## GATE NO.4, IBA, MAIN CAMPUS, KARACHI



Tender Evaluation Report
For Civil & Electrical Works
August, 2015

## <u>Contents</u>

1.0	Overview	2
2.0	Financial Aspect	3
3.0	Bid comparative statement	4
4.0	Recommendation	5

#### 1. Overview

Tenders were invited for Civil and Electrical Works for Gate No. 4, IBA Main Campus Karachi by the client. Single tender was floated for Civil and Electrical works. General contractors were invited for the tender after prequalification process, having been prequalified by IBA to carry out the construction works.

The tenders submitted by the bidders were forwarded by IBA for verification and evaluation. The evaluation of the bids is presented here in two parts. Part one is done by Najmibilgrami Collaborative (Pvt) Ltd. for Civil works and part two for Electrical works done by our consultant M/s. Excellent Associates.

Bids of the following contractors were received:

- 1 M/s. AIKES PVT. LTD.
- 2 M/s. SAMAD KHAN BABAR

The bidders provided no technical details of equipment for Electrical works with the filled in BOQ's. It is presumed that all the major equipment and items have been bid as per the 'Approved List of Manufacturers' which is stipulated in the tender specifications. Detailed analysis and evaluation of bids are presented on the following pages.

Note: The evaluation report is made on the basis of the documents received by Najmibilgrami Collaborative (pvt) Ltd. Najmibilgrami Collaborative (pvt) Ltd. is not responsible for any information submitted by the contractor but not received by us.

,

### 2.0 Financial Aspect

Below is the table showing the comparison of the amount, arithmetically corrected amount and the adjusted amount.

#### ORIGINAL BID AMOUNT, ARTHMETICALLY CORRECTED BID, ADJUSTED BID

S. No.	Bidder	Bid Amount (Rs.)	Arithmetically Corrected Amount (Rs.)	Adjusted Amount (Rs.)
1	AIKES PVT. LTD.	5,640,112.00	5,640,112.00	0
2	SAMAD KHAN BABAR	6,225,471.00	6,225,472.00	1

,

## 3.0 Bid comparative statement

Below is the summary of financial standing of each bidder. In short, the bidders' position is as follows:

M/s. SAMAD KHAN BABAR : Highest
 M/s. AIKES PVT LTD : Lowest

## **BIDS COMPARATIVE STATEMENT**

		Engineer's Estimate	AIKES	SAMAD KHAN BABAR
S#	Description	Amount	Amount	Amount
Α	STRUCTURE	1,832,750.00	2,313,420.00	2,672,388.00
В	ARCHITECTURE	2,814,800.00	2,732,060.00	2,488,176.00
С	MEP	377,850.00	594,632.00	1,064,908.00
			30 1,002.00	1,001,000.00
	ORIGINAL BID AMOUNT		5,640,112.00	6,225,471.00
	TOTAL AMOUNT (AFTER ARTIHMETIC CHECKING)	5,025,400.00	5,640,112.00	6,225,472.00
	,	0,020,10010	0,010,11100	0,220,00
	DIFFERENCE IN AMOUNT		-	(1.00)
	POSITION FROM ENG.ESTIMATE		12.23%	23.88%

4.0 Recommendation

Following considerations shall be taken into account while finalizing the award of project:

- 1 Duration of construction period as proposed by the bidder.
- 2 Inventory of equipment actually available for the job.
- 3 Any pre-condition to carry out the works, proposed by the bidder.
- 4 Number and qualification of supervisory staff to be actually deployed on the job.
- 5 Full compliance with the tender requirements.

Keeping in mind the engineer's estimate prepared by M/s NBCL and after carefully studying and analyzing the prices submitted by the bidders, the subject work is to be awarded to M/s. AIKES Pvt. Ltd., as they have come closest to the Engineers Estimate and are lowest of the bidders.

It may also be noted here that M/s. Najmibilgrami has not yet worked with any of these two contractors before and hence are not truly aware of their true potential and quality of work. This evaluation has been done on the basis of list pre-qualified contractors provided by IBA. However, before awarding the work to them, IBA should obtain a complete detail of the company, staff, portfolio, financial statement etc so that true capabilities of the contractor can be analyzed.

Najmi Bilgrami Collaborative (Pvt) Ltd.

## IBA Gate No. 4, Main Campus, Karachi.

		Engineer's Estimate	AIKES	SAMAD KHAN BABAR
S#	Description	Amount	Amount	Amount
Α	STRUCTURE	1,832,750.00	2,313,420.00	2,672,388.00
В	ARCHITECTURE	2,814,800.00	2,732,060.00	2,488,176.00
С	MEP	377,850.00	594,632.00	1,064,908.00
	ORIGINAL BID AMOUNT		5,640,112.00	6,225,471.00
	TOTAL AMOUNT (AFTER ARTIHMETIC CHECKING)	5,025,400.00	5,640,112.00	6,225,472.00
	DIFFERENCE IN AMOUNT			(1.00)
	POSITION FROM ENG.ESTIMATE		12.23%	23.88%

# IBA Gate No. 4, Main Campus, Karachi.

S. No.	Bidder	Bid Amount (Rs.)	Arithmetically Corrected Amount (Rs.)	Adjusted Amount (Rs.)
1	AIKES PVT. LTD.	5,640,112.00	5,640,112.00	0
2	SAMAD KHAN BABAR	6,225,471.00	6,225,472.00	1

## IBA Gate No. 4, Main Campus, Karachi. Summary Of Cost For Civil & Finishing Works.

S #	Description	ENGINEERS EST.	AIKES	SAMAD KHAN BABAR
A	STRUCTURE	1,832,750.00	2,313,420.00	2,672,388.00
В	ARCHITECTURE			
1	GROUND FLOOR	1,658,300.00	1,658,470.00	1,206,996.00
3	ROOF	459,500.00	301,190.00	599,430.00
4	FACADE / ELEVATION & EXTERNAL DEVELOPMENT	697,000.00	772,400.00	681,750.00
	TOTAL ARCHITECTURE WORKS	2,814,800.00	2,732,060.00	2,488,176.00
	SUB-TOTAL OF CIVIL & FINISHING WORKS RS.	4,647,550.00	5,045,480.00	5,160,564.00
С	ELECTRICAL WORKS	377,850.00	594,632.00	1,064,908.00
	GRAND - TOTAL RS.	5,025,400.00	5,640,112.00	6,225,472.00

