mineral fibre plaster ceiling board; not exceeding 3.00m high	M2	9		
Prepare and apply 'Nippon Paint' approved one coat of wall sealer and two coats of emulsion paint as described to manufacturer's instruction and S.O approval.					
D	Surface of suspended ceiling	M2	9		
TOTAL CARRIED TO SUMMARY					

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 9 - SANITARY INSTALLATION</u></p> <p><u>SANITARY FITTINGS</u></p> <p>Supply and install the following sanitary fittings and accessories including storing, assembling, bedding, plugging and screwing with matching screws, cutting and pinning or building in brackets, jointing and connection to services and to soil and waste pipe making good all work disturbed:</p>				
A	Approved 12.5mm booster bib tap with arrowline (BRASS) handle	NO	1		
B	Approved 150mm x 150mm stainless steel floor trap with anti-insect (cocroach/ant) feature , high low rate , satin finished and approved waterproof compound cement grout as per manufacturer's specifications.	NO	1		
	<u>TESTING OF THE INSTALLATION</u>				
C	On completion of the Plumbing and Sanitary Installation test all apparatus, piping and fittings, make good.	ITEM			
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3E - RUMAH SAMPAH					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 10 - SUNDRIES</u>				
	<u>Reinforced Concrete Ramp</u>				
A	To construct in position reinforced concrete ramp including necessary works of concrete, lean concrete, formwork, reinforcement, BRC, plastering and 10mm diameter half round groove line with broom finishing and including all necessary accessories as per Architect detail drawing no; MN/005/23/MBIPLHB-08/08.	M2	2		
	<u>Reinforced Concrete Scupper Drain</u>				
B	Supply and construct in position 200mm wide x 50mm depth reinforced concrete (Grade 25) scupper drain including all necessary accessories, formwork, reinforcement, finishes, plaster and painting all as per Architects detail drawings no; MN/005/23/MBIPLHB-08/08.	M	3		
	<u>Trash Bin</u>				
C	Supply, install and fix in position overall size 1400mm x 1030mm x 1330mm Trash Bin all to manufacturer's detail and S.O's Approval and Architects detail drawings no; MN/005/23/MBIPLHB-08/08.	NO	2		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 3E - RUMAH SAMPAH			
SUMMARY			
ITEM	ELEMENT	FROM PAGE	AMOUNT (RM)
1	SUBSTRUCTURE	3E/1/4	-
2	FRAME	3E/2/1	-
3	ROOF	3E/3/3	-
4	WALL	3E/4/1	-
5	DOOR	3E/5/1	-
6	FLOOR FINISHES	3E/6/1	-
7	WALL FINISHES	3E/7/1	-
8	CEILING FINISHES	3E/8/1	-
9	SANITARY INSTALLATION	3E/9/1	-
10	SUNDRIES	3E/10/1	-
TOTAL CARRIED TO SUMMARY OF TENDER			-

**BILL NO. 4 - FURNITURE AND ELECTRICAL
APPLIANCES**

BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>BUILT IN FURNITURE, LOOSE FURNITURE</u>				
	<u>Lounge Area</u>				
A	Supply and install Reception Counter or other approved equivalent; complete with counter top, drawer and cabinet including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 1.1)	Nos	1		
B	Supply and setting 1+1+2 seater Sofa set Armchairs complete with coffee table; including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 1.2)	Nos	1		
C	Supply and install Signage material acrylic with vinyl lettering for Jabatan Information, fixing and screw to wall, including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 1.3)	Nos	1		
	<u>Work and Discussion Area</u>				
D	Supply and install Office Desk 4ft Melamine 25mm thick table top Heavy Duty scratch resistant computer table or equivalent complete with 3 drawer and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 2.1)	Nos	4		
E	Supply and install Meeting table with ractangular shape complete with sliding hidden wire box at center including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 2.2)	Nos	1		
F	Supply and install Low back mesh chair all including necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 2.3)	Nos	4		
G	Supply and install Visitor chair Low back mesh chair including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 2.4)	Nos	10		
	TOTAL CARRIED TO COLLECTION				

BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>BUILT IN FURNITURE AND LOOSE FURNITURE (Cont'd)</u>				
	<u>Work and Discussion Area</u>				
A	Supply and install Smart whiteboard wall or equivalent including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 2.5)	L/s	1		
B	To fabricate, supply and install Curtain Roller blind fixed on top of window, including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 2.6)	L/s	1		
C	Supply and install Notice Softboard 90cm x 120cm length foam board including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 2.7)	Nos	1		
	<u>Pantry</u>				
D	Supply Dining set 6 seater complete with table and chairs including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 3.1)	Set	1		
E	Supply Mini bar solid Rubber wood bar table complete with 6 seater stool and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval (Ref: Lampiran A / No 3.2)	Set	1		
F	Contruct and complete Concrete Counter Top with ceramic tile finish, including concrete work, formwork, reinforcement and all necessary cabinet door, drawer, finishing and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval (Ref: Lampiran A / No 3.3)	Set	1		
	<u>Surau Male & Female</u>				
G	Supply and install prayer matt and 'Telekung' including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval	Nos	4		
	TOTAL CARRIED TO COLLECTION				

BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
<u>BUILT IN FURNITURE AND LOOSE FURNITURE (Cont'd)</u>					
<u>Surau Male & Female (Cont'd)</u>					
A	Supply and install wood hanging rack including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval (Ref: Lampiran A / No 4.2)	Nos	2		
B	Supply and install wood shoes rack including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval (Ref: Lampiran A / No 4.3)	Nos	2		
C	Supply and install wood bench including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval (Ref: Lampiran A / No 4.4)	Nos	2		
D	Supply and install face mirror screw and fix at wall including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval (Ref: Lampiran A / No 4.5)	Nos	2		
<u>Locker Room Hutan Bandar & Taman Permainan</u>					
E	Supply and install metal locker, single door including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval (Ref: Lampiran A / No 5.1)	Nos	14		
F	Supply and install metal mesh shoes rack 6 level shelves including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 5.2)	Nos	2		
G	Supply and install Notice Softboard 90cm x 120cm length foam board including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 5.3)	Nos	1		
H	Supply and install wood bench including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 5.4)	Nos	2		
TOTAL CARRIED TO COLLECTION					

BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>BUILT IN FURNITURE AND LOOSE FURNITURE (Cont'd)</u>				
	<u>Toilet OKU</u>				
A	Supply and install sliding door or equivalent complete with door frame and ironmongeries including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 6.1)	Nos	1		
B	Supply and install wall hung basin or equivalent and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 6.2)	Nos	1		
C	Supply and install water tap or equivalent and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 6.3)	Nos	1		
D	Supply and install stainless steel safety grab bar or equivalent and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 6.4)	Nos	1		
E	Supply and install Braille Signage or equivalent and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 6.5)	Nos	1		
	<u>Washing Area</u>				
F	Supply and install colth hanging or equivalent and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval (Ref: Lampiran A / No 7.1)	Nos	1		
G	Supply and install Wall rack with colth hanging holder or equivalent and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 7.2)	Nos	1		
	<u>Utility Room</u>				
A	Supply 800mm x 600mm width Counter bar with 1500mm x 600mm width folding table and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 8.1)	Nos	1		
	TOTAL CARRIED TO COLLECTION				

BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>BUILT IN FURNITURE AND LOOSE FURNITURE (Cont'd)</u>				
	<u>Utility Room</u>				
A	Supply and fix 6000mm x 900mm x 2800mm height heavy duty rack complete with metal frame and plywood shelves and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 8.2)	Nos	2		
B	Supply 2500mm x 900mm x 2100mm height metal storage cabinet for tools and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 8.3)	Nos	2		
C	Supply 2400mm x 400mm x 2700mm height stand rack and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval.	Nos	2		
D	Supply 1200mm x 2400mm height open shelves and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 8.5)	Nos	1		
E	Supply safety and tools signboard for inventory item and including all necessary accessories and fittings as per to manufacturer's instruction and specification; as per Architect's and S.O approval.	Nos	1		
F	Supply Office Desk 4ft Melamine 25mm thick table top Heavy Duty scratch resistant computer table or equivalent complete with 3 drawer and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 8.7)	Nos	1		
G	Supply Low back mesh chair and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 8.8)	Nos	4		
H	Supply key lock box steel wall mounted and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 8.9)	Nos	2		
	TOTAL CARRIED TO COLLECTION				







BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
<u>BUILT IN FURNITURE AND LOOSE FURNITURE (Cont'd)</u>					
<u>Utility Room (Cont'd)</u>					
A	Supply 4 Drawer steel filing office cabinet and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 8.10)	Nos	2		
C	Supply Notice Softboard foam board and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 8.11)	Nos	1		
D	Supply 90cm x 120cm length whiteboard and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 8.12)	Nos	1		
<u>ELECTRICAL AND ELECTRONIC APPLIANCES</u>					
<u>Surau Male & Female</u>					
E	Supply and install ceiling fan complete with fan hook and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval	Nos	2		
F	Supply and install 1.0Hp Air Conditoning complete with outdoor unit compressor and including all necessary accessories and fittings as per to manufacturer's instruction and specification; as per Architect's and S.O approval	Unit	2		
<u>Locker Room Hutan Bandar & Taman Permainan</u>					
G	Supply and install ceiling fan/wall fan complete with fan hook and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 9.2.1)	Nos	2		
<u>Toilet OKU</u>					
A	Supply and install alarm emergency including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 9.3.1)	L/s	1		
TOTAL CARRIED TO COLLECTION					

BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELECTRICAL AND ELECTRONIC APPLIANCES (cont'd)</u>				
	<u>Utility Room</u>				
A	Supply and install 1.0Hp Air Conditioning complete with outdoor unit compressor and including all necessary accessories and fittings as per to manufacturer's instruction and specification; as per Architect's and S.O approval	Unit	1		
B	Supply and install ceiling fan/wall fan complete with fan hook and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 9.4.3)	Nos	1		
C	Supply and install 16" heavyduty exhaust fan and including all necessary accessories and fittings as per to manufacturer's instruction and specification; colour and pattern as per Architect's and S.O approval. (Ref: Lampiran A / No 9.4.1)	Nos	2		
	<u>Others</u>				
D	Supply and install 'EPSON' LCD projector with bracket at ceiling or equivalent as per S.O approval.	Nos	1		
E	Supply and install 'VENOVA' projector wall screen, with white matt or equivalent as per S.O approval.	Nos	1		
F	Supply and install 'ASUS' computer or equivalent complete with software, including accerssories and all necessary as per S.O approval	Nos	5		
G	Supply and install 48" smart TV complete with brecket as per S.O approval.	Nos	1		
H	Supply and install 220L - 335L refrigerator 2 door or equivalent as per S.O approval.	Nos	1		
J	Supply and install 25L - 30L microwave as per S.O approval	Nos	1		
K	Supply 'AX3000' wall plate Wifi 6 Access Point or equivalent as per S.O apporval.	Nos	1		
L	Supply and lay cable cat-6 for network complete with wireless transmitter receiver, AP/repeater.	L/s	1		
	TOTAL CARRIED TO COLLECTION				


BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELECTRICAL AND ELECTRONIC APPLIANCES (cont'd)</u>				
	<u>CCTV SYSTEM</u>				
A	Supply and install 'HIK Vision' 8CH complete with 2T HDD or equivalent as per S.O approval.	Set	1		
B	Supply and install 'HIK Vision' HDTVI 2MP 4.0mm Fix Lens IR CCD/Dome or equivalent as per S.O approval.	Set	4		
C	Supply and lay cable type 'RG59 Coaxia'; and 2 core power cable plus earth in high PVC conduit as per S.O approval.	L/s	1		
D	Supply and install 13VCD power point with metal casing as per S.O approval.	L/s	1		
E	Supply and install 13A power point as per S.O approval.	L/s	1		
	TOTAL CARRIED TO COLLECTION				
	COLLECTION:				
	B4/1				-
	B4/2				-
	B4/3				-
	B4/4				-
	B4/5				-
	B4/6				-
	B4/7				-
	B4/8				-
	TOTAL CARRIED TO SUMMARY OF TENDER				-

Lampiran A		
BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES		
Item	Sample Picture	Specification
<u>BUILT IN FURNITURE, LOOSE FURNITURE AND ELECTRICAL APPLIANCES</u>		
1	<u>Lounge Area</u>	
1.1	Reception Counter	
1.2	Wooden Sofa set 1+1+2 seater Armchairs	
1.3	Signage material acrylic with vinyl lettering for Jabatan Information	
2	<u>Work and Discussion Area</u>	
2.1	Office Desk 4ft Melamine	


Lampiran A		
BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES		
Item	Sample Picture	Specification
<u>BUILT IN FURNITURE AND LOOSE FURNITURE AND ELECTRICAL APPLIANCES (Cont'd)</u> <u>Work and Discussion Area (Cont'd)</u>		
2.2	Meeting table 	
2.3	Low back mesh chair 	
2.4	Visitor chair Low back mesh chair 	
2.5	Smart whiteboard wall  	


Lampiran A		
BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES		
Item	Sample Picture	Specification
<u>BUILT IN FURNITURE AND LOOSE FURNITURE AND ELECTRICAL APPLIANCES (Cont'd)</u> <u>Work and Discussion Area (Cont'd)</u>		
2.6	Curtain Roller blind	
		
2.7	Notice Softboard 90cm x 120cm	
		
3	<u>Pantry</u>	
3.1	Dining set 6 seater	
	 	
3.2	Mini bar solid Rubber wood bar table	
	 	





Lampiran A		
BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES		
Item	Sample Picture	Specification
<u>BUILT IN FURNITURE AND LOOSE FURNITURE AND ELECTRICAL APPLIANCES (Cont'd)</u> <u>Pantry (Cont'd)</u>		
3.3	Counter Top/ Table Top	
		
4	<u>Surau Male & Female</u>	
4.1	Prayer matt/ Sejadah and 'Telekung'	
4.2	Wooden hanging rack	
		
4.3	Metal shoes rack	
		
4.4	Wooden bench	
		





Lampiran A		
BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES		
Item	Sample Picture	Specification
<u>BUILT IN FURNITURE AND LOOSE FURNITURE AND ELECTRICAL APPLIANCES (Cont'd)</u> <u>Surau Male & Female (Cont'd)</u>		
4.5	Face mirror	
		
5	<u>Locker Room Hutan Bandar & Taman Permainan</u>	
5.1	Metal locker, single door	
		
5.2	Metal mesh shoes rack	
		
5.3	Notice Softboard foam board	
		

Lampiran A		
BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES		
Item	Sample Picture	Specification
<u>BUILT IN FURNITURE AND LOOSE FURNITURE AND ELECTRICAL APPLIANCES (Cont'd)</u> <u>Locker Room Hutan Bandar & Taman Permainan (Cont'd)</u>		
5.4	Wooden bench	
		
6	<u>Toilet OKU</u>	
6.1	Sliding door complete with door frame and ironmongeries	
		
6.2	Wall hung basin	
		
6.3	Water tap (for oku basin)	
		



Lampiran A		
BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES		
Item	Sample Picture	Specification
<u>BUILT IN FURNITURE AND LOOSE FURNITURE AND ELECTRICAL APPLIANCES (Cont'd)</u> <u>Toilet OKU (Cont'd)</u>		
6.4	Stainless steel safety grab bar	
		
6.5	Braille Signage "Restroom"	
		
7	<u>Washing Area</u>	
7.1	Colth hanging	
		
7.2	Wall rack with colth hanging holder	
		

Lampiran A		
BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES		
Item	Sample Picture	Specification
<u>BUILT IN FURNITURE AND LOOSE FURNITURE AND ELECTRICAL APPLIANCES (Cont'd)</u>		
8	<u>Utility Room</u>	
8.1	Counter bar folding table	
		
8.2	Heavy duty rack	
		
8.3	Metal storage cabinet for tools	
		
8.4	Stand rack	
8.5	Open shelves	
		

Lampiran A		
BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES		
Item	Sample Picture	Specification
<u>BUILT IN FURNITURE AND LOOSE FURNITURE AND ELECTRICAL APPLIANCES (Cont'd)</u> <u>Utility Room (Cont'd)</u>		
8.6	Safety and tools signboard for inventory item	
8.7	Office Desk 4ft Melamine	
		
8.8	Low back mesh chair	
		
8.9	Key lock box steel wall mounted	
		
8.10	4 Drawer steel filing office cabinet	
		

Lampiran A		
BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES		
Item	Sample Picture	Specification
<u>BUILT IN FURNITURE AND LOOSE FURNITURE AND ELECTRICAL APPLIANCES (Cont'd)</u>		
8.11	Notice Softboard foam board	
		
8.12	Whiteboard	
		
9	<u>ELECTRICAL AND ELECTRONIC APPLIANCES</u>	
9.1	<u>Surau Male & Female</u>	
9.1.1	Ceiling fan	
9.1.2	1.0Hp Air Conditioning complete with outdoor unit compressor	
9.2	<u>Locker Room Hutan Bandar & Taman Permainan</u>	
9.2.1	Ceiling fan/wall fan	
		
9.3	<u>Toilet OKU</u>	
9.3.1	Alarm emergency	
		

BILL NO.4 - FURNITURE AND ELECTRICAL APPLIANCES

Item	Sample Picture	Specification
<u>BUILT IN FURNITURE AND LOOSE FURNITURE AND ELECTRICAL APPLIANCES (Cont'd)</u>		
9.4	<u>Utility Room</u>	
9.4.1	16" heavyduty exhaust fan	
		
9.4.2	1.0Hp Air Conditioning complete with outdoor unit compressor	
9.4.3	Wall fan/Ceiling Fan	
		
9.5	<u>ELECTRICAL AND ELECTRONIC APPLIANCES</u>	
9.5.1	EPSON' LCD projector with bracket	
9.5.2	VENOVA' projector wall screen, with white matt	
9.5.3	ASUS' computer	
9.5.4	48' smart TV with brecket	
9.5.5	Refrigerator 2 door	
9.5.6	Microwave	
9.5.7	AX3000' wall plate Wifi 6 Access Point	
9.5.8	Cable cat-6 for network complete with wireless transmitter receiver, AP/repeater.	
10	<u>CCTV SYSTEM</u>	
10.1	HIK Vision' 8CH complete with 2T HDD	
10.2	HIK Vision' HDTVI 2MP 4.0mm Fix Lens IR CCD/Dome	
10.3	Cable type 'RG59 Coaxia'; and 2 core power cable plus earth in high PVC conduit.	
10.4	13VCD power point with metal casing	
10.5	13A power point	

**BILL NO. 5 - MECHANICAL & ELECTRICAL
WORKS**

KERJA-KERJA MEMBINA DAN MENYIAPKAN 'STORE HARDWARE' DAN STOR MENYIMPAN BAHAN
MUDAH TERBAKAR DI HUTAN BANDAR MUTIARA RINI, SKUDAI, JOHOR.
UNTUK TETUAN MAJLIS BANDARAYA ISKANDAR PUTERI

SUMMARY OF PRICE

MECHANICAL & ELECTRICAL SERVICES

ITEM	DESCRIPTIONS	FROM PAGE	TOTAL AMOUNT (RM)
A	MECHANICAL SERVICES	SUM MECH/1	
B	ELECTRICAL SERVICES	SUM ELECT/1	
TOTAL PRICE CARRY TO FINAL SUMMARY			

Ringgit Malaysia:
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**KERJA - KERJA MEMBINA DAN MENYIAPKAN ' STORE HARDWARE ' DAN STOR MENYIMPAN BAHAN MUDAH
TERBAKAR DI HUTAN BANDAR MUTIARA RINI, SKUDAI, JOHOR.
UNTUK TETUAN MAJLIS BANDARAYA ISKANDAR PUTERI.**

MECHANICAL SYSTEM SUMMARY OF PRICE

ITEM	DESCRIPTION OF WORKS	FROM PAGE	CONTRACT AMOUNT (RM)
A	COLDWATER PLUMBING SYSTEM	M/A/1	
B	SANITARY PLUMBING SYSTEM	M/B/1	
C	AIRCONDITIONING & MECHANICAL VENTALITAION SYSTEM (ACMV)	M/C/1	
D	AIR COMPRESSOR SYSTEM	M/D/1	
E	MISCELLANEOUS	M/E/1	
CARRIED FORWARD TO M&E SUMMARY (ITEM A)			

