



**Sindh Madressatul Islam
University**

**Development of SMIU Model School & University Academic Block
at SMIU City Campus Karachi (Phase-I)**



Model School

Tender Document

Volume-III

Bill of Quantities



EA Consulting Pvt Ltd

**ARCHITECTURE | ENGINEERING | PROJECT MANAGEMENT
PAKISTAN | UAE | CANADA**

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PREAMBLE TO PRICING AND METHOD OF MEASUREMENTS

PREAMBLE TO PRICING AND METHOD OF MEASUREMENTS

Generally

The Bill of Quantities herein, including all notes and instructions, forms an integral part of the Bid/Contract Documents. However, the descriptions contained in the Bill of Quantities for each item are not necessarily complete. The Contractor is referred to the Conditions of the Contract and other Documents, Specifications and Drawings as well as relevant Standards and Codes of Practice for further information as no claim or variation will be considered on account of the Contractor's failure to do so.

The Contractor is cautioned to familiarize himself with the full content of other Contract Documents including the Instructions to Bidders, Bid Form, General Conditions, Particular Conditions, Bid / Contract Drawings and Specifications or any other information that can be easily inferred from any of them and all obligations contained in the documents shall be included in the item rates and / or contract price.

Drawings, Specifications and Bill of Quantities and all other documents are complementary and if description of any item is included in any of them, it shall be deemed included in all.

The Contractor's bid for the entire work shall provide for supervision of any or all trades that are intended to be performed with his own forces, his domestic sub-contractors and nominated sub-contractors. No extra compensation for services as a General Contractor will be paid.

The Contractor shall not use these Bills of Quantities as the basis for a construction program or for the purposes of ordering materials or arranging sub-contracts. The references for these activities shall be the drawings, specifications and instructions issued by the Engineer.

This is a Measurable type of Contract. The quantities contained within these Bills of Quantities may not accurately reflect the quantities of works as indicated in the drawings, Specification and Package Scope. The contractor is to satisfy himself for the accuracy of all quantities. No claim will be entertained for differences in quantities between the Tender Drawings, Specification and Bills of Quantities.

Items in the Preamble Section of these Bills of Quantities are deemed to qualify and to form part of description of measured work to which they refer including composite description.

All measurements are net and the rates shall include for all laps, waste, working space, etc. and trade or traditional allowances.

Amendments shall not be made to these Bills of Quantities without the authority, in writing of the Engineer.

A price or rate is to be entered against each item in the Bills of Quantities. The cost of any item left un-priced will be deemed to be included for elsewhere in the Bills of Quantities, and the rate for the un-priced item will be taken as nil. Any item of the Day Works if not entered by the Bidder shall have to be carried out at the Rate as decided by the Engineer.

For the general guidance of the bidders the relevant CSI Section numbers have been mentioned in the beginning of each Bill/Division/Section. This does not absolve the Bidder's responsibility to confirm and price according to the appropriate BSI/ASTM/CSI code applicable to any item mentioned in the Bill of Quantities and drawings etc.

Method of Measurement

The quantities in the Bill of Quantities have been prepared generally in accordance with the **Principles of Measurement (International) for works of construction dated June 1979 / Standard Method of Measurement of Building Works (SMM 7) seventh edition year 1988, published by the Royal Institution of Chartered Surveyors, 12 Great George Street, Parliament Square, London SW1P 3AD, U.K. amended to suit the local practice and conditions.** The description of each item (which description shall imply references to any heading, sub-heading, preamble or other clause of item which shall apply) shall be held to include all claims, materials, workmanship, including all taxes, duties, charges, all Government levies, landing charges, transport, profit and overheads and all other incidental costs to complete the Works.

These preambles are to be read in conjunction with the item description in the Bill of Quantities.

"As described" means as directed in the Specifications and / or Drawings.

Unless otherwise described or measured separately, prices for all items shall include for all necessary straight, raking or circular cutting.

The Conditions of Contract applicable to this Contract is as specified in Volume 1 – Tender & Contract Conditions of the Tender and Contract Document.

Pricing

The prices shall be comprehensive and must include for complying in all respects with the instructions to Bidder, Conditions of Contract, Specifications, and Drawings and for all matters and things necessary for the proper construction and completion of the whole of the Works. No claim for additional payment will be allowed for any error or misunderstanding by the Contractor of the work involved.

The rates and sums inserted in the Bills of Quantities are deemed to include for the following:

- (i) Labor and all costs in connection therewith.
- (ii) Materials, goods and all costs in connection therewith (e.g. carriage, freight, delivery, unloading, storing, returning packing handling, Letters of Credit, Bank Guarantees, Bank charges and the like, Customs duties, port dues, import duties, taxes including sales tax, charges, Insurances and other dues levied by any authority or imposed by the Government, hoisting or lowering, replacing work, goods or materials damaged, broken, lost or stolen until the issue of a Certificate of Completion.
- (iii) Fittings and fixing materials or goods in position.
- (iv) Plant.
- (v) Waste, bulking, shrinkage and overlaps.
- (vi) Land required for tips and stockpiles including all costs for obtaining any necessary licenses and approvals.
- (vii) Allowance for phasing requirements of works, effect on programming of the works of all traffic diversions and construction activity associated with diversion or installation of services.
- (viii) For taking measures for the support and full protection of pipes, cables and other apparatus required during the progress of the Works as required by Service Authority or the Engineer.
- (ix) For working alongside and liaising with other Contractors working on the same site.
- (x) Preparation and submission of shop drawings.
- (xi) Overhead charges and profit.
- (xii) Guarantees and warranties where necessary.
- (xiii) Temporary works, if any.
- (xiv)

Lump sums shall not be given where unit rates are applicable.

Where the word "allow" is used, the cost of the item shall be the responsibility of the Contractor.

The amounts set against any items of overhead shall include for all costs in connection with letters of credit, bank charges, interest charges and insurance after the materials come under the control of the Contractor.

The rates inserted will be used to determine the amount of the Contractor's Interim Payments.

The Bidder shall submit the full and detailed rate breakdown of all the BOQ items including spare parts items in the format as per enclosed Annexure-1, together with their Bid submission. The breakdown is to show the actual calculations of the General Items, Labor, Plant and Materials costs for the Works, the build-up of measured rates with on-costs and site and Head Office overheads and any other allowances used to arrive at the Bid Price. In addition the Bidder will be required to provide the Engineer within 48 hours with a full and detailed breakdown/any other information if requested. The purpose of this Breakdown/Rate Analysis is to make sure that (i) the rates used in the analysis of the items of permanent works and those quoted in the Day Works are reciprocal to each other, (ii) the bid is not front loaded, and (iii) the markup of Overheads & profit is uniform throughout the bid.

Where "fix only" items are specified, the rate shall be deemed to include for taking delivery, storing and installation of goods or materials in works where appropriate.

The rates inserted in the Schedule of Day work shall be deemed to be the rates used by the Contractor in making up rates for works items in all Parts of the Bills of Quantities.

Adjustment Item

The adjustment item, if any, addition or deduction, shall apply to all Bill items, excluding provisional sum unless clearly indicated otherwise. The adjustment item shall not be a lump sum, but a percentage of the total Bid amount excluding provisional sum or a percentage of the total for the items indicated. The adjustment items shall be applied to all applicable item rates and sums entered in the Bills of Quantities (including any addenda). The adjusted rates and sums shall be applied for the valuation of Variations.

General Requirements

Standards

Where no reference is made to a code, standard or Specifications in volume-II Specifications of the SUB-CONTRACT Documents, the Standard Specifications of the American Society of Testing Materials, (ASTM), British Standard Codes of Practice (BSCP) or any other relevant standard as approved by the EMPLOYER shall govern.

Drawings

The WORK shall agree in all particulars with the Drawings or any approved modifications of them or such other drawings as may be issued during the SUB-CONTRACT.
The EMPLOYER will supply two copies of each of the drawings to the CONTRACTOR.

The CONTRACTOR will make any further copies required by him at his own expense.

The CONTRACTOR will keep one set of all drawings duly mounted with muslin cloth and hanged on the wooden drawings stand when not in use.

CONTRACTOR'S (Drawings & Documents)

The CONTRACTOR shall submit three prints/copies of all drawings, documents and schedules to be prepared by him. These will be of a standard size and format acceptable to the EMPLOYER. All such submission by the CONTRACTOR shall be accompanied by a letter of submittal.

Record Drawings

The CONTRACTOR shall prepare during the progress of the SUB-CONTRACT, drawings showing the WORK "as built" including the positions of all services, plant and equipment. The drawings shall be prepared to a form & detail to the satisfaction of the EMPLOYER and prints shall be submitted to the EMPLOYER'S REPRESENTATIVE for his approval as the WORK proceeds. At the completion of the SUB-CONTRACT the CONTRACTOR shall supply to the EMPLOYER reproducible of each drawing.

Supply of Water and Electricity

The CONTRACTOR shall make his own arrangements for the provision of water & electricity whether for use in the execution and construction of the WORK or otherwise. In the event of the source of water being from any existing piped supply the CONTRACTOR shall comply with any regulations laid down by the Water Authority and shall pay for such supply, stand-pipe connections, meter rents and all other charges as required all at his own expense. Similarly he will be responsible for all costs in providing electricity. Where electricity is not available for 24 hours, diesel/petrol driven electricity generators in good and reliable condition and of sufficient capacity to meet the requirements of construction equipment and lighting and other facilities at Site will be used by the CONTRACTOR.

Disposal of Wastes

The CONTRACTOR shall make adequate arrangements to the satisfaction of the EMPLOYER'S REPRESENTATIVE for disposal of all sewage, rubbish and all other waste material arising from or connected with the execution of the WORK.

Other Services

The CONTRACTOR shall make his own arrangements for and shall provide any service (including telephone) which may require in addition to the foregoing.

Bench Marks and Control Points

All levels, lines, grades and measurements shown on the Drawings shall be measured from a Bench Mark and points to be established by the EMPLOYER within the Points Site of the WORK. The CONTRACTOR shall be responsible for ensuring the levels of all parts of the work are accurately related to this Bench Mark which shall be notified to the CONTRACTOR by the EMPLOYER immediately after commencement of the WORK.

Survey

The CONTRACTOR shall furnish and maintain at his own expense survey instruments stakes and other such materials and give such assistance, including qualified staff as may be required by the EMPLOYER who will establish Bench Marks base lines, grades and other principal control points. The CONTRACTOR shall, however, call the EMPLOYER'S attention to any inaccuracies and discrepancies of such controlling points etc., before proceeding with the work. The CONTRACTOR shall at his own expense, establish working or construction lines and grades as

required, which shall be frequently checked by the EMPLOYER'S REPRESENTATIVE but the CONTRACTOR shall be solely responsible for the accuracy thereof.

Safeguarding Bench Marks & Control Points

The CONTRACTOR shall safeguard all points, stakes, grade marks and bench marks made or established on the work. If disturbed he shall bear the cost of re-establishing them and also the entire Points expense of rectifying the work rendered defective due to such disturbance.

Progress Photograph

The CONTRACTOR shall, throughout the construction of the WORK use digital camera for photography and provide the progress photographs in color to the EMPLOYER. He will also submit three prints each of size 5"x7" along with the recorded data at two week intervals. All such photographs will be taken under the direction of the EMPLOYER.

Materials and Workmanship

As soon as possible after the SUB-CONTRACT has been awarded, the CONTRACTOR shall submit to EMPLOYER list of suppliers from whom he proposes to purchase the materials necessary for the execution of the WORK. The information regarding the names of suppliers may be submitted at different times, as may be convenient, but no approved source of supply shall be changed without the prior permission of the EMPLOYER'S REPRESENTATIVE.

Preference shall be given to the use of materials and fittings manufactured in Pakistan which comply with the SUB-CONTRACT and are competitive in price. Foreign materials shall only be used with the consent of the EMPLOYER.

All materials incorporated in the WORK shall be new and of the best quality and description of their respective kinds and shall comply with all relevant specifications. Similarly the workmanship in every case shall be of the best character, and the whole shall be subject to the approval of the EMPLOYER.

Materials whose quality and construction are not covered by the Technical Specifications shall be of equal or better quality than the relevant sample accepted by the EMPLOYER'S REPRESENTATIVE.

Samples

In addition to any special provisions herein for the sampling and testing of materials, the CONTRACTOR shall submit to the EMPLOYER as he may require samples of all materials and goods which he proposes to use or employ in or for the WORK. Such samples, if approved, will be retained by the EMPLOYER'S REPRESENTATIVE, and no materials or goods of which samples have been submitted shall be used on the WORK unless and until such samples have been approved in writing by the EMPLOYER.

The EMPLOYER'S REPRESENTATIVE may reject any materials and goods which in his opinion are inferior to the samples thereof previously approved and the CONTRACTOR shall promptly remove such materials and goods from the Site.

The cost of supplying all such samples and of conveying same to such place of inspection or testing as the EMPLOYER may designate within the country of origin shall be deemed to be included in the tendered rates and prices.

Samples will be retained by the EMPLOYER and when directed by the EMPLOYER'S REPRESENTATIVE the CONTRACTOR shall dispose of the samples. Except for those which may be incorporated into the WORK after approval, such as plumbing and electric fixtures.

Tests Generally, Access to Premises

The EMPLOYER may examine and may require to be tested any materials or goods required in or for the WORK such as he may decide from time to time and shall have unrestricted access to the CONTRACTOR'S, CONTRACTOR'S and supplier's premises for such purpose at all times and the CONTRACTOR shall specify this requirement when placing all orders.

The EMPLOYER will notify the CONTRACTOR whether materials and goods will be inspected at the manufacturer's or supplier's premises or at the Site. No materials or goods shall be dispatched from such premises until such notification is given and, if appropriate, inspection is complete and a release certificate is given to this effect. In both cases the CONTRACTOR is to notify the EMPLOYER when materials and good will be ready for inspection and shall do so adequately in advance for him to make the necessary arrangement for inspection.

The CONTRACTOR shall afford the EMPLOYER all facilities, assistance, labor and appliances necessary for the convenient examination, testing weighing or analysis of all such materials or goods. The CONTRACTOR shall provide and prepare such test pieces of any such materials or goods as the EMPLOYER may require.

Notwithstanding any tests which may have been carried out off the Site the EMPLOYER shall be empowered to order further tests of any materials or goods to be made on the Site and to reject such materials or goods should they fail to pass such test on the Site.