				ENGINEE	RS ESTIMATE	AIKES	S (Pvt) Ltd.	SAMAD I	KHAN BABAR
	BOO (CIVII WORKS)								
S.No	BOQ (CIVIL WORKS)  DESCRIPTION OF ITEM	QTY	UNIT	RATE (Rs)	AMOUNT (Rs.)	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)
Α.	STRUCTURE								
	EXCAVATION								
1.1	Excavation for foundation, plinth beams								
	etc. in any strata up to required depth								
	from natural ground level , including								
	dewatering, shoring removing of water								
	by pumps, if required and stocking,								
	disposing off surplus earth within or								
	outside the area of job site and then								
	thrown away by dumpers / trucks etc. (								
	no extra payment will be made in this								
	regard). complete in all respect as per								
	drawing, specifications and directed by								
	Engineer in charge.								
a)	A. up to 5'-0" depth	3,800	CFT	9.00	34,200.00	26.0	98,800.00	5.8	21,888.00
b)	B. Beyond 5'-0" depth	Rate Only	CFT			29.0		18.0	
	DAOK EUL ING								
2.	BACK FILLING								
	Filling of earth obtained from excavation								
	in layers (not exceeding 9" depth in one layers) including watering and								
	compaction (compaction test will be								
	required as per standard density)								
	complete in all respect as directed. (For								
	billing compacted thickness will be								
	measured)	2,800	CFT	5.00	14,000.00	9.00	25,200.00	2.00	5,600.00
3.	EARTH FILLING (OUTSIDE)	2,000	<u> </u>	0.00	1 1,000.00	0.00	20,200.00	2.00	0,000.00

				ENGINEERS ESTIMATE		AIKES (Pvt) Ltd.		SAMAD KHAN BABAR	
	BOQ (CIVIL WORKS)								
S.No	DESCRIPTION OF ITEM	QTY	UNIT	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)
Α.	STRUCTURE								
	Supply and filling of earth in plinth below								
	stone soling, brought from approved								
	sources in layers (not exceeding 9"								
	depth in one layer) including watering								
	and compaction (compaction test will be								
	required as per standard density)								
	complete in all respect as directed. For								
	billing compacted thickness will be								
	measured.	1,050	CFT	11.00	11,550.00	28.0	29,400.00	13.0	13,650.00

					ENGINEERS ESTIMATE		6 (Pvt) Ltd.	SAMAD KHAN BABAR	
	BOQ (CIVIL WORKS)								
S.No	DESCRIPTION OF ITEM	QTY	UNIT	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)
Α.	STRUCTURE			·					
4	CONCRETE AND REINFORCEMENT:								
4.1	Lean concrete 1:4:8								
	Providing, mixing, depositing, curing								
	and compacting using S.R. cement lean								
	concrete under foundations, plinth								
	beams etc., as shown on the drawings								
	with clean local sand and crushed stone,								
	graded as specified , including formwork								
	where required etc. complete in all								
	respects as per drawing, specifications								
	and directed by Engineer- in charge.	310	CFT	120.00	37,200.00	146.0	45,260.00	153.0	47,430.00
4.2	Situ								
	Providing, mixing, depositing, vibrating								
	and curing of cement concrete using								
	S.R. cement 1:3:6 cast in situ with clean								
	local sand including formwork etc.								
	complete in all respect as per drawings								
	specifications and directed by Engineer-								
	in-charge.			<u> </u>				<u> </u>	
a)	Under plinth beams	160	CFT	180.00	28,800.00	209.0	33,440.00	292.0	46,720.00
b)	Situ steps	Rate Only	CFT		•	215.0	,	350.0	,

				ENGINEERS ESTIMATE		AIKES (Pvt) Ltd.		SAMAD KHAN BABAR	
	BOQ (CIVIL WORKS)								
S.No	DESCRIPTION OF ITEM	QTY	UNIT	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)
Α.	STRUCTURE								
5	REINFORCED CEMENT CONCRETE								
5.1	UPTO PLINTH								
	Providing, mixing, depositing, vibrating and cutting reinforced cement concrete in sub-structure using crushing stone and sand to relevant B.S.S. / ASTM specifications with minimum compressive cylindrical strength of 3000psi (3750 psi cube strength) at 28 days with a mix not leaner than 1:1-1/2: 3 using Sulphate Resisting Cement as under including water tight shuttering fixing and removing etc., but excluding the cost of reinforcing steel. Complete in all respect at any depth and any height, complete as per specifications, drawings and all to the approval of Engineer in charge.								
a b	Foundations	850	CFT	180.00	153,000.00	235.00	199,750.00	234.00	198,900.00
С	Columns up to plinth level Plinth Beam with projected ledges , nibs etc.	150 190	CFT CFT	235.00	35,250.00 38,950.00	320.00 334.00	48,000.00 63,460.00	334.00 425.00	50,100.00 80,750.00
5.2	ABOVE PLINTH								

				ENGINEERS ESTIMATE		AIKES (Pvt) Ltd.		SAMAD KHAN BABAR	
	BOQ (CIVIL WORKS)								
S.No	DESCRIPTION OF ITEM	QTY	UNIT	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)
Α.	STRUCTURE								
	Same as item 6 above but R.C.C. work of super structure with O.P. Cement, Complete in all respect, as per drawing, specifications and directed by Engineer in charge.								
а	Columns	380	CFT	275.00	104,500.00	332.00	126,160.00	385.00	146,300.00
	Beams, lintels with projected ledges , nibs etc.	200	CFT	275.00	55,000.00	339.00	67,800.00	429.00	85,800.00
С	Slabs / Projections etc.	200	CFT	300.00	60,000.00	246.00	49,200.00	330.00	66,000.00

				ENGINEE	ENGINEERS ESTIMATE		AIKES (Pvt) Ltd.		KHAN BABAR
	BOQ (CIVIL WORKS)								
S.No	DESCRIPTION OF ITEM	QTY	UNIT	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)
Α.	STRUCTURE								
6	STEEL REINFORCEMENT.								
	Supplying, cutting, bending, binding and fixing in position Ribbed Deformed Bars conforming to ASTM A615 latest edition, and made of Pak steel billets and having minimum yield strength of 60000 psi including all wastages, unspecified laps, steel chairs, rolling margin, binding wire, etc. complete in all respect as per drawings, specifications and to all approval of the Engineer in charge. Complete up to any floor and any height. Unspecified overlaps, pins and chairs etc. Not to be paid.		KG	108.00	280,800.00	116.0	301,600.00	127.0	330,200.00
7.	ROOF SCREEDING								
	Providing and laying 2.5" thick average, 1:2:4 cement concrete screed over roof in slope with dividing glass strip as directed by consultant and engineer-incharge. Complete in all respect.	450	SFT	60.00	27,000.00	56.00	25,200.00	80.00	36,000.00

