



**GOVERNMENT OF PAKISTAN  
PAKISTAN PUBLIC WORKS DEPARTMENT**

Address: Suite No.16, 1<sup>st</sup> floor, Carlton Hotel, Adj. Post Office, Cantt. Station Road, Karachi.

**NO. RE/PCD-I/ASF/1934.**

**Karachi dated the: 30/04/2024.**

To,

The Regional Director,  
Press Information Department,  
Government of Pakistan,  
**Karachi.**

The Deputy Director,  
Public Procurement Regulatory Authority  
Sector G-5/2, FBC Building  
**Islamabad.**

**SUBJECT: CLASSIFIED ADVERTISEMENT (RE-INVITATION OF BID) FOR PUBLICATION.**

Please find enclosed herewith a copy of specimen Classified Advertisement "Invitation to Bid for publication" in two daily leading newspapers, as per detail herewith:-

<b>a</b>	Date of Publication	<b>Up to : 04-05-2024.</b>
<b>b</b>	Number of Insertion:	One.
<b>c</b>	Page Position:	Inner
<b>d</b>	Color:	Black
<b>e</b>	Target:	Karachi
<b>f</b>	Special position:	Box Form
<b>g</b>	Number of News Papers:	Two Leading News Papers(Each one in English & Urdu.) (Like Jang and Dawn)

Necessary bill (in duplicate) supported with the tear sheets of the newspapers where in the advertisement appeared may be sent to this office for payment thereof.

**Encl: as stated above.**

**SD/-**  
**(Nadeem Ahmed Shaikh)**  
Resident Engineer  
Project Civil Division No: I  
Pak PWD Karachi.

**❖ Copy along with specimen classified advertisement, is forwarded for information to: -**

- 1- The Chief Engineer (South), Pak P.W.D., Karachi.
- 2- The Superintending Engineer, PCC-I, Pak P.W.D., Karachi.
- 3- The Superintending Engineer, (QS) Director General's Office, Pak P.W.D., Islamabad, with the request to upload the advertisement on website of [www.pakpwd.gov.pk](http://www.pakpwd.gov.pk). Pak. PWD.
- 4- The Executive Engineer (Monitoring), Director General's Office, Pak P.W.D., Islamabad.
- 5- Deputy Director ( Project) Airport Security Force Karachi.
- 6- The General Secretary, Pak P.W.D. Contractor's Association, Saddar, Karachi.
- 7- The General Secretary, Pak P.W.D. Contractor's Action Committee, Saddar, Karachi.
- 8- The Divisional Accounts Officer, of this Division.
- 9- Cashier, of this Division.
- 10- Notice Board.

**RESIDENT ENGINEER**



**GOVERNMENT OF PAKISTAN**  
**PAKISTAN PUBLIC WORKS DEPARTMENT**

Address: Suite No.16, Carlton Hotel, Adj. Post Office, Cantt. Station Road, Karachi

NO. RE/PCD-I/ASF/1934.

Karachi dated the: 30/04/2024.

**RE-INVITATION OF BID**

The Resident Engineer, Project Civil Division-I, Pak.PWD, Karachi Re-invites sealed bids, under Single Stage Single Envelope bidding procedure on percentage rate basis from eligible firms or persons licensed by the Pakistan Engineering Council in Category Minimum C-4 or above having code CE-09, CE-10, CE-11, EE-04 and EE-05 for the work “**Up gradation of ASF Academy Karachi; (SH-1: External Development works), SH-II: Medical Center)**” (Phase-I)”. The Estimated Cost Amount in **Rs. 1,54,753,081/-**

Complete set of bidding documents may be purchased from the office of the under signed during office hours on any working day up to **20-05-2024** upon written request on the letter head of the company/ firm, along with the following documents:

- 1- Valid Registration with Pakistan Engineering Council renewed up to 30-06-2024.
- 2- Documents showing the Company/Firm name on the active tax payer list displayed on the FBR website.
- 3- Registration with Sindh Revenue Board.
- 4- Registration with Electrical Inspector, Government of Sindh.
- 5- Non-refundable tender cost **Rs. 5000/-** in shape of Pay Order.

6- Tender will be issued to the proprietor of the Firm/ Company or their legally authorized representatives having registered power of attorney (duly attested). The tenders in sealed envelope should be dropped in the tender box , in the office of the undersigned on **dated: 21-05-2024 Upto 11:00 A.M** and will be opened on the same day at **11:30 A.M.** in the presence of contractor or their representative. Other terms & Condition can be seen in the bidding document.

7- All bids must be accompanied by a Bid Security amounting to (**Rs.7,700,000/-**) in a freely convertible currency in the format of **Call Deposit CDR /Pay Order/ Bank Guarantee** on bid security form provided in the name of Resident Engineer, Project Civil Division-I, Pak.PWD Karachi from company/firm’s account from any scheduled bank of Pakistan.

**Terms & Conditions:**

- 8- Single Stage Single Envelope bidding procedure will be adopted.
- 9- Enclose Financial Audit Report, for the Last Three (03) Years Carried out by QCR Rating Firm.
- 10- No tender will be sold/issue after closing date.
- 11- In case of public holiday, the receipt and opening of bid will be on the next working day.
- 12- Three Work order of ongoing Schemes Amounting to **Rs.200 (Million)** or above .
- 13- Three Work order of Completed Schemes Amounting to **Rs.200 (Million)** last Five

(05) Years.

- 14- Bank Credit Lines Certificate of **100 (Million)**.
- 15- Under taking on original stamp paper of **Rs:100/-** that there is no litigation history, Black Listing, involvement incorrupt ,fraudulent and collusive practice. if so the history of the same may also be disclosed showing the nature , outcome an organization. the bidder shall also submit Affidavit to the effect that the information and documents provided are correct ,genuine and nothing has been concealed.
- 16- Notice inviting bids are also available at PPRA's website [www.ppra.org.pk](http://www.ppra.org.pk).
- 17- Under clause 33(1) of Public Procurement Rules 2004, the undersigned reserve the rights to reject all bids or proposal, at any time, before acceptance.
- 18- The submission of bids by the contractor implies that he is fully conversant with the site of work, scope of work and all terms and conditions laid down in the bidding documents.
- 19- Incomplete tenders will not be entertained.
- 20- No tender will be entertained if received after the due date/time.
- 21- No tender will be sold or receive through postage or courier.

**SD/-**

**(Nadeem Ahmed Shaikh)**

Resident Engineer

Project Civil Division No: I

Pak PWD Karachi.

**PH. # 021-99332067**

## UPGRADATION OF ASF ACADEMY KARACHI

SH- EXTERNAL DEVELOPMENT WORKS (PHASE-I)+MEDICAL CENTER (STRUCTURE WORKS)  
(PHASE 01)

S. No.	Description	Amount
<b>EXTERNAL DEVELOPMENT WORKS</b>		
<b>CIVIL WORKS</b>		
1	(i) Under Ground Water Tank	6,460,780
	(ii) SH: Plumbing Works	210,543
	<b>TOTAL (A)</b>	<b>6,671,323</b>
2	(i) SH: Water Supply (A/R Items) A	3,224,203
	(i) SH: Water Supply (S/R Items) B	677,937
3	(ii) SH: External Sewerage (A+B)	4,706,751
4	(iii) SH: Storm Water Drainage (under footpath)	16,193,338
	<b>(B) Total (i+i+ii+iii)</b>	<b>24,802,229</b>
5	(i) SH: Road Works (S/R Items) A	17,685,310
	(i) SH: Road Works (A/R Items) B	19,807,511
	(ii) SH: Road Parking (S/R Items) A	2,125,871
	(ii) SH: Road Parking (A/R Items) B	2,339,505
	(iii) SH: Foot path Works (A+B)	19,429,265
	<b>(C) Total (i+i+ii+ii+iii)</b>	<b>61,387,461</b>
6	(i) SH: Horticulture (S/R Items)	41,396
	(i) SH: Horticulture (A/R Items)	524,260
	<b>(i+i) TOTAL (D)</b>	<b>565,656</b>
7	<b>ELECTRICAL EXTERNAL DEVELOPMENT WORKS SH -S/R</b>	<b>41,490,497</b>
	<b>ELECTRICAL EXTERNAL DEVELOPMENT WORKS SH -M/R Items</b>	<b>422,112</b>
	<b>TOTAL (E)</b>	<b>41,912,608</b>
8	(i) SH: Building Work (Structure Work) MEDICAL CENTER (STRUCTURE WORKS)	16,488,716
	(ii) SH: W/S & S/I (S/R Items) MEDICAL CENTER (STRUCTURE WORKS)	1,289,437
	(ii) SH: W/S & S/I (M/R Items) (STRUCTURE WORKS)	159,490
	<b>(i+ii+ii) TOTAL (F)</b>	<b>17,937,643</b>
	SH-i Item # 1 to 12 (Wiring & Distribution Board) MEDICAL CENTER (Phase-I / Electric	1,436,458
	SH-ii Item # 1 (Fan Clamp Box) MEDICAL CENTER (Phase-I / Electric Works)	39,702
	<b>(i+ii) TOTAL (G)</b>	<b>1,476,160</b>
	<b>(A+B+C+D+E+F+ G)=Estimate Cost Total</b>	<b>Rs.154,753,081/-</b>