The full cost of providing all facilities, labor, consumable stores and appliances required in connection with all testing on the Site shall be deemed to be included in the tendered rates and prices.

Test Certificates

Should the EMPLOYER not inspect any materials or goods at the place of manufacture, the CONTRACTOR shall, if required, obtain certificates of test from the suppliers of such materials or goods and shall send such certificates to the EMPLOYER. Such certificates shall certify that the materials or goods concerned have been tested in accordance with the requirements of the Technical Specifications and shall show the results of all the tests carried out. The CONTRACTOR shall provide adequate means of identifying the materials & goods delivered to the Site with the corresponding certificates.

Testing at an independent Laboratory

Where tests are specified or directed by the EMPLOYER to be carried out in an independent testing laboratory, the CONTRACTOR shall supply and deliver the samples and shall arrange for the relevant tests to be carried out. The independent testing laboratory shall be nominated by the CONTRACTOR and acceptable to the EMPLOYER. Unless otherwise specified the CONTRACTOR shall arrange for one copy each of the independent testing laboratory's test certificates to be delivered to the EMPLOYER and to the EMPLOYER not less than 3 working days before the materials covered by the relevant test certificates are to be incorporated in the WORK. Each test certificate shall be relatable to the materials from which the sample was taken.

Site Testing

The CONTRACTOR shall carry out such laboratory and field test (including tests to check the accuracy of testing equipment and methods but excluding tests specified to be carried out in an independent testing laboratory) as specified or as can reasonably be inferred from herein, as may be necessary to ensure and satisfy the EMPLOYER that the requirements of the Technical Specifications are met. The type and frequency of testing shall be in accordance with the relevant standards except as otherwise specified herein or directed by the EMPLOYER.

The CONTRACTOR'S attention is drawn to the fact that the frequencies of testing specified in the relevant clauses are intended to represent only a general guide. The EMPLOYER shall be empowered to vary the frequencies at which tests are conducted should he deem this necessary for the proper control of the quality of the WORK. Should the EMPLOYER'S REPRESENTATIVE vary the frequencies stated in the relevant clauses of the Technical Specifications, the CONTRACTOR shall not be entitled to extra payments thereof.

Unless otherwise agreed or directed by the EMPLOYER methods of sampling and test procedures shall be in accordance with the relevant Standard Methods of ASTM, British Standard Codes of Practice or any other relevant standard approved by the EMPLOYERS. Sample will be selected by the EMPLOYER'S REPRESENTATIVE.

Shop Drawings, Working Drawings, Operations and Maintenance Instructions.

The Contractor is to allow in his rates for the production of all shop drawings, working drawings, operations and maintenance instructions called for in the Specifications.

These shall include but not to be limited to the following:

- (i) The surveyed location of all existing services.
- (ii) A Combined Services Drawing including all surveyed existing and proposed services showing manholes, draw pits, joint boxes, inspection chambers, lighting column bases traffic signal bars, concrete surrounds, pipe diameters, etc. to scale, plus any other possible obstructions.
- (iii) Combined Services Working drawings original and new.
- (iv) Separate sets of working drawings for each individual service showing proposed locations for submission to the service authorities.
- (v) Existing ground levels.
- (vi) Earthworks cross sections.
- (vii) Temporary traffic sign design and fixing details.
- (viii) Proposed traffic sign design and fixing details.
- (ix) Mechanical, electrical and other services drawings, diagrams and instructions as required in the contract and directed by the Engineer.
- (x) Temporary work drawing where requested by the Engineer.

The rates in the appropriate section shall include for design of the civil works as specified in the Contract and for providing working drawings, shop drawings, schedules, specifications, calculations, etc. and for obtaining the Engineer's approval.

Abbreviations

In the Specification and Bill of Quantities the following abbreviations have the meanings hereby assigned to them:

B.S.	Means the specification issued by the British Standards Institution (B.S.I.)
C.P.	Means the code of practice issued by the B.S.I.
AASHTO	means the specification issued by the American of State Highways & Transportation Officials.
ASTM	means the specification issued by the American Society for Testing & Materials.
AC	Asbestos Cement
B.S.	British Standards
Cont'd	Continued
DEPT, Dept.	Department
Dia	diameter
Drg.	Drawing
E.O.	Extra Over
F.C.	Fiber Cement
GRP	Glass Fiber Reinforced Plastics
HDPE	High Density Polyethylene
HP	Horse Power
ISO	International Standards Organization
Kg.	Kilograms

Kw/hr	Kilowatt per hour
L.R.B.	Local Regulatory Body
L.S.	Lump Sum
M	meter
mm	millimeter
m ³ ,cu.m.	Cubic meter
m ² , sq.m.	Square meter
MDPE	Medium Density Polyethylene
Mic	Micron
Min., min	Minimum
MDD	Maximum Dry Density
MH	MANHOLE
No.	Number
Nos.	Numbers
O.P.C.	Ordinary Portland cement
PE	Polyethylene
P.Q.	Provisional Quantity
PVC	Polyvinyl Chloride
Qty.	Quantity
RHS	Rectangular Hollow Section
Spec	Specifications
S.R.C.	Sulphate Resisting Cement
t, tons	tonne
uPVC	Unplasticised Polyvinyl Chloride
W	Width
P.C. Rate	prime cost rate
>	Greater than
≥	Equal to or Greater than
<	Less than
≤	Equal to or Less than
=	Equal to

Rates for various items throughout the Bills of Quantities shall include, unless otherwise stated or measured, for cutting of every description and the consequent waste, for work in girths, widths or heights of less than 300mm and for all short lengths.

Rates for all work shall include for protection, provision of samples and testing.

The pricing of materials shall take account of the following:

- (i) Pricing Preambles and Specifications shall apply reciprocally between sections of the works unless otherwise described.
- (ii) Materials shall be of the quantity specified unless otherwise directed by the Engineer.
- (iii) All materials shall be transported, handled, stored and fixed in accordance with the printed instructions or recommendations of their manufacturer's or suppliers.
- (iv) Protection of completed work, all casings and temporary coverings and making good, cleaning and polishing and clearing away upon completion.

Rates for Plumbing and HVAC Work

Rates for all pipe work shall include for assembling and joining, pipe supports, pipe sleeves and cover plates and the like.

Rates for pipework shall include for all fittings to small pipes (i.e. pipes into an internal dia. of 60mm or less) fittings (except joint in running lengths) to large pipes (i.e. pipes with internal dia exceeding 60mm) and to gutters shall be enumerated, grouped together for each size of pipe and gutter and described as fittings.

Rates for duct work are to be included all fittings, brackets, hangers and other support.

Rates for insulation are to be included for cutting, waste, joining lap and working around and our ancillaries, fittings, flanges and other obstructions.

Electrical Installations

The rates and prices for plant, equipment and installations are to be all inclusive of supply, installation, testing, commissioning and all associated builders work required for the full operation of such plant, equipment and installations, to comply in all respects with the Specification, Bills of Quantities, Drawings and to the complete satisfaction of the Local Regulatory Body and the Engineer.

The rates in general shall include for the following:

- (i) All cutting, short lengths and small quantities.
- (ii) All joints in the running length and all connections.
- (iii) All considerations arising from the specification.
- (iv) Fixing conduits / cable trays, etc., by approved methods.
- (v) Pipe sleeves through walls.
- (vi) Assembling component parts.
- (vii) Cleaning off all protective wrappers and leaving ready for use.
- (viii) Leaving all equipment etc., clean and in full working order.
- (ix) Draw wires in empty conduits.
- (x) Rates for cable and duct trench excavation shall include for all excavation, bedding, backfill and disposal as required by the Statutory Authority standard specification.
- (xi) Backfilling to trenches with approved excavated material. If the excavated material is not suitable imported fill shall be used.

The Contractor shall include for the supply of manufacturers recommended spares as required by the Specification for all electrical engineering installations and shall submit details of spares to be provided by him on the Schedule of Recommended Spares, including other relevant details.

The cable lengths / routes are measured from point to point on the drawing (horizontal plan distance on the drawing, any cable required for connections, loops, etc., at equipments, appliances, control gear or the like will be deemed to be included.

Multiple Ducts and Cables

The quantity stated in the Bills of Quantities for multiple ducts and cables is the length of a single duct or cable in the particular group of ducts or cables. The contractor will allow the cost of number of ducts or cables in the rate as appropriate. eg., a qty of 50m against a 3 way 200mm dia duct means that a total quantity of $50 \times 3 = 150\text{m}$ of 200mm duct is to be priced for, ditto for cables.

External Services

The rates for all manholes and the like are to be all inclusive of all costs for the complete construction, in accordance with the specifications, drawings and local authority requirements.

External Works

Where external works are analogous to other sections of the work e.g. excavation concrete etc., the clauses elsewhere shall apply equally to this section of the work.

Kerbing – Rates shall include for construction of concrete bed and lacking, supply and laying of precast concrete kerbs either straight or curved, finishing, curing and protecting building in gratings and frame.

Paved areas (footpaths and roadways) – Rates shall include bedding material, supply and laying of paving slabs including all cutting to fit around manhole covers and the like. Allow for forming patterns and designs in the paving stones all as detailed.

GRAND SUMMARY

Development of SMIU Model School and
University Academic Block at
SMIU City Campus, Karachi (Phase 1, Model School)
BILL OF QUANTITY
GRAND SUMMARY

S.No	DESCRIPTION	AMOUNT (Rs)
A	PRELIMINARIES & GENERAL REQUIREMENTS	<i>Included in Permanent Works</i>
B	PERMANENT WORKS	
1	CIVIL WORKS	
2	PLUMBING WORKS	
3	ELECTRICAL WORKS	
4	ELV SYSTEM	
5	EXTERNAL DEVELOPMENT WORKS	
TOTAL COST		

(Amount in words Rs.

CIVIL WORKS

**DEVELOPMENT OF (SMIU) SINDH MADRESSATUL ISLAM UNIVERSITY
CAMPUS KARACHI.
CONSTRUCTION OF MODEL SCHOOL CITY CAMPUS
BILL OF QUANTITY
SUMMARY**

S.No	DESCRIPTION	AMOUNT
A.	<u>SCHEDULE ITEMS</u>	
1	EARTH WORKS	2,073,712.00
2	SUB STRUCTURE	4,831,617.30
3	SUPER STRUCTURE	6,802,321.85
4	MASONRY WORKS	2,762,206.26
5	THERMAL & MOISTURE PROTECTION	-
6	MATEL WORKS	15,171.73
7	WOOD WORKS	-
8	FLOOR FINISHES	65,254.50
9	WALL FINISHES	1,094,603.18
10	CEILING FINISHES	751,075.20
11	EXTERNAL FINISHES	625,567.15
	SUB-TOTAL RS.	19,021,529.17
	Add% Above / below / At par on civil Works of Sindh CSR-2012	
	TOTAL OF (A) WITH PREMIUM RS.	
B.	<u>(NON-SCHEDULE ITEMS)</u>	
1	EARTH WORKS	NOT APPLICABLE
2	SUB STRUCTURE	
3	SUPER STRUCTURE	
4	THERMAL & MOISTURE PROTECTION	
5	MATEL WORK	
6	DOORS AND WINDOWS	
7	FLOOR FINISHES	
8	WALL FINISHES	
9	CEILING FINISHES	
10	EXTERNAL FINISHES	
	TOTAL OF (B) NON-SCHEDULE ITEMS RS.	
	TOTAL AMOUNT CARRIED TO GRAND SUMMARY (A + B)	

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
PART-A (SCHEDULE ITEMS)						
1		EARTH WORKS				
		SITE CLEARING AND GRUBBING				
1.1	Item # 1/ P-1/ Vol.III, Part-VI, (Public Highway Works)	Clearing and grubbing the site by cutting, uprooting and removing all rubbish and shrubs including disposal to (outside limits) designated places etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	8,685	Sft	0.97	8,424.45
		EXCAVATIONS, BACKFILLING AND DEWATERING				
1.2	Vol. III,Part-II & III,(General & PHEW)	Excavation in foundation & dewatering or bailing or pumping out sub soil water during excavation concreting, cast in situ concrete or masonry work in foundation of building, bridges and other structures including dagbelling dressing refilling around structure with (suitable) excavated earth watering, ramming lead upto 5'-0" ft. Complete and disposal of surplus excavated material to designated area i/c all lead & lift. etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
		a) In Sand, Ashes or Loose Soil				
1.3	Item # 18(a)+18(i.ii) / P-4+75/	± 0'-0" ft to -5'-0"ft Add for additional lift of every three ft or part there of for excavation for building, bridges, pipelines & storage tanks tranches and pits and other structures.	20,275	Cft	8.15	165,241.25
		From -5'-0" ft to -8'-0" ft	12,080	Cft	8.70	105,096.00
	Item # 18(a)+18(i.ii) & 16/ P-4+74+75	From -8'-0" ft to -11'-0" ft	6,365	Cft	9.25	58,876.25
		From -11'-0" ft to -14'-0" ft	-	Cft	9.80	-
		c) In Hard Soil or soft Murum				
1.4	Item # 18(c)+18(i.ii)/ P-4+75/	± 0'-0" ft to -5'-0"ft Add for additional lift of every three ft or part there of for excavation for building, bridges, pipelines & storage tanks tranches and pits and other structures	8,690	Cft	8.98	78,036.20
		From -5'-0" ft to -8'-0" ft	5,180	Cft	9.53	49,365.40
	Item # 18(c)+18(i.ii) & 16/ P-4+74+75	From -8'-0" ft to -11'-0" ft	2,730	Cft	10.08	27,518.40
		From -11'-0" ft to -14'-0" ft	-	Cft	10.63	-
		SHORING WORKS				
1.5	Item # 19/ P-76/ Vol.III, Part-VI, (PHEW)	Providing and fixing /driving close timbering to trenches for depth upto 10 feet etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	8,235	Sft	166.81	1,373,680.35
1.6	Item # 20/ P-76/ Vol.III, Part-VI, (PHEW)	Providing and fixing /driving close timbering to trenches for depth exceeding 10 feet upto 20 feet etc. Complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	-	Sft	333.62	-
		IMPORTED EARTH-FILLING FROM OUTSIDE SOURCES				
1.7	Item # 22+13 (b+cii)/P-3 & 4/Vol- III,Part-II, (General)	Supplying and filling watering and ramming earth under floor with new earth excavated from outside) lead upto one chain and lift upto 5 feet. laying earth in 6" layers leveling dressing and watering for compaction by rolling to obtain 95% modified AASHTO density. Complete including all lead & lifts etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	5,225	Cft	4.74	24,766.50
		STONE SOLING				
1.8	Item # 2 / P-15 /Vol-III,Part-II, (General)	Providing and laying dry rammed brick or stone ballast / soling 1-1/2" to 2" gauge from approved quarry including hand packing & filling voids with stone material, consolidating & compacting with power or hand roller,etc complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	5,490	Cft	33.28	182,707.20
Total Amount of Schedule Items Carried to Civil Summary						2,073,712.00