				ENGINEE	RS ESTIMATE	AIKES	S (Pvt) Ltd.	SAMAD	KHAN BABAR
	BOQ (CIVIL WORKS)								
S.No	DESCRIPTION OF ITEM	QTY	UNIT	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)	RATE (Rs)	AMOUNT ( Rs.)
Α.	STRUCTURE								
8.	MILD STEEL GIRDERS AND PLATES								
	Providing and fixing Steel girders and angles of approved sizes including welding all the side of the sections at the junction, gusset plates, bolts, nuts etc. complete with hoisting and erecting in position at ground floor.								
a.	Girder 10" x 5" x 12.5 kg/ft	2,250	KG	150.00	337,500.00	189.00	425,250.00	243.00	546,750.00
b.	Angle 2" x2" x 1/4" x 1.44 kg/ft	800	KG	150.00	120,000.00	189.00	151,200.00	243.00	194,400.00
	Mild Steel Plates 12 mm to 20mm thick and bolts	500	KG	150.00	75,000.00	189.00	94,500.00	243.00	121,500.00
d.	Fixing 16g G.I. sheet as per design and instruction of engineer	2,800	KG	150.00	420,000.00	189.00	529,200.00	243.00	680,400.00
	TOTAL				1,832,750.00		2,313,420.00		2,672,388.00

				ENGINEE	RS ESTIMATE	AIKES	S (Pvt) Ltd.	SAMAD I	KHAN BABAR
S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)
	Entrance Areas								
1.	Clearing and Grubbing.								
	Clearing and Grubbing of all the shrubs and debris								
	as per site condition etc, complete as per instruction								
	of Architect and IBA along with the removal of all								
	shrubs and debris out of the premises of Karachi								
	University.	1	Job	20000.00	20,000.00	28500.00	28,500.00	3840.00	3,840.00
2.	Dismantling and Demolition of existing structures.								
	Cutting, chiseling, dismantling, removing & disposal								
	of any existing RCC, precast or CC structure of any								
	height and size with underground foundation at any								
	height and depth along with removal of existing								
	doors, windows, grill, gates, partitions, false ceiling,								
	electrical fixtures, wiring, plumbing fixtures, piping								
	including the removal of all debris out of the Karachi								
	University premises and handing over and place IBA								
	properties to the IBA representative in the specified								
	location as instructed by IBA.								
	Note: Contractor should visit the site to quote for								
	the same.			12=000 5	425 000	4440005-	44.005		
		1	Job	125000.00	125,000.00	114000.00	114,000.00	25600.00	25,600.00

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)
3.	Site Securing.								
	Provide and install temporary GI sheet fencing with								
	scaffolding to secure the premises of the campus								
	where ever necessary as requested by Architect								
	and/or IBA security.	1	Job	200000.00	200,000.00	171000.00	171,000.00	35000.00	35,000.00
4.	Earth Filling. Provide & lay Earth filling in plinth under soling / sand cushion with Baloo earth brought from outside, available suitable excavated earth and suitable earth brought from outside in layers not more than 8" in depth including compacting with mechanical means, ramming dressing, watering, etc.								
I)	With Baloo Earth brought from outside	1500	CFT	25.00	37,500.00	23.00	34,500.00		
ii)	With Suitable Earth brought from outside	Rate Only	CFT			51.00			
iii)	With Suitable Earth from excavation	Rate Only	CFT			23.00			
5.	TERMITE CONTROL TREATMENT.	1	JOB	20000.00	20,000.00	57000.00	57,000.00	5280.00	5,280.00
S.No.	Product Name	Manufac	turer/Sup <sub>I</sub>	l olier	Or	igin			
01.	Agenda	Bayer Enviro	onmental S	ciences	Franc	e			
02.	Dursban TC	Dow Agro	Science		Gerr	nany			
03.	Biflex	FMC			US	SA			

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)
a)	Warranty: 10 years comprehensive warranty is required that covers effectiveness of termite treatment. Any failure in this regard has to be addressed and rectified by the vendor in 7 calendar days. Undertaking will be required from the vendor that the product is environment friendly and non-hazardous. Treatment shall be carried out as per manufacturer's specifications and instructions in stages given below:								
	Treatment Stages:								
I)	Stage # 1								
	Complete treatment should be carried out in and around foundation pits with pressure sprayer after excavation.								
ii)	Stage # 2								
	Treatment will be carried out once backfilling/earth filling and compaction is completed, before sub-floor at plinth level stage, with pressure sprayer. Due care should be considered/practiced to avoid exposure to direct Sun-light.								

IBA Gates Main Campus, Karachi.

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)
iii)	Stage # 3								
	All building periphery has to be treated encompassing comprehensively. All wall and floor junctions needed to be treated. All electrical and plumbing sleeves needed to be treated at wall and floor junctions, creating an effective barrier.								
iv)	Stage # 4								
	Complete treatment should be carried out for electrical back boxes prior to installation of switch plates.								
6.	Lean Concrete. Provide & lay lean Cement Concrete 1:4:8(1 cement, 4 screened sand, 8 crush) cast under cast-in-situ plinth beam including cost of water-tight formwork & its removal, consolidating, curing, etc. complete in all respect.	280	CFT	165	46,200.00	148	41,440.00	153	42,840.00
7.	Stone Soling Provide and lay 6" thick stone soling & filling of voids with crushed stone sand over compacted earth including compacting, watering etc. complete in all respect.	600	SFT	25.00	15,000.00	40.00	24,000.00	31.00	18,600.00

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)
8.	Situ Wall.			(13.)	(13.)	(185.)	(13.)	(185.)	(13.)
	Provide & lay Situ Wall Cement Concrete 1:3:6 (1								
	cement, 3 screened sand, 6 crush) cast in situ wall								
	including cost of water-tight formwork & its								
	removal, consolidating, curing, etc. complete in all								
	respect.	150	CFT	250	37,500.00	268	40,200.00	430	64,500.00
9.	Sub - Floor.								
	Provide & lay Sub-Floor Cement Concrete 1:3:6 (1								
	cement, 3 screened sand, 6 crush) sub-floor 6" thick								
	in two layers including consolidating, curing, etc.								
	complete in all respect.	300	CFT	165	49,500.00	160	48,000.00	170	51,000.00
10.	Damp Proof Course.								
	Providing and laying Polythene sheet weighing 200								
	gm per sq. meter including overlapping of 8" at								
	joints stuck with bitumen.	600	SFT	10	6,000.00	34	20,400.00	15	9,000.00
	Damp Proof Course in 1:4 cement sand mortar								
	smooth finished minimum 2" thick on plinth beam								
	mixed with pudlo at 5 lbs per bag of cement								
	including formwork, curing, cleaning, hacking of								
	existing surface for bonding, where necessary, etc.								
	complete in all respect.	150	SFT	75.00	11,250.00	86.00	12,900.00	68.00	10,200.00