Resident Engineer

## (I) SH - CONSTRUCTION OF UNDER GROUND WATER TANK (CHAMBER-I)

## ENGINEERS ESTIMATE

S.No	Sub Head Code	Description	Units	Quantity	Rate (Rs)	Amount (Rs)
		<b>CIVIL WORKS (Schedule Items)</b>				
<b>1</b>		<b>Clearing and Grubbing</b>				
	102-1	Clearing jungle (ordinary) by cutting, removing all shrubs, trees, upto 6 inches (152 mm) girth, etc. and taking out their entire roots and filling the hollows with earth complete with dressing, consolidating and watering the filling including stacking the serviceable materials and disposal of useless material as directed, included all leads, cost of earth included.	100 Sq.ft	1,125.00	25.23	284
<b>2</b>		<b>Excavation</b>				
a	103-10	Excavation for raft foundations, underground tanks and septic tanks (rectangular or square) in all kinds of soil (except gravelly and murum soil wet silt, clay or mud, conglomeration of gravel and boulders, soft, sandy or disintegrated and hard rock) and back filling the excavated material all round the trenches including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead up to one chain (30.5 R.m) and lift UIJO 5 feet ( 1.52 m ).	100 Cft	5,625.00	1,358.75	76,430
b	103-10 + 28	5 feet to 8 feet	100 Cft	3,375.00	1,596.25	53,873
c	103-10 + 28 x 2	8 feet to 11 feet	100 Cft	3,375.00	1,833.75	61,889
d	103-10 + 28 x 3	11 feet to 15 feet	100 Cft	4,000.00	2,071.25	82,850
3	103-40	Bailing or pumping out sub-soil water during excavation, concreting, cast in situ concrete or masonry work in foundation etc. (only three operations to be allowed, trench volume under water to be measured first time for excavation, second time for concreting, and third time for cast in situ concrete or masonry work in foundaton etc.	100 Cft	1,775.00	632.50	11,227
<b>4</b>		<b>Lean Concrete</b>				
	105-13	Providing and laying 1:4:8 (1 cement 4 sand and 8 coarse aggregate) cement concrete using graded bajri 02 inches (25 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	565.00	21,744.25	122,855
<b>5</b>		<b>Foundation</b>				
	114-99 + 134+137	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3750 lbs. per sq. inch (23.24 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:1.5:3 in foundation or bottom slab of rectangular underground tank including form works and its removal, levelling, compacting and curing etc. complete but excluding the cost of reinforcement	100 Cft.	1,584.00	35,159.55	556,927
<b>6</b>		<b>Walls UGWT</b>				
	114-101 + 134 + 137	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3750 lbs. per sq inch at 28 days with a mix not leaner than 1:1.5:3 in walls of rectangular underground tanks or septic tanks including formwork and its removal, compacting and curing etc. complete but excluding the cost of reinforcement.	100 Cft.	1,650.00	58,261.17	961,309

**(I) SH - CONSTRUCTION OF UNDER GROUND WATER TANK (CHAMBER-I)**

## ENGINEERS ESTIMATE

S.No	Sub Head Code	Description	Units	Quantity	Rate (Rs)	Amount (Rs)
<b>7</b>		<b>Beams</b>				
	114-101 + 134+137 + 138	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3750 lbs. per sq inch with a mix not leaner than 1:1.5:3 in straight beams, lintels cantilever beams of required shape or section including M.S Plates / ply wood formwork and MS pipe folding and its removal, compacting and curing etc. complete but excluding the cost of reinforcement in basement and ground floor	100 Cft.	35.00	51,051.03	17,868
<b>8</b>		<b>Slab</b>				
	114-104 + 134 + 137	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3750lbs. per sq. inch (23.24 N/mm <sup>2</sup> ) at 28 days in top slab of rectangular underground water tank or septic tank i/c formwork its removal, compacting and curing ate. complete but excluding the cost of reinforcement.	100 Cft.	615.00	50,480.37	310,454
<b>9</b>		<b>Water Proofing</b>				
	108-12	Providing coat of bitumen emulsion at 10 Lbs. per % sft. (0.49 Kg/sm) on walls and floor in ground floor.	100 Sq.ft.	2,048.00	1,010.75	20,700
<b>10</b>		<b>Steel Reinforcement</b>				
	114-166	Providing and laying hard grade ribbed deformed (minimum yield point 60,000 psi) reinforcement bars with & including the cost of straightening, cutting, bending, binding, wastage, and such overlaps as are not shown in the drawings, placing in position on cement concrete 1:2:4 precast or m.s. chairs, tying with binding wire, cost of chairs and wires etc. in all kinds of RCC work in foundation, basement, plinth and ground floor of building including septic tanks and under ground tanks and in projections for future extension .	CWT	250.00	14,349.01	3,587,253
<b>11</b>		<b>Plaster</b>				
<b>a</b>		1/4" thick cement plaster 1:4 on soffits of ceiling cantilever slab sides and soffits of beams etc in basement mezzanine and ground floor including making edges corners and curing etc complete	100 sq-ft	900	3,852.59	34,673
<b>b</b>		3/4" (19 mm) thick cement plaster 1:4 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete.				
	122-8	Ground Floor	100 Sq.ft.	1,600.00	5,335.06	85,361
<b>12</b>	122-29	Providing and mixing water proofing agent cemcon in cement mortar of any description in any floor	mg/l	25.00	1,237.50	30,938
<b>13</b>		<b>Flooring</b>				
	117-07	Providing and laying floors of 3 inches (76 mm) thick 1 : 2 : 4 cement concrete using graded screened bajri 3/4 inch (19 mm) and down gauge in ground floor laid in with or without panels including form work, consolidation, finishing and curing etc. complete.	100 Sq.ft.	800.00	9,562.54	76,500
<b>14</b>		<b>C.C. Gola</b>				
	124-141	Providing and laying gola 3" x 3" (76 mm x 76 mm) concrete 1:2:4 using graded screened bajri at junction of roof slab and walls and finished with cement plaster 1:4 including curing etc. complete.	100 Rft.	174.00	3,202.36	5,572
15	114-154	Providing and using sulphate resisting cement in place of ordinary portland cement in item of RCC..	P.cwt	720.00	237.50	171,000
<b>16</b>		<b>PVC Water Stops</b>				
	124-92	Providing and fixing plain polyvinyle chloride (PVC) water stops 18" (457 mm) wide in vertical or horizontal expansion joints including cutting and jointing etc. complete in all floors .	RFT	120.00	874.06	104,887
<b>18</b>		<b>Manhole Cover</b>				
	315-28	Providing & fixing C.I Cover & Frame 30" dia (765 mm) weight 3 cwt (152.41 Kg.)	Each	2.00	43,965.00	87,930
<b>(I) SH - CONSTRUCTION OF UNDER GROUND WATER TANK (CHAMBER-I) Sub Total (Schedule Items) = Rs.</b>						<b>6,460,780</b>