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT
A	COLD WATER PLUMBING				
	To complete supply, install, testing and commissioning of the following system and other ancillary works in accordance with the requirements of the specifications and drawings :-				
A.1	FACILITY BUILDING				
1.0	<u>STROGE TANK & ASSOCIATED PIPEWORKS</u>				
	PE tank c/w cover, tank support, 25mm thick water proof plywood, overflow pipe, scour pipe, warning pipe, balancing pipe, ball float valves, valves, plinth, sampling pipe, pipe and other necessary accessories; Capacity :300 gallon	Lots	2		
2.0	<u>DISTRIBUTION & DELIVERY PIPE</u>				
2.1	Internal distribution & delivery pipe c/w hangers, pipe sleeves thorough beam/slab/wall, supports, bracket, painting, connection, concealed works, elbow, tee, reducer, valve, bends, pipe clip, and all accessories and necessary works for the following pipe sizes:				
	<u>i) Distribution Pipe (UPVC Class 7)</u>				
	a) 15 mm	Lot	1		
	b) 20 mm	Lot	1		
	c) 25 mm	Lot	1		
	d) 32 mm	Lot	1		
	e) 40 mm	Lot	1		
	<u>i) Delivery Pipe (HDPE PN 12.5)</u>				
	a) 20 mm	Lot	1		
	a) 40 mm	Lot	1		
2.2	All valves including gate valves, stop cock, angle stop valve, flexible hose, ball valve, pressure reducing valve, pressure gauge cover item 2.1	Lot	1		
A.2	PRODUCTION HALL & BIN CENTRE				
1.0	<u>STROGE TANK & ASSOCIATED PIPEWORKS</u>				
1.1	PE tank c/w cover, tank support, 25mm thick water proof plywood, overflow pipe, scour pipe, warning pipe, balancing pipe, ball float valves, valves, plinth, sampling pipe, pipe and other necessary accessories; Capacity :150 gallon	Lot	1		
2.0	<u>DISTRIBUTION & DELIVERY PIPE</u>				
2.1	Internal distribution & delivery pipe c/w hangers, pipe sleeves thorough beam/slab/wall, supports, bracket, painting, connection, concealed works, elbow, tee, reducer, valve, bends, pipe clip, and all accessories and necessary works for the following pipe sizes:				
	<u>i) Distribution Pipe (UPVC Class 7 & HDPE PN 12.5)</u>				
	a) 15 mm	Lot	1		
	b) 20 mm	Lot	1		
	c) 25 mm	Lot	1		
	d) 32 mm	Lot	1		
	e) 40 mm	Lot	1		
	<u>i) Delivery Pipe (HDPE PN 12.5)</u>				
	a) 20 mm	Lot	1		
	b) 40 mm	Lot	1		
2.2	All valves including gate valves, stop cock, angle stop valve, flexible hose, ball valve, pressure reducing valve, pressure gauge cover item 2.1	Lot	1		
TO SUMMARY					-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT
B	<u>SANITARY PLUMBING</u> To complete supply, install, testing and commissioning of the following system and other ancillary works in accordance with the requirements of the specifications and drawings :-				
B.1	<u>FACILITY BUILDING</u>				
1.0	UPVC piping for internal soil pipe, waste pipe and anti syphonage pipe c/w fittings, pipe sleeves through beam/slab/wall, traps, joints, fittings, elbows, tee, reducer, bends, bracket, plug, cleaning eye, cap, bedding, high quality resin and connection to Manhole/Inspection Chamber etc as specified for:-				
	Vent Pipe				
	a) 80 mm	Lot	1		
	Branch Pipe				
	a) 32 mm	Lot	1		
	b) 80 mm	Lot	1		
	c) 110 mm	Lot	1		
B.2	<u>PRODUCTION HALL & BIN CENTRE</u>				
1.0	UPVC piping for internal soil pipe, waste pipe and anti syphonage pipe c/w fittings, pipe sleeves through beam/slab/wall, traps, joints, fittings, elbows, tee, reducer, bends, bracket, plug, cleaning eye, cap, bedding, high quality resin and connection to Manhole/Inspection Chamber etc as specified for:-				
	Branch Pipe				
	a) 32 mm	Lot	1		
	b) 82 mm	Lot	1		
B.4	<u>ACCESSORIES</u>				
1.0	Floor drain, floor trap, gully trap, grease trap, neutralization tank, stainless steel gratings bottle trap, vent cowl etc c/w excavation, brickwork, bedding, and all necessary accessories.	Lot	1		
2.0	600x600x150 precast/cast-in situ concrete slab for floor trap/gulley trap/grease trap/neutralization tank c/w reinforcement bar and etc.	Lot	1		
3.0	115mm thick brickwall to covered all exposed pipes including reinforced with a layer of 'Exmet' 65mm wide at every fourth course, plastering and painting works to the satisfactory of the Engineer.	Lot	1		
4.0	Inspection Chambers c/w excavation, bedding, medium duty grating cover and frame, steps, brickwall, forming inlet and outlet, internal plastering using High Alumina Cement of 20mm thick and all necessary accessories	Lots	3		
5.0	Connection to external sewer from inspection chamber to manhole including excavation, backfilling, back drop, spigot, socket rubber ring jointing, 150mm bend, M.S. Plate (where applicable) using 150 mm dia. UPVC brown type to the satisfactory of engineer.	Lot	1		
TO SUMMARY					-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT
C.1	<u>AIR-CONDITIONING</u> To complete supply, install, testing and commissioning of the following system and other ancillary works in accordance with the requirements of the specifications and drawings:- Air-Cooled Split Unit (Inverter) System c/w outdoor unit, plinths, refrigerant piping, 6/8" insulation, bracket, fitting, power/control wiring, drain pipe, vibration isolation and all associated accessories at:Chamber etc as specified for:-				
1.0	<u>SPLIT UNITS</u> a) WORK & DISCUSSION AREA (Min. Cap: 19,500 Btuh/each) Type: Wall Mounted	Lots	2		
2.0	PVC 7 class drain pipe 20 mm	Lots	1		
3.0	Copper pipe size 6.35 mm	Lots	1		
4.0	Copper pipe size 9.52 mm	Lots	1		
TO SUMMARY					-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT
D	<u>AIR COMPRESSOR SYSTEM</u> To complete supply, install, testing and commissioning of the following system and other ancillary works in accordance with the requirements of the specifications and drawings:-				
1.0	Air Compressor with capacity 120CFM, 120PSI c/w valve, pressure switch, flexible pipe works, compressor tank, air release valve, plinth and all accessories.	Lot	1		
2.0	All Hose Reel pipe works Pre-paint 25mm & 50mm G.I CL 'C' Piping from factory and fitting type from pump hose reel to building c/w fittings, pressure gauges, pressure regulator, hose connector, supporting hangers and brackets, valves, painting, pipe sleeves, making good of walls and floors, pvc class D pipe for underground piping and all necessary accessories.	Lot	1		
TO SUMMARY					-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT
E	<u>MISCELLANEOUS</u>				
1.0	Testing and commissioning of the whole mechanical system to the satisfactory and acceptance Client and Engineer.	L/S	1		
2.0	Submission of five (5) Sets of Proposed Construction Drawings, Detailed "Shop Drawing", Documents - List of Material, Method of statement & Catalogues before commencement of installation for consultant approval and record.	L/S	1		
3.0	Submission of five (5) Sets of 'As Built Drawing' c/w softcopy(cd-rom) and 5 sets Documents - 'Operation Maintenance Manual', Warranty after completion of installation for consultant approval and record.	L/S	1		
4.0	Other item deemed necessary but not included in this BQ, please specify: a) _____ b) _____ c) _____ d) _____				
TO SUMMARY					-

**KERJA-KERJA MEMBINA DAN MENYIAPKAN 'STORE HARDWARE' DAN STOR MENYIMPAN BAHAN MUDAH TERBAKAR DI
HUTAN BANDAR MUTIARA RINI, SKUDAI, JOHOR.
UNTUK TETUAN MAJLIS BANDARAYA ISKANDAR PUTERI**