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE	AMOUNT	RATE	AMOUNT	RATE	AMOUNT
5.NO.	DESCRIPTION OF ITEM	Q11.	UNII	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
11.	Pathway.								
	Providing and laying 60mm thick pigmented Roman								
	Classic pavers Envicrete or Equivalent over base 2"								
	thick compacted sand in required line, levels, shape								
	and design, sand grouting, complete in all respect as								
	per drawing, specifications and as directed by								
	Architect.	700	SFT	145.00	101,500.00	217.00	151,900.00	214.00	149,800.00
12.	Kerb Stone.								
	Providing and fixing kerb stone 6" x 12" x 18" of								
	Envicrete or Equivalent with 1:3 mortar over a base								
	of 1:4:8 if required in line, level, shape and design								
	complete in all respect as per drawing, specifications,								
	and as directed by Architect.	150	RFT	200.00	30,000.00	456.00	68,400.00	459.00	68,850.00
13.	Block Masonry								
	Provide and lay machine made block masonry of								
	approved quality, setting the blocks in 1:4 cement								
	sand mortar, raked joints including curing,								
	scaffolding, hacking of existing surface for bonding								
	where necessary, etc. complete in all respect with 1:4								
	cement sand mortar infill, if required, which will be								
	paid under reinforcement item.(The compressive								
	strength shall be minimum 800 psi for blocks with 28								
	days after casting)								
	4" thick Solid	Rate Only	SFT	120.00		91.00		173.00	
ii)	6" thick Solid	1650	SFT	160.00	264,000.00	103.00	169,950.00	80.00	132,000.00
ii)	12" thick Solid	500	SFT	220.00	110,000.00	188.00	94,000.00	137.00	68,500.00

IBA Gates Main Campus, Karachi.

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE	AMOUNT	RATE	AMOUNT	RATE	AMOUNT
				(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
14.	Plaster								
	Provide and apply 1:4 cement sand plaster of								
	minimum thickness as specified including G.I. corner								
	beads / plaster stops (all horizontal and vertical								
	exposed corner edges up to 2400mm height from								
	FFL), 200mm wide galvanized metal lathe of 18 SWG								
	at the junctions of concrete and block masonry,								
	conduit chases, etc., fixed with masonry nails and								
	G.I. sheet strip, rounded edges where required,								
	grooves where required, smooth finished in line,								
	level, plumb, curing, scaffolding, hacking / chipping								
	of existing surface for bonding where necessary, etc.,								
	complete in all respect								
	1/2" thick	rate only	SFT			46.00		32.00	
	3/4" thick	2000	SFT	40.00	80,000.00	48.00	96,000.00	33.00	66,000.00
15.	Flooring.								
15.1	CC flooring:								
	Provide and lay 3" thick 1:2:4 cement concrete floor								
	smooth finished, laid in panels of 4' X 4' including								
	curing, hacking of existing surface for bonding								
	where necessary, etc, complete in all respect as per								
	drawing, specifications and as instructed by the								
	architect.								
I)	1:2:4 C.C floor 2" thick Smooth Floor	Rate Only	SFT			80.00		81.00	
ii)	1:2:4 C.C floor 3" thick Sub- Floor	500	SFT	50.00	25,000.00	86.00	43,000.00	63.00	31,500.00

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)
15.2	Terrazzo Tile Flooring.			(13.)	(145.)	(105.)	(13.)	(105.)	(13.)
iii)	Provide and lay 1" thick white terrazzo tile of Matrix								
	or equivalent having 3/8" thick toping of approved								
	quality for flooring, in slope if required, with 1:4								
	cement sand mortar base (minimum 2") to achieve a								
	minimum overall finished floor thickness including								
	tiles is 3", setting the tiles with neat cement mortar,								
	grouting the butt joints, grinding , polishing								
	complete as per manufacturer's specifications &								
	instructions, including curing, cleaning, hacking /								
	chipping of existing surface for bonding where								
	necessary, etc. complete in all respect as per								
	drawing, specifications and as instructed by the								
	architect.								
	Basic price of Terrazzo Tiles shall be Rs.70.00/SFT	550	SFT	280.00	154,000.00	221.00	121,550.00	239.00	131,450.00
16.	Dado / Skirting.								
	Terrazzo tile Skirting.								
	Same as item # 16.3 above but Terrazzo tiles skirting								
	of approved sample as per manufacturer's								
	specifications & instructions.								
	Basic price of Terrazzo Tiles shall be Rs.70.00/SFT	200	RFT	110.00	22,000.00	103.00	20,600.00	74.00	14,800.00

IBA Gates Main Campus, Karachi.