**UPGRADATION OF ASF ACADEMY KARACHI**  
**SH- EXTERNAL DEVELOPMENT WORKS (PHASE 01) (CONSTRUCTION OF UGWT)**

**(ii) SH: Plumbing Works**

SI No.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
310-2	Providing and fixing cast iron sluice valves with' flanged ends and two tail pieces to each valve complete with bolts and nuts, including the cost of insertion rubber washers (valves to stand test pressure head of 400 feet (122 m).				
<b>1</b>	<b>Do. 4 inches (100 mm) dia .</b>	<b>EACH</b>	<b>2</b>	<b>10,236.40</b>	<b>20,473</b>
310-3	Providing and fixing cast iron sluice valves with' flanged ends and two tail pieces to each valve complete with bolts and nuts, including the cost of insertion rubber washers (valves to stand test pressure head of 400 feet (122 m)				
<b>2</b>	<b>Do. Do. 6 inches (150 mm) dia .</b>	<b>EACH</b>	<b>2</b>	<b>12,516.80</b>	<b>25,034</b>
307-36	Providing and fixing gun-metal non-return valves with male and female ends as required. 4 inches dia ..				
<b>3</b>	<b>Do. 6 inches (150 mm) dia</b>	<b>EACH</b>	<b>2</b>	<b>30,668</b>	<b>61,336</b>
310-23	Providing and fixing cast iron foot valve with flranged ends complete with a strainer suitable for fixing to 1 inch (25 mm) dia. suction pipe including 1/8 inches (3.2 mm) thick rubber washer ...				
<b>4</b>	<b>Do. to 6 inches (150 mm) dia</b>	<b>EACH</b>	<b>2</b>	<b>13,750</b>	<b>27,500</b>
306-27	Providing and fixing un platisized polyvinyl chloride pipe (P.V.C) "D" class and specials etc. including cutting and fitting complete with and including the cost of cutting trench upto 1-1/2 feet deep refilling, watering, ramming, and disposal of surplus earth within one chain and after cleaning the pipe and cartage within 10 miles (16.09 km.) (working pressure 12 kg/cm2 )				
<b>5</b>	<b>Do. 6 inches (150 mm) diapipe.</b>	<b>RFT</b>	<b>20</b>	<b>717</b>	<b>14,332</b>
306-8	Providing G.I. pipes and specials, etc.; including fixing, cutting and fitting, complete with and including the cost of cutting trench upto 2-1/2 feet (762 mm) deep, refilling, watering, ramming and disposal of surplus earth within one chain and painting 2 coats of bitumen paint to pipes and specials after cleaning and hessian cloth soaked in maxphalt composition wrapped tightly round the pipes and testing to a pressure head of 200 feet (61 m) and cartage within 10 miles. (16.09km). (ILLM).				

**UPGRADATION OF ASF ACADEMY KARACHI  
SH- EXTERNAL DEVELOPMENT WORKS (PHASE 01) (CONSTRUCTION OF UGWT)**

**(ii) SH: Plumbing Works**

SI No.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>6</b>	<b>Do. 4 inches (100 mm) dia pipe (ILLM).</b>	<b>RFT</b>	<b>12</b>	<b>1,564</b>	<b>18,773</b>
306-10	Providing G.I. pipes and specials, etc.; including fixing, cutting and fitting, complete with and including the cost of cutting trench upto 2-1/2 feet (762 mm) deep, refilling, watering, ramming and disposal of surplus earth within one chain and painting 2 coats of bitumen paint to pipes and specials after cleaning and hessian cloth soaked in maxphalt composition wrapped tightly round the pipes and testing to a pressure head of 200 feet (61 m) and cartage within 10 miles. (16.09km). (ILLM).				
<b>7</b>	<b>Do. 6 inches (150 mm) dia pipe (ILLM).</b>	<b>RFT</b>	<b>16</b>	<b>2,693</b>	<b>43,095</b>
<b>(ii) SH: Plumbing Works TOTAL RS:</b>					<b>210,543.00</b>



**EXTERNAL DEVELOPMENT WORKS AT A.S.F ACADEMY AT KARACHI**

**ENGINEER'S ESTIMATE**

**EXTERNAL WATER SUPPLY**

ITEM NO.	PWD SCHEDULE 2022 ITEM CODE	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		(Non Schedule Items)				
		<b>Water Supply Pipe</b>				
1		Providing and laying P.E pipe (PN 10) with special for cold water supply from approved HDPE in trench upto required depth in proper allignment and gradient i/c all types of fitting (i.e socket, equal and unequal tees, elbow, Y single & double socket etc complete) jointing, fixing, testing and i/c the cost of but fussion joint with tools, loading and unloading the material upto the site as per pecification. Complete in all respect as directed by the Engineer.				
a	Approved rate provided by the client	<b>4" Dia pipe</b>	Rft	491.00	803.39	394,464.49
b	Approved rate provided by the client	<b>6" Dia pipe</b>	Rft	1,182.00	1,672.30	1,976,658.60
c	Approved rate provided by the client	<b>8" Dia pipe</b>	Rft	300.00	2,591.92	777,576.00
2		Providing , and fixing different types of <b>valve by Ascon</b> or equivalent , with all accessories (union , gasket , flanges, bends etc ) including connection, jointing and testing in accordance with the specifications. Complete in all respect as directed by the Engineer.				
a	MR	<b>a. Double Acting Air Valve equipped with isolating valve</b>	Each	1.00	30,000.00	30,000.00
b	Approved rate provided by the client	<b>b. Gate Valve (4" dia.)</b>	Each	2.00	10,236.00	20,472.00
c	Approved rate provided by the client	<b>c. Gate Valve (6" dia.)</b>	Each	2.00	12,516.00	25,032.00
		<b>(I) SH: EXTERNAL WATER SUPPLY TOTAL (A)</b>				<b>3,224,203</b>
3		<b>Excavation</b>				
	313-1	Excavation in soft soils including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m). Including dressing and disposal of surplus earth etc complete	100 Cft	17,986.00	1,425.27	256,349.06
4		<b>Valve Chamber</b>				
a	310-24	Providing chambers 2-1/3 ft x 1-1/2 ft or 685 mm x 460 mm (inside dimensions) x 4-1/2 ft (1372 mm) deep as per approved design for sluice valves 3 inches to 12 inches (80 mm to 305 mm) dia, with 18 inches (460 mm) dia, (inside) cast iron cover and frame (wt = 1 cwt. 3 qr. or 88.9 kg) fixed in R.C.C. 1 :2:4 slab 4 inches (100 mm) thick (with 5 lbs .. of steel per CFT or 80.09 kg/cm.) 8 inches (205 mm) thick C.C. 1 :3:6 block masonry walls set in 1:4 C.M., 6 inches (150 mm) thick C.C. 1:3:6 in foundation, 1/2 inches (13 mm) thick cement plaster 1 :3 to all inside wall surfaces and to top. including providing and fixing C.I. foot rest at every one foot beyond 2-1/2 feet (765 mm) depth, curing, excavation, back filling and disposal of surplus earth etc. complete ..	Each	4.00	45,496.64	181,986.56
d	104-09	Supplying stacking and filling sand of approved quality from outside sources in foundation, trenches, plinth or under floor, etc. including dressing, watering and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction and lift upto 5 feet (1.52 m).	100 Cft	4,920.00	4,869.94	239,601.05
		<b>(I) SH:EXTERNAL WATER SUPPLY TOTAL (B)</b>				<b>677,937</b>
		<b>EXTERNAL WATER SUPPLY G. TOTAL (A + B)</b>				<b>3,902,140</b>

# EXTERNAL DEVELOPMENT WORKS AT A.S.F ACADEMY AT KARACHI

## ENGINEER'S ESTIMATE

### EXTERNAL SEWERAGE

ITEM NO.	PWD SCHEDULE 2022 ITEM CODE	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		<b>Excavation</b>				
1	313-01	Excavation in soft soils including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m). Including cost of backfilling dressing and disposal of surplus earth including all lead and lift complete	100 Cft	50,000.00	1,425.27	712,635
	313-1+15	<b>5 to 8 ft</b>	100 Cft	10,000.00	1,662.77	166,277
2	104-09	Supplying stacking and filling sand of approved quality from outside sources in foundation, trenches, plinth or under floor, etc. including dressing, watering and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction and lift upto 5 feet (1.52 m).	100 Cft	13,685.00	4,869.94	666,451
3	311-03	Providing R.C.C. pipes and collars of class 'B' male and female joints with rubber ring and fixing in trench i/c cutting fitting and jointing with maxphalt composition and cement mortar (1:1) and back filling the excavated material in trench including testing with water to a pressure head of 50 feet (15.24m) and cartage within 10 miles (16.09 km), for 9 inches dia. pipe	Rft	4,000.00	463.49	1,853,960
4	311-04	Providing R.C.C. pipes and collars of class 'B' and fixing in trench including cutting, fitting and jointing with maxphalt composition and cement mortar (1:1) and back filling the excavated material in trench including testing with water to a pressure head of 50 feet (15.24m) and cartage within 10 miles (16.09 km), for 12 inches dia. pipe	Rft	78.00	548.16	42,756
5	315-29	P/L RCC 1:2:4 slab cover 3" thick average (precast complete with M.S Angle iron frame M.S bars embedded in concrete) of any shape i/c the cost of R/F etc as per direction of Engineer in charge	cft	28.00	2,274.73	63,692
<b>TOTAL (A)</b>						<b>3,505,771</b>