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
PART-A (SCHEDULE ITEMS)						
2		SUB-STRUCTURE				
		CONCRETE WORKS				
2.1	Item # 5(l) / P-16 /Vol-III,Part-II, (General)	Providing and laying cement concrete plain including placing compacting, finishing, leveling and curing complete (including screening and washing at stone aggregate without shuttering etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer. Below foundation, plinth beam,situ,walls,tanks, over stone soling or where required (Ratio 1:4:8)	4,060	Cft	112.89	458,333.40
2.2	Item # 5(h) / P-16 /Vol-III,Part-II, (General)	Providing and laying cement concrete plain including placing compacting, finishing, leveling and curing (including screening and washing at stone aggregate without shuttering etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer. (For Cast in situ concrete or where required.Ratio 1:3:6)	165	Cft	125.95	20,781.75
		WOODEN FORMWORKS/SHUTTERING				
2.3	Item # 19b(i+ii/2) / P-18 /Vol-III,Part- II,(General)	Providing, fixing, erection and removal of centering for R.C.C or plain cement concrete works of partial wood (shuttering / formwork) of approved quality in horizontal / vertical surface etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
i		Form work for lean 1:4:8 / situ 1:3:6 concrete	1,355	Sft	33.58	45,500.90
		RCC CONCRETE				
2.4	Item # 101 / P-112 /Vol-III,Part-II, (General)	Providing and laying Reinforced cement concrete having 3000 psi cylindrical strength (ready mixed concrete) including all kinds of formwork, hoisting, placing, compacting, finishing, vibrating, curing etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.(Excluding the cost of steel reinforcement)				
		Sub-Structure Concrete				
i)		Foundations & equipment pad (Raft, isolated, combined & strip etc.)	12,040	Cft	271.61	3,270,184.40
ii)		Plinth Beams / Grade beams i/c nibs / projections	1,260	Cft	271.61	342,228.60
iii)		Rcc Ramp	-	Cft	271.61	-
iv)		Rcc Steps & Staircase (Steps, landing & waist)	-	Cft	271.61	-
v)		Trenches & Manholes (Bottom & Top Slab)	-	Cft	271.61	-
vi)		Trenches & Manholes (Walls)	-	Cft	271.61	-
2.5	Item # 102 / P-112 /Vol-III,Part-II, (General)	Providing and laying Reinforced cement concrete having 4000 psi cylindrical strength (ready mixed concrete) including all kinds of formwork, hoisting, placing, compacting, finishing, vibrating, curing etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.(Excluding the cost of steel reinforcement)				
		Sub-Structure Concrete				
i)		Columns upto plinth	985	Cft	288.15	283,827.75
ii)		Rcc Retaining Wall upto plinth	-	Cft	288.15	-
iii)		Rcc Shear Lift / Core / Rcc wall upto plinth	-	Cft	288.15	-
iv)		UGWTank (Bottom & Top Slab)	350	Cft	288.15	100,852.50
v)		UGWTank (Walls)	440	Cft	288.15	126,786.00
		STEEL REINFORCEMENT (SUB-STRUCTURE)				
2.6	Item # 8b / P-17 /Vol-III,Part-II, (General)	Providing, supplying, cutting, fabrication of Tor / deformed steel reinforcement bar for cement concrete including cutting, bending, laying in position making joints and fastening including cost of binding wire (also includes removal of) etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer. (Bars to be cut and placed in position at any level according to the Bar bending schedule prepared by the contractor and approved by the Engineer).	-	Ton	100,034	-

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
2.7	Item # 9 / P-71 /Vol-III,Part-II, (General)	BITUMEN COATING Providing and applying industrial bitumen paint/coating to plastered or cement concrete surface etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	15,400	Sft	7.78	119,812.00
2.8	Item # 92 / P-109 / Vol-III,Part- II,(General)	TERMITE TREATMENT Providing Anti-Termite treatment by spraying / sprinkling / spreading Neptachlar 0.5% Emulsion as an overall pre-construction treatment in slab type construction under the slab and along attached perches or entrances etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer. (Note: Plinth Area will be measured one time for payment where is the number of applications will be three times on all horizontal & vertical surfaces of the excavation for termite proofing)	6,500	Sft	9.74	63,310.00
Total Amount of Schedule Items Carried to Civil Summary						4,831,617.30
PART-B (NON-SCHEDULE ITEMS)						
2.9	N.S.I	WATER STOPPER BAR (FOR RCC WALL & TANKS WALL) Providing and fixing PVC Centre bubble Type ribbed water stops 300mm wide x 12mm thick including cutting or jointing for retaining wall/UGWTank wall and where required etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	100	Rft		
2.10	N.S.I	Providing, supplying, transporting, straightening, cutting, bending, fabricating, placing and installing / binding in position etc., straight or curved deformed steel bar reinforcement having minimum yield strength 414 Mpa (60 ksi or 60,000 Psi) , including cost of G.I binding wire 18SWG, chairs, wastages, precast c.c. spacers and welding where required to be followed ASTM A615 standard. Only those overlaps shall be paid which are according to the approved Bar Bending Schedule / shown on drawings or instructed by the Engineer, all kind of R.C.C. work etc, complete in all respects as per drawing, standard , specifications and direction of the Engineer. (Bars to be cut and placed in position at any level according to the Bar bending schedule prepared by the contractor and approved by the Engineer).	49	Ton		
Total Amount of Non-Schedule Items Carried to Civil Summary						

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
PART-A (SCHEDULE ITEMS)						
3		SUPER-STRUCTURE RCC CONCRETE				
3.1	/Vol-III,Part-II, (General)	Providing and laying Reinforced cement concrete having 3000 psi cylindrical strength (ready mixed concrete) including all kinds of formwork, hoisting, placing, compacting, finishing, vibrating, curing etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.(Excluding the cost of steel reinforcement)				
i)	Item # 101 / P-112	Ground Floor Beams / Rib beams /purdi / bracing / lintels / nibs / sills / coping / bands around opening and projection	1,460	Cft	271.611	396,552.06
ii)		Slab i/c Rib / Waffle slab & projections	3,325	Cft	271.611	903,106.58
iii)		Stair Case / steps / Rcc seats (Steps, Landing & Waist slab)	470	Cft	271.611	127,657.17
		1st Floor				
i)	Item # 101 / P-112	Beams / Rib beams /purdi / bracing / lintels / nibs / sills / coping / bands around opening and projection	1,225	Cft	271.611	332,723.48
ii)		Slab i/c Rib / Waffle slab & projections	3,300	Cft	271.611	896,316.30
iii)		Stair Case / steps / Rcc seats (Steps, Landing & Waist slab)	470	Cft	271.611	127,657.17
		2nd Floor				
i)	Item # 101+12a /	Beams / Rib beams /purdi / bracing / lintels / nibs / sills / coping / bands around opening and projection	1,235	Cft	283.711	350,383.09
ii)	P-18+112	Slab i/c Rib / Waffle slab & projections	3,295	Cft	283.711	934,827.75
iii)		Stair Case / steps / Rcc seats (Steps, Landing & Waist slab)	470	Cft	283.711	133,344.17
		3rd Floor				
i)	Item	Beams / Rib beams /purdi / bracing / lintels / nibs / sills / coping / bands around opening and projection	1,000	Cft	291.274	291,274.00
ii)	#101+12a+12b	Slab i/c Rib / Waffle slab & projections	2,740	Cft	291.274	798,090.76
iii)	/P-18+112	Stair Case / steps / Rcc seats (Steps, Landing & Waist slab)	245	Cft	291.274	71,362.13
		Roof				
i)	Item #	Beams / Rib beams /purdi / bracing / lintels / nibs / sills / coping / bands around opening and projection	100	Cft	298.836	29,883.60
ii)	101+12a+12b+12b	Slab i/c Rib / Waffle slab & projections	195	Cft	298.836	58,273.02
iii)	/P-18+112	OHWTank Top & Bottom slab	495	Cft	298.836	147,923.82
iv)		OHWTank Walls	325	Cft	298.836	97,121.70
3.2	Vol-III, Part-II,(General)	Providing and laying Reinforced cement concrete having 4000 psi cylindrical strength (ready mixed concrete) including all kinds of formwork, hoisting, placing, compacting, finishing, vibrating, curing etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.(Excluding the cost of steel reinforcement)				
		Ground Floor				
i)	Item # 102 / P-112	Columns	1,015	Cft	288.147	292,469.21
ii)		RCC Shear / Core / Lift / RCC Wall NOT APPLICABLE	-	Cft	288.147	-
		1st Floor				
i)	Item # 102 / P-112	Columns	915	Cft	288.147	263,654.51
ii)		RCC Shear / Core / Lift / RCC Wall NOT APPLICABLE	-	Cft	288.147	-
		2nd Floor				
i)	Item #102+12a	Columns	915	Cft	288.147	263,654.51
ii)	/P-18+112	RCC Shear / Core / Lift / RCC Wall NOT APPLICABLE	-	Cft	300.247	-
		3rd Floor				
i)	Item	Columns	750	Cft	307.809	230,856.75
ii)	#101+12a+12b	RCC Shear / Core / Lift / RCC Wall NOT APPLICABLE	-	Cft	307.809	-
	/P-18+112					

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
PART-A (SCHEDULE ITEMS)						
i)	Item # 102+12a+12b+12b	Roof Columns	175	Cft	315.372	55,190.10
ii)	/P-18+112	RCC Shear / Column / RCC Wall NOT APPLICABLE	-	Cft	315.372	-
3.3	Vol-III,Part-II, (General)	STEEL REINFORCEMENT Providing, supplying, cutting, fabrication of Tor / deformed steel reinforcement for cement concrete including cutting,bending,laying in position making joints and fastening including cost of binding wire (also includes removal of) etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer. (Bars to be cut and placed in position at any level according to the Bar bending schedule prepared by the contractor and approved by the Engineer).				
	Item # 8b / P-17	Ground Floor		Ton	100,034	-
	Item # 8b / P-17	1st Floor		Ton	100,034	-
	Item # 8b+29 / P-17+19	2nd Floor		Ton	103,059	-
	Item # 8b+29x2 / P-17+19	3rd Floor		Ton	106,084	-
	Item # 8b+29x3 / P-17+19	Roof		Ton	109,109	-
3.4	Item # 2 / P-91/Vol- III,Part-II,(General)	STEEL STRUCTURE WORKS Providing, supplying, cutting, fabrication of heavy steel work with angles, tees, flat iron, round iron and sheet iron for making trusses,corrugated sheet, girders, tands including cutting, tanks etc. including cutting, drilling riveting, handling assembling and fitting but excluding erection in position (contractor to submit the shop drawings for approval prior to execution of work) etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	-	Kg	98.57	-
3.5	Item # 3 / P-91/Vol- III,Part-II,(General)	Erection and fitting in position of iron trusses staging of water tanks (contractor to submit the shop drawings for approval prior to execution of work) etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	-	Kg	5.42	-
3.6	Item # 3 / P-91/Vol- III,Part-II,(General)	PAINT ON STEEL STRUCTURE WORKS Providing and applying preparing the surface and painting on MS works guard bars, gates of iron bars, grating, railings (including standards braces) and similar open works 3 coats of Enamel paint of equivalent approved quality and shade including surface preparation, primer coat, filling, cutting etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
		Priming coat	-	Sft	5.22	-
		Each subsequent coat of paint (1st coat to 3rd coat)	-	Sft	11.23	-
Total Amount of Schedule Items Carried to Civil Summary						6,802,321.85
PART-B (NON-SCHEDULE ITEMS)						
3.8	N.S.I	WATER STOPPER BAR (FOR RCC WALL & TANKS WALL) Providing and fixing PVC Centre bubble Type ribbed water stops 300mm wide x 12mm thick including cutting or jointing for wall/OHWTank wall and where requiredetc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	85	Rft		

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
PART-B (NON-SCHEDULE ITEMS)						
3.9	N.S.I	<p>Providing, supplying, transporting, straightening, cutting, bending, fabricating, placing and installing / binding in position etc., straight or curved deformed steel bar reinforcement having minimum yield strength 414 Mpa (60 ksi or 60,000 Psi), including cost of G.I binding wire 18SWG, chairs, wastages, precast c.c. spacers and welding where required to be followed ASTM A615 standard. Only those overlaps shall be paid which are according to the approved Bar Bending Schedule / shown on drawings or instructed by the Engineer, all kind of R.C.C. work etc, complete in all respects as per drawing, standard , specifications and direction of the Engineer. (Bars to be cut and placed in position at any level according to the Bar bending schedule prepared by the contractor and approved by the Engineer).</p> <p>Ground Floor</p> <p>1st Floor</p> <p>2nd Floor</p> <p>3rd Floor</p> <p>Roof</p>	21	Ton		
			21	Ton		
			21	Ton		
			17	Ton		
			4	Ton		
Total Amount of Non-Schedule Items Carried to Civil Summary						