DESCRIPTION OF ITEM	OTV	UNIT	RATE	AMOUNT	RATE	AMOUNT	RATE	AMOUNT
DESCRIPTION OF THEM	Q11.	UNII	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
Windows & Ventilators.								
Provide & install open able & fixed window,								
Ventilators consisting of aluminum frame / sections								
of required dimensions of approved sample								
(Pakistan Cables or approved equivalent) main								
frame & shutter frame where shown in drawing,								
4+4mm thick laminated glass in windows &								
ventilators where required hardware's as per								
hardware's schedule, lock set, latch, tower bolts, S.S								
hinges, sliding system of approved quality,								
including all hardware's, wastage, etc, complete as								
per drawing and instruction of the Architect. (For								
payment, net exposed Elevation frame to frame will								
be measured.)	130	SFT	725.00	94,250.00	741.00	96,330.00	704.00	91,520.00
Metal Door.								
Providing, fabricating and fixing M.S. open able								
doors comprising of structural steel sections such as								
plates, angles, tees, etc including all fixtures like hold								
fast, handles, hinge, locks, stops, etc., including the								
cost of three coats of enamel paint of approved make								
and shade, complete in all respect as per drawings,								
specification and instructions of the architect, For								
payment, Frame to frame area will be measured.								
Refer to DWG. A5-301	4	Nos	2 400 00	9 600 00	17 100 00	68 400 00	18 <i>47</i> 9 በበ	73,916.00
	Ventilators consisting of aluminum frame / sections of required dimensions of approved sample (Pakistan Cables or approved equivalent) main frame & shutter frame where shown in drawing, 4+4mm thick laminated glass in windows & ventilators where required hardware's as per hardware's schedule, lock set, latch, tower bolts, S.S hinges, sliding system of approved quality, including all hardware's, wastage, etc, complete as per drawing and instruction of the Architect. (For payment, net exposed Elevation frame to frame will be measured.)  Metal Door.  Providing, fabricating and fixing M.S. open able doors comprising of structural steel sections such as plates, angles, tees, etc including all fixtures like hold fast, handles, hinge, locks, stops, etc., including the cost of three coats of enamel paint of approved make and shade, complete in all respect as per drawings, specification and instructions of the architect, For payment, Frame to frame area will be measured.	Windows & Ventilators.  Provide & install open able & fixed window, Ventilators consisting of aluminum frame / sections of required dimensions of approved sample (Pakistan Cables or approved equivalent) main frame & shutter frame where shown in drawing, 4+4mm thick laminated glass in windows & ventilators where required hardware's as per hardware's schedule, lock set, latch, tower bolts, S.S hinges, sliding system of approved quality, including all hardware's, wastage, etc, complete as per drawing and instruction of the Architect. (For payment, net exposed Elevation frame to frame will be measured.)  Metal Door.  Providing, fabricating and fixing M.S. open able doors comprising of structural steel sections such as plates, angles, tees, etc including all fixtures like hold fast, handles, hinge, locks, stops, etc., including the cost of three coats of enamel paint of approved make and shade, complete in all respect as per drawings, specification and instructions of the architect, For payment, Frame to frame area will be measured.	Windows & Ventilators.  Provide & install open able & fixed window, Ventilators consisting of aluminum frame / sections of required dimensions of approved sample (Pakistan Cables or approved equivalent) main frame & shutter frame where shown in drawing, 4+4mm thick laminated glass in windows & ventilators where required hardware's as per hardware's schedule, lock set, latch, tower bolts, S.S hinges, sliding system of approved quality, including all hardware's, wastage, etc, complete as per drawing and instruction of the Architect. (For payment, net exposed Elevation frame to frame will be measured.)  SFT  Metal Door.  Providing, fabricating and fixing M.S. open able doors comprising of structural steel sections such as plates, angles, tees, etc including all fixtures like hold fast, handles, hinge, locks, stops, etc., including the cost of three coats of enamel paint of approved make and shade, complete in all respect as per drawings, specification and instructions of the architect, For payment, Frame to frame area will be measured.	Windows & Ventilators.  Provide & install open able & fixed window, Ventilators consisting of aluminum frame / sections of required dimensions of approved sample (Pakistan Cables or approved equivalent) main frame & shutter frame where shown in drawing, 4+4mm thick laminated glass in windows & ventilators where required hardware's as per hardware's schedule, lock set, latch, tower bolts, S.S hinges, sliding system of approved quality, including all hardware's, wastage, etc, complete as per drawing and instruction of the Architect. (For payment, net exposed Elevation frame to frame will be measured.)  Metal Door.  Providing, fabricating and fixing M.S. open able doors comprising of structural steel sections such as plates, angles, tees, etc including all fixtures like hold fast, handles, hinge, locks, stops, etc., including the cost of three coats of enamel paint of approved make and shade, complete in all respect as per drawings, specification and instructions of the architect, For payment, Frame to frame area will be measured.  Refer to DWG. A5-301	Windows & Ventilators.  Provide & install open able & fixed window, Ventilators consisting of aluminum frame / sections of required dimensions of approved sample (Pakistan Cables or approved equivalent) main frame & shutter frame where shown in drawing, 4+4mm thick laminated glass in windows & ventilators where required hardware's as per hardware's schedule, lock set, latch, tower bolts, S.S hinges, sliding system of approved quality, including all hardware's, wastage, etc, complete as per drawing and instruction of the Architect. (For payment, net exposed Elevation frame to frame will be measured.)  Metal Door.  Providing, fabricating and fixing M.S. open able doors comprising of structural steel sections such as plates, angles, tees, etc including all fixtures like hold fast, handles, hinge, locks, stops, etc., including the cost of three coats of enamel paint of approved make and shade, complete in all respect as per drawings, specification and instructions of the architect, For payment, Frame to frame area will be measured.  Refer to DWG. A5-301	Windows & Ventilators.  Provide & install open able & fixed window, Ventilators consisting of aluminum frame / sections of required dimensions of approved sample (Pakistan Cables or approved equivalent) main frame & shutter frame where shown in drawing, 4+4mm thick laminated glass in windows & ventilators where required hardware's as per hardware's schedule, lock set, latch, tower bolts, S.5 hinges, sliding system of approved quality, including all hardware's, wastage, etc, complete as per drawing and instruction of the Architect. (For payment, net exposed Elevation frame to frame will be measured.)  Metal Door.  Providing, fabricating and fixing M.S. open able doors comprising of structural steel sections such as plates, angles, tees, etc including all fixtures like hold fast, handles, hinge, locks, stops, etc., including the cost of three coats of enamel paint of approved make and shade, complete in all respect as per drawings, specification and instructions of the architect, For payment, Frame to frame area will be measured.  Refer to DWG. A5-301	Windows & Ventilators.  Provide & install open able & fixed window, Ventilators consisting of aluminum frame / sections of required dimensions of approved sample (Pakistan Cables or approved equivalent) main frame & shutter frame where shown in drawing, 4+4mm thick laminated glass in windows & ventilators where required hardware's as per hardware's schedule, lock set, latch, tower bolts, S.5 hinges, sliding system of approved quality, including all hardware's, wastage, etc, complete as per drawing and instruction of the Architect. (For payment, net exposed Elevation frame to frame will be measured.)  130 SFT 725.00 94,250.00 741.00 96,330.00  Metal Door.  Providing, fabricating and fixing M.S. open able doors comprising of structural steel sections such as plates, angles, tees, etc including all fixtures like hold fast, handles, hinge, locks, stops, etc., including the cost of three coats of enamel paint of approved make and shade, complete in all respect as per drawings, specification and instructions of the architect, For payment, Frame to frame area will be measured.  Refer to DWG. A5-301	DESCRIPTION OF ITEM QTY. UNIT (Rs.) (Rs.) (Rs.) (Rs.) (Rs.)  Windows & Ventilators.  Provide & install open able & fixed window, Ventilators consisting of aluminum frame / sections of required dimensions of approved sample (Pakistan Cables or approved equivalent) main frame & shutter frame where shown in drawing. 44-4mm thick laminated glass in windows & ventilators where required hardware's as per hardware's schedule, lock set, latch, tower bolts, 5.5 hinges, sliding system of approved quality, including all hardware's, wastage, etc, complete as per drawing and instruction of the Architect. (For payment, net exposed Elevation frame to frame will be measured.)  130 SFT 725.00 94,250.00 741.00 96,330.00 704.00  Metal Door.  Providing, fabricating and fixing M.S. open able doors comprising of structural steel sections such as plates, angles, tees, etc including all fixtures like hold fast, handles, hinge, locks, stops, etc., including the cost of three coats of enamel paint of approved make and shade, complete in all respect as per drawings, specification and instructions of the architect, For payment, Frame to frame area will be measured.  Refer to DWG. A5-301