SUMMARY OF PRICE FOR ELECTRICAL SYSTEM

ITEM	DESCRIPTION OF WORKS	FROM PAGE	SUB-AMOUNT (RM)	CONTRACT AMOUNT (RM)
A	EXTERNAL LOW-VOLTAGE SYSTEM	E/A/1		-
B	INTERNAL LOW-VOLTAGE SYSTEM			-
	B.1) FACILITY BUILDING	E/B.1/2	-	
	B.2) PRODUCTION HALL	E/B.2/2	-	
	B.3) STORE TYPE 'A'	E/B.3/2	-	
	B.4) STORE TYPE 'B' & BIN CENTRE	E/B.4/2	-	
C	LIGHTNING PROTECTION SYSTEM	E/C/1		-
D	INFORMATION & COMMUNICATION TECHNOLOGY SYSTEM.	E/D/1		-
E	MISCELLANEOUS	E/E/1		-
TOTAL TO BE CARRIED TO M&E SUMMARY OF PRICE (ITEM B)				-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT (RM)
A	EXTERNAL LOW-VOLTAGE SYSTEM				
	Note: i) The rates shall include for the supply, delivery, installation, erection, testing and commissioning rate for the complete system with internal wiring, making good and etc as per specifications and for the necessary completion of the system. ii) This portion of work shall be carried out by registered contractor (CIDB, PKK, SSM). All installation works must be complied with Suruhanjaya Tenaga, JKR requirements regulations and drawing.				
A.1	<u>MAIN POWER CABLE</u>				
A.1.1	1 x 4C x 35mm ² XLPE/SWA/PVC (Cu.) cable laid underground in pipe sleeves from Existing main Feeder Pillar to MSB c/w cable lug, cable termination and all necessary works.	m	500		
A.1.2	Underground Ø100mm HDPE double wall Corrugated pipe sleeve from existing main feeder pillar to MSB cable works as indicated in drawing, depth not exceeding 1.2m.	m	500		
A.1.3	Road cutting for cable-trenching by using diamond-cutting machine, concrete slab 150mm thick with 2 layer BRC A10 and reinstatement.	m	2		
A.1.4	150mm thick sand bedding for the Ø100mm HDPE Double wall Corrugated pipe sleeve.	m	2		
	Note: Road cutting works shall be deemed to include preparation of surfaces, excavation for bedding, multiple handling, disposal of surplus excavated material (including unsuitable material), upholding sides of excavation, allowance for working space, back filling, reinstatement of original surface unless covered by separate item and cart away surplus excavated materials to contractor's own dump site.				
A.1.3	Junction box/Draw pit (450mm x 450mm x 750) c/w cover& accessories	nos	1		
A.2	<u>EXTERNAL INFORMATION & COMMUNICATION TECHNOLOGY (I.C.T) SYSTEM.</u>				
A.2.1	Supply and install concrete pole 9m c/w stay wire and all necessary accessories for complete	nos	1		
A.2.2	Telephone pit (750mm x 750mm) c/w cover as per specification of Telekom Malaysia (TM).	nos	1		
A.2.3	Telephone pit (450mm x 450mm x 750mm) c/w cover as per specification of Telekom Malaysia (TM).	nos	1		
A.2.4	Road cutting from pit to FTB by using diamond-cutting machine, concrete slab 150mm thick with 2 layer BRC A10 and reinstatement.	m	2		
A.2.5	150mm thick sand bedding for the Ø100mm HDPE Double wall Corrugated pipe sleeve.	m	2		
	Note: Road cutting works shall be deemed to include preparation of surfaces, excavation for bedding, multiple handling, disposal of surplus excavated material (including unsuitable material), upholding sides of excavation, allowance for working space, back filling, reinstatement of original surface unless covered by separate item and cart away surplus excavated materials to contractor's own dump site.				
TOTAL TO BE CARRIED TO SUMMARY OF PRICE FOR ELECTRICAL SYSTEM (ITEM A)					-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT (RM)
B.1	INTERNAL LOW-VOLTAGE SYSTEM (FACILITY BUILDING)				
	Note: i) The rates shall include for the supply, delivery, installation, erection, testing and commissioning for the complete system with internal wiring, making good and etc as per specifications and for the necessary completion of the system ii) Unless otherwise stated, all sub-mains cable shall be single PVC-insulated installed in HDG trunking properly hung from the floor slab and all wiring shall be in G.I Conduit. iii) Adequate space factor shall be allowed for cables in trunkings or on cable trays. Sub-main cables shall not be run in the same trunking as final sub-circuit wiring. All CPC sizes are as per IEE Regulations (17th. Edition-Table 54G).				
B.1.1	MAIN SWITCHBOARD (MSB)				
B.1.1.1	100A 3Ø wall mounted main switch board (Form 2B) c/w: i) Protection devices as indicated in drawing. ii) Mild steel frame & body coated with epoxy powder (RAL 7035). iii) 50kA incomer breaking capacity. iv) 50kA main earth bar.	set	1		
B.1.2	SUB-MAIN POWER CABLE				
B.1.2.1	1 x 2C x 25mm ² PVC/PVC (Cu.) cable run in metal trunking/ G.I Conduit from MSB to DB/FP 60A SPN c/w 1C x 10mm ² PVC (Cu.) cable as circuit protective conductor (CPC).	m	5		
B.1.3	DISTRIBUTION BOARD				
B.1.3.1	60A 1Ø wall mounted distribution board of DB/FP 60A SPN c/w: i) Protection devices as indicated in drawing. ii) Mild steel frame & body coated with epoxy powder (RAL 7035). iii) 25kA incomer breaking capacity. iv) 25kA main earth bar.	set	1		
B.1.4	FINAL CIRCUIT WIRING				
B.1.4.1	Lighting point using 2C x 1.5mm ² PVC (Cu.) in concealed conduit c/w 1C x 1.5mm ² PVC (Cu.) green cable as (CPC).	nos	10		
B.1.4.2	Lighting point using 2C x 4 mm ² PVC (Cu.) in concealed conduit c/w 1C x 1.5mm ² PVC (Cu.) green cable as (CPC).	nos	33		
B.1.4.3	Power point using 2C x 2.5mm ² PVC (Cu.) in concealed conduit c/w 1C x 2.5mm ² PVC (Cu.) green cable as (CPC) for 13A 3-pin S/S/O.	nos	20		
B.1.4.4	Fan point using 2C x 4mm ² PVC (Cu.) in concealed conduit c/w 1C x 1.5mm ² PVC (Cu.) green cable as (CPC).	nos	2		
B.1.4.5	A/C point using 3C x 4mm ² PVC (Cu.) in concealed conduit c/w 1C x 2.5mm ² PVC (Cu.) green cable as (CPC) and 3-phase ceiling rose.	nos	4		
B.1.4.6	Exhaust Fan point using 2C x 4mm ² PVC (Cu.) in concealed conduit c/w 1C x 1.5mm ² PVC (Cu.) green cable as (CPC).	nos	6		
B.1.5	ELECTRICAL FITTING				
B.1.5.1	SWITCH:				
	i) Switch Centre Metal clad type c/w mounting bracket, body earth & accessories	nos	4		
	ii) 1-gang 13A 3-pin switched socket outlet (flushed)	nos	26		
	iii) 1-gang 15A 3-pin switched socket outlet (flushed) for A/C	nos	4		
	iv) 2 gang, 1 way switch (flushed)	nos	3		
	iv) 4 gang, 1 way switch (flushed)	nos	2		
	TOTAL CARRIED FORWARD				-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT (RM)
	TOTAL BROUGHT FORWARD				-
B.1.5.2	LUMINAIRE: i) Jabatan Bomba approved Non-maintained, self-contained rechargeable surface mounted Emergency Light luminaire c/w clear prismatic diffuser, 1 X 8W tube, fluorescent tube charger, sealed NiCd battery of minimum 3 hour rating etc. (Explosion Proof Type) ii) Jabatan Bomba approved single sided surface mounted 'KELUAR' sign luminaire c/w 18W lamps, 3 hours battery back-up etc. (Explosion Proof Type) iii) 1 x 32W T8 L.E.D Batten Bare Channel Fitting c/w mounting bracket & accessories (Explosion Proof Type) iv) 2 x 32W T8 L.E.D Batten Bare Channel Fitting c/w mounting bracket & accessories (Explosion Proof Type) v) 2 x 32W T8 L.E.D Reessed mounted c/w aluminium reflector & accessories (Explosion Proof Type)	no nos nos nos	3 15 5 15		
B.1.5.3	FAN: i) 60W ceiling fan c/w regulator, mounting kit and all necessary accessories. ii) Minimum capacity of exhaust fan c/w automatic shutter, mounting kit and all necessary accessories.	nos nos	2 6		
B.1.6	EARTHING SYSTEM				
B.1.6.1	Earthing for electrical system c/w, complete heavy duty earth chamber, copper tape (25mm x 3mm) from MSB to earth earth chamber, A clamp, sufficient copper rod, rod coupling and all necessary accessories/works. Note: i) MSB and SPD earthing system must be install independently. ii) Ohm reading of each earthing system must comply with S.T requirement.	lot	1		
B.1.7	ELECTRICAL PROTECTION RELAY SCHEME				
B.1.7.1	Calibration of all protection relays in all switchboard before handover process c/w fault calculation, endorsed test report by electrical service engineer, valid calibration seal and all necessary documents/works.	lot	1		
TOTAL TO BE CARRIED TO SUMMARY OF PRICE FOR ELECTRICAL SYSTEM (ITEM B)					-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT (RM)
B.2	INTERNAL LOW-VOLTAGE SYSTEM (PRODUCTION HALL)				
	Note:				
	i) The rates shall include for the supply, delivery, installation, erection, testing and commissioning for the complete system with internal wiring, making good and etc as per specifications and for the necessary completion of the system				
	ii) Unless otherwise stated, all sub-mains cable shall be single PVC-insulated installed in HDG trunking properly hung from the floor slab and all wiring shall be in G.I Conduit.				
	iii) Adequate space factor shall be allowed for cables in trunkings or on cable trays. Sub-main cables shall not be run in the same trunking as final sub-circuit wiring. All CPC sizes are as per IEE Regulations (17th. Edition-Table 54G).				
B.2.1	SUB-MAIN POWER CABLE				
B.2.1.1	1 x 4C x 25mm ² PVC/PVC (Cu.) cable run in Ø100mm HDPE corrugated pipe t from MSB to DB/PH 60A TPN c/w 1C x 10mm ² PVC (Cu.) cable as circuit protective conductor (CPC).	m	200		
B.2.1.2	Junction box/Draw pit (450mm x 450mm x 750) c/w cover & accessories	nos	1		
B.1.1.3	Ø100mm diameter double wall corrugated pipe laid underground c/w excavation, back-fill, compaction of soil surface and all other necessary works.	m	250		
B.2.2	DISTRIBUTION BOARD				
B.2.2.1	60A 3Ø wall mounted distribution board of DB-/PH 60A TPN c/w: i) Protection devices as indicated in drawing. ii) Mild steel frame & body coated with epoxy powder (RAL 7035). iii) 25kA incomer breaking capacity. iv) 25kA main earth bar.	set	1		
B.2.3	FINAL CIRCUIT WIRING				
B.2.3.1	Lighting point using 2C x 1.5mm ² PVC (Cu.) in concealed conduit c/w 1C x 1.5mm ² PVC (Cu.) green cable as (CPC).	nos	10		
B.2.3.2	Lighting point using 2C x 4mm ² PVC (Cu.) in concealed conduit c/w 1C x 1.5mm ² PVC (Cu.) green cable as (CPC).	nos	18		
B.2.3.3	Power point using 2C x 2.5mm ² PVC (Cu.) in concealed conduit c/w 1C x 2.5mm ² PVC (Cu.) green cable as (CPC) for 13A 3-pin S/S/O.	nos	2		
B.2.3.4	Exhaust Fan point using 2C x 4mm ² PVC (Cu.) in concealed conduit c/w 1C x 1.5mm ² PVC (Cu.) green cable as (CPC).	nos	6		
B.2.3.1	Lighting point using 2C x 4mm ² PVC (Cu.) in concealed conduit c/w 1C x 1.5mm ² PVC (Cu.) green cable as (CPC). (connection from DB/PH)	nos	5		
B.2.4	ELECTRICAL FITTING				
B.2.4.1	SWITCH:				
	i) Switch Centre Metal clad type c/w mounting bracket, body earth & accessories	nos	1		
	ii) 1-gang 13A 3-pin switched socket outlet (flushed)	nos	1		
	iii) 1-gang 15A 3-pin switched socket outlet (flushed) for A/C	nos	1		
	TOTAL CARRIED FORWARD				-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT (RM)
	TOTAL BROUGHT FORWARD				-
B.5.3	LUMINAIRE: i) Jabatan Bomba approved Non-maintained, self-contained rechargeable surface mounted Emergency Light luminaire c/w clear prismatic diffuser, 1 X 8W tube, fluorescent tube charger, sealed NiCd battery of minimum 3 hour rating etc. (Explosion Proof Type) ii) Jabatan Bomba approved single sided surface mounted 'KELUAR' sign luminaire c/w 18W lamps, 3 hours battery back-up etc. (Explosion Proof Type) iii) 1 x 32W T8 L.E.D Tube Bare Channel Fitting c/w mounting bracket & accessories (Explosion Proof Type) iv) 1 x 160W E.C.O GEN 2 LED Hi-Bay c/w supended chain & accessories v) 1 x 200w LED Floodlight c/w bracket & accessories	no nos nos nos	2 12 12 5		
B.1.5.3	FAN: i) Minimum capacity of exhaust fan c/w automatic shutter, mounting kit and all necessary accessories.	nos	6		
B.6	EARTHING SYSTEM				
B.6.1	Earthing for electrical system c/w, complete heavy duty earth chamber, copper tape (25mm x 3mm) from MSB to earth earth chamber, A clamp, sufficient copper rod, rod coupling and all necessary accessories/works. Note: i) MSB and SPD earthing system must be install independently. ii) Ohm reading of each earthing system must comply with S.T requirement.	lot	1		
B.7	ELECTRICAL PROTECTION RELAY SCHEME				
B.7.1	Calibration of all protection relays in all switchboard before handover process c/w fault calculation, endorsed test report by electrical service engineer, valid calibration seal and all necessary documents/works.	lot	1		
TOTAL TO BE CARRIED TO SUMMARY OF PRICE FOR ELECTRICAL SYSTEM (ITEM B)					-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT (RM)
B.3	INTERNAL LOW-VOLTAGE SYSTEM (STORE TYPE A)				
	Note:				
	i) The rates shall include for the supply, delivery, installation, erection, testing and commissioning for the complete system with internal wiring, making good and etc as per specifications and for the necessary completion of the system.				
	ii) Unless otherwise stated, all sub-mains cable shall be single PVC-insulated installed in HDG trunking properly hung from the floor slab and all wiring shall be in G.I Conduit.				
	iii) Adequate space factor shall be allowed for cables in trunkings or on cable trays. Sub-main cables shall not be run in the same trunking as final sub-circuit wiring. All CPC sizes are as per IEE Regulations (17th. Edition-Table 54G).				
B.3.1	SUB-MAIN POWER CABLE				
B.3.1.1	1 x 2C x 25mm ² PVC/PVC (Cu.) cable run in Ø100mm HDPE corrugated pipe from MSB to DB STORE A SPN c/w 1C x 10mm ² PVC (Cu.) cable as circuit protective conductor (CPC).	m	350		
B.3.1.2	Junction box/Draw pit (450mm x 450mm x 750) c/w cover	nos	1		
B.3.1.3	Ø100mm diameter double wall corrugated pipe laid underground c/w excavation, back-fill, compaction of soil surface and all other necessary works.	m	350		
B.3.2	DISTRIBUTION BOARD				
B.3.2.1	60A 1Ø wall mounted distribution board of DB STORE A 60A SPN c/w: i) Protection devices as indicated in drawing. ii) Mild steel frame & body coated with epoxy powder (RAL 7035). iii) 30kA incomer breaking capacity. iv) 30kA main earth bar.	set	1		
B.3.3	FINAL CIRCUIT WIRING				
B.3.3.1	Lighting point using 2C x 1.5mm ² PVC (Cu.) in concealed conduit c/w 1C x 1.5mm ² PVC (Cu.) green cable as (CPC).	nos	4		
B.3.3.2	Lighting point using 2C x 4mm ² PVC (Cu.) in concealed conduit c/w 1C x 1.5mm ² PVC (Cu.) green cable as (CPC).	nos	35		
B.3.3.3	Power point using 2C x 2.5mm ² PVC (Cu.) in concealed conduit c/w 1C x 2.5mm ² PVC (Cu.) green cable as (CPC) for 13A 3-pin S/S/O.	nos	6		
B.3.3.4	Exhaust Fan point using 2C x 1.5mm ² PVC (Cu.) in concealed conduit c/w 1C x 1.5mm ² PVC (Cu.) green cable as (CPC).	nos	4		
B.3.4	ELECTRICAL FITTING				
B.3.4.1	SWITCH:				
	i) Switch Centre Metal clad type c/w mounting bracket, body earth & accessories	nos	4		
	ii) 1-gang 13A 3-pin switched socket outlet (flushed)	nos	5		
	iii) 1-gang 15A 3-pin switched socket outlet (flushed) for A/C	nos	1		
	iv) 1 gang, 1 way switch (flushed)	nos	1		
	TOTAL CARRIED FORWARD				-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT (RM)
	TOTAL BROUGHT FORWARD				-
B.3.4.2	LUMINAIRE:				
	i) Jabatan Bomba approved Non-maintained, self-contained rechargeable surface mounted Emergency Light luminaire c/w clear prismatic diffuser, 1 X 8W tube, fluorescent tube charger, sealed NiCd battery of minimum 3 hour rating etc. (Explosion Proof Type)	no	1		
	ii) Jabatan Bomba approved single sided surface mounted 'KELUAR' sign luminaire c/w 18W lamps, 3 hours battery back-up etc. (Explosion Proof Type)	no	1		
	iii) 1 x 32W T8 L.E.D Batten Bare Channel Fitting c/w mounting bracket & accessories (Explosion Proof Type)	nos	10		
	iv) 2 x 32W T8 L.E.D Batten Bare Channel Fitting c/w mounting bracket & accessories (Explosion Proof Type)	nos	27		
	B.3.5 EARTHING SYSTEM				
B.3.5.1	Earthing for electrical system c/w, complete heavy duty earth chamber, copper tape (25mm x 3mm) from MSB to earth earth chamber, A clamp, sufficient copper rod, rod coupling and all necessary accessories/works.	lot	1		
	Note:				
	i) MSB and SPD earthing system must be install independently.				
	ii) Ohm reading of each earthing system must comply with S.T requirement.				
	B.3.6 ELECTRICAL PROTECTION RELAY SCHEME				
B.3.6.1	Calibration of all protection relays in all switchboard before handover process c/w fault calculation, endorsed test report by electrical service engineer, valid calibration seal and all necessary documents/works.	lot	1		
TOTAL TO BE CARRIED TO SUMMARY OF PRICE FOR ELECTRICAL SYSTEM (ITEM B)					-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT (RM)
	TOTAL BROUGHT FORWARD				-
B.4.4.2	LUMINAIRE:				
	i) Jabatan Bomba approved Non-maintained, self-contained rechargeable surface mounted Emergency Light luminaire c/w clear prismatic diffuser, 1 X 8W tube, fluorescent tube charger, sealed NiCd battery of minimum 3 hour rating etc. (Explosion Proof Type)	no	1		
	ii) Jabatan Bomba approved single sided surface mounted 'KELUAR' sign luminaire c/w 18W lamps, 3 hours battery back-up etc. (Explosion Proof Type)	no	1		
	iii) 1 x 32W T8 L.E.D Batten Bare Channel Fitting c/w mounting bracket & accessories (Explosion Proof Type)	nos	2		
	iv) 2 x 32W T8 L.E.D Batten Bare Channel Fitting c/w mounting bracket & accessories (Explosion Proof Type)	nos	2		
B.4.5	EARTHING SYSTEM				
B.4.5.1	Earthing for electrical system c/w, complete heavy duty earth chamber, copper tape (25mm x 3mm) from MSB to earth earth chamber, A clamp, sufficient copper rod, rod coupling and all necessary accessories/works.	lot	1		
	Note:				
	i) MSB and SPD earthing system must be install independently.				
	ii) Ohm reading of each earthing system must comply with S.T requirement.				
B.4.6	ELECTRICAL PROTECTION RELAY SCHEME				
B.4.6.1	Calibration of all protection relays in all switchboard before handover process c/w fault calculation, endorsed test report by electrical service engineer, valid calibration seal and all necessary documents/works.	lot	1		
TOTAL TO BE CARRIED TO SUMMARY OF PRICE FOR ELECTRICAL SYSTEM (ITEM B)					-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT (RM)
C	<u>LIGHTNING PROTECTION SYSTEM</u>				
	Note: i) The rates shall include for the supply, delivery, installation, erection, testing and commissioning rate for the complete system with internal wiring, making good and etc as per specifications and for the necessary completion of the system. ii) This portion of work shall be carried out by registered contractor (CIDB, PKK, SSM). All installation works must be complied with Suruhanjaya Tenaga, JKR requirements and regulations as per drawing and to complete supply, install, tagging, complete earthing , configure, testing & commissioning all LPS as per drawing and specification.				
C.1	Air terminal.	nos	18		
C.2	Air terminal base.	nos	18		
C.3	Copper Tape (25mm x 3mm) c/w saddle and all necessary accessories.	m	100		
C.4	Testbon c/w bolts, nuts and all necessary accessories.	nos	2		
C.5	'A' clamp for copper rod c/w all necessary accessories.	nos	20		
C.6	Bi-metallic connector c/w all necessary accessories.	nos	20		
C.7	Copper rod (16mm centre point x 1500mm) c/w rod coupling and all necessary accessories.	nos	2		
C.8	12" x 12" heavy duty earth chamber c/w heavy duty lid, and all necessary works & accessories.	nos	10		
TOTAL TO BE CARRIED TO SUMMARY OF PRICE FOR ELECTRICAL SYSTEM (ITEM C)					-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT (RM)
D	<u>INFORMATION & COMMUNICATION TECHNOLOGY SYSTEM.</u> Note: i) For these portion of works, the rates must include for the supplying, installing, testing, commissioning and transportating of a complete infra I.C.T system with clean up all the debris and surplus material during/after the installation process. ii) All quantities in this section are provisional. The final quantity shall be measured upon completion.				
D.1	<u>INTERNAL TELECOMMUNICATION WORKS</u>				
D.1.1	Supply and install TM approved fibre termination boxes c/w accessories	no	1		
D.1.2	Supply and install 4-core single mode fiber optic cable from fiber termination box to ICT equipment rack run in exposed black painted G.I conduit.	lot	1		
D.1.3	19" Equipment Rack, 24U floor standing c/w cooling fan, extension cable, sliding tray and all accessories.	no	1		
D.1.4	Supply and install complete set of Multimedia PABX System in equipment rack c/w tray, connector and all accessories as per specification.	lot	1		
D.1.5	Supply and install Minimum 3kVA rackmount type Uninterruptible Power Supply for Core Switch etc in equipment rack c/w lightning and surge protection, able backup for min 2 hours and c/w cabling, termination and all accessories.	lot	1		
D.1.6	Supply and install Fibre Patch Panel and tags in equipment rack c/w tray, connector and all accessories as per specification.	lot	1		
D.1.7	Supply and install tm approved fiber wall socket c/w 4-core single mode fiber optic cable from ICT equipment rack to SOHO box run in exposed black painted G.I conduit.	nos	1		
D.1.8	Supply and install SOHO box c/w: i) 4 x CAT 5e 8 ports patch panel and patchcord ii) ONU, RG and Network switche units iii) Standard accessories including ventilation fan, 2-gang S/S/O, thermostat and MCB iv) Standard feature: Swing out equipment tray	nos	1		
D.1.9	Suppy and install telephone socket outlet (RJ11) using Cat 3 cable c/w cable termination which run in exposed black painted G.I conduit.	nos	4		
D.1.10	Suppy and install telephone socket outlet (RJ45) using Cat 5e/6 cable c/w cable termination which run in exposed black painted G.I conduit.	nos	4		
TO SUMMARY OF PRICE (ITEM D)					-