S.No	GOVT.OF SINDH CSR 2012 Item #/Page#/ Vol.sched ref.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=4*6
PART-A (SCHEDULE ITEMS)						
4		Masonry Works All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.				
4.1	Item # 28b / P-19 / Vol-III,Part-II,(General)	D.P.C Providing and laying DPC damp proof course with (cement sand and shingle concrete 1:2:4) including 2 coats of asphaltic mixture with leveling, curing, finishing etc complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
		i) Ground Floor	500	Sft	39.13	19,565.00
4.2	Item # 23 / P-19 /Vol-III,Part-II, (General)	Block Masonry Providing and laying 1:3:6 cement concrete solid block masonry wall above 6" in thickness set in 1:6 cement mortar in ground floor Super Structure including raking out joints & curing etc., complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
a)		8" Thick Block Masonry				
	Item # 23 / P-19	i) Ground Floor	2,020	Cft	146.00	294,920.00
	Item # 23+30 / P-19	ii) First Floor	2,395	Cft	148.19	354,915.05
	Item # 23+30 / P-19	iii) Second Floor	2,350	Cft	153.26	360,161.00
	Item # 23+30 / P-19	iv) Third Floor	1,805	Cft	161.20	290,966.00
	Item # 23+30 / P-19	v) Roof	705	Cft	174.14	122,768.70
4.3	Item # 24 / P-19 /Vol-III,Part-II, (General)	Providing and laying 1:3:6 cement concrete solid block masonry wall 6" and below in thickness set in 1:6 cement mortar in ground floor Super Structure including raking out joints & curing etc., complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
a)		6" Thick Block Masonry				
	Item # 24 / P-19	i) Ground Floor	2,230	Cft	157.71	351,693.30
	Item # 24+30 / P-19	ii) First Floor	2,255	Cft	159.35	359,334.25
	Item # 24+30 / P-19	iii) Second Floor	1,341	Cft	163.16	218,797.56
	Item # 24+30 / P-19	iv) Third Floor	1,340	Cft	169.11	226,607.40
	Item # 24+30 / P-19	v) Roof	540	Cft	178.81	96,557.40
b)		4" Thick Block Masonry				
	Item # 24 / P-19	i) Ground Floor	85	Cft	157.71	13,405.35
	Item # 24+30 / P-19	ii) First Floor	125	Cft	158.81	19,851.25
	Item # 24+30 / P-19	iii) Second Floor	100	Cft	161.34	16,134.00
	Item # 24+30 / P-19	iv) Third Floor	100	Cft	165.30	16,530.00
	Item # 24+30 / P-19	v) Roof	-	Cft	171.76	-
Total Amount Carried to Summary						2,762,206.26

**Development of SMIU Model School and
University Academic Block at
SMIU City Campus, Karachi (Phase 1, Model School)
BILL OF QUANTITY**

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
5		<p><u>THERMAL & MOISTURE PROTECTION</u> All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.</p> <p style="text-align: center; font-size: 2em; opacity: 0.5;">NOT APPLICABLE</p>				
Total Amount Carried to Summary						-

**Development of SMIU Model School and
University Academic Block at
SMIU City Campus, Karachi (Phase 1, Model School)
BILL OF QUANTITY**

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=4*6
6		<p><u>METAL WORK</u></p> <p>All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.</p>				
6.1	Item # 5d/ P-70 / Vol.III,Part II, (Chapter -7)	<p><u>Door Frame Paint</u></p> <p>Preparing surface and painting 3 coats on guard bars, gates of iron bars, gratings, railings (including standards braces, etc). And similar open work., Complete in all respects as per drawings, specification and direction of the Engineer. For (Door Frame)</p>	1,351	Sft	11.23	15,171.73
Total Amount Carried to Summary						15,171.73

Development of SMIU Model School and
University Academic Block at
SMIU City Campus, Karachi (Phase 1, Model School)
BILL OF QUANTITY

S.No	GOVT.OF SINDH CSR 2012 Item #/Page#/ Vol.sched ref.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=4*6
7		<p>WOOD WORKS All items under this head (Architectoral) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.</p> <p style="text-align: center; font-size: 2em; transform: rotate(-15deg);">NOT APPLICABLE</p>				
Total Amount Carried to Summary						

**Development of SMIU Model School and
University Academic Block at
SMIU City Campus, Karachi (Phase 1, Model School)
BILL OF QUANTITY**

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
8		<u>FLOOR FINISHES</u> All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.				
8.1	Item # 16C+75 / P-42,50/Vol. III,Part-II, (General)	<u>P.C.C FLOOR</u> Providing and laying 2" (50 mm) thick topping cement concrete 1:2:4 floor including surface finishing, leveling curing and dividing into panels with P/fixing glass strip 4mm for flooring up to 1" depth of specified pattern & design with steel trowel finished maintaining proper level etc complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.(at any height any floor)	425	Sft	43.92	18,666.00
8.2	Item # 15/ P-41/Vol. III,Part-II, (General)	<u>Colored Cement Tiles</u> Providing & laying Colored Cement Tiles (8" x 8" x 3/4") of approved dark shade laid flat in 1:2 cement mortar over 3/4" bedding mortar 1:2. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.(at any height any floor)	425	Sft	109.62	46,588.50
Total Amount Carried to Summary						65,254.50

S.No	GOVT.OF SINDH CSR 2012 Item #/Page#/ Vol.sched ref.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=4*6
9		WALL FINISHES All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.				
9.1		INTERNAL PLASTER Providing and applying (1/2") thick cement plaster to internal walls, columns, beams, etc. with cement mortar 1:4 including all corners, recesses, jambs, raking out joints of masonry, scaffolding etc, complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
	Item # 11b / P-52 / Vol. III,Part- II,(General)	i) Ground Floor	12,300	Sft	22.84	280,932.00
	Item # 11b+29 / P- 52 & 54	ii) First Floor	9,490	Sft	24.25	230,132.50
	Item # 11b+29 / P- 52 & 54	iii) Second Floor	11,928	Sft	25.66	306,072.48
	Item # 11b+29 / P- 52 & 54	iv) Third Floor	9,140	Sft	27.07	247,419.80
	Item # 11b+29 / P- 52 & 54	v) Roof	1,055	Sft	28.48	30,046.40
Total Amount Carried to Summary						1,094,603.18

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
10		CEILING FINISHES All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.				
10.1	Item # 13b / P-52 / Vol. III,Part- II,(General)	PLASTER (INTERNAL CEILING SURFACE) Providing and applying (1/2") thick cement plaster to internal ceiling, soffits of beams and projections etc. with cement mortar 1:6 in all corners, recesses, jambs, raking out joints of masonry, scaffolding etc, complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
	Item # 13b / P-52	i) Ground Floor	5,010	Sft	22.07	110,570.70
	Item # 13b+29 / P- 52 & 54	ii) First Floor	4,930	Sft	23.48	115,756.40
	Item # 13b+29 / P- 52 & 54	iii) Second Floor	4,870	Sft	24.89	121,214.30
	Item # 13b+29 / P- 52 & 54	iv) Third Floor	3,980	Sft	26.30	104,674.00
	Item # 13b+29 / P- 52 & 54	v) Roof	300	Sft	27.70	8,310.00
10.2	Item # 23+24c / P- 54/ Vol.III,Part II, (General)	PAINT (INTERNAL CEILING SURFACE) Providing and applying painting on all ceiling surface with Distemper Paint of approved shade three coats over and including a coat of primer over plastered surface at any height in any floor including preparation of surface, filling depression with putty, rubbing, sand papering and cleaning etc complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
	Item # 23+24c / P-54	i) Ground Floor	5,010	Sft	15.22	76,252.20
	Item # 23+24c / P-54	ii) First Floor	4,930	Sft	15.22	75,034.60
	Item # 23+24c / P-54	iii) Second Floor	4,870	Sft	15.22	74,121.40
	Item # 23+24c / P-54	iv) Third Floor	3,980	Sft	15.22	60,575.60
	Item # 23+24c / P-54	v) Roof	300	Sft	15.22	4,566.00
Total Amount Carried to Summary						751,075.20

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
11		EXTERNAL FINISHES All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.				
11.1	Item # 11c / P-52 / Vol. III,Part- II,(General)	PLASTER (EXTERNAL SURFACE) Providing and applying (3/4") thick cement plaster to external walls, columns, beams, etc. with cement mortar 1:4 including all corners, recesses, jambs, raking out joints of masonry, scaffolding etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
	Item # 11c / P-52	i) Ground Floor	3,465	Sft	30.16	104,504.40
	Item # 11c+29 / P-52 & 54	ii) First Floor	4,410	Sft	31.57	139,223.70
	Item # 11c+29 / P-52 & 54	iii) Second Floor	4,390	Sft	32.98	144,782.20
	Item # 11c+29 / P-52 & 54	iv) Third Floor	3,400	Sft	34.39	116,926.00
	Item # 11c+29 / P-52 & 54	v) Roof	1,905	Sft	35.80	68,199.00
11.2	Item # 13b / P-52 / Vol. III,Part- II,(General)	Rough Cast Plaster Providing and applying (1/2") thick cement plaster to internal ceiling, soffits of beams and projections etc. with cement mortar 1:6 ic all corners, recesses, jambs, raking out joints of masonry, scaffolding etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	1,450	Sft	22.07	32,001.50
11.3	Item # 34/ P-55 / Vol. III,Part- II,(General)	Groove Plaster Extra labor rate for making grooves of 1" x 1/4" or 3/4" x 1/2" plastered surface with true edges both vertically and horizontally with uniform depth, with groove base smoothly finished etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer. (At any height any Floor)	2,585	Rft	7.71	19,930.35
Total Amount Carried to Summary						625,567.15

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BILL OF QUANTITY**

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
PART-B (NON SCHEDULE ITEMS)						
4		<p><u>THERMAL & MOISTURE PROTECTION</u></p> <p>All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.</p>				
4.1		<p>Providing & laying complete roof treatment at any floor and any height as shown in the drawing, details consisting of following items complete in all respects as per drawing, standards, specifications and direction of the Engineer.</p> <p>i) Providing and laying 1" thick average levelling CC screed over Rcc slab for achieving leveled surface with (1:4) cement sand mortar, complete in all respect and as per drawing & specification and to the entire satisfaction of the Engineer.</p> <p>ii) Providing and laying in position Water proofing membrane Hi Grip Elastomer SUNTAN PP4000 4mm thick from Pak Hy-Oils limited or approved equivalent over above leveled surface including primer coating, overlapping (horizontal & vertical) complete as per manufacturer's specifications, instruction & as shown in the drawing etc, complete in all respects as per drawings, specification and as directed by the Engineer.</p> <p>iii) Providing and laying 2" thick minimum with 3000 psi strength concrete screed including BRC mesh 4" x 4" x 10 swg from Al - Burhan (Pvt) Ltd or approved equivalent in required slope curing, making ridges, valleys, chamfered edges etc complete in all respects as per drawings, specifications and as directed by the Engineer.</p> <p>iv) Providing & laying 34mm thick heat & cold Insulation tile by National Tile or approved equivalent, approved pattern & color as per the finishing schedule as shown in drawing including setting the tiles with cement sand mortar 1:4/Dry Bond, chipping, cutting, jointing and grouting material of approved quality (overall thickness as shown in the drawings) etc. complete in all respects as per specifications, drawings and instructions of the Engineer.</p>	4,290	Sft		
			4,290	Sft		
			4,290	Sft		
			4,290	Sft		
Total Amount Carried to Summary						

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	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
5		<u>METAL WORK</u> All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.				
5.1		<u>SS Railing</u> Providing, fabricating, welding & fixing in position Stainless Steel 304 grade Staircase railing comprising of 2" dia hand rail, 1-1/2" dia baluster in alternate steps with 1/2" dia solid bar, mid rail with 1/2" dia (4-Nos) including all required accessories (base plate, cap, nuts & bolts etc), complete in all respects as per drawing, standard, specifications and direction of the Engineer. i) Ground Floor ii) First Floor iii) Second Floor iv) Third Floor v) Roof	65 45 45 45 45	Rft Rft Rft Rft Rft		
5.2		<u>Aluminum Windows & Ventilator</u> Providing, fabricating and fixing champagne color anodized premium quality deluxe aluminum section with beading section for openable and fixed windows, ventilator (using Pakistan Cable, Alcorp, Krudson or equivalent approved manufacturers) including 5mm thick clear glass to be approved make by (Ghani Glass or other equivalent approved) fixed to concrete or masonry surfaces, using champagne color anodized long screws with nylon plugs, for window and ventilators hinges, stainless steel rollers, locking arrangements, handles stays, PVC glazing bead and weather strips, Caulking with caulking compound etc. complete in all respects, as per drawings and specifications and all works to be carried out the satisfaction of Engineer. (at any height/floor) Note: Minimum wall thickness for all sections shall be 2mm and width will be 100mm wide to be made according to the design.				
		<u>Windows</u>				
		W1	925	Sft		
		W2	380	Sft		
		W3	105	Sft		
		<u>Ventilator</u>				
		V1	225	Sft		
		V2	55	Sft		
		V3	310	Sft		
		V4	20	Sft		
5.3		<u>Rolling Shutter</u> Providing and fixing 20 swg G.I. sheet rolling shutters including all accessories and fitting encased in G.I. box complete with brackets, arrangement for inside and outside looking with operation handles, cutting holes and making good damages to walls etc. painting with 3 coats of enamel paint over a coats of red oxide paint on M. S. section etc. complete as required (at any height / floor) etc, complete in all respects as per specifications & relevant drawings and all works to the satisfaction of the Engineer.				
		W4	35	Sft		

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1	2	3	4	5	6	7=4*6
5.4		<p>Rungs / Monkey Ladder Providing fabricating and fixing of MS Monkey Ladder /Access Ladder for O.H water tank or where required comprising of 1-1/2" dia MS pipe with structural steel including all required fixing arrangements for complete the job as shown in drawing (at any height in any floor) etc. complete in all respects as per drawing, standard, specifications & direction of the Engineer.</p>	-	Kg		
5.5		<p>Grill Door Providing, fabricating, welding & fixing in position MS hollow tube grill door comprising of 1-1/2" x 1-1/2" x 16 Swg hollow tube horizontal & vertical as shown on drawing, including solid posts, hold fast (6 No), L-drop with lock & MS sheet 16 swg, heavy duty wheel up to 3" dia with cover, MS wheel track with 2" x 2" x 1/4" thick " T " iron including 1:2:4 concrete and all required fixing hardware including two coat of red oxide paint and three coat of epoxy paint of approved color & shades as per manufacturer's specification etc. complete in all respects as per drawing, standard, specifications and direction of the Engineer.</p>	1,350	Kg		
5.6		<p>MS SHEET DOOR FRAME Providing and fixing M.S. moulded sheet door frames of 5" x 2" manufactured from mild steel sheet of 16 gauge conforming to B.S.S. 1245 having a double rebate size 1-1/2" x 1/2" provision of 3 Nos. M.S. plate, section 1-1/2" x 1/4" (2 Nos. 6 inch long welded with frame at not less than 10 points and 1 Nos. 12 inch long welded with frame at not less than 20 points), with holes and threads for fixing steel hinges, fitted with one locking box of same sheet (point welded inside the frame), 6 Nos. 6 inches long flat iron fixing lugs of 1-1/4" x 3/16" section, treated with special red oxide primer coat all around including cutting holes and filling the cavity with cement concrete 1:4 etc. in any floor at any height. etc, complete in all respects as per drawing, standard , specifications and direction of the Engineer. (at any height any floor)</p>	1,655	Rft		
		<p>Providing fabricating and fixing of 25mm dia SS pipe rungs(304 grade) in UG & O.H water tank complete with all fixing arrangements (rawal bolt,etc) as shown in drawing painting with rust proof paint (at any height in any floor) etc, complete in all respects as per drawing, standard, specifications and direction of the Engineer.</p>	60	Rft		
Total Amount Carried to Summary						