#### Bill Of Quantities for Civil & Finishing Works

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE	AMOUNT	RATE	AMOUNT	RATE	AMOUNT
5.NO.	DESCRIPTION OF ITEM	Q11.	UNII	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
19.	Planters								
	Provide and construct Planter as per drawing,								
	consisting of following items, etc, complete.								
	For Payment Top area of planter will be measured.	400	SFT	300.00	120,000.00	171.00	68,400.00	192.00	76,800.00
20.	Paint Work.								
20.1	Matt Enamel Paint.								
	Provide and apply Matt Enamel paint (ICI / Berger)								
	minimum three coats of approved shade over a coat								
	of primer on plastered surface prepared smooth with								
	carborandum stone, filling the depression with putty								
	etc., complete in all respect.								
		2000	SFT	40.00	80,000.00	34.00	68,000.00	18	36,000.00

Total Rs. 1,658,300.00 Total Rs. 1,658,470.00 Total Rs. 1,206,996.00

				ENGINEE	RS ESTIMATE	AIKE	S (Pvt) Ltd.	SAMAD I	KHAN BABAR
S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)
	ROOF		ı	(1131)	(1101)	(1101)	(1131)	(1131)	(1101)
	D . 4747 1								
1.	Paint Work.								
1.1	Red Oxide.								
	Provide and apply two coats of Red Oxide (ICI) or								
	equivalent at M.S roofgirders, angles, plates, bolts								
	and both internal and external faces covering all the								
	exposed edges of M.S structure, complete in all								
	respect and as intructed by Architect.Charcol Grey								
	paint (ICI) or approved equivalent over red oxide								
	coated M.S. roof structure at both internal and								
	external surfaces prepared smooth with								
	carborandum stone including scaffolding, including								
	removing of rust if any etc. complete in all respect.	3500	SFT	40.00	140,000.00	10.00	35,000.00	57.00	199,500.00
1.2	Matt enamel Paint.								
	Provide and apply powder coated charcoal grey								
	(ICI) or approved equivalent paint at outer surfaces								
	of the roof structure covering all the exposed M.S								
	girders, angles, plates and bolts, complete in all								
	respect scaffolding , etc. complete in all respect.	2800	SFT	40.00	112,000.00	51.00	142,800.00	102.00	285,600.00

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)
2.	Roof Treatment.			(KS.)	(KS.)	(KS.)	(KS.)	(KS.)	(KS.)
	Provide and laying roof treatment of following items								
	(For payment screed area will be measured)	550	SFT	350.00	192,500.00	181.00	99,550.00	183.00	100,650.00
i)	1:3:6 screed in required slope minimum 2 1/2" thick								
	on RCC slab including curing, making ridges,								
	valleys, chamfered edges etc.								
ii)	2mm thick self adhesive "Hy-Grip" water proofing								
	membrane (coated on both sides with SBS modified								
	bitumen compound) from Pak Hy Oil Ltd, laid as								
	per manufacturer's specifications and instruction,								
	and approval of Architect.								
iii)	1:3:6 screed 2" thick over high grip membranin								
	including curing, etc								
iv)	Provide and apply Heat reflective paint (ICI or								
	approved equivalent) over the roof surface, complete								
	in all respect as per directed by the Architect or								
	Engineer Incharge.								
v)	Making water spout & rain water Chanel as per								
	drawing & detail etc.	2	NOS			3420.00	6,840.00	640.00	1,280.00

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE (Rs.)	AMOUNT	RATE	AMOUNT	RATE (Rs.)	AMOUNT
3.	Plaster.			(KS.)	(Rs.)	(Rs.)	(Rs.)	(KS.)	(Rs.)
	Provide and apply 1:4 cement sand plaster of								
0.1	minimum thickness as specified including G.I. corner								
	beads / plaster stops (all horizontal and vertical								
	exposed corner edges upto 2400mm height from								
	FFL), 200mm wide galvanized metal lathe of 18 SWG								
	at the junctions of concrete and block masonry,								
	conduit chases, etc., fixed with masonry nails and								
	,								
	G.I. sheet strip, rounded edges where required,								
	grooves where required, smooth finished in line,								
	level, plumb, curing, scaffolding, hacking / chipping								
	of existing surface for bonding where necessary, etc.,								
j)	complete in all respect 3/4" thick	200	SFT	45.00	9,000.00	51.00	10,200.00	33.00	6,600.00
	Paint Work.	200	OF I	45.00	2,000.00	31.00	10,200.00	33.00	0,000.00
	Weather Shield.								
	Provide and apply Weather Shield paint (ICI) or								
	approved equivalent minimum three coats of								
	approved shade to external surfaces prepared								
	smooth with carborandum stone including								
	scaffolding, etc. complete in all respect.	200	SFT	30.00	6,000.00	34.00	6,800.00	29.00	5,800.00
	iscarroiding, etc. complete in all respect.	200	011	55.00	0,000.00	01.00	0,000.00	27.00	3,000.00

Najmi Bilgrami Collaborative (Pvt.) Ltd.

Total Rs.

459,500.00

Total Rs.

301,190.00

Total Rs.

599,430.00

IBA Gates Main Campus, Karachi.