5		<b>Manhole</b>				
	Approved rate provided by the client	Providing circular manhole comprised on cylindrical and conal portions as per approved design and specifications complete with RCC 1:2:4 slab, 6" thickness C.C 1:2:4 situ wall 9" thickness with the deduction of pipe holes, C.C 1:3:6 in foundation 6" thick and 1:2:4 C.C in benching using sulphate resting cement in all C.C works including providing and fixing cast iron foot rest at every two foot of depth copltered as per direction of the Engineer - in charge but excluding the cost excavation backfilling disposal of excavated stuff,manhole cover and frame.				
			cft	2,200.00	545.90	1,200,980
					(B)	1,200,980
					(ii) SH: External Sewerage TOTAL ( A + B )	4,706,751

**EXTERNAL DEVELOPMENT WORKS AT A.S.F ACADEMY AT KARACHI**

**ENGINEER'S ESTIMATE**

<b>STORM WATER DRAINAGE (under foot path)</b>						
<b>ITEM NO.</b>	<b>PWD SCHEDULE 2022 ITEM CODE</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>RATE</b>	<b>AMOUNT</b>
		<b>Excavation</b>				
1	313-1	Excavation in soft soils including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m). Including cost of backfilling dressing and disposal of surplus earth	100 Cft	31,580.00	1,425.27	450100.266
2	105-13	Providing and laying 1:4:8 (1 cement 4 sand and 8 coarse aggregate) cement concrete using graded stone ballast 2 inches (51 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	2,340.00	21,744.25	508815.45
3	114-02+136	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in raft or strip foundation with columns and pillars, of any shape including form work and its removal, compacting, leveling and curing etc. complete but excluding the cost of reinforcement, in foundation basement and plinth.	100 Cft	4,085.00	33,203.65	1356369.103
4	114-10+136	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in straight walls 5" (127 mm) to 6" (152 mm) thick including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft	6,174.00	55,098.94	3401808.556
5	114-56+136	Providing and Laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1 :2:4 in ordinary slab 5 inches (127 mm) to 6 inches (152 mm) thick Including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft	4,085.00	45,586.77	1862219.555

		<b>Reinforcement</b>				
6	114-166	Providing and laying hard grade ribbed deformed (minimum yield point 60,000 psi) reinforcement bars with & including the cost of straightening, cutting, bending, binding, wastage, and such overlaps as are not shown in the drawings, placing in position on cement concrete 1 :2:4 precast or m.s. chairs, tying with binding wire, cost of chairs and wires etc. in all kinds of RCC work in foundation, basement, plinth and ground floor of building including septic tanks and under ground tanks and in projections for future extension .	P CWT	592.00	14,349.01	8494613.92
		<b>Grating</b>				
7	124-107	Providing and laying mild steel grating with or without perforated over drain as per direction of the Engineer-in-Charge complete	cwt	3.75	13,393.05	50223.9375
8	101-127	Providing and fixing PVC water-stop and expansion Joint plain 6" to 7" (152 mm to 179 mm) wide placed horizontally at 2" or 51 mm depth from top surface of pavement, 1/2" (13 mm) wide joint filler of fibre board in bottom and top filled with premoutedd bitumen filler of approved proprietary brand complete.	100 Rft	290.00	23,857.69	69187.301
<b>STORM WATER DRAINAGE (under foot path)TOTAL</b>						<b>16,193,338</b>

NAME OF WORK		INTERNAL ROAD WORKS AT ASF ACADEMY KARACHI				
S.No	Sub Head Code	Description	Units	Quantity	Rate (Rs)	Amount (Rs)
<b>1</b>	<b>(i) SH: ROAD WORKS WITH PAVERS</b>					
1	102-5	Levelling and dressing the ground by cutting and filling earth upto 6 inches (152 mm) in depth including consolidating and watering, complete as required.	100 Sq.ft	<b>55,432.00</b>	<b>332.50</b>	<b>184311.40</b>
2	127-01	Excavation or cutting in all kinds of soil (except gravelly, murum, wet silt, clay or mud and rock) to a required grade, camber and side slopes including dressing top and sides and disposal of excavated stuff within a lift of 5 ft. (1.52 m) and with all lead.	100 C.ft	<b>46,800.00</b>	<b>1,336.44</b>	<b>625453.92</b>
3	104-8	Making earth embankments with approved by Supplying earth from approved outside sources with all lead and lift including digging, loading and unloading and filling in foundation trenches, plinth or under floor, etc. including breaking clods, dressing, watering and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within and lead and lift with 95% compaction as per AASHTO.	100 C.ft	<b>26,728.00</b>	<b>3,254.05</b>	<b>869742.48</b>
3b	19+18	If excavated earth is required to be required to be filled in road embankments by placing it in layer not exceeding 9" in depth as per approved section including dressing top & sides of the banks (qty of above item no 2 of excavation or cutting) Compaction of earthen embankments to full depth and width below sub-grade level by approved mechanical means in layers not exceeding 9" (229 mm) in depth at optimum moisture content including watering, mixing by mechanical means complete (the sub-grade embankment of 3 Ft. (914 mm) or less in height shall be compacted to at least 95% modified A.A.S.H.O. max. dry density or their full depth and width, embankments over 3 ft. (914 mm) in depth shall have top 3 ft. (914 mm) compacted to not less than 95% modified A.A.S.H.O. maximum dry density to their full depth and width and portion below 3 ft. (914 mm) compacted not less than 85% modified A.A.S.H.O. max. dry density to their full depth and width) .	100 Cft	<b>46,800.00</b>	<b>2,656.98</b>	<b>1243466.64</b>
4	126	Supplying and laying hand broken 3" to 3/4" (76 mm to 19 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with 10 miles lead and all lift complete (actual compacted depth shall be considered for payment)	100 Cft	<b>59,604.00</b>	<b>7,544.65</b>	<b>4496913.19</b>

5	127-94	Providing and laying 1:4:8 cement concrete in any thickness using 2" (51 mm) and down gauge stone ballast of approved grade and quality over prepared sub-grade or sand cushion in roads, paths, creteways laid to required gradient and camber including cost of necessary form work and its removal compacting with vibrators including curing etc. complete.	100 Cft	29,802.00	27,877.27	8307984.01
6	117-177	Providing and laying in floor C.C. 1 :2:4: tuff paver 2-1/2" thick of approved design and colour pattren laid on sand cushion filling of joint with sand and warring etc. complete as per direction of Engineer Incharge. (the cost of sand cushion is included)(7000 Psi)	P. Sft	11,920.00	135.13	1610749.60
7	127-190	Traffic road signs category -2, including fixing in cement concrete 1 : 2 : 4 complete as per direction of Engineer incharge.	EACH	16.00	21,668.06	346688.96
<b>A</b>	<b>(i) SH: ROAD WORKS WITH PAVERS TOTAL</b>					<b>17,685,310</b>
<b>1</b>	<b>(i) SH: Road Parking (A/R Items)</b>					
		NON. SCHEDULE ITEM				
	AR	Providing and laying in floor C.C. 1 : 2 : 4 tuff pavers 80mm thick of approved design and colour and pattren laid on sand cushion filling of joint with sand and warring etc. complete as per direction of Engineer Incharge. (the cost of sand cushion is included) (Average 7000 psi)	P. Sq.ft.	107,288.00	184.62	19807510.56
<b>B</b>	<b>(i) SH: Road Parking (A/R Items) TOTAL</b>					<b>19,807,511</b>
<b>1</b>	<b>SH: Road ParkingG. TOTAL ( A + B )</b>					<b>37,492,821</b>
<b>2</b>	<b>SH: ROAD PARKING WORKS WITH PAVERS</b>					
1	102-5	Levelling and dressing the ground by cutting and filling earth upto 6 inches (152 mm) in depth including consolidating and watering, complete as required.	100 Sq.ft	6,547.00	332.50	21768.78
2	127-01	Excavation or cutting in all kinds of soil (except gravelly, murum, wet silt, clay or mud and rock) to a required grade, camber and side slopes including dressing top and sides and disposal of excavated stuff within a lift of 5 ft. (1.52 m) and with all lead.	100 C.ft	8,300.00	1,336.44	110924.52
3	104-8	Making earth embankments with approved by Supplying earth from approved outside sources with all lead and lift including digging, loading and unloading and filling in foundation trenches, plinth or under floor, etc. including breaking clods, dressing, watering and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within and lead and lift with 95% compaction as per AASHTO	100 C.ft	2,150.00	3,254.05	69962.08