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	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
6		<u>DOORS, WINDOW & VENTILATORS</u> All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.				
6.1		<u>Door Shutter</u> Providing, Making & Fixing 1-1/2" thick (38mm) solid core Formica finished flush door shutters with & with out fanlight, including 1/4" thick(6mm) MDF with mechanically pressed Formica of approved quality, colour & shade, Formica facing on either side, over all around best quality partal wood 50mm wide horizontal, vertical & cross band frame & 150mm wide lock rail, hollow area except framing to be filled with the approved rough wood, 1-1/2" x 1-1/2" thick Red Marinti wood edge lipping all around the shutter including approved colour shade polish with door beading. The door shutter mechanically pressed by standard manufacturers under power driven hydraulic press as approved by the Engineer, including (termite treatment using termite liquid) etc., complete in all respect, as per specifications & relevant drawings, and to the entire satisfaction of the Engineer.				
		i) Ground Floor to Roof(D1, D2, D4 & D5)	2,010	Sft		
6.2		Providing, Making & Fixing 1-1/2" thick 1st class seasoned Red Maranti wood shutter fully glazed comprising of 3" x 1-1/2" outer & inner frame 5mm thick clear glass & 1-1/4 x 1-1/4" wooden strip for glass holding, door beading including approved colour shade polish with lacquer finished, termite treatment etc. Complete in all respects, as per specifications & relevant drawings, and to the entire satisfaction of the Engineer.				
		D3	70	Sft		
6.3		<u>IRON MONGRY</u>				
		i) Ball Bearing Hinges 125mmx3mm, Stainless Steel (BON-91)	292	Nos.		
		ii) Tower bolts (DTB-12)	71	Nos.		
		iii) Locks (heavy duty) Lever Handle on Rose + Euro Profile Escutcheon, SS Finish(BON-704)+Mortise Cylinder Lock case, 45mm BS, SS Finish (BON-761)	71	Nos.		
		iv) Knob Profile Cylinder, one side key, one side knob, L-60mm, SN Finish	71	Nos.		
		v) Overhead Hydraulic Door Closer, Max.50 Kg. Door Weight, Silver Finish	15	Nos.		
		vi) Magnetic Wall & Floor Door Stop, SS Finish (BOZ-23)	15	Nos.		
		vii) SS push plates 100 x 300mm	12	Nos.		
		viii) SS kick plates 1500 x 150mm	12	Nos.		
6.4		<u>CABINET (WALL MOUNTED)</u> Providing making and fixing in position wall mounted cabinets made of 3/4" thick laminated MDF i/c all around Red Marinti wood lipping, rough wood frame, complete with all accessories i.e. imported magnetic hinges, locks, catchers, best quality handles etc. including termite treatment using termite liquid and (Lacquer polish finish) complete in all respects as per drawing, specifications, and or as directed by the Engineer. (Front face will be measured for payments)(At any height Any floor)				
			25	Sft		

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	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
6.5		<p>CABINET (FLOOR MOUNTED) Providing making and fixing in position floor mounted cabinets made of 3/4" thick laminated MDF i/c all around Red Marinti wood lipping, rough wood frame, complete with all accessories i.e. imported magnetic hinges, locks, catchers, best quality handles etc. including termite treatment using termite liquid and (Lacquer polish finish) complete in all respects (at any height / floor) as per drawing, specifications, and or as directed by the Engineer. (Front face will be measured for payments)(At any height any floor)</p>	40	Sft		
Total Amount Carried to Summary						

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
7		FLOOR FINISHES All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.				
7.1		LEVELLING SCREED Providing & laying 1: 4 cement sand mortar levelling screed under marble/porcelain tiles or where required complete in all respects as per specifications, drawings and instructions of the Engineer.				
		i) Ground Floor	832	Cft		
		ii) First Floor	800	Cft		
		iii) Second Floor	800	Cft		
		iv) Third Floor	800	Cft		
		v) Roof	35	Cft		
7.2		PORCELAIN TILE Providing & laying full body Porcelain Tile (Matt finish) on floor comprising of 12" x 24" x 3/8" & 24" x 24" x 1/2" thick Porcelain tiles of approved make & colour as per floor pattern with or without spacers shown in drawing including setting the tiles with dry bond sulry, grouting with matching colour approved grouting material in jointing, curing, cutting etc, complete in all respects as per specifications, drawings and instructions of the Engineer. (Note: Cost of base mortar/levelling screed will be paid separate item) Base Rate only for Porcelain Tile: 1350/Sq.m				
		i) Ground Floor	755	Sft		
		ii) First Floor	570	Sft		
		iii) Second Floor	235	Sft		
		iv) Third Floor	1,320	Sft		
		v) Roof	-	Sft		
7.3		Marble Tile Providing and laying Pre-Polished Marble Tile on floor 18" x 18" of approved make & colors with borders, patterns as per design with or without spacers including setting the tiles with dry bond sulry, grouting with matching colour approved grouting material in jointing, curing, cutting etc, complete in all respects as per specifications, drawings and instructions of the Engineer. (Note: Cost of base mortar/levelling screed will be paid separate item) Base Rate only for Marble Tile: 70/Sft				
		i) Ground Floor	4,896	Sft		
		ii) First Floor	4,875	Sft		
		iii) Second Floor	5,210	Sft		
		iv) Third Floor	4,125	Sft		
		v) Roof	255	Sft		

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1	2	3	4	5	6	7=4*6
7.4		<p>Marble Counter Top Providing, laying and fixing Per-Polished Marble Counter Top 24" wide and 3/4" thick as per drawing, activities include provide & fixe 1-1/2" thick RCC slab, setting with Dry Bond, fixing in wall with cutting/chiseling in RCC / CC members etc, grouting with matching colour approved grouting material in joints, chamfering edging/half D gola around the counter top, finishing, maintaining proper level with curing etc. where required complete in all respects as per specifications and as directed by the Engineer. Base Rate only for Marble counter top 150/Sft</p> <p>i) Ground Floor ii) First Floor iii) Second Floor iv) Third Floor</p>	45 50 25 25	Sft Sft Sft Sft		
7.5		<p>National Tile Providing, laying and fixing 125 x 155 x 20mm Industrial Tile by National Tiles (split clay tile) or equivalent, of approved design, size, pattern & color as per the finishing schedule, including fixing with Dry Bond, chipping, cutting, jointing and grouting material of approved quality & using plastic spacers (overall thickness as shown in the drawings) complete in all respects, as per drawings, specifications and as directed by the Engineer.</p>	60	Sft		
Total Amount Carried to Summary						

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
8		WALL FINISHES All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.				
8.1		PORCELAIN SKIRTING Providing and fixing Porcelain tiles Skirting 4" high of approved make & colors over plastered surface including jointing with dry board, grouting with approved material, curing, cutting etc. complete in all respects as per specifications, drawings and instructions of the Engineer. Base rate only for Porcelain tiles: 1350 Per Sq.m				
		i) Ground Floor	30	Sft		
		ii) First Floor	-	Sft		
		iii) Second Floor	-	Sft		
		iv) Third Floor	60	Sft		
		v) Roof	-	Sft		
8.1		PORCELAIN DADO Providing and fixing half body Porcelain tiles Dado 12" x 12" x 3/8" thick up to required height of approved make & colors over plastered surface including jointing with dry bond, grouting with approved material, curing, cutting etc. complete in all respects as per specifications, drawings and instructions of the Engineer. Base rate only for Porcelain tiles: 1350 Per Sq.m				
		i) Ground Floor	1,275	Sft		
		ii) First Floor	1,425	Sft		
		iii) Second Floor	915	Sft		
		iv) Third Floor	915	Sft		
		v) Roof	-	Sft		
8.3		Marble Skirting Providing and fixing of Pre-polished Marble tile Skirting 4" high (12" x 4" x 1/2") of approved colors with patterns, match with floor tiles over plastered surface, including jointing with dry bond, cutting, curing, etc complete in all respects as per drawings, specifications and the satisfaction of the Engineer. Base rate only for Marble Tile: 40 Per Sft				
		i) Ground Floor	320	Sft		
		ii) First Floor	264	Sft		
		iii) Second Floor	290	Sft		
		iv) Third Floor	235	Sft		
		v) Roof	90	Sft		
8.4		PAINT (INTERNAL WALL SURFACE) Providing and applying painting on all internal wall surface with Matt Enamel Paint of approved shade three coats over and including a coat of primer over plastered surface including preparation of surface, filling depression with putty, rubbing, sand papering and cleaning etc complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
		i) Ground Floor	12,300	Sft		
		ii) First Floor	9,490	Sft		
		iii) Second Floor	11,928	Sft		
		iv) Third Floor	9,140	Sft		
		v) Roof	100	Sft		

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	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
8.5		Puddlo Plaster Providing and applying 3/4" thick 1:4 cement sand pudlo plaster , using pudlo mixed with 2.25 kg/ cement bag on all internal surface of UG & OHW Tanks at any height & level, using chamfered edges, rounding off corner etc. including scaffolding complete in all respects as per drawing, standard, specifications and direction of the Engineer.	2,275	Sft		
8.6		Providing and laying Pre-Polished Marble Tiles/Slab one piece of approved make, colors & size with borders, patterns including 3 grooves at nosing as per design including setting the tiles with dry bond sulry, grouting with matching colour approved grouting material in jointing, curing, cutting, chamfering edging/half D gola etc, (overall thickness as shown in the drawings) complete in all respect as per drawings, specifications and to the instructions of the Engineer. a) For tread 1" (25mm) thick i) Ground Floor ii) First Floor iii) Second Floor iv) Third Floor b) For riser 1/2" (10mm) thick i) Ground Floor ii) First Floor iii) Second Floor iv) Third Floor	235	Sft		
			235	Sft		
			235	Sft		
			235	Sft		
			235	Sft		
			130	Sft		
			130	Sft		
			130	Sft		
			130	Sft		
8.7		Providing and fixing of Pre-polished National tile Skirting of approved colors with patterns, match with floor tiles over plastered surface, including jointing with dry bond, cutting, curing, etc complete in all respects as per drawings, specifications and the satisfaction of he Engineer.	12	Sft		
Total Amount Carried to Summary						

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	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
9		CEILING FINISHES All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.				
9.1		Providing and laying 24" x 24" x 1/2" thick Mineral fiber ceiling fixed in aluminum section complete with adjustable metal suspension system consisting of galvanized steel furring channel, intermediate channel, perimeter channel, aluminum angle / tee, including cutting of holes for lights fittings etc. Complete in all respects as per drawings, relevant specifications and as directed by the Engineer.	950	Sft.		
9.2		Providing, fabricating and installing Gypsum board 24" x 24" x 1/2" thick moisture resistant false ceiling of approved colour and shape of elephant brand or equivalent including adjustable metal framing suspension system, required hard wears, jointing tap, all cutting for light fixers & other design feature etc, complete in all respects, as per drawings, specifications and or as directed by the consultant / Engineer.	900	Sft.		
Total Amount Carried to Summary						

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	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=4*6
10		External Finishes All items under this head (Architectural) to be carried out as per specifications, Drawings, relevant BSI/ASTM Standards, and complete in all respect and to the entire satisfaction of the Engineer.				
10.1		Ornamental Stone Providing & fixing approved Ornamental Stone (Gadap / Gizri) railing comprising of 6" x 6" x 36" high baluster over 9" x 3" thick stone slab, 9" x 2" thick stone coping including all fixing arrangement (Nut, Bolts, MS plates) etc complete in all respects as per specifications, drawings and instructions of the Engineer. (At any height & any floor)	170	Rft		
10.2		Providing and fixing approved Stone (Gadap / Gizri) 4" x 2" & 2" x 2" around windows/ventilators or where required with 1:4 cement sand mortar, grouting with the pigmented approved grouting material including cutting, jointing, screwing, clip & clamping system, curing, etc complete in all respect as per drawings, specifications and the satisfaction of the Engineer.				
		a) 4" x 2"	3,235	Rft		
		b) 2" x 2"	3,235	Rft		
10.3		Providing & applying pure acrylic water based, durable moderate texture that gives a traditional look with crack bridging of 0.6mm, breathable, anti-carbonation coating with its unique long lasting colours. One coat alkali resistant primer, two coats heritage traditional texture and two final coats of approved Jotashield colorlast of approved colour shade including surface preparation & as per instruction of the manufacturer etc complete in all respects as per drawings, specifications and the satisfaction of the Engineer.	19,340	Sft		
10.4		Stone Cladding (GIZRI / GADAP) Providing and fixing Stone Cladding with GADAP / GIZRI Stone 12" x 6" x 1" thick of approved colors, size, thickness with patterns over 1/2" thick base of cement mortar in 1:4 C.M., including cutting, jointing, curing, etc complete in all respect as per drawings, specifications and the satisfaction of the Engineer.(At any height & any floor)	855	Sft		
10.5		PRE-CAST Providing and fixing RCC/PCC Pre-Cast Coping /Gola of approved colors, size & thickness shown on the drawing lay over 1/2" thick base of cement mortar in 1:4 C.M., including cutting, jointing, screwing, grouting & curing, etc complete in all respects as per drawings, specifications and the satisfaction of the Engineer.				
		a) Projection Gola	1,045	Rft		
		b) Coping	750	Rft		
10.6		C.C Flower Planter Supply and set plants with CC flower planter up to 450mm dia as shown on drawing all works comprising of (Filling sweet earth with manure compacting, curing, finishing & leveling) etc, size of plant as per drawing, complete in all respect as per drawing and direction of Engineer.	16	Each.		
10.7		BENCH Providing and fixing 2" thick top Pre-cast concrete Bench size of (5'-10" long x 2' wide x 1.5' high) in natural colour without backrest as shown in drawing, including reinforcement, rounding off edges, fixing bench permanent with base, complete in all respect, as per drawings, specifications and directed by the consultant / Engineer.	10	Nos.		
Total Amount Carried to Summary						