NO	DESCRIPTION	UNIT	QTY	UNIT RATE (RM)	AMOUNT (RM)
E	MISCELLANEOUS				
E.1	<u>AUTHORITIES</u> <i>The whole of electrical installation in this section shall be installed completed in accordance with the engineer's drawings and specifications to the requirements of the approving authorities.</i> <i>Price include supply, installation, testing and commisioning for al services, guarantee and free maintenance within the defect liability period of 24 month for all works in this bill.</i>				
E.1.1	Complete liason and dealing with Majlis Bandaraya Iskandar Puteri including submission of related necessary documents, arrangement for official site inspection, arrangement of neecessary tools and facilities and all follow up untill sucessfull connection and functioning and handing over of the system.	L/S	L/S		
E.1.2	Allow here or in rates for the cost of carrying out inspection and test at works, testing stallation and the equipment of the testing as required in the MBIP specifications including providing all necessary labour, materials, transportation, appliance or equipment electricity and fuels, and paying all fees and charges for tests carried out with MBIP. All cost and fees incurred in the process of getting the Contractor Works inspected, tested and approved by the MBPG shall be included here No additional costs will beetertained in the respect.	L/S	L/S		
E.2	<u>PRELIMINARY</u>				
E.2.1	Submission of the following documents before commencement of installation works for consultant's/client's approval and record: i) Submission of "Detailed Working & Shop Drawings" c/w CD-ROM ii) Submission of "Approval & Sample of Material" iii) Submission of "Technical Catalogue" iv) Submission of "Work Methode of Statement"	set lot set set	3 1 3 3		
E.3	<u>SITE, TESTING & COMMISSIONING</u>				
E.3.1	Testing & Commissioning of the whole works in accordance with specification requirements. The testing shall include the following works: i) Submission of all relavant test report. ii) To provide Testing Equipment and at least 2 competent workers at site during Testing & Commissioning iii) To allow for factory acceptance test for Main Switchboard (MSB) and all other related electrical equipment for at least 4 representatives of the client/consultant. The contractor shall provide for all transportation, meals and all direct and indirect expenses.	lot lot lot	1 1 1		
	INSURANCES Allow for the provision of all the insurances as per Conditions of Contract. All insurances required to be taken out under this contract. i) Contractor's All Risks ii) Workmen's Compensation Contractor are required to provide their own insurance and performance bond to ensure that all materials and machinery on site duing construction are safe and that work is completed in accordance with approved specifaions.				
E.4	<u>UPON COMPLETION</u>				
E.4.1	Submission of the following documents after completion of electrical works for consultant's/client's approval and record: i) Submission of "As-Built Drawing" c/w CD-ROM ii) Submission of "Warranty Certificate" iii) Submission of "Operation Maintenance & Manual"	set set set	3 3 3		
E.7.2	The Contractor will, on completion of the work, removes as quickly as possible and convey away from site at is sole cost, all plants and surplus materials except those ordered to be left on the site, together with all rubbish and debris. The site is to be restored in a neat and workmanlike manner to the satisfaction of the Client.				
E.7.3	Hacking works and Making good any damages to the existing road and road kerb done by the contractor during the construction of work to the satisfaction of the S.O.				
TOTAL TO BE CARRIED TO SUMMARY OF PRICE FOR ELECTRICAL SYSTEM (ITEM E)					-