#### <u>Bill Of Quantities</u> <u>for Civil & Finishing Works</u>

				ENGINEE	RS ESTIMATE	AIKE	S (Pvt) Ltd.	SAMAD KHAN BABAR	
S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)
	FAÇADE / ELEVATION / EXTERNAL								
1. 1.1	Plaster.  Provide and apply 1:4 cement sand plaster of 3/4" thickness as specified including G.I. corner beads / plaster stops (all horizontal and vertical exposed corner edges upto 2400mm height from FFL), 200mm wide galvanized metal lathe of 18 SWG at the junctions of concrete and block masonry, conduit chases, etc., fixed with masonry nails and G.I. sheet strip, rounded edges where required, grooves where required, smooth finished in line, level, plumb, curing, scaffolding, hacking / chipping of existing surface for bonding where necessary, etc., complete in all respect.								
	3/4" thick  Plaster Bands.  Providing and applying 1 1/4" thick Plaster bands (1:4 cement sand) over 3/4" thick base plaster (1:4) including making edges, corners, niche, lifting, hoisting, scaffolding, fixing metal lath and SS nails, curing and finishing etc., at any height and floor, including the cost of base plaster and excluding the cost of fairface coating. Complete as per drawings, specification and as instructed by the architect.	2500	SFT	45.00	112,500.00	63.00	157,500.00	33.00	82,500.00
	specification and as instructed by the architect.	600	SFT	45.00	27,000.00	103.00	61,800.00	106.00	63,600.00

IBA Gates
External Facade & Elevation
Main Campus, Karachi.

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE	AMOUNT	RATE	AMOUNT	RATE	AMOUNT
S.NO.	DESCRIPTION OF ITEM	Q11.	UNII	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
1.2	Fair Face Coating. Provide and Apply weather proof Fairface Coating (3/8" thick) on Plaster Bands by mixing cement with sand and titanium using the ratio1:4 (A:B) where: A= Mixture of cement and titanium with ratio of 1:8) B= Sand								
		600	SFT	35.00	21,000.00	86.00	51,600.00	192.00	115,200.00
1.3	Transparent Sealer To Fair Face Plaster.  Provide and apply silicon based water repellent transparent sealer of approved sample (Zahabia or equivalent) to External Finish as per manufacturer's specifications and instructions.	600	SFT	30.00	18,000.00	29.00	17,400.00	45,00	27,000.00
2.	Paint Work.				20,000.00		-1,200.00		
2.1	Weather Shield.  Provide and apply Weather Shield paint (ICI) or approved equivalent minimum three coats of approved shade to external surfaces prepared smooth with carborandum stone including scaffolding, etc. complete in all respect.	650	SFT	30.00	19,500.00	34.00	22,100.00	29.00	18,850.00
2.2	Textured Paint.  Provide and apply White Texture paint (ICI or Berger) minimum three coats of approved shade mixed with fine screed sand of required ratio to internal plastered surfaces prepared smooth with carborandum stone, without filling including scaffolding, wastage, etc. complete in all respect.  Refer to Drg. A2-001,A3-001	600	SFT	65.00	39,000.00	86.00	51,600.00	89.00	53,400.00

IBA Gates
External Facade & Elevation
Main Campus, Karachi.

#### Bill Of Quantities for Civil & Finishing Works

S.NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)	RATE (Rs.)	AMOUNT (Rs.)
3.	Sill Batta Stone Cladding. Provide and lay 1/2" thick Sill Batta Stone cladding of approved sample with 1:4 cement sand mortar base plaster of 3/4" thickness, setting the stone with neat cement mortar/ bond, grouting the joints with 1:4 cement sand mortar, anchoring with M.S angle with redoxide treated, including curing, cleaning, hacking of existing surface for bonding where necessary, etc. complete in all respect. (Basic price of Stone tile shall be Rs.200.00 /Sft.) Refer to Drg. A2-001,A3-001								
4.	Main Gate Matt Enamel Paint Finish.  Provide and install main Gate consisting of 2"x2" M.S angle & 1"x2" metal pipe frame paint finish including all hardwares, wastage, polishing, fixing etc, complete in all respect as per drawings, specification and as instructed by the Architect.  For payment running length will be measured Refer to Drg. A6-001	250	SFT	300.00	180,000.00	285.00	171,000.00 171,000.00	274.00	164,400.00
5.	Small Gate.  Same as Item #4 but including all hardwares, clamps, fixing etc, complete in all respect as per drawings, specification and as instructed by the architect.  For payment running length will be measured Refer to Drg. A6-001	100	SFT	800	80,000.00	684	68,400.00	448	44,800.00

Total Rs. 697,000.00 Total Rs. 772,400.00 Total Rs. 681,750.00

#### **IBA EXTERNAL DEVELOPMENT**

#### **MAIN GATE ENTRANCE-04**

#### **ELECTRICAL WORKS**

#### **BILL OF QUANTITIES**

S.No.	Description	Unit	Qty.	Rate	Amount	Rate	Amount	Rate	Amount
	SECTION - A WIRING INSTALLATION	•	•						
1.	Providing and installing light and fan point wiring with 3 x 1.5sq.mm single core PVC insulated 450/750V grade copper wires in 1" dia. PVC conduit surface/concealed mounted including all accessories, connectors switches with specified cover plates, sheet steel back boxes with brass earth terminal, 1.0 sq.mm 3-core PVC/PVC cable in flexible PVC conduit for final connection complete in all respect.								
a)	Light point controlled by one switch.	Nos.	15	1,450	21,750	1,881	28,215	1,920	28,800
b)	Light point from point to point.	Nos.	9	700	6,300	945	8,505	1,664	14,976
c)	Bracket fan point	No.	1	1,500	1,500	1,881	1,881	1,280	1,280
d)	Circuit wiring from distribution board to switch/lighting point with 3 x 2.5sq.mm in 1" dia. PVC conduit complete with all accessories.	Nos.	4	3,400	13,600	2,780	11,120	2,816	11,264
2.	Providing and installing of circuit wiring from DB for 5 / 10A, 3 / 2 pin switch socket outlet with 3 x 2.5 sq.mm single core PVC insulated copper wires in 1" dia. PVC conduit concealed/surface mounted with all accessories, and providing and installing 5 /10A 3 / 2 pin switch socket outlets.	No.	1	3,400	3,400	4,097	4,097	7,680	7,680
2.1	Same as Item No.2 but wiring from point to point.	Nos.	6	1,700	10,200	3,169	19,014	4,480	26,880

Bill Of Quantities for Electrical works.