3b	19+18	If excavated earth is required to be required to be filled in road embankments by placing it in layer not exceeding 9" in depth as per approved section including dressing top & sides of the banks (qty of above item no 2 of excavation or cutting) Compaction of earthen embankments to full depth and width below sub-grade level by approved mechanical means in layers not exceeding 9" (229 mm) in depth at optimum moisture content including watering, mixing by mechanical means complete (the sub-grade embankment of 3 Ft. (914 mm) or less in height shall be compacted to at least 95% modified A.A.S.H.O. max. dry density or their full depth and width, embankments over 3 ft. (914 mm) in depth shall have top 3 ft. (914 mm) compacted to not less than 95% modified A.A.S.H.O. maximum dry density to their full depth and width and portion below 3 ft. (914 mm) compacted not less than 85% modified A.A.S.H.O. max. dry density to their full depth and width) .	100 Cft	8,300.00	2,656.98	220529.34
4	127-26	Supplying and laying hand broken 3" to 3/4" (76 mm to 19 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with 10 miles lead and all lift complete (actual compacted depth shall be considered for payment).	100 Cft	7,040.00	7,544.65	531143.36
5	127-94	Providing and laying 1:4:8 cement concrete in any thickness using 2" (51 mm) and down gauge stone ballast of approved grade and quality over prepared sub-grade or sand cushion in roads, paths, creteways laid to required gradient and camber including cost of necessary form work and its removal compacting with vibrators including curing etc. complete.	100 Cft	3,520.00	27,877.27	981279.90
6	117-177 (a)	Providing and laying in floor C.C. 1 :2:4: tuff paver 2-1/2" thick of approved design and colour pattren laid on sand cushion filling of joint with sand and warring etc. complete as per direction of Engineer Incharge. (the cost of sand cushion is included)(7000 Psi)	P. Sft	1,408.00	135.13	190263.04
<b>A</b>	<b>(ii) SH: Road Parking (S/R Items )TOTAL</b>					<b>2,125,871</b>
		<b>NON. SCHEDULE ITEM</b>				
	AR	Providing and laying in floor C.C. 1 : 2 : 4: tuff pavers 80mm thick of approved design and colour and pattren laid on sand cushion filling of joint with sand and warring etc. complete as per direction of Engineer Incharge. (the cost of sand cushion is included) (Average 7000 psi)	P. Sq.ft.	12,672.00	184.62	2339504.64
<b>B</b>	<b>(ii) SH: Road Parking (A/R Items )TOTAL</b>					<b>2,339,505</b>
2	<b>G. TOTAL ( A + B )</b>					<b>4,465,376</b>



<b>3 SH: FOOT PATHS WORKS</b>						
1	102-5	Levelling and dressing the ground by cutting and filling earth upto 6 inches (152 mm) in depth including consolidating and watering, complete as required.	100 Sq.ft	<b>28,510.00</b>	<b>332.50</b>	<b>94795.75</b>
2	127-01	Excavation or cutting in all kinds of soil (except gravelly, murum, wet silt, clay or mud and rock) to a required grade, camber and side slopes including dressing top and sides and disposal of excavated stuff within a lift of 5 ft. (1.52 m) and with all lead.	100 C.ft	<b>15,200.00</b>	<b>1,336.44</b>	<b>203138.88</b>
3	104-8	Making earth embankments with approved by Supplying earth from approved outside sources with all lead and lift including digging, loading and unloading and filling in foundation trenches, plinth or under floor, etc. including breaking clods, dressing, watering and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within and lead and lift with 95% compaction as per AASHTO	100 C.ft	<b>21,800.00</b>	<b>3,254.05</b>	<b>709382.9</b>
3b	19+18	If excavated earth is required to be required to be filled in road embankments by placing it in layer not exceeding 9" in depth as per approved section including dressing top & sides of the banks (qty of above item no 2 of excavation or cutting) Compaction of earthen embankments to full depth and width below sub-grade level by approved mechanical means in layers not exceeding 9" (229 mm) in depth at optimum moisture content including watering, mixing by mechanical means complete (the sub-grade embankment of 3 Ft. (914 mm) or less in height shall be compacted to at least 95% modified A.A.S.H.O. max. dry density or their full depth and width, embankments over 3 ft. (914 mm) in depth shall have top 3 ft. (914 mm) compacted to not less than 95% modified A.A.S.H.O. maximum dry density to their full depth and width and portion below 3 ft. (914 mm) compacted not less than 85% modified A.A.S.H.O. max. dry density to their full depth and width) .	100 Cft	<b>15,200.00</b>	<b>2,656.98</b>	<b>403860.96</b>
4	127-26	Supplying and laying hand broken 3" to 3/4" (76 mm to 19 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with 10 miles lead and all lift complete (actual compacted depth shall be considered for payment)	100 Cft	<b>29,802.00</b>	<b>7,544.65</b>	<b>2248456.593</b>

5	117-178 (b)	Providing and laying in floor C.C. 1 : 2 : 4 tuff pavers 2" thick of approved design and colour and pattern laid on sand cushion filling of joint with sand and warring etc. complete as per direction of Engineer Incharge. (the cost of sand cushion is included) (Average 5000 psi)	P. Sq.ft.	<b>59,604.00</b>	<b>100.75</b>	<b>6005103</b>
6	127-115	Providing and laying road kerb of precast cement concrete 1 : 2 : 4 (24" long 6" wide and 12" deep (610 mm long 152 mm wide and 305 mm deep) using screened graded bajri, from work and its removal compacting and curing laid in cement mortar 1 : 4 and cement plaster 1 : 4 neatly finished including cost of excavation and back filling of excavated stuff and its disposal within one chain lead as desired.	100 Rft	<b>9,934.00</b>	<b>33,910.87</b>	<b>3368705.826</b>
7	117-02	Providing and laying 1:4:8 cement concrete bed under floors using graded stone ballast 1 inches (25 mm) and down gauge with levelling and ramming, watering and curing etc. complete ..	100 Cft	<b>14,901.00</b>	<b>22,036.75</b>	<b>3283696.118</b>
<b>A</b>	<b>SH: Foot path Works TOTAL</b>					<b>16,317,141</b>
	<b>NON. SCHEDULE ITEM</b>					
	MR	Providing and laying road kerb gutter of precast cement concrete 1 : 2 : 4 (Required Shape Size 3'0" Long 2'0" wide and 6" thick) using screened graded bajri, from work and its removal compacting and curing laid in cement mortar 1 : 4 and cement plaster 1 : 4 neatly finished including cost of excavation and back filling of excavated stuff and its disposal.	P RFT	<b>9,934.00</b>	<b>313.28</b>	<b>3112123.52</b>
<b>B</b>	<b>SH: Foot path Works TOTAL</b>					<b>3,112,124</b>
<b>(iii) SH: FOOT PATHS WORKS GRAND TOTAL ( A + B )</b>						<b>19,429,265</b>
<b>(i) SH: ROAD WORKS WITH PAVERS</b>						<b>37,492,821</b>
<b>SH: ROAD PARKING WORKS WITH PAVERS</b>						<b>4,465,376</b>
<b>SH: FOOT PATHS WORKS</b>						<b>19,429,265</b>
<b>(INTERNAL ROAD WORKS AT ASF ACADEMY KARACHI) RS:</b>						<b>61,387,462</b>