PLUMBING

S. NO.	DESCRIPTION	TOTAL AMOUNT IN PAK RUPEES
A. SCHEDULE ITEMS		
1	Plumbing Fixtures	509,122
	SUB-TOTAL-A Rs.	509,122
	Add% Above/Below/At par on Plumbing Works of Composite Schedule of Rates 2012, GOVT. OF SINDH	
	TOTAL-A Rs.	
B. NON-SCHEDULE ITEMS		
1	Plumbing Fixtures	
2	Cold and Hot Water Supply Piping	
3	Isolation Valves	
4	Plumbing Specialties	
5	Packaged Pump Sets	
6	Water Tank Connection	
7	Water Cooler & Water Filter	
8	Soil, Waste,RW and Vent Pipes	
9	Drainage Specialties	
10	Manholes and Gully traps	
11	External Connection	
12	Gas Works	
	TOTAL-B Rs.	
	TOTAL AMOUNT (A+B) CARRIED TO GRAND SUMMARY	

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=(4X6)
A. (SCHEDULE ITEMS)						
		PLUMBING FIXTURES				
1	Chapter #1, Item #2 (A),Page #1	Providing & fixing squatting type white glazed earthen ware w.c pan with front flush inlet & complete with including the cost of flushing cistern with internal fitting and flush pipe with bend and making requisite number of holes in walls plinth & floor for pipe connection& making good in cement concrete 1:2:4 (Foreign Equivalent).				
	(a)ii	W.C.pan 23" & low level earthen ware flush tank 3 gallons with 4" dia white glazed earthen were trap and plastic thumble.	9	Nos	5,772.80	51,955
2	Chapter #1, Item #5, Page #2	Providing & fixing European white glazed earthen ware wash down w.c pan complete with and l/c the cost of white/black plastic seat (best Quality) and lid with c.p brass hinges and buffers, 3 gallons white glazed earthen ware low level foushing cistern with siphon fitting 1-1/2" dia white porcelain enamelled flush bend 3/4" dia and making requisite number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4. (Foreign Quality)	18	Nos	11,477.40	206,593
3a	Chapter #1, Item #10, Page #3	Providing and fixing 24" x 18" lavatory basin in white glazed earthen ware complete with & l/c the cost of W.I. or C.I cantilever brackets 6 inches built into walls, painted white in two coats after a primary coat of red lead paint a pair of 1/2" dia rubber plug & chrome plated brass chain 1-1/4" dia, malleable iron or brass unions and making requisite number of holes in walls, plinth & floor for pipe connectios and making good in cement concrete 1:2:4 (Foreign or Equivalent)	18	Nos	4,928.00	88,704
3b	Chapter #1, Item #11, Page #3	Add extra for labour for providing & fixing of earthen ware pedestal white or coloured glazed (Foreign or Equivalent)	18	Nos	2,533.47	45,602
4	Chapter #1, Item #19, Page #6	Providing & Fixing steel sinks satinless local make complete with cast iron or wrought iron brackets 6 inches built in wall, 1-1/2" c.p rubber plug chrome plated brass chain, 1-1/2" c.p brass waste, with 1-1/2" P.V.C waste pipe & making requisite number of holes in wall & plinth & floor for pipe connection & making good in cement concrete 1:2:4.				
	(a)	Steel sink stainless sized 40" x 20" local make (Standard Pattern)	2	Nos	5,052.30	10,105
	(c)	Steel sink stainless sized 33" x 18" local make (Standard Pattern)	11	Nos	5,712.30	62,835
5	Chapter #2, Item #1, Page #7	Providing & Fixing chrome plated brass towel rail complete with brackets fixing on wooden cleats with 1" long c.p brass screws.				
	i b	Towel rail 36" long 3/4" dia round or square (Superior quality)	9	Nos	1,412.95	12,717
6	Chapter #2, Item #2, Page #7	Providing & fixing c.p brass toilet paper holder of standard size with chrome plated brass brackets complete (similar to twytords design No.1108)				
	b	Superior Quality	18	Nos	1,071.40	19,285
7	Chapter #2, Item #3, Page #7	Providing & Fixing 24" x 18" bavelled edge mirror of begium glass complete with 1/8" thick hard board and c.p screws fixed to wooden pleat.				
	b	Superior Quality	1	Nos	2,376.00	2,376
8	Chapter #2, Item #5, Page #8	Supplying & Fixing soap tray earthen ware with c.p screws etc. complete.	18	Nos	497.20	8,950
AMOUNT CARRIED TO SUMMARY						509,122

S.No.	GOVT. OF SINDH CSR 2012 Item #/Page#/ Vol.sched ref.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=(4X6)
B. (NON-SCHEDULE ITEMS)						
1		PLUMBING FIXTURES:				
ii		Providing and fixing bath toilet accessories as under:				
		Hand Spray / Muslim shower	18	Nos		
		WC Cleaning Brush	18	Nos		
AMOUNT CARRIED TO SUMMARY						

S.No.	GOVT. OF SINDH CSR 2012 Item #/Page#/ Vol.sched ref.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=(4X6)
2		<p>WATER SUPPLY:</p> <p>Cold and Hot Water Supply Piping</p> <p>Supply, installation, testing and Commissioning of PPR PN - 20 Cold/Hot water pipes as per DIN 8077-8078 with molded fittings PN - 25 as per DIN 16962, including pipe supports, cutting, filling, testing/commissioning and all accessories as indicated on the drawing, as per specifications and Engineers approval.</p>				
i		3/4" dia	750	Rft		
ii		1" dia	230	Rft		
iii		1 1/4" dia	30	Rft		
iv		1 1/2" dia	800	Rft		
v		2" dia	1400	Rft		
vi		2 1/2" dia	100	Rft		
vii		3" dia	0	Rft		
viii		4" dia	0	Rft		
		<p>External Connection</p> <p>Connection to external water supply network, after including coordination with external drawings, the cost of excavation, Piping as specified and shown on the drawing, as per specifications and Engineers approval.</p>	1	Job		
AMOUNT CARRIED TO SUMMARY						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=(4X6)
3		Isolation Valves Providing and fixing of PPR Coated PN-20 Gate valves of bronze material for diameter 2" and smaller and Cast Iron material for Diameter greater than 2" as per specifications and Engineers approval.				
i		3/4" dia	0	Nos		
ii		1" dia	1	Nos		
iii		1 1/4" dia	1	Nos		
iv		1 1/2" dia	7	Nos		
v		2" dia	2	Nos		
vi		2 1/2" dia	0	Nos		
vii		3" dia	0	Nos		
viii		4" dia	0	Nos		
4		Non Return Valves Providing and fixing of PN-20 non return Valve of Bronze Material for diameter 2" and smaller and Cast Iron material for Diameter greater than 2" as per type indicated in specifications and as per Engineers approval.				
i		1 1/2" dia	0	Nos		
ii		2" dia	2	Nos		
iii		3" dia	0	Nos		
AMOUNT CARRIED TO SUMMARY						

S.No.	GOVT. OF SINDH CSR 2012 Item #/Page#/ Vol.sched ref.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=(4X6)
5		Plumbing Specialties				
a		Supply and installation of the following including all fittings, fixings, accessories, etc., as indicated on the drawing, as per Specifications and Engineers approval.				
i		1/2" dia. Bib Tap	1	Nos.		
ii		1" Air Relief Valve	3	Nos.		
iii		2 1/2" dia foot valve	2	Nos.		
iv		2 1/2" Y-type Strainer	2	Nos.		
v		2 1/2" Flexible Connection	4	Nos.		
AMOUNT CARRIED TO SUMMARY						

S.No.	GOVT. OF SINDH CSR 2012 Item #/Page#/ Vol.sched ref.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=(4X6)
6		Packaged Pump Sets Supply and installation of below mentioned pump including pump foundation, control panel, wiring from panel to pumps, valves, piping, accessories, etc. from Suction header to Discharge header, as indicated on the drawing, as per specifications and Engineers approval. Water Transfer Pump set (1 Duty), Flow = 65 GPM @ 75 ft head	1	Nos		
AMOUNT CARRIED TO SUMMARY						

S.No.	GOVT. OF SINDH CSR 2012 Item #/Page#/ Vol.sched ref.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=(4X6)
7		<p>Water Tank Connection for water tank including with valves, supports, excavation and Backfill, complete all in accordance with the drawing and specifications.</p>				
a		2" Connection to RCC water tanks	1	No.		
i		Connection to overhead water tanks using Float switch	1	No.		
ii		Cast Iron Medium Duty Cover For RCC water tanks	1	No.		
iii						
AMOUNT CARRIED TO SUMMARY						

S.No.	GOVT. OF SINDH CSR 2012 Item #/Page#/ Vol.sched ref.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=(4X6)
8		Water Cooler Supply and installation of Stainless Steel Electric water cooler of below mentioned capacity with two taps, R-22 Refrigeration system, S.Steel Tank safety tested at 10kg/cm ² (142 p.s.i.) with recommended maximum working pressure of 3kg/cm ² (42 p.s.i.) including all accessories like Valves, interconnecting piping, Drain tray and drain connection s as indicated in the drawings, as per specifications and engineers approval.	4	No.		
a						
b		Water Filter Supply and installation of 3 stage UV Water filter having minimum flow rate of 0.5 gpm including valves, piping, accessories, etc., as indicated on the drawing, as per specifications and Engineers approval.	4	No.		
AMOUNT CARRIED TO SUMMARY						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=(4X6)
9		Soil, Waste,RW and Vent Pipes Providing and fixing, uPVC pipes and fittings as per BS EN 1329 for above ground installations for Soil, Waste, Vent & Rw pipes with Kite mark on pipes and fittings including cleanout plug, clamps, hanger collars, supports, specials (bend, tees, Y-tee etc.) as indicated on the drawing, as per specifications and Engineers approval.				
i		2" dia	280	Rft		
ii		3" dia	1130	Rft		
iii		4" dia	340	Rft		
		Providing and fixing, uPVC pipes and fittings as per BS EN 1401 for below ground installations for Soil pipes including excavation, backfill, fittings (bend, tees, Y-tee etc.) as indicated on the drawing, as per specifications and Engineers approval.				
i		6" dia	220	Rft		
AMOUNT CARRIED TO SUMMARY						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=(4X6)
10		Drainage Specialties				
a		Providing and fixing of Multi floor trap with multiple dia inlet and Single outlet and cleanout plug of the approved self cleaning design with S.Steel grating as specified by the architect, as indicated on the drawing, as per specifications, architectural finishing schedule and Engineers approval.	70	Nos		
b		Providing and fixing of PVC Roof Drains with Over Drain of Dome Type with PVC/Stainless Steel Dome with 6" Outlet, as specified by the architect, as indicated on the drawing, as per specifications, architectural finishing schedule and Engineers approval.	4	Nos		
c		Providing and fixing UPVC cowl for vent pipe of the following dia including all accessories complete in all respects.				
i		2" dia	2	Nos		
ii		3" dia	1	Nos		
d		Providing and fixing of Single Hinge, 6" dia PN-10 back flow preventer/Flap valve as per DIN EN 1092-2 for sewage water outlet connection into the nala as indicated on the drawing, as per specifications, architectural finishing schedule and Engineers approval.	2	Nos		
AMOUNT CARRIED TO SUMMARY						

S.No.	GOVT. OF SINDH CSR 2012 Item #/Page#/ Vol.sched ref.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=(4X6)
11		Manholes and Gully traps				
a		Construction of 30" x 30" Sanitary sewage manhole with 24" x 24" Medium duty Cover (Min Weight = 60 kg) cover as specified and shown on the drawing, as per specifications and Engineers approval.	2	Nos.		
b		Construction of 18" x 18" gully trap with 10" P- trap and 18" x 18" cover (min Weight =65 kg) as specified and shown on the drawing, as per specifications and Engineers approval.	3	Nos.		
c		Providing and fixing of 12" x 12" (inner) RCC Catch Basing with 12" x 12" heavy duty ductile iron grating, as specified by the architect, as indicated on the drawing, as per specifications, architectural finishing schedule and engineers approval.	2	Nos		
AMOUNT CARRIED TO SUMMARY						

S.No.	GOVT. OF SINDH CSR 2012 Item #/Page#/ Vol.sched ref.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	2	3	4	5	6	7=(4X6)
12		<p>External Connection Connection to external Sewage network, after including coordination with external drawings, the cost of excavation, Piping as specified and shown on the drawing, as per specifications and Engineers approval.</p>	1	Job		
AMOUNT CARRIED TO SUMMARY						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7=(4X6)
13		<p>Gas Piping Supply, installation Testing and Commissioning of Poly Ethylene PE 80 PN-16 Gas pipes for buried applications as per BS DIN 8074-8075 and PS-3580 with fusion fittings including excavation, backfill, pipe supports as indicated on the drawing, as per specifications and Engineers approval.</p>				
i		1/2" dia	250	Rft		
ii		3/4" dia	0	Rft		
iii		1" dia	0	Rft		
		<p>Gas Valves Supply, installation, testing and Commissioning of Isolation/Gate valves for Gas piping as indicated on the drawing, as per specifications and Engineers approval.</p>				
i		1/2" dia	2	Nos		
ii		3/4" dia	0	Nos		
iii		1" dia	0	Nos		
		<p>Connections Making service connection with existing Gas Company mains with necessary approval and directions by the Local Gas Company.</p>				
i			1	Job		
ii		Installation and provision of Gas meter and Regulator to the Gas Service Lines as per specifications and requirements of Local Gas Company including taking approval and making all payments to the Gas Company in this regard.	1	Job		
AMOUNT CARRIED TO SUMMARY						

ELECTRICAL WORKS

SUMMARY

S. NO.	DESCRIPTION	TOTAL AMOUNT IN PAK RUPEES
A. SCHEDULE ITEMS		
1	SUB HEAD I MAIN & SUBMAINS	614,710
2	SUB HEAD II POINT WIRING	502,850
3	SUB HEAD XI ELECTRICAL ACCESSORIES	366,465
	SUB-TOTAL-A Rs.	1,484,025
	Add% Above/Below/At par on Electrical Works of Composite Schedule of Rates 2012, GOVT. OF SINDH	
	TOTAL-A Rs.	
B. NON-SCHEDULE ITEMS		
1	L.V. DISTRIBUTION BOARDS	
2	LOW VOLTAGE CABLES AND WIRES	
3	CONDUITS & PIPES	
4	WIRING ACCESSORIES	
5	LIGHT FIXTURE & FANS	
6	UPS SYSTEM	
7	CABLE TRUNKING	
8	LIGHTNING PROTECTION SYSTEM (LPS)	
	TOTAL-B Rs.	
	TOTAL AMOUNT (A+B) CARRIED TO GRAND SUMMARY	