**BILL NO. 6 - INFRASTRUCTURE WORKS (ALL
PROVISIONAL)**

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 1 - DEMOLITION WORKS</u></p> <p><u>GENERALLY</u></p> <p>The Contractor shall be held to have visited the site. Inspected the existing premises and ascertained the nature of the demolitions to be carried out. No claims extra payments in this respect will be entertained. Contractor's price shall be deemed included for all item mention's in general note.</p> <p>The Contractor's attention is drawn to close proximity of the surrounding buildings near or adjoining the site and the close proximity of the public throughfare.</p> <p>The Contractor under their own capacity shall engage a specialist Contractor to carry out the demolition works including all existing piles and provides all necessary equipment's, professional personnel to execute the abovesaid works as directed by the S.O.</p> <p>Unless otherwise stated advised by the appointed specialist consultant the Contractor shall furnish his method of statement to the S.O as described and to execute demolition works and any other unforeseen structures findings as directed by the S.O.</p> <p>The Contractor shall provide sufficient staging to support the whole area involved in the demolition works.</p> <p>Unless or otherwise required by the S.O the Contractor should take all the necessary precaution that all demolition as described apply to the specified sections as showing in the drawings.</p> <p>The works on site shall generally be carried out in such manner as to cause the minimum of inconvenience to adjoining or neighbouring owners or to the public. The safety of the adjacent or neighbouring building and the public shall be of paramount importance during the execution of the works and all necessary precautions shall be taken. The Contractor will be held responsible and is to indemnify the owner for any claims or series of claims which may arise out of the carrying out of the works.</p> <p>Before commencing any works, the Contractor shall ascertain the existance and position of water and other services from the relevant authorities and arrange for the diversions or terminations of the services. The Contractor shall allow for paying all costs and charges in connection therewith.</p>				
	TO COLLECTION			-	

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>DEMOLITION WORKS (Cont'd)</u> <u>GENERALLY</u> All old materials and debris arising from the demolitions and alterations are to become the property of the Contractor who shall forthwith remove the same from the buildings and clear away from site. The buildings to be demolished are indicated in the drawings. The Contractor shall satisfy himself as to the nature of works and make allowance for any demolition required over and above the approximate nett area given and make good all works disturbed as necessary. The Contractor shall provide three (3) copies complete dilapidations report with coloured photos of the works before and after demolition works is carried out. The Contractor will be required to repair or replace at his own expenses any parts or complete items which is the opinion the S.O have been damaged as a result of insufficient care in removing, handling and protecting. The Contractor shall allow for protection and support of all demolition works and subsequent reconstruction. <u>Existing Concrete Drain</u> A Demolish existing concrete drain and remove from site to the Contractor's own dump all to the S.O.satisfaction and as per Architect's drawing no; PMRM/2023/MNA/11/RD-01.(Approximate Quantity : 14m)	LS			
	TO COLLECTION				-
	<u>COLLECTION</u> From Page B6/1/1 From Page B6/1/2				- - -
	TOTAL CARRIED TO SUMMARY				-

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ELEMENT 2 - SITE CLEARENCE AND EARTHWORKS</u>				
	<u>SITE CLEARANCE</u>				
A	Clear the areas of the site affected by the proposed works of all grass, cutting trees, weeds, shrubs, bushes including grubbing up roots, etc., filling cavities with surplus excavated material and ramming and removing all debris off the site, construct all temporary works such as cut off drains, earth drain, dykes and all other precautionary measure, etc., incidental or deemed necessary for the proper execution of the whole contract works and maintain same and removing on completion as directed by the S.O and all as per Engineer drawings no; PMRM/2023/MNA/11/ESCP-01.	M2	6400		
	<u>CUTTING TREES</u>				
	Cutting down trees, grubbing up roots, clearing from site, backfilling and compacting cavities with excavated material and cart away tree trunk and debris to Contractor's own dump and all as per Engineer's drawing no; PMRM/2023/MNA/11/ESCP-01.				
B	Not exceeding 1.0m girth	NO	80		
	<u>EARTHWORK</u>				
	Note: The contractor shall deem to have the requirement for Eroton Sediment Control Protection (ESCP) prior to the execution of the earthworks all as shown on Eroton Sediment Control Protection (ESCP) drawings. No additional cost shall be entertained should the contractor fails to comply with requirements.				
	<u>GENERAL</u>				
C	Provision of all temporary works required for the carrying out of the earthworks such as cut-off drains, earth drains, bunds, dykes, stock pile and all other precautionary measures, dewatering including temporary waterway crossing, silt fence, check dam, etc and including make good land slips erosions and subsidences as may be required as directed by the S.O. incidental or deemed necessary for the proper execution of the whole contract works and maintain same for the duration of the contract and removal including making good all existing works disturbed at the end of the contract period and all as per Engineer drawings no; PMRM/2023/MNA/11/ESCP-01.	ITEM			
	TO COLLECTION				

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<p><u>SITE CLEARENCE AND EARTHWORKS (Cont'd)</u></p> <p><u>WASH THROUGH</u></p> <p>To Construction and completion 12796mm x 5107mm x 800mm high reinforced concrete (Grade 20) structure platform of wash trough complete with waterjet and all associated works as washing trough for the cleaning of site vehicles, complete with hose pipe to wash down all the dirt and tires before vehicles leaving the site etc. The washing through shall be located at the outgress of the site comprising of sedimentation sump overall size 1680mm x 1520mm x 1200mm high reinforced concrete (Grade 20) structure including excavation, lean concrete, formwork, reinforcement, BRC, water jet and 230mm precast concrete block drain for discharge drain as shown on the site plan all to the approval of the Engineer and remove up upon completion and make good of disturbed works and all as shown on Engineer's detail drawing no: PMRM/MNA/11/ESCP-01.</p> <p><u>SEDIMENT BASIN</u></p> <p>To Construct sediment basin constructed of earth sediment ground complete with reinforced concrete Grade 25 outlet chamber and discharge outlet structure, brick sump, 150mm thick riprap emergency spillway, 75mm diameter aggregate base on needle-punched 'Geotextile' filter cloth, and turfing including all necessary excavation and dispose surplus excavated materials to contractor's own dump and all as shown on Engineer's detail drawing no: PMRM/MNA/11/ESCP-01.</p>	NO	1		
	<p>Overall size 16000mm x 10000mm x 1500mm deep</p> <p><u>TEMPORARY CONSTRUCTION ACCESS</u></p>	NO	1		
	<p>Construction and completion platform of construction access stabilisation with 200mm thick compacted 25mm to 75mm aggregate and geotextile fabric including excavation all to the approval of the Engineer and remove up upon completion and make good of disturbed works all as per Engineer's instruction</p> <p>Excavate to formation levels commencing at existing level to form platforms, embankments, terraces, etc including loading transport, multiple handling and deposited in temporary spoil, filling in to make up levels as directed and carting away excavated materials to designated areas on site including deposit, level, consolidated and rolled in layers not exceeding 150mm thick.</p>	M2	78		
	<p>Cut and fill and cart away esexisting platform level to suit new platform level as described to designated areas on site and deposit, level and consolidate as directed.</p>	M3	1,500		
TO COLLECTION					

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>COLLECTION</u> From Page B6/2/1 From Page B6/2/2				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	ELEMENT 3 - ROADWORKS, CARPARKS & KERB Excavate to formation level from reduced level, including trimming, grading, cambers and filling in make up level as directed including consolidation and rolled in layers with power roller 150mm thick and remainder, cart away from site to Contractor's own dump				
	A Average 730mm deep	M2	1756		
	B Supply, lay and compact 150mm thick sand base including all approved sand and materials, labour, plants, transport, etc. over the whole width of pavements for all roads in accordance with the drawings, specifications and as directed by the Engineer.	M2	1756		
	Crusher run base in two layers, each layers 150mm thick laid to required falls and cambers, blinded by quarry waste laterite or dust, well rolled with a power roller and compacted as specified.				
	C 450mm thick (consolidated thickness)	M2	1756		
	Supply and spray prime coats of bitumen emulsion uniformly on prepared surfaces at the rate of not less than 0.435 litres/m2 as specified including cleaning the surfaces.				
	D Prime coat	M2	1756		
	Supply and spray asphaltic concrete binder course (ACB 28) well rolled to required falls gradients and cambers on prepared surfaces of crusher run base.				
	E 70mm compacted thickness	M2	1756		
	Supply and spray tack coats uniformly over the full prepared surfaces at the rate of not less than 0.326 (litre/m2) as specified				
	F Tack coat	M2	1756		
	Supply and apply asphaltic concrete wearing course (ACW 20) well rolled with approved roller to required falls, gradients and cambers.				
	G 60mm compacted thickness	M2	1756		
TO COLLECTION					

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROADWORKS, CARPARKS & KERB.....Cont'd</u> <u>KERB</u> Supply and lay slipform concrete kerb Grade 25 including all necessary round, corner, angle, junction, bedding on in situ 600mm x 300mm high concrete Grade 25 bedding, excavation, backfilling, cement mortar joint, formwork, reinforcement, grating for opening and remove surplus excavated material to contractor's own dump and all as per Engineer's detail drawing no; PMRM/2023/MNA/11/RD-01 and PMRM/2023/MNA/11/RD-05				
A	533mm x 280mm high precast concrete kerb	M	455		
B	EXTRA OVER for laying circular-on-plan	M	73		
C	EXTRA OVER for outlet opening at 5.00m centre	NO	106		
	Prepare and apply two coats of emulsion paint in alternate white and black colours on general surfaces of precast concrete kerb				
D	General surfaces of kerb	M	528		
	<u>ROAD MARKINGS</u> Prepare and apply two coats of approved hot applied, superimposed with reflectorised thermoplastic material road marking paint complying to BS 3262 (unless otherwise stated) as specified and as detailed in drawing on road surfaces all as per Engineer's detail drawing no; PMRM/2023/MNA/11/RD-01 & PMRM/2023/MNA/11/RD-06				
E	100mm wide centre line / lane line	M	42		
F	150mm wide edge line	M	528		
G	300mm wide stop line	M	15		
H	Arrow Straight	NO	6		
J	OKU Carpark Parking Symbol	NO	1		
	Prepare and apply 100mm wide line with two coats of approved reflectorised brushing quality road paint on premix road all as approved by JKR Standard and requirements all as per Engineer's detail drawing no; PMRM/2023/MNA/11/RD-01.				
K	Carpark ; size 5000mm x 2500mm	NO	9		
L	Motorcycle park ; size 2000mm x 1000mm	NO	5		
M	OKU Carpark ; size 5000mm x 3500mm	NO	1		
	TO COLLECTION				