**EXTERNAL DEVELOPMENT WORKS AT A.S.F ACADEMY AT KARACHI**

**ENGINEERS ESTIMATE**

S.No	Description	Units	Quantity	Rate (Rs)	Amount (Rs)
	<b>CIVIL WORKS (Schedule Items)</b>				
126-1+2	Supplying and stacking well decayed cowdung manure from approved source including all leads and lifts, Spreading cowdung manure and mixing the same upto any depth in the prepared bed including breaking clods, dressing fine for grassing, including, disposal of rubbish within 3 chains (92 m) complete.	100 Cft	399.00	6,621.88	26,421.30
126-6 + 7	Supplying and stacking well decayed sewage manure from approved sources including all leads and lifts, Spreading sewage manure in uniform thickness in the prepared bed including mixing with original soil upto any depth including breaking clods and dressing fine for grassing as directed by the Engineer-in-charge including disposal of rubbish within 3 chains (92 m) complete.	100 Cft	399.00	3,753.13	14,974.99
<b>(i) SH: Horticulture (S/R Items ) Rs.</b>					<b>41,396</b>
	<b>TREES AND SEASONAL FLOWERS</b>				
<b>A R</b>	Providing and fixing of different types of trees and plants at different location as well as on road sides (median as per direction of Engineer incharge including the cost of excavation & mixing already supplied sweet earth in trench including watering weeding till such time the plant flower and trees will be set & becomes green and fit for further growing at shifted places . The following trees and plants number etc complete job.(Neem, Cassia, Gulmohar with Height 7 to 10 feet - Stem circumference 4 to 5 inches) and seasonal flowers complete in all respect as per design and as per Instruction of Enginner incharge.		1 Job	524,260.00	524,260.00
<b>1</b>	NEEM TREE (Height 6 to 8 feet - Stem circumference 4 to 5 inches)	20 Nos			
<b>2</b>	CASSIA TREE (Height 6 to 8 feet - Stem circumference 4 to 5 inches)	30 Nos			
<b>3</b>	GULMOHAR TREE (Height 8 to 10 feet -Stem circumference 8 to 9 inches)	15 Nos			
<b>4</b>	SEASONAL FLOWERS (different types)	450 Nos			
<b>(i) SH: Horticulture (A/R Items ) Rs.</b>					<b>524,260</b>

**UPGRADATION OF ASF ACADEMY (EXTERNAL PHASE-I)****EXTERNAL ELECTRICAL WORK****ABSTRACT**

<b>S.#</b>	<b>Sub Head No.</b>	<b>Name Of Work</b>	<b>Rate Based On S/R</b>	<b>Rate Based On M/R</b>	<b>N.I.T Amount</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
			<b>(A)</b>	<b>(B)</b>	<b>(A+B)</b>
1	SUB HEAD I , 10% Above Item No 1 & 2	ERECTION OF POLES	<b>2,394,072</b>	-	<b>2,394,072</b>
2	SUB HEAD II , 10% Above Item No 1 (	LIGHTING FIXTURE	<b>2,365,686</b>	-	<b>2,365,686</b>
3	SUB HEAD III , 10% Above Item No 1 To 2	WIRING	<b>1,228,584</b>	-	<b>1,228,584</b>
4	SUB HEAD IV , 10% Above Item No 1 To 2	CONDUIT	<b>554,535</b>	-	<b>554,535</b>
5	SUB HEAD V , 10% Above Item No 1	DISTRIBUTION BOARDS	<b>1,054,088</b>	-	<b>1,054,088</b>
6	SUB HEAD VI , 40% Above Item No 1 To 6	LV SWITCH GEARS	<b>1,249,517</b>	-	<b>1,249,517</b>
7	SUB HEAD VII , 10% Above Item No 1	HT CABLES	<b>242,385</b>	-	<b>242,385</b>
8	SUB HEAD VII , 20% Above Item No 2	HT CABLES	<b>101,808</b>	-	<b>101,808</b>
9	SUB HEAD VIII , 20% Above Item No 1 (k+j+g)	MAIN / SUB-MAIN FEEDERS (4 core underground L.T Armoured cables)	<b>17,116,086</b>	-	<b>17,116,086</b>

10	SUB HEAD VIII , 10% Above Item No 1 (B)	MAIN / SUB-MAIN FEEDERS (4 core underground L.T Armoured cables)	2,944,500	-	2,944,500
11	SUB HEAD VIII , 20% Above Item No 1 (E, F & G)	MAIN / SUB-MAIN FEEDERS (4 core underground L.T Armoured cables)	1,420,584	-	1,420,584
12	SUB HEAD IX 10% Above Item No 1	EXCAVATION OF CABLES	286,593	-	286,593
13	SUB HEAD X , 40% Above Item No 1	TRANSFORMER indoor pole mounted transformer	5,834,888	-	5,834,888
14	SUBHEAD X ITEM NO 2	RMU F6	3,707,779	-	3,707,779
15	SUB HEAD XI , 10% Above Item No 1	EARTHING	394,572	-	394,572
16	SUB HEAD XII , 10% Above Item No 1	NETWORKING	547,840	-	547,840
17	SUB HEAD XIII , 10% Above Item No 1	RCC PIPE	22,925	-	22,925
18	SUB HEAD XIV , 10% Above Item No 1	CHAMBERS	24,054	-	24,054
19	MARKET RATE ITEM	MARKET RATE ITEM		422,112	422,112
TOTAL AMOUNT (RS):			41,490,497	422,112	41,912,608

Executive Engineer  
Karachi Center E/M Division II  
Pak PWD Karachi

**UPGRADATION OF ASF ACADEMY (EXTERNAL PHASE-I)**

**ENGINEER'S ESTIMATES**

**EXTERNAL ELECTRICAL WORK**

S.No		Description	Units	Quantity	Rate (Rs)	Amount (Rs)
		SCHEDULE RATE ITEM				
	<b>SH -S/R</b>	<b>SUB HEAD I</b>				
		<b>ERECTION OF POLES</b>				
1	3-10-02	Providing & erecting LT M.S Tabular pole 30 feet long having size (3" x 5') x (4" x 7') x (5" x18') in the ground 5' deep and making PCC foundation 1 :3:4 ratio , 2 ' height from the ground level duly plastered etc as required.as required.	Each	36	65,010.00	2,340,360.00
2	10-3-04	Hand Painting of Steel Tubular pole of all size and type including cross arm, etc with fine coat of anti corrosive under coating and two coats of superior quality Silver or enamel paint as required.	Each	36	1,492.00	53,712.00
		<b>TOTAL OF SUB HEAD I</b>				<b>2,394,072.00</b>
		<b>SUB HEAD II</b>				
		<b>LIGHTING FIXTURE</b>				
1	2-77-07	Providing, Installation, Testing & Commissioning of Street / Road Lights (IP65) including driver, having neutral white 1 cool white colour,90 - 110 lm/watts efficiency, 0.9 or above power factor, 20000-25000 hours life cycle, including connection, complete in all respect as approved by the Engineer Incharge				
a	d	<b>90-100 Watts</b>	Each.	54	43,809.00	2,365,686.00
		<b>TOTAL OF SUB HEAD II</b>				<b>2,365,686.00</b>
		<b>SUB HEAD III</b>				
		<b>WIRING</b>				
1	2-28-02	Wiring for sub-main with 3x 2.5 mm', PVC insulated wire 300/500 volts grade, single core, stranded copper conductor wire including 1.5 mm' PVC insulated wire single core wire as ECC in all kinds of existing or given conduit/cable duct as required.	P/RFT	1224	141.00	172,584.00
2	2-43-03	Wiring for sub-main with 4 core, 4 mm2 , stranded copper conductor, PVC insulated & PVC sheathed circular/flat cable 1/C 1.5 mm2 single core PVC insulated wire as ECC in 25 mm (1 ") dia uPVC conduit fitted on surface as required.	P/RFT	3300	320.00	1,056,000.00
		<b>TOTAL OF SUB HEAD III</b>				<b>1,228,584.00</b>
		<b>SUB HEAD IV</b>				
		<b>CONDUIT</b>				
1	2-61-1	Supply & fixing 20mm ( 3/4") dia uPVC conduit with all especial such as bends, sockets, Junction etc fitted on surface as required.	P/RFT	3275	45.00	147,375.00
2	2-61-10	Supply & fixing 50mm (2") dia uPVC conduit with all especial such as bends, sockets, Junction etc recessed in the in the wall or floor as required.	P/RFT	3480	117.00	407,160.00
		<b>TOTAL OF SUB HEAD IV</b>				<b>554,535.00</b>
		<b>SUB HEAD V</b>				
		<b>DISTRIBUTION BOARDS</b>				
1	2-73-02	Providing & fixing cubical type metal sheet vermin protected LT panel board as per drawing with locking arrangement duly powder coated 1/c all fastening devices and electrical wire/ leads for internal connection complete as required.	P/Sft	98	10,756.00	1,054,088.00
		<b>TOTAL OF SUB HEAD V</b>				<b>1,054,088.00</b>
		<b>SUB HEAD VI</b>				
		<b>LV SWITCH GEARS</b>				
1	2-71-13	Providing & fixing 1250 Amps,( Low Breaking Capacity) T.P circuit breaker fixed on existing board , l/c inter-connection as required	Each.	1	233,503.00	233,503.00
2	2-71-04	Providing & fixing 10 to 60 Amps,( High Breaking Capacity) T.P MCCB fixed on existing board , l/c inter-connection as required.	Each.	22	10,338.00	227,436.00
3	2-71-05	Providing & fixing 75 to100 Amps,( Low Breaking Capacity) T.P MCCB fixed on existing board , l/c inter-connection as required.	Each.	7	5,977.00	41,839.00