S.No.	Description	Unit	Qty.	Rate	Amount	Rate	Amount	Rate	Amount
3.	Providing and installing of circuit wiring from DB for 13A, 3 pin switch socket outlet with 3 x 2.5 sq.mm single core PVC insulated copper wires in 1" dia. PVC conduit concealed/surface mounted with all accessories, and providing and installing 13A 3 pin switch socket outlets.	Nos.	5	3,400	17,000	3,911	19,555	7,680	38,400
3.1	Same as Item No.3 but wiring from point to point.	Nos.	9	1,700	15,300	2,985	26,865	4,480	40,320
4.	Providing and installing of circuit wiring (Pump / UPS) from DB to 20A 3 pin switch socket outlets wired with 3 x 6 sq mm single core PVC insulated copper wires in 1" dis PVC conduit, surface/concealed mounted with all accessories, and providing and installing 3 pin, 20A specified switch socket outlet.	Nos.	2	6,500	13,000	7,636	15,272	9,600	19,200
5.	Supply & installation of Floor box 18 SWG.G.I. Sheet having cover of 14 SWG. Suitable for 2 Nos. 13 Amps Duplex. Socket, 2 Nos. Data / Lan (Duplex) Socket as per drawing.	No.	1	4,500	4,500	11,400	11,400	7,680	7,680
6.	Supply & installation of Pull Box 9" x 9"	No.	1	2,500	2,500	7,980	7,980	2,944	2,944
		TOTAL C			109,050		153,904		199,424
	SECTION - B								
	TELEPHONE SYSTEM								
1.	Providing and installing of telephone point with 1" dia pvc conduit + Cat-6 cable, concealed mounted including sheet steel back box.								
		Nos.	2	1,150	2,300	2,850	5,700	4,480	8,960
2.	Providing & connecting of cat-6 RJ-45 Face Plate (Simplex) + I/O $$	Nos.	2	1,200	2,400	2,508	5,016	1,700	3,400
		TOTAL O			4,700		10,716		12,360

Bill Of Quantities for Electrical works.

S.No.	Description	Unit	Qty.	Rate	Amount	Rate	Amount	Rate	Amount
	SECTION - C		· ·						
	COMPUTER DATA SYSTEM								
1.	Providing and installing of computer data outlet point in 1" dia. PVC conduit including sheet steel back box.	Nos.	10	1,150	11,500	1,824	18,240	1,280	12,800
2.	Providing and installing of data Cat-6 UTP, 4 Pair 23 AWG cable upto computer Hub in already laid PVC pipe.	Nos.	24	2,250	54,000	2,873	68,952	4,480	107,520
3.	Providing & connecting of Cat-6 RJ- 45 Face Plate (Simplex) + I/O (Make Schneider)	Nos.	3	1,100	3,300	1,020	3,060	1,536	4,608
4.	Providing & connecting of Cat-6 RJ- 45 Face Plate (Duplex) + I/O (Make Schneider)	Nos.	8	1,500	12,000	1,020	8,160	1,920	15,360
5.	Providing and installing of Clipsal make 1 x 24 - port patch panel with rear cable management. Completed with all fixing accessories. (Make Schneider)	No.	1	19,500	19,500	28,500	28,500	30,720	30,720
6.	Supply, installation and connectiong up 6U Rack. Complete with all mounting accessories.	No.	1	6,500	6,500	17,100	17,100	32,000	32,000
7.	Installation and connecting of Fiber Optic (laying by IBA)	Job.	1	5,000	5,000	28,500	28,500	7,680	7,680
8.	Supply, installation and connecting up of certified cat - 6, 4 pair (RJ45 TO RJ45 type plugs) patch cord. (Make Schneider)								
a)	1.0 m Long (patch panel end)	Nos.	4	375	1,500	570	2,280	1,088	4,352
b)	3.0 m Long (work station end)	Nos.	4	375	1,500	855	3,420	1,472	5,888
		TOTAL O			114,800		178,212		220,928
	SECTION - D					•		•	
	CCTV SYSTEM.								
1.	Supply, Installation & Connecting RG-7 coaxial cable Schneider make to be drawn in & including 1" dia PVC conduits as per								
	specification and drawings.	Nos.	3	3,000	9,000	17,100	51,300	4,500	13,500
		TOTAL C			9,000	:	51,300		13,500

S.No.	Description	Unit	Qty.	Rate	Amount	Rate	Amount	Rate	Amount
	SECTION - E SWITCHGEAR DISTRIBUTION BOARD (MAIN GATE ENTRANCE-04)	1							
1.	Supply, installation, testing & commissioning of Distribution Board surface type 16 SWG sheet steel fabricated suitable for 3 phase, 4 wires, 50 Hz, A./c system complete with all mounting accessories as per following configuration:								
	INCOMING  01 - 30 Amps TP 15 KA MCCB  01 - 32 Amps DP 06 KA MCB  04 - Phase Indication Lamps with Control Fuses  01 - Neutral Bar  01 - Earth Bar  OUTGOING								
	06- 10 Amps. SP 06 KA MCB. 06- 16 Amps. SP 06 KA MCB. 03- 20 Amps. SP 06 KA MCB.	Job.	1	40,000	40,000	28,500	28,500	45,000	45,000
		TOTAL O			40,000		28,500		45,000
1.	SECTION - F LIGHT FIXTURES & FANS  Providing Installation of following light fixtures including connecting accessories, flexible pipe, wire, termination, connectors testing & commissioning.								
a)	Fixture Type - A  Down light recessed ceiling mounted with 1 x 18 watts.	Nos.	12	1,800	21,600	3,420	41,040	2,688	32,256
b)	Fixture Type - B Planter uplights with 1 x 6 watts.LED IP-65	Nos.	6	5,500	33,000	5,700	34,200	5,760	34,560
c)	<u>Fixture Type - C</u> Flourescent Light T5 with 1 x 28 watts.	Nos.	6	1,400	8,400	2,280	13,680	6,784	40,704
2.	Supply, installation $\&$ connection of Bracket fan, complete with all mounting accessories.	No.	1	2,800	2,800	5,700	5,700	7,936	7,936
3.	Industrial socket single phase 3 pin 32 Amps.	Nos.	2	3,500	7,000	2,280	4,560	3,840	7,680
		TOTAL O	F			•		•	

S.No.	Description	Unit	Qty.	Rate	Amount	Rate	Amount	Rate	Amount
		SECTION	N-F RS.		72,800		99,180		123,136

S.No.	Description	Unit	Qty.	Rate	Amount	Rate	Amount	Rate	Amount
	SECTION - G								
	MAIN/SUB-MAIN CABLES								
,	Supply, installation and connection of following main, submain $600/1000V$ grade PVC copper cables.								
1.	From Exiting P.DB to External DB ( Gate - 4).								
	$10\ mm^2\ 4$ core $\ PVC\ /\ PVC\ cable\ +\ 2\ x\ 10\ mm^2$ single core PVC cable in suitable size PVC conduit.	Mtr.	220	125	27,500	331	72,820	2,048	450,560
		TOTAL C SECTION			27,500		72,820		450,560
		GRAND <sup>-</sup>	TOTAL		377,850		594,632		1,064,908