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>ROADWORKS, CARPARKS & KERB.....Cont'd</u> <u>ROAD SIGNAGES</u> Supply and install in position complete all road signboard, with post including sign lettering and colour on aluminium sheet all as specified and detailed in drawings including all necessary excavation, footing and remove surplus excavated materials away all as per Engineer's detail drawing no; PMRM/MNA/11/RD-01 & 06.				
A	"Stop At Intersection" sign	NO	1		
B	"Speed Limit" sign	NO	1		
C	"Give Way" sign	NO	1		
D	"One Way Street" sign	NO	1		
E	"Parking" sign	NO	2		
F	"No Entry" sign	NO	1		
	<u>TESTING</u>				
G	Allow for compaction test, coring test, CBR tests and all necessary tests in accordance to Authority's requirements and as directed by the Engineer.	ITEM			
	<u>INTERLOCKING PAVER</u>				
H	Supply and lay 225mm x 225mm x 80mm thick heavy duty interlocking concrete paver as described including all necessary excavation, 100mm thick compacted crusher run base, 50mm thick compacted sand, finishing and including make good to all disturbed works to manufacturer's details colour & pattern to Architect and Engineer's detail drawing no; PMRM/MNA/11/RD-01.	M2	140		
	TO COLLECTION				
	<u>COLLECTION</u> From Page B6/3/1 From Page B6/3/2 From Page B6/3/3				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 4 - DRAINAGE WORKS</u></p> <p><u>Storm Water Pipe</u></p> <p>Supply and lain in position approved precast reinforced concrete storm water pipe culvert Class 'X' complete with 150mm to 200mm thick reinforced concrete (Grade 20) base with 1 layer BRC A10 and reinforced concrete (Grade 20) surround including all necessary excavation trench, formwork, concrete hunching, selected back filling material arround pipe culvert and filters materials, transport out excavated material to Contractor's own dump site and all as per Engineer's detail drawing no: PMRM/2023/MNA/11/RD-01 - PMRM/2023/MNA/11/RD-03.</p> <hr/> <p>Not exceeding 1.00m deep</p> <p>A Overall size 450mm diameter M 52</p> <p>B Overall size 600mm diameter M 10</p> <p><u>PRECAST CONCRETE BLOCK DRAIN</u></p> <p>Precast concrete block drain with minimum 75mm thick sides and bottom, cast in suitable lengths, finished fair on exposed surfaces, bedded, jointed and pointed in cement mortar (1:3) on and including mass concerte infill, 50mm thick lean concrete (grade 15), 150mm thick concrete base reinforced (grade 25) with A10 mesh or equivalent as specified bed, 225mm thick brickwall on bothside and 19mm thick plastered brickwall on exposed side and 75mm diameter weephole with filter medium at every 1500mm centre to centre staggered complete with 300mm hardcore, 150mm wide opening at 5000mm centre to centre on top of brickwall including all necessary excavation trench, formwork, junctions and ends, including disposal of surplus excavated material as per Engineer's detail drawing no; PMRM/2023/MNA/11/RD-01 - PMRM/2023/MNA/11/RD-03.</p> <hr/> <p>Not exceeding 1.00m deep</p> <p>C Overall size 300mm x 300mm M 161</p> <p>D Overall size 450mm x 450mm M 210</p>				
	TO COLLECTION				

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>DRAINAGE WORKSCont'd</u> <u>PC Culvert</u> Approved reinforced concrete pipe culvert Class 'Z' complete with 225mm x 45mm coupling, precast concrete hunching, bedded, jointed and pointed in cement mortar (1:6) and splayed fillets infill, 50mm thick lean concrete (grade 15), 150mm thick concrete base reinforced (grade 25) with fabric reinforcement A10 or equivalent as specified bed including all necessary excavation trench, formwork, junctions and ends, including disposal of surplus excavated material as per Engineer's detail drawings no; PMRM/MNA/11/RD-01 - PMRM/2023/MNA/11/RD-03.				
A	Not exceeding 1.00m deep Overall size 600mm diameter <u>Precast Concrete Slab Cover</u>	M	44		
B	Supply and install overall size 610mm x 75mm thick precast concrete cover drain complete with 1 layer of BRC A10 including all necessary formwork and fixed in position all as per Engineer's detail drawings no; PMRM/2023/MNA/11/RD-03.	M	12		
	<u>BRICK SUMP</u> To construct brick sump comprising of 225mm thick (grade 25) reinforced concrete as base and slab with 2 layer of BRC A6, 50mm thick lean concrete (grade 15), 225mm thick brickwall with with 20mm thick cement and sand (1:3) rendered and plastering on all surfaces, 10mm thick mild steel bar at 450mm centers including all necessary excavations, disposal of excavated materials, formwork, reinforcement, building in inlets and outlets of drain internally and all as per Engineer's detail drawing no; PMRM/2023/MNA/11/RD-01 - PMRM/2023/MNA/11/RD-03.				
C	Not exceeding 1.00m deep Overall size 750mm x 750mm internally	NO	14		
D	Overall size 900mm x 900mm internally	NO	4		
TO COLLECTION					

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>DRAINAGE WORKSCont'd</u> <u>P.C CONCRETE SLAB COVER</u> Supply an install in position approved 100mm thick concrete (grade 25) sump grating complete with reinforcement bar constructed with 65mm x 65mm x 6.4mm thick equal angle with fish tail and lifting hole to manufacturers detail and all as shown on Engineer's detail drawings no; PMRM/MNA/11/RD-03. Not exceeding 1.00m deep A Overall size 750mm x 750mm internally NO 14 B Overall size 900mm x 900mm internally NO 4 <u>Underground Detention Pond</u> C To construct approved underground on detention pond overall size 30m x 3.60m x 1.60m depth constructed of 3600mm wide x 1600mm depth precast concrete box culvert with lid and 3 nos of 1500mm x 1500mm rc sump complete with 1 nos 450mm diameter outlet culvert, 100mm thick concrete base Grade 20 with 1 layer BRC A7 , 200mm thick compacted hardcore, trash screen, stainless steel steps, and concrete cover opening slab including all necessary excavation, formwork, reinforcement, maintenance step and dispose surplus excavated materials to contractor's own dump and all as per detail Engineer detail drawing no.: PMRM/MNA/11/RD-01 - PMRM/MNA/11/RD-04. <u>Connection and Testing</u> D Allow for drainage system connection to existing drain or sump including hacking, excavation and make good upon completion to the S.O. satisfaction. ITEM E Test and commission the whole drainage systems as described and make good all defects, retest and leave whole in perfect working order to the satisfaction of the S.O. and the Authorities (Note : Method of testing shall in accordance with the S.O. / Authority requirement). ITEM				
	TO COLLECTION				

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>COLLECTION</u> From Page B6/4/1 From Page B6/4/2 From Page B6/4/3				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 5 - SEWERAGE WORKS</u></p> <p><u>Septic Tank</u></p> <p>A The Contractor shall provide Septic tank with a minimum capacity of 10PE and system approved by the authority JPP, which must fit into the allocated area as shown on the plan drawings. The work shall include but not limited to design preparation, authority approval, supply, fabricate, construct, commissioning, testing, operational approval, provide training and warranty. The works shall include all preliminaries, related civil and structural works, mechanical & electrical works and all necessary foundations and external works required for the proper completion and operational of the septic tank. All to the satisfaction of the S.O. all as per detail Engineer detail drawing no.: PMRM/2023/MNA/11/SEW-01</p>	No	1		
	TOTAL CARRIED TO SUMMARY				

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>ELEMENT 6 - WATER RETICULATION WORKS</u></p> <p>Excavation not exceeding 2.00m deep and get out, part return, fill in and ram and remove surplus excavated material to Contractor's own dump site and make good all works disturbed for :-</p>				
A	100mm diameter MSCL pipe	M	200		
B	32mm diameter PA pipe	M	12		
C	63mm diameter PA pipe	M	60		
D	Plain concrete (Grade 20) as described thrust block to all type of pipe including all necessary excavation, reinforcement and formwork.	M3	1		
	<p><u>Mild Steel Cement Lining Pipe (MSCL)</u></p> <p>Supply and install mild steel cement lining pipe as described including all necessary bend, tee and other accessories and jointing with mild steel collars fillet-welded and painted; and preparing end of mild steel concrete line pipes for jointing; laying in trench with and including filled trench 150mm high and all above with compacted sand and all as shown on Engineer's detail drawing no; PMRM/2023/MNA/11/WR-01.</p>				
E	<p>100mm diameter pipe</p> <p><u>PA Pipe</u></p> <p>Supply and install PA pipe as described including all necessary bend, tee and other accessories and jointing including filled trench 150mm high and all above with compacted sand all as shown on Engineer's detail drawing no; PMRM/2023/MNA/11/WR-01.</p>	M	200		
F	32mm diameter pipe	M	12		
G	63mm diameter pipe	M	60		
	<p><u>Valve and fitting</u></p> <p>Valve to BS 5163 jointed to main pipes or fittings and including all necessary spigot adaptor pipes, extension pieces, joint fitting couplings and ductile iron detachable joints as required.</p>				
H	Supply and install 100mm Diameter sluice valve including flanged joints and rubber gaskets	NO	2		
J	Supply and install 100mm diameter double outlet pillar hydrant and including tee off, duck foot, short piece and all necessary fittings as per authority's requirement.	NO	1		
	TO COLLECTION				

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>WATER RETICULATIONCont'd</u> <u>Valve Chamber</u> Valve Chamber overall size 1350mm x 1450mm x 3300mm deep constructed of 225mm thick brickwall with 20mm thick plastering (1:3) to exposed surface, 50mm thick blinding concrete grade 15, 300mm thick concrete grade 25 base with 2 layers of mesh A393, 25mm diameter galvanized MS rings staggered steps at 300mm centres, reinforcement concrete caping beam, flange adaptor, cover with 150mm thick concrete slab at the top and 495mm x 440mm unbreakable steel plate cover single seal hinged with steel frame complete with key and locking gear of heavy patterned type forming pipe outlet and inlet and including all excavation, formwork, backfill and other associated works and all as per Engineer's detail drawing no; PMRM/2023/MNA/11/WR-01 and PMRM/2023/MNA/11/SEW-02				
A	Sluice valve	NO	2		
B	Hydrant	NO	1		
	<u>Pipe Marker</u> Precast reinforced concrete Grade 20 as described with splayed top inscribed with countersunk including all moulds, finishing fair on exposed faces, painting post in oil based paint, all to approval and fixing firmly in position into ground as per Engineer's detail drawing no; PMRM/2023/MNA/11/WR-01.				
	224mm x 62mm x 1000mm high				
C	Indicator post with "Sluice Valve" sign	NO	2		
D	Indicator post with "Hydrant" sign	NO	1		
	<u>Bulk Meter</u>				
E	Approved bulk meter complete with water meter and including all necessary pipe fittings, bends, 150mm diameter incoming and outgoing pipeline, stainless steel / mild steel short piece, taper, short piece single flanged, flanged adaptor, MS flanged, couplings, double flanged sluice valves MS, sluice gate valve, T-Pot strainer double flanged, concrete platform, 300mm x 300mm Grade 20 mass concrete thrust block with a layer of BRC A7, 50mm thick sand base, 225 x 225 brick pipe support complete with cement plaster, 300 width Grade 25 concrete slab with one layer of BRC A6, 100mm diameter x 6m length bakau pile at 300mm centres both directions, etc. all as shown in Engineer's detail drawing no; PMRM/2023/MNA/11/WR-01.	NO	2		
TO COLLECTION					