4	2-71-10	Providing & fixing 400 to 630 Amps,( High Breaking Capacity) T.P circuit breaker fixed on existing board , l/c inter-connection as required	Each.	3	65,685.00	197,055.00
5	2-71-07	Providing & fixing 250 to 400 Amps,( High Breaking Capacity) T.P circuit breaker fixed on existing board , l/c inter-connection as required.	Each.	5	42,489.00	212,445.00
6	9-1-02	Providing, Installation, Testing & Commissioning of 400 Volts, 3-Phase. 3-pole. ATS Panel. without MOR, duly powder coated, painted. having magnetic contactor. mechanical interlocking, emergency stop system, ATS module. battery charger. auxiliary relays. voltmeter, ampere meter. frequency meter, selector switch. indication lights. copper bus bar, timers. including wiring, locking arrangements, etc, complete in all respect as approved by the Engineer Incharge.				
a	f	<b>80 KVA</b>	Job.	1	337,239.00	337,239.00
<b>TOTAL OF SUB HEAD VI</b>					<b>1,249,517.00</b>	
<b>SUB HEAD VII</b>						
<b>HT CABLES</b>						
1	3-13-02	Providing and laying HT 11 KV, 3 core, stranded copper conductor, XLPE insulated, cu tape screened PVC bedded and PVC sheathed armoured cable, laid in existing all kind of pipes. cable duct, channels etc as per Pak.P.W.D specification as required. (without Termination)				
a	d	50 mm	P/Meter	65	3,729.00	242,385.00
2	3-14-01	Providing and fixing indoor/outdoor, 3 core, 11 KV, XLPE, heat shrink termination ends Kit complete in all respect as required				
a	b	50 mm2 to 95 mm2	P/Job	3	33,936.00	101,808.00
<b>TOTAL OF SUB HEAD VII</b>					<b>344,193.00</b>	
<b>SUB HEAD VIII</b>						
<b>MAIN / SUB-MAIN FEEDERS (4 core underground L.T Armoured cables)</b>						
1	3-2-01	Providing & laying 4 core, PVC insulated & PVC sheathed, 600/1000 volts grade with stranded copper conductor , armoured underground, L.T cable buried in the ground dully covered with sand and warning cable tiles as per Pak. P.W.D specification as required.				
a	k	<b>240 mm2</b>	P/RFT	196	12,826.00	2,513,896.00
b	c	<b>25 mm2</b>	P/RFT	1510	1,950.00	2,944,500.00
c	j	<b>185 mm2</b>	P/RFT	880	10,013.00	8,811,440.00
d	g	<b>95 mm2</b>	P/RFT	1050	5,515.00	5,790,750.00
e	d	<b>35 mm2</b>	P/RFT	490	2,445.00	1,198,050.00
f	a	<b>10 mm</b>	P/RFT	147	1,122.00	164,934.00
<b>4 core cable with ECC wire in UPVC Conduit</b>						
g	2-43-03	Wiring for sub-main with 4 core, 4 mm2 , stranded copper conductor, PVC insulated & PVC sheathed circular/flat cable 1/C 1.5 mm2 single core PVC insulated wire as ECC in 25 mm (1 ") dia uPVC conduit fitted on surface as required.	P/Meter	180	320.00	57,600.00
<b>TOTAL OF SUB HEAD VIII</b>					<b>21,481,170.00</b>	
<b>SUB HEAD IX</b>						
<b>EXCAVATION OF CABLES</b>						
1	SUB-HEAD CODE 313-1	Excavation in soft soil including lift up to 5 feet ( 1.52 m ) and lead upto one chain (30.48 m)	100 Cft	201.08	1,425.27	286,593.29
<b>TOTAL OF SUB HEAD IX</b>					<b>286,593</b>	
<b>SUB HEAD X</b>						
<b>TRANSFORMER indoor pole mounted transformer</b>						

1	3-11-05	Providing, fixing and commissioning Pad mounted, step down 11000/ 400 volts three phase, 50Hz, Transformer as per electricity code complete in all respect as reqd.				
a	e	<b>800 KVA</b>	Job.	1	<b>5,834,888.00</b>	<b>5,834,888.00</b>
					<b>SUB HEAD X</b>	<b>5,834,888.00</b>
		<b>SUB HEAD XI</b>				
		<b>EARTHING</b>				
1	3-8-02	Providing and fixing Earthing set with 2'x2'x1/4" copper plate buried in the ground at a depth of 12 feet or less if water comes out from the ground level (with salt and charcoal, or Earthing chemical Powder) etc making the pit 12 feet deep by excavation of all type of soil (except soft or hard rock) i/c fixing of 8 SWG copper wire in 1/2 " G.I conduit complete in all respect as required.	Job	6	<b>65,762.00</b>	<b>394,572.00</b>
					<b>TOTAL OF SUB HEAD XI</b>	<b>394,572.00</b>
		<b>SUB HEAD XII</b>				
		<b>NETWORKING</b>				
1	8-11-03	Providing, Supplying, installation, fitting, fixing and commissioning of 12 Core single mode Fiber Optics Cable in given existing PVC Conduit, Box Conduit , complete in all respect as approved by the Engineer Incharge	P/RFT	320	<b>1,712.00</b>	<b>547,840.00</b>
					<b>TOTAL OF SUB HEAD XII</b>	<b>547,840.00</b>
		<b>SUB HEAD XIII</b>				
		<b>RCC PIPE</b>				
1	SUB-HEAD CODE NO. 314-6	Providing RCC pipes and collars of class 'A' and fixing in trench including cutting, fitting and jointing with maxphalt composition and cement mortar ( 1: 1) and testing with water to a head of 4 feet ( 1.22 m) above the top of the highest pipe including cartage within 10 miles (16.09 km.) 6 inches (150 mm) dia. pipe.	P/RFT	98	<b>233.93</b>	<b>22,925.14</b>
					<b>TOTAL OF SUB HEAD XIII</b>	<b>22,925</b>
		<b>SUB HEAD XIV</b>				
		<b>CHAMBERS</b>				
1	SUB-HEAD CODE (308)-1	Providing chambers 15 inches x 9 inches (380 mm x 230 mm) (inside dimensions) x 24 inches (610 mm) deep for house meters with 6 inches (150 mm) thick C.C. 1:3:6 blocks sets in 1:6 C.M. 6" inches (150mm) C.C. 1:4:8 the foundation, 1/2" Thick (13mm cement plaster, 1:3: to all inside wall surfaces and to top, 1" inch (25mm thick), C.C. 1 :2:4 flooring complete with hinged cast iron cover and frame 15 inches x 9 inches (360 mm x 230 mm) (inside) clear opening (wt =1 Qtr. or 12.7 kg) fixed in cement concrete 1 :2:4 including curing excavation, back filling and disposal of surplus earth etc. complete.	Each	3	<b>8,018.04</b>	<b>24,054.12</b>
					<b>TOTAL OF SUB HEAD XIV</b>	<b>24,054</b>
		<b>MARKET RATE ITEM</b>				
		<b>CROSS ARM</b>				
1	M/R	Supply & fixing single cross arms galvanized channels iron with clamp, washers, bolts and nuts etc.	Each	20	<b>5,610.00</b>	<b>112,200.00</b>
2	M/R	Supply & fixing double cross arms galvanized channels iron with clamp, washers, bolts and nuts etc.	Each	15	<b>11,220.00</b>	<b>168,300.00</b>
3	M/R	Supply & fixing four cross arms galvanized channels iron with clamp, washers, bolts and nuts etc.	Each	1	<b>22,440.00</b>	<b>22,440.00</b>
		<b>MAIN LT PANEL -3 OF TRANSFORMER -1 MALE MESS TRANEE L.V SWITCH GEAR</b>				
4	M/R	Supplying ,Installation and commissioning of MCCB (Moulded Case Circuit Breaker) 125 AMP T.P High Breaking Capacity (with fixed Thermal-Magnetic Trip ) in prelaidd DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge.	Each	1	<b>16,753.20</b>	<b>16,753.20</b>