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
PART-A (SCHEDULE ITEMS)						
1	SUB HEAD I	<u>SUB HEAD I MAIN & SUBMAINS</u>				
	D.	<u>WITH 3 WIRE PVC CONDUIT RECESSED IN THE WALL OR COLUMN</u>				
a)	Item # 24(D)/ P-4/ Second Edition-2012	Providing & laying (MAIN or SUB MAIN) PVC insulated with size 3-7/.029 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	740	Per Mtr.	294	217,560
b)	Item # 25(D)/ P-4/ Second Edition-2012	Providing & laying (MAIN or SUB MAIN) PVC insulated with size 3-7/.036 copper conductor in 3/4" dia PVC conduit recessed in the wall or column as required.	1,175	Per Mtr.	338	397,150
CARRIED TO ELECTRICAL SUMMARY =====>>>>						614,710

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
2	SUB HEAD II	SUB HEAD II POINT WIRING				
a)	Item # 124/ P-15/ Second Edition-2012	Wiring for light or fan point with 3/029 PVC insulated wire in 20mm (3/4'') PVC conduit recessed in the wall or column as required.	445	Per Point	1,130	502,850
CARRIED TO ELECTRICAL SUMMARY =====>>>>						502,850

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
3	SUB HEAD XI	<u>SUB HEAD XI ELECTRICAL ACCESSORIES</u>				
	B.	<u>CEILING ROSE</u>				
a)	Item # 228(B)/ P-33/ Second Edition-2012	Providing & fixing Bakelite ceiling rose with two terminals.	445	Per No.	72	32,040
	C.	<u>FAN</u>				
b)	Item # 235(C)/ P-34/ Second Edition-2012	Providing & fixing Brass Ceiling fan 56'' (good quality)	105	Per No.	3,185	334,425
CARRIED TO ELECTRICAL SUMMARY =====>>>						366,465

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
PART-B (NON-SCHEDULE ITEMS)						
1		L.V. DISTRIBUTION BOARDS				
a)		Supply, installation, testing & commissioning of Wall/Flush mounted Sub Main Distribution Board (SMDB) / Distribution Boards (DB), made with 16 SWG sheet steel metal, as per single line diagram, dust protected, vermin proof housing coated with approved color having all the necessary switching and protections, including all mounting accessories as per specifications and drawings, complete in all respect.				
i		SMDB-MS (Form-2, Type-2)	1	No.		
ii		DB-MS-GF	1	No.		
iii		DB-MS-1F	1	No.		
iv		DB-MS-2F	1	No.		
v		DB-MS-3F	1	No.		
vi		DB-MS-ICT	1	No.		
CARRIED TO ELECTRICAL SUMMARY =====>>>>						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
2		<p>LOW VOLTAGE CABLES AND WIRES Supply, installation, testing & commissioning of following size of multi core / single core, Cu/PVC, Cu/PVC/PVC, unarmoured, 0.6 kV/1 kV, 450/750V or 300/500V voltage grade copper cable in already laid raceways or trench including all accessories lugs, cable gland etc. as per drawings and specification, complete in all respect.</p>				
a)		<p>4 Core - AL/PVC/PVC Cable (600/1000V) 4 Core - 50 Sq.mm Al./PVC/PVC Cable</p>	60	Mtr.		
b)		<p>1 Core - CU/PVC Cable (450/750V) 1 Core - 10 Sq.mm Cu/PVC Cable</p>	235	Mtr.		
c)		<p>2 Core - CU/PVC/PVC Flexible Cable (300/500V) 2 Core - 6 Sq.mm Cu/PVC/PVC Flexible Cable</p>	10	Mtr.		
d)		<p>1 Core - AL/PVC Cable (450/750V) as ECC 1 Core - 25 Sq.mm Al./PVC Cable</p>	60	Mtr.		
e)		<p>1 Core - CU/PVC Cable (450/750V) as ECC 1 Core - 10 Sq.mm Cu/PVC Cable</p>	60	Mtr.		
ii		<p>1 Core - 6 Sq.mm Cu/PVC Cable</p>	10	Mtr.		
CARRIED TO ELECTRICAL SUMMARY =====>>>>						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
3		CONDUITS & PIPES				
a)		Providing and laying of following size (inner dia) PVC / UPVC Conduit as race ways with all accessories recessed / surface on wall / column / under floor for Power. As per specifications and drawings, complete in all respect.				
i		32 mm dia PVC	20	Mtr.		
ii		38 mm dia PVC	20	Mtr.		
iii		50 mm dia UPVC (Class-D)	15	Mtr.		
b)		Providing and laying of UPVC (Class-D) pipe having dia of following size. Buried in ground as per drawing. Including excavation for laying of pipe and backfilling with clean sand (under and above pipe), compaction, concrete, plugging of pipe ends etc. as shown on drawing complete in all respect.				
i		100 mm dia UPVC (Class-D)	100	Mtr.		
c)		Providing and Construction of Manhole Size 600x600x900 mm deep, 6" thick, concrete 1:2:4 ratio with 600mm round heavy duty cast iron cover, 100% water proof, complete in all respect.	3	No.		
d)		Cable Trench Covers consisting of Heavy Duty MS Chequered Plate for Electrical Room. (Civil works cost not included)	2	Mtr.		
CARRIED TO ELECTRICAL SUMMARY =====>>>>						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
4		WIRING ACCESSORIES				
a)		Supply, installation, testing & commissioning of following 10/13/15/20A, gang type switches, Dimmer Switches, Sockets including 16 SWG Sheet Steel powder coated back Boxes with earth terminal, recessed in wall, with all accessories as per specification, complete in all respects.				
i		10A, One Gang Switch	8	No.		
ii		10A, One Gang Switch (2-Way)	9	No.		
iii		10A, Two Gang Switch	10	No.		
iv		10A, Three Gang Switch	25	No.		
v		10A, Four Gang Switch	19	No.		
vi		One Gang Fan Dimmer with 10A Switch	4	No.		
vii		Two Gang Fan Dimmer with 10A Switch	51	No.		
viii		13A, 3-Pin Multi Standard Switched Socket Outlet	75	No.		
ix		13A, 3-Pin Flat 2-Gang Switched Socket Outlet	30	No.		
x		15A, 3-Pin 1-Gang Switched Socket Outlet	3	No.		
xi		13A, 3-Pin Flat 1-Gang Un-Switched Socket Outlet	18	No.		
xii		10A, One Gang Switch (for Projector)	18	No.		
CARRIED TO ELECTRICAL SUMMARY =====>>>>						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
5		LIGHT FIXTURE & FANS				
a)		Supply, installation, testing & commissioning of following light fixtures complete with starters, Electronic ballast (unless mention otherwise), lamps, lamp holders, drivers, mounting accessories etc., as per specification, complete in all respects. Lighting fixtures sample must be submitted to consultant for approval. Note: Refer light fixtures drawings for complete light fixtures details.				
i		Type D1 - Surface Ceiling mounted Down Light Fixture (IP-20) with 20W LED (Minimum 1600 lm Luminous Flux)	85	No.		
ii		Type D2 - Recessed Ceiling mounted Down Light Fixture (IP-44) with 7W LED (Minimum 650 lm Luminous Flux)	27	No.		
iii		Type D3 - Recessed Ceiling mounted Down Light Fixture (IP-44) with 10W LED (Minimum 1000 lm Luminous Flux)	18	No.		
iv		Type F1 - Surface Ceiling mounted 4' Long Batten Light Fixture (IP-20) with 40W LED (Minimum 3700 lm Luminous Flux)	157	No.		
v		Type F2 - Surface Ceiling mounted 2' Long Batten Light Fixture (IP-20) with 20W LED (Minimum 1900 lm Luminous Flux)	4	No.		
vi		Type W1 - Wall mounted Light Fixture (IP-54) with 2x5W LED	15	No.		
vii		Type W2 - Wall mounted Bulkhead Light Fixture (IP-54) with 10W LED (Minimum 800 lm Luminous Flux)	6	No.		
b)		Supply, installation, testing & commissioning of following types of fan including all connecting accessories as per drawings and specifications, complete in all respects.				
i		12" dia Wall Bracket Fan	1	No.		
CARRIED TO ELECTRICAL SUMMARY =====>>>>						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
6		UPS SYSTEM				
a)		Providing, installing, testing & commissioning of True Online Double Conversion UPS rating 6 kVA Single Phase in, Single Phase out, input power factor with 10 minutes battery backup, batteries with related DC cables from UPS to batteries, external By-pass and all accessories as per specification & drawings, complete in all respect.	1	No.		
b)		Providing, installing, testing & commissioning of Pure Sine-wave Line interactive UPS rating 600 VA (0.6 kVA), Single Phase in, Single Phase out, input power factor with 10 minutes battery backup, batteries with related DC cables from UPS to batteries and all accessories as per specification & drawings, complete in all respect.	3	No.		
CARRIED TO ELECTRICAL SUMMARY =====>>>>						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
7		CABLE TRUNKING				
a)		Providing, fabricating, erecting, fixing and installing of following size of 16 SWG GI Cable Trunking with 18 SWG Cover, including cutting, welding, jointing and necessary required hardware etc., from chamber boxes to energy meters as shown on drawings complete in all respect as per drawing, standard, specifications and direction of the Engineer.				
i		2" x 2" (50mm x 50mm)	10	Mtr.		
ii		3" x 3" (75mm x 75mm)	20	Mtr.		
CARRIED TO ELECTRICAL SUMMARY =====>>>>						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
8		LIGHTNING PROTECTION SYSTEM (LPS)				
a)		Supply, installation,testing and commissioning of 27mm x 2mm Tinned Copper Tape to be run on roof and on the elevation of the building as required and shown on drawings including all fixing accessories etc.,as per specification, as per site requirement necessary for the functioning of the system and drawing, complete in all respect.	50	Mtr.		
b)		Supply, installation,testing and commissioning of Early Streamer Emission (ESE) Air Terminal mounted on 2 meter elevation mast, as per drawing, complete in all respect and having following specifications: Efficiency: 60 micro seconds Lightning current withstanding test (10/350µs): 100 kA ESE Central Rod: Nickel Plated Copper Metal Housing : Stainless Steel 316L Protection Radius : 31 meter at 2 meter height	1	No.		
c)		Providing and installation of 2 meter high elevation mast consisting side wall mounting bracket for installation and fixing of ESE Air Terminal, as per drawing and specification as per site requirement necessary for the system, complete in all respect.	1	No.		
d)		Providing and installation of pyramid holdfasts / studs filled with cement for holding and supporting the flat tape conductor, as per drawing and specification as per site requirement necessary for the system, complete in all respect.	13	Nos.		
e)		Providing and installation of lightning flash counter as per drawing and specification as per site requirement necessary for the system, complete in all respect.	1	No.		
f)		Providing and installation of Earth Electrode Copperbond earth rod 6 meters and clamp, Polypropelene earth pit, as per drawing and specification, complete in all respect.	2	No.		
g)		Providing and installation of Test Clamp and Guard Tube 2 m in length, as per drawing and specification, as per specification,as per site requirement necessary for the functioning of the system, complete in all respect.	1	Job.		
h)		Supply, laying, testing and commissioning of 1x16 Sq.mm PVC insulated Cu. Conductor cable in 25 mm dia uPVC Pipe at ground level connecting Lightning protection pits to power earthing pits, complete in all respect.	15	Mtr.		
CARRIED TO ELECTRICAL SUMMARY =====>>>						

ELV SYSTEM

SUMMARY

	DESCRIPTION	TOTAL AMOUNT IN PAK RUPEES
A. SCHEDULE ITEMS		
1	SUB HEAD VI JUNCTION BOX	5,600
	SUB-TOTAL-A Rs.	5,600
	Add% Above/Below/At par on Electrical Works of Composite Schedule of Rates 2012, GOVT. OF SINDH	
	TOTAL-A Rs.	
B. NON-SCHEDULE ITEMS		
1	CONDUITS & PIPES	
2	VOICE, DATA COMMUNICATION & CCTV CABLING SYSTEMS (Passive Equipment Only)	
3	PUBLIC ADDRESS SYSTEM	
4	MASTER CLOCK SYSTEM	
5	CCTV SYSTEM	
6	BIOMETRIC ATTENDANCE SYSTEM	
	TOTAL-B Rs.	
	TOTAL AMOUNT (A+B) CARRIED TO GRAND SUMMARY	

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
PART-A (SCHEDULE ITEMS)						
1	SUB HEAD VI	SUB HEAD VI JUNCTION BOX				
a)	Item # 158(VI)/ P-24/ Second Edition-2012	Providing & fixing junction box as per following specification Size of box 8"x6"x4" MS plate size 16 SWG thick Clamp with nuts & bolts Cover plate with screw Painting two coats of rust preventive red oxide & two coats of ICI oil paint as per site requirement & instruction of EI	7	Per No.	800	5,600
CARRIED TO ELECTRICAL SUMMARY =====>>>>						5,600

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
PART-B (NON-SCHEDULE ITEMS)						
1		CONDUITS & PIPES				
1.1		Supply and installing of following PVC Conduit as race ways with all accessories recessed/ surface on wall / column / under floor for ELV system. As per relevant specifications and drawing, complete in all respect.				
ii		2" dia PVC	90	Mtr.		
1.2		Providing and laying of following size UPVC pipe of Class D for Telecommunication Cable (copper / optic fiber). Buried in ground / under roads / under floor as per specification. Including excavation for laying of pipe, bricks, warning tape and backfilling with new and fresh soil etc., as shown on the drawing, complete in all respect.				
i		2" dia UPVC	160	Mtr.		
1.3		Providing and Construction of Manhole Size 2' x 2' x 3' mm deep 6" thick concrete 1:2:4 ratio with 2' round heavy duty cast iron cover, 100% water proof, complete in all respect. (For Incoming Telecommunication cables).	4	No.		
CARRIED TO ELECTRICAL SUMMARY =====>>>						

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
2		VOICE, DATA COMMUNICATION & CCTV CABLING SYSTEMS (Passive Equipment Only)				
2.1		Providing, installation, testing and commissioning of following Data / Voice Cabinets, for patch panel, Fiber panels, adapter, PDU's, Fans and space for active switches as it may require to accommodate complete the entire passive & active network as per the single line diagram drawing and specification, complete in all respect.				
i		12U Data Rack in IT Closet (600mmx800mm)	2	No.		
2.2		Supply, installing, testing & commissioning of Single RJ-45, Cat-6a outlet for Voice with shutter type and 16 SWG back box including tagging, complete in all respect.	5	Nos.		
2.3		Providing, fixing, testing and commissioning of 4 Pair RJ-45, Cat-6a Simplex Outlet (for Data) with I/O - Shutter type with 16 SWG back box, complete in all respect.	30	Nos.		
2.4		Supply, installing, testing & commissioning of Dual RJ-45, Cat-6a outlet for Data with shutter type and 16 SWG back box including tagging, complete in all respect.	28	Nos.		
2.5		Supply, installing, testing & commissioning of Single RJ-45, Cat-6a outlet for Camera with shutter type and 16 SWG back box including tagging, complete in all respect.	11	Nos.		
2.6		Supply, installing, testing & commissioning of Single RJ-45, Cat-6a outlet for Projector with shutter type and 16 SWG back box including tagging, complete in all respect.	15	Nos.		
2.7		Supply, laying, testing & commissioning of CAT 6a - 4 pair cable for Single RJ-45 outlet (Data, Voice, Camera, Projector and Biometric Attendance system) in 25mm dia PVC conduit concealed / surface from each outlet to IDF racks, including tagging and piping with all necessary accessories, complete in all respect.	722	Mtr.		
2.8		Supply, laying, testing & commissioning of Cat 5, 25 pair backbone cable incoming to TJB GF in already laid 50mm dia PVC conduit including with all the necessary accessories as per drawing and specifications, complete in all respect.	85	Mtr.		
2.9		Supply, laying, testing & commissioning of 8 core multi mode OM3 fiber optic cable from server room to school and then going to remaining IDF 12U Rack IDF located in Ground floor in already laid 50 mm dia PVC conduit including with all necessary accessories, as per drawing and specification, complete in all respect.	350	Mtr.		