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>WATER RETICULATIONCont'd</u>				
A	Supply labour and materials to construct hot tapping connection between new and existing main supply pipe including ductile iron alloy saddle, brass ferrule/off take tee, adaptors, concrete base slab, reducer, stop cock and all necessary temporary works such as sheet pile, strutting and including excavation, compacted backfilling etc. all to the S.O.'s satisfaction.	ITEM			
	<u>Testing and Commissioning</u>				
B	Allow for testing, cleaning and disinfecting the whole water reticulation system to the requirements of the Local Authorities and make good all defects.	ITEM			
C	Allow for hydraulic tests (pressure and leakage) as specified and as directed by the S.O	ITEM			
	TO COLLECTION				
	<u>COLLECTION</u>				
	From Page B6/6/1				
	From Page B6/6/2				
	From Page B6/6/3				
	TOTAL CARRIED TO SUMMARY				

BILL NO. 6 - INFRASTRUCTURE WORKS (ALL PROVISIONAL)			
SUMMARY			
ITEM	ELEMENT	FROM PAGE	AMOUNT (RM)
1	DEMOLITION WORKS	B6/1/2	-
2	SITE CLEARANCE AND EARTHWORKS	B6/2/2	-
3	ROADWORKS, CARPARKS & KERB	B6/3/4	-
4	DRAINAGE WORKS	B6/4/3	-
5	SEWERAGE	B6/5/1	-
6	WATER RETICULATION WORKS	B6/6/3	-
TOTAL CARRIED TO SUMMARY OF TENDER			-

BILL NO. 7 - LANDSCAPE WORK

BILL NO. 7 - LANDSCAPE WORK					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>LANDSCAPE WORKS</u> <u>SOFTLANDSCAPE</u> To supply, deliver the following plant materials as directed by the S.O. All plants supplied shall be well established in polybag containers, healthy and proportionate with no top cutting & freshly root trenched trees. All plants including excavation of planting pits, carting off excess & dispose off site, handling, setting and planting with a minimum of 50mm thk. coco fiber mulching and watering to ensure survival as directed by the S.O. - Polybag size 28" x 28" (50mm trunk diameter) - Polybag size 35" x 35" (75mm trunk diameter) <u>TREES</u> A <u>Legerstroemia langkawiensis (Bungor Langkawi)</u> (Overall ht: 3000mm, Clr Trk Ht: 1500mm, Trk Dia: 75mm dia) B <u>Magnolia grandiflora (Cempaka telur)</u> (Overall ht: 3000mm, Clr Trk Ht: 1500mm, Trk Dia: 75mm dia) C <u>Podocarpus macrophyllus (Podocarpus)</u> (Overall ht: 1500mm, Trk Dia: 55mm dia) D <u>Bauhinia blakeana (Tapak Kuda)</u> (Overall ht: 3000mm, Clr Trk Ht: 1000mm, Trk Dia: 75mm dia) <u>SHRUBS/GROUND COVER</u> E <u>Calathea lutea (Cuping Gajah)</u> (Overall ht: 600mm, 150mm c/c) F <u>Osmoxylon lineare (Green aralia)</u> (Overall ht: 250mm, 150mm c/c) G <u>Heliconia psittacorum (Sepit Udang)</u> (Overall ht: 300mm, 150mm c/c) <u>TURFING</u> <u>Axonopus compressus (cow grass) - Close Turfing</u> H To supply and lay Axonopus compressus (mcow grass), min sod size of 200mm x 200mm, specified obtained from Contractor own source; trimming, levelling and grading surfaces; 50mm thick top soil as specified, watering and tendering until well establish; replacing badly grow turves to flat ground area.				
	TOTAL CARRIED TO COLLECTION				

BILL NO. 7 - LANDSCAPE WORK					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<u>SOFTLANDSCAPE</u> <u>'PLANTING OPERATION</u> <u>SOIL MIX</u>				
A	Soil mix for TREES (1m x 1m x 1m)	M3	40		
B	Soil mix for SHRUBS (0.3m x 0.3m x 0.3m)	M3	20		
	<u>STAKING</u>				
C	<u>Tripod Staking (for trees ≥ 75mm dia)</u> To supply & install stakes for trees using 3 nos hardwood timber of 50mm x 50mm x 2400mm length each. The stakes shall be equidistant around tree and firmly driven into the ground (min 500mm in ground and 1900mm exposed). The stake shall be tied neatly and firmly. The point of contact between the trunk and staking shall be padded with suitable material & secured with plastic coated tie from three (3) different points of the tripod stake to S.O approval	NO	35		
D	<u>Double stake (for trees 35mm - 75mm dia)</u> To supply & install double stakes for trees using 2 nos hardwood timber of 50mm x 50mm x 2400mm length each (500mm in ground and 1900 mm exposed) with 2 pieces of horizontal timber support of 50mm x 25mm each. The stakes shall be installed neatly and firmly. The point of contact between the trunk and upper horizontal support shall be padded with suitable material & secured with plastic coated tie to S.O approval	NO	5		
	TOTAL CARRIED TO COLLECTION				

BILL NO. 7 - LANDSCAPE WORK					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
A	<p><u>SOFTLANDSCAPE</u></p> <p><u>MAINTENANCE WORKS</u></p> <p>Maintenance Operation and Schedule - All maintenance shall be as per schedule which Contractor should prepare and submit to S.O. Where the specific maintenance is required but not stated, the Contractor shall refer to the S.O for directions.</p> <p>To supply material, machinery, labour, transportation and other necessary items to carry out the maintenance of all completed work which includes but not limited to the items stated below. Contractor to state the minimum number of competent, full time workers stationed daily on site during working hours for the purpose of satisfactory maintenance of the completed works.</p> <p>Unsatisfactory maintenance - It shall be the responsibility of the Contractor to write in requesting for inspection at the end of every month failing which he shall not be entitled to the maintenance claim for that month. Maintenance claim due to the Contractor shall be deducted with a recommended amount that S.O finds reasonable if the areas are found to be unsatisfactorily maintained.</p> <p>If the maintenance of any area is found to be grossly unsatisfactory, the Employer has the right to employ other parties to maintain/rectify/make good such areas and all costs incurred shall be back-charged to the contractor.</p> <p><u>SOFTSCAPE WORK</u></p> <p>Watering - watering all plant materials and quantity of water applied at all times shall be sufficient to penetrate to a minimum depth of 150mm at a rate which allows saturation of the soil. Water to be provided by contractor unless specifically stated otherwise. Frequency - daily or as when necessary.</p> <p>Weeding and Forking - keep all planting areas free from weeds and undesirable vegetation & loosen the soil around the base by methods and materials approved by the S.O. Herbicides are prohibited. Frequency - at least once a month or as and when necessary.</p> <p>Pest and Disease control - to treat plants found to be infected by any disease or pest using the appropriate method/materials approved by the S.O and take all necessary precaution/remedial action to contain the spread of the infection to other plants. Frequency - regular monitoring, treatment as & when necessary.</p>	MONTH	12		
		no. of full time workers			
TOTAL CARRIED TO COLLECTION					

BILL NO. 7 - LANDSCAPE WORK					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>MAINTENANCE WORKS (Cont'd)</u></p> <p>Pruning and Shaping - The amount of pruning shall be limited to the minimum necessary to remove dead or injured twigs and branches and or compensate for the loss of roots as a result of transplanting and or to achieve the desired form & shape of the plant. Frequency - for shrub - at least once a month or as & when necessary. For trees,</p> <p>Fertilizer Application - Application of commercial inorganic fertilizer (Behn Mayer or approved equivalent) of a complete formula 15:15:15 for greens, 12:12:17+2 for flowering plants or otherwise as specified by the S.O at a rate recommended by the manufacturer. Fertilizer shall be uniform in composition, dry and free flowing.</p> <p>Turf Fertilizer Rotation :-</p> <ol style="list-style-type: none"> 1. Zoysia & Axonopus (Behn Mayer or approved equivalent) - Fortnightly 2. Organic compost - Every 3 months <p>Replacement of Plants - Dead/unhealthy/missing plants are to be replaced with true to type and size or as specified by the S.O in the event of non-availability of spec. The plant shall be replaced immediately or latest within 1 month upon being instructed. Any trees replaced during the last 2 months of DLP shall have the maintenance extended by additional 3 months to ensure survival. Frequency - monthly inspection and replacement</p> <p>Staking and Guys - To inspect, replace, adjust all staking, padding & ties to ensure proper and safe support for the tree without any injury to the trunk. To ensure it is not a safety hazard. Frequency - at least once a month or as necessary.</p> <p>Grass Cutting - To cut the turf not more than one - third of the blade at any one time and ensure no overcutting resulting in bare or brown patches. Turf clipping are to be removed and disposed immediately. Frequency - fortnightly for Zoysia and Axonopus as well.</p> <p>Rubbish Removal - All waste / rubbish arising shall be continuously and promptly removed daily and disposed off site. All reasonable precaution should be taken to avoid damage to existing structures, plants and grass. Frequency - daily.</p> <p>Vandalism/ Damages - During the DPL, the Contractor is required to replaced any dying or vandalized / damaged plants either by human or animal to the original type and true to the size at his own cost and it is the Contractor's responsibility for the safe custody of all the trees, shrubs and plants etc until it is handed over to the Employer after maintenance period expires.</p>				
	TOTAL CARRIED TO COLLECTION				

BILL NO. 7 - LANDSCAPE WORK					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p>COLLECTION:</p> <p>From Page 7/1</p> <p>From Page 7/2</p> <p>From Page 7/3</p> <p>From Page 7/4</p>				
	TOTAL CARRIED TO SUMMARY OF TENDER				

BILL NO. 8 - PROVISIONAL SUM

BILL NO. 8 - PROVISIONAL SUM					
Item	Description	Unit	Qty	Rate (RM)	Amount (RM)
	<p><u>PROVISIONAL SUM</u></p> <p><u>NOTES:</u></p> <p>The Provisional Sum shall be expended as directed by the Superintending officer or deducted in whole or in part if not expended.</p> <p><u>EQUIPMENT & FACILITIES MACHINES</u></p> <p>A Allow a Provisional Sum of RM 300,000.00 (Ringgit Malaysia : Three Hundred Thousand Only) for Equipment & Facilities Machines to be expended as directed by S.O or deducted in whole or in part if not expended.</p> <p><u>SIGNAGE WORKS</u></p> <p>B Allow a Provisional Sum of RM 50,000.00 (Ringgit Malaysia : Fifty Thousand Only) for Signage Works to be expended as directed by S.O or deducted in whole or in part if not expended.</p> <p><u>SOIL INVESTIGATION WORKS</u></p> <p>C Allow a Provisional Sum of RM 15,000.00 (Ringgit Malaysia : Fifteen Thousand Only) for Soil Investigation Works to be expended as directed by S.O or deducted in whole or in part if not expended.</p> <p><u>STRUCTURE HOIST GIRDER/CRANE</u></p> <p>D Allow a Provisional Sum of RM 180,000.00 (Ringgit Malaysia : One hundred eighty thousand Only) for Structure Hoist Girder/Crane to be expended as directed by S.O or deducted in whole or in part if not expended.</p>	SUM			300,000.00
		SUM			50,000.00
		SUM			15,000.00
		SUM			180,000.00
	TOTAL CARRIED TO SUMMARY OF TENDER				545,000.00