**Development of SMIU Model School and
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BILL OF QUANTITY**

S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
2.10		Supply, installing, testing & commissioning of 24 port Cat 6a, RJ 45 UTP Patch Panel fully loaded with tool less jacks and rear cable manager, complete in all respects.	5	Nos.		
2.11		Supply, installing, testing & commissioning of 24 port Fiber Patch Panel fully loaded with pigtailed etc., and rear cable manager, complete in all respects.	2	Nos.		
2.12		Supply, installing, testing & commissioning of 19" front/rear (as required) cable organizer between patch panels and active equipment to provide patch cable management including with all necessary accessories, complete in all respect.	9	Nos.		
2.13		Providing, installation, testing and commissioning of CAT-6a UTP (RJ-45 to RJ-45) for the above Patch Panels including with all necessary accessories, complete in all respect.				
i		CAT-6a (1m) Long Patch Cord.	117	Nos.		
ii		CAT-6a (2m) Long Patch Cord.	117	Nos.		
2.14		Supply, installing, testing and commissioning of following blocks in Telephone junction boxes as per drawing and specification, complete in all respect.				
i		10 Pair IDC Block	1	Nos		
2.15		Installation, testing and commissioning by Manufacturer Authorized Agent / Dealer and handing over complete Voice & Data System to Owner with Providing Training voice data fuke & OTDR Testing,as build drawing, Rack layouts and certification's Principal, complete equipment's Manual and Warranty Documents to Owners representative.	1	Job.		
CARRIED TO ELECTRICAL SUMMARY =====>>>>						

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S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
3		PUBLIC ADDRESS SYSTEM				
3.1		Providing, laying, testing and commissioning of Wiring for complete PA System with 2C - 1.5 Sq.mm shielded, twisted pair Fire Resistant Cable in 25 mm dia PVC conduit concealed as per drawing and specification. Complete in all respect.	110	Mtr.		
3.2		Supply, wiring and testing of PA Microphone points with Microphone Cable in 25mm dia PVC Conduit, recessed / surface in wall and ceiling, complete in all respects.	1	Job.		
3.3		Supply, installation, testing & commissioning of PA System complete with all connecting accessories comprising of the following equipment, as per drawing and specification, complete in all respects.				
i		4 Zone Gooseneck Microphone with Phantom Supply	1	No.		
ii		Mixer Amplifier with 60W output for Dual Zone	2	No.		
iii		Providing & Connecting of Inter Connects Cables etc.	1	No.		
iv		19' Rack Cabinet with Glass Door to accommodate above equipments located at Vice Principal room. Complete in all respects.	1	No.		
3.4		Supply, installing, testing & commissioning of following type Speakers of Architect Approved color, as per drawing and specification, complete in all respects.				
i		6W Ceiling mounted Speakers with Tapping Transformers of (1, 1.5, 3, 4.5, 6W)	16	No.		
3.5		Installation, testing and commissioning, Programming by Manufacturer Authorized Agent / Dealer and handing over complete PA System to Owner with providing training, SOP, complete equipment's manual and warranty documents to Owners representative.	1	Job.		
CARRIED TO ELECTRICAL SUMMARY =====>>>>						

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S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
4		MASTER CLOCK SYSTEM				
4.1		Providing, laying, testing and commissioning of Wiring for complete PA System with 2C - 2.5 Sq.mm shielded, twisted pair Fire Resistant Cable in 25 mm dia PVC conduit concealed as per drawing and specification. Complete in all respect.	55	Mtr.		
4.2		Supply, installation, testing & commissioning of Master Clock network time server for synchronizing all clocks that will be used as interface for POE type analog clocks and interfacing with electric bells via 4 pulse lines of 24V DC with 1.5A max per line creating 4 in as per drawing and specifications, complete in all respect.	1	Job.		
4.3		Supply, installation, testing & commissioning of GPS interface with external antenna with POE supply as per drawing and specifications, complete in all respect.	1	No.		
4.4		Supply, installation, testing & commissioning of single sided analog slave clocks with POE interface with brackets for wall mounting as per drawing and specifications, complete in all respect.	23	No.		
4.5		19" Rack cabinet with glass door to accommodate master clock system, active switch and poe injectors lcoated at vice principal room, complete in all respect.	1	No.		
4.6		Supply, installation, testing & commissioning of school bell as per drawing and specifications, complete in all respect.	4	Nos.		
4.7		Supply, installation, testing and commissioning of central management software,as per drawing and specifications, complete in all respect.	1	No.		
4.8		Supply, installation, testing and commissioning of work station with licensed windows,as per drawing and specifications, complete in all respect.	1	No.		
4.9		Installing, testing and commissioning by manufacturer Authorized agent / dealer and handing over complete Master Clock System to owner with providing training, complete equipment's manual and warranty documents to owners representative.	1	Job.		
CARRIED TO ELECTRICAL SUMMARY =====>>>>						

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S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
5		CCTV SYSTEM				
5.1		Supply, installing, testing and commissioning of 2 MP IP based camera with 1/2.8" CMOS 7 to 35 mm varfocal lens, power adopter, wall mounted bracket, and IP-65 housing, complete in all respect with fixing accessories, as per specification and drawings.	11	Nos.		
5.2		Installation, testing, commissioning, programming by Manufacturer Authorized Agent / Dealer and handing over complete CCTV System to Owner with providing training, SOP, complete equipment's manual and warranty documents to owners representative.	1	Job.		
CARRIED TO ELECTRICAL SUMMARY =====>>>>						

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S.No.	GOVT. OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
1	2	3	4	5	6	7 = (4 x 6)
6		BIOMETRIC ATTENDANCE SYSTEM				
6.1		Supply, installing, testing and commissioning of Biometric attendance system, as per drawing and specification ,complete in all respect.	1	No.		
6.2		Supply, installing, testing and commissioning of Enterprise level time attendance system with IP based CCTV Camera, as per drawing and specification, complete in all respect.	1	No.		
6.3		Supply, installing and commissioning of Core i7 PC for enterprise software, as per drawing and specification, complete in all respect.	1	No.		
6.4		Installation, testing, commissioning, programming by Manufacturer Authorized Agent / Dealer and handing over complete Biometric Attendance System to Owner with providing training, SOP, complete equipment's manual and warranty documents to owners representative.	1	Job.		
CARRIED TO ELECTRICAL SUMMARY =====>>>						

EXTERNAL DEVELOPMENT

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
PART-A (SCHEDULE ITEMS)						
1	Vol. III,Part-II & III,(General & PHEW)	LOW HEIGHT BOUNDRY WALL EXCAVATIONS, BACKFILLING AND DEWATERING Excavation in foundation & dewatering or bailing or pumping out sub soil water during excavation concreting, cast in situ concrete or masonry work in foundation of building, bridges and other structures including dagbelling dressing refilling around structure with (suitable) excavated earth watering, ramming lead upto 5'-0" ft. Complete and disposal of surplus excavated material to designated area i/c all lead & lift. etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer. a) In Sand, Ashes or Loose Soil ± 0'-0" ft to -5'-0"ft	320	Cft	8.15	2,608.00
2	Item # 18(a)+18(i.ii) / P-4+75/	STONE SOLING Providing and laying dry rammed brick or stone ballast / soling 1-1/2" to 2" gauge from approved quarry including hand packing & filling voids with stone material, consolidating & compacting with power or hand roller,etc complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	80	Cft	33.28	2,662.40
3	Item # 2 / P-15 /Vol-III,Part-II, (General)	PCC 1:4:8 Providing and laying cement concrete plain including placing compacting, finishing, leveling and curing complete (including screening and washing at stone aggregate without shuttering etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer. Below foundation, plinth beam,situ,walls,tanks, over stone soling or where required (Ratio 1:4:8)	240	Cft	112.89	27,093.60
4	Item # 19b(i+ii/2) / P-18 /Vol-III,Part- II,(General)	WOODEN FORMWORKS/SHUTTERING Providing, fixing, erection and removal of centering for R.C.C or plain cement concrete works of partial wood (shuttering / formwork) of approved quality in horizontal / vertical surface etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer. Form work for lean 1:4:8 / situ 1:3:6 concrete	92	Sft	33.58	3,089.36
5	Item # 101 / P-112 /Vol-III,Part-II, (General)	Providing and laying Reinforced cement concrete having 3000 psi cylindrical strength (ready mixed concrete) including all kinds of formwork, hoisting, placing, compacting, finishing, vibrating, curing etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.(Excluding the cost of steel				
ii)		Plinth Beams	80	Cft	271.61	21,728.80
6	Item # 8b / P-17 /Vol-III,Part-II, (General)	Providing, supplying, cutting, fabrication of Tor / deformed steel reinforcement bar for cement concrete including cutting, bending, laying in position making joints and splicing including cost of binding wire (also includes removal of etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer. (Bars to be cut and placed in position at any level according to the Bar bending schedule prepared by the contractor and approved by the Engineer).		Ton	100,034	-
7	Item # 9 / P-71 /Vol-III,Part-II, (General)	BITUMEN COATING Providing and applying industrial bitumen paint/coating to plastered or cement concrete surface etc. complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	320	Sft	7.78	2,489.60
8	Item # 28b / P-19 / Vol-III,Part- II,(General)	D.P.C Providing and laying DPC damp proof course with (cement sand and shingle concrete 1:2:4) including 2 coats of asphaltic mixture with leveling, curing, finishing etc complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.	40	Sft	39.13	1,565.20

BILL OF QUANTITY

S.No	GOVT.OF SINDH CSR 2012	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	Item #/Page#/ Vol.sched ref.					
9	Item # 23 / P-19 /Vol-III,Part-II, (General)	Block Masonry Providing and laying 1:3:6 cement concrete solid block masonry wall above 6" in thickness set in 1:6 cement mortar in ground floor Super Structure including raking out joints & curing etc., complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
a)		8" Thick Block Masonry i) Block column	32	Cft	146.21	4,678.72
10	Item # 24 / P-19 /Vol-III,Part-II, (General)	Providing and laying 1:3:6 cement concrete solid block masonry wall 6" and below in thickness set in 1:6 cement mortar in ground floor Super Structure including raking out joints & curing etc., complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer.				
a)		6" Thick Block Masonry i) Ground Floor	180	Cft	157.71	28,387.80
11	Item # 11c / P-52 / Vol. III,Part- II,(General)	PLASTER (EXTERNAL SURFACE) Providing and applying (3/4") thick cement plaster to external walls, columns, beams, etc. with cement mortar 1:4 including all corners, recesses, jambs, raking out joints of masonry, scaffolding etc, complete in all respects as per standard specification, drawing and entire satisfaction of the Engineer				
		i) Ground Floor	720	Sft	30.16	21,715.20
12	Item # 38 A / P-56 / Vol. III,Part- II,(General)	Preparing the surface and painting with weather coat i/c rubbing the surface with rubbing brick/sand paper, filling the voids with chalk/plaster of paris and then painting with weather coat of approved make				
		2nd and subsequent coat	720	Sft	13.28	9,561.60
			720	Sft	6.20	4,464.00
13	Item # 72 / P-49 / Vol. III,Part- II,(General)	CC Pre-Cast Paving Providing & fixing cement paving blocks flooring heving size of 197 x 97 x 60 (mm) of city/quddra/cobble shape with pigmented, having strength b/w 5000 psi to 8500 psi i/c filling the joints with hill sand and laying in specified manner /pattern and design etc, complete in all respects s per standard specification, drawing and entire satisfaction of the	6,400	Sft	223.97	1,433,408.00
Total of Schedule Items						1,563,452.28
Add % Above / Below / At par on Civil Works of Sindh CSR-2012						
PART-B (NON-SCHEDULE ITEMS)						
14	N.S.I	Providing, supplying, transporting, straightening, cutting, bending, fabricating, placing and installing / binding in position etc., straight or curved deformed steel bar reinforcement having minimum yield strength 414 Mpa (60 ksi or 60,000 Psi) , including cost of G.I binding wire 18SWG, chairs, wastages, precast c.c. spacers and welding where required to be followed ASTM A615 standard. Only those overlaps shall be paid which are according to the approved Bar Bending Schedule / shown on drawings or instructed by the Engineer, all kind of R.C.C. work etc, complete in all respects as per drawing, standard , specifications and direction of the Engineer. (Bars to be cut and placed in position at any level according to the Bar bending schedule prepared by the contractor and approved by the Engineer).	0.29	Ton		
Total of Non-Schedule Items						-
Grand Total Carried to Grand Summary						