		<b>COMMUNICATION</b>				
5	M/R	Supply, installation and connecting of 100 Pairs Main Telephone Junction box MS sheet steal fabricated, powder coated Floor mounted with locking arrangements and comprising Complete In all respect.	Nos.	1	<b>39,270.00</b>	<b>39,270.00</b>
6	M/R	Supply, installation testing and commissioning CAT 5E 4 Pair Cable 24AWG complete in all respect as approved by-the engineer incharge.	FT	320	<b>197.34</b>	<b>63,148.80</b>
<b>TOTAL OF MARKET RATE ITEM</b>						<b>422,112.00</b>

**CONSTRUCTION OF MEDICAL CENTER (PACKAGE-I GREY STRUCTURE)  
AT UPGRADATION OF A.S.F ACADEMY AT KARACHI  
KARACHI**

<b>ENGINEER ESTIMATE</b>		
<b>S. NO.</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>
	<b>CIVIL WORKS</b>	
<b>A</b>	(i) SH: Building Work (Structure Work) Schedule Items	16,488,716
	<b>(I) TOTAL (A)</b>	<b>16,488,716</b>
	<b>PLUMBING WORKS</b>	
<b>B</b>	(ii) SH: W/S & S/I ( S/R Items) Schedule Items	1,289,437
	<b>(II) TOTAL (B)</b>	<b>1,289,437</b>
	(ii) SH: W/S & S/I ( M/R Items) Non- Schedule Items	159,490
	<b>(ii) TOTAL M/R Items</b>	<b>159,490</b>
	<b>(A+B+ M/R ITEMS) GRAND TOTAL</b>	<b>17,937,643</b>

**CONSTRUCTION OF MEDICAL CENTER (PACKAGE-I STRUCTURE WORKS)****ENGINEERS ESTIMATE**

S.No	Sub Head Code	Description	Units	Quantity	Rate (Rs)	Amount (Rs)
<b>CIVIL WORKS (Schedule Items)</b>						
<b>1</b>		<b>Clearing and Grubbing</b>				
	102-1	Clearing jungle (ordinary) by cutting, removing all shrubs, trees, upto 6 inches (152 mm) girth, etc. and taking out their entire roots and filling the hollows with earth complete with dressing, consolidating and watering the filling including stacking the serviceable materials and disposal of useless material as directed, included all leads, cost of earth included.	100 Sq.ft	<b>10,890.00</b>	<b>25.23</b>	<b>2747.547</b>
<b>2</b>		<b>Excavation</b>				
a	103-1	Excavation for foundation trenches and drains in all kinds of soil (except gravelly and murum soil, wet silt, clay or mud conglomeration of gravel and boulders, soft, sandy or disintegrated sandy and hard rock) and back filling the excavated material in foundation, plinth or under floor including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead upto one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft	<b>10,550.00</b>	<b>1,624.63</b>	<b>171398.465</b>
b	103-10	Excavation for raft foundations, underground tanks and septic tanks (rectangular or square) in all kinds of soil (except gravelly and murum soil wet silt, clay or mud, conglomeration of gravel and boulders, soft, sandy or disintegrated and hard rock) and back filling the excavated material all round the trenches including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead up to one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft	<b>1,790.00</b>	<b>1,358.75</b>	<b>24321.625</b>
<b>3</b>		<b>Stone soling</b>				
	104-12	Supplying, stacking, spreading and filling stones of required size to required slope from approved quarries in plinth or under floor including filling voids with spawl and chips and consolidation by ramming layers not exceeding 9 inches (229 mm) in depth to full compaction lift upto 5 feet (1.52 m).	100 Cft	<b>1,030.00</b>	<b>4,562.87</b>	<b>46997.561</b>
<b>4</b>		<b>Lean Concrete</b>				

	105-13	Providing and laying 1:4:8 (1 cement 4 sand and 8 coarse aggregate) cement concrete using graded stone ballast 2 inches (51 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	2,040.00	21,744.25	443582.7
<b>5</b>		<b>C C 1:3:6</b>				
	106-12	Providing and laying in situ 1:3:6 (1 cement 3 sand and 6 coarse aggregate) cement concrete using crushed graded boulders i 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work, etc. complete, foundation and basement up to 5 feet (1.52 R.m) depth and plinth up to 4 feet (1.2 R.m) height from ground level.	100 Cft	1,000.00	34,857.58	348575.8
<b>6</b>		<b>REINFORCED CEMENT CONCRETE (SUB STRUCTURE)</b>				
<b>a</b>		<b>Foundation</b>				
	114-01 + 136	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in column footing of required shape including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in foundation basement and plinth.	100 Cft.	1,200.00	38,098.77	457185.24
<b>7</b>	114-99 + 136	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq. inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in foundation or bottom slab of rectangular underground tank including form works and its removal, levelling, compacting and curing etc. complete but excluding the cost of reinforcement..	100 Cft.	320.00	31,431.41	100580.512
<b>8</b>		<b>Sub-Structure Columns</b>				
	114-04 + 136	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in columns of square or rectangular shape of regular section including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth.	100 Cft.	365.00	41,920.62	153010.263

<b>9</b>		<b>Plinth Beam</b>				
a	114-08 + 136	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs.. per sq inch (20.69 N/mm2) at 28 days with a mix not leaner than 1:2:4 in plinth beams of required shape and design including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, tn foundation basement and plinth	100 Cft.	<b>1,756.00</b>	<b>40,365.27</b>	<b>708814.1412</b>
10	114-154	Providing and using sulphate resisting cement in place of ordinary portland cement in item of RCC..	KG	<b>1,070.00</b>	<b>237.50</b>	<b>254125</b>
<b>11</b>		<b>Termite treatment and Water Proofing</b>				
	108-12	Providing coat of bitumen emulsion at 10 Lbs. per % sft. (0.49 Kg/sm) on walls and floor in ground floor.	100 Sq.ft.	<b>9,430.00</b>	<b>1,010.75</b>	<b>95313.725</b>
12	124-199	Providing and carrying out Termite proofing in foundations under floors and wood work surface with a solution using of confront TC with water and spraying the solution of the area to be treated as completed as per direction of Engineer Incharge	P.SFT	<b>9,650.00</b>	<b>13.13</b>	<b>126704.5</b>
<b>13</b>	<b>108-3</b>	<b>Damp Proof Course</b>				
		Providing and laying 2 inches (51 mm) thick damp proof course with cement concrete 1:2:4 cast in situ using graded screened bajri of 3/4 inch (19 mm) and down gauge mixed with any approved water proofing agent including compacting, curing form work and its removal etc. complete, but excluding the cost of water proofing agent .	100 Sq.ft.	<b>440.00</b>	<b>5,555.26</b>	<b>24443.144</b>
<b>14</b>		<b>Earth Filling</b>				
	104-8	Supplying earth from approved outside sources including digging, loading and unloading and filling in foundation trenches, plinth or under floor, etc. including breaking clods, dressing, watering and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete with all lead and lift of 5 feet (1.52 m).	100 Cft	<b>12,920.00</b>	<b>3,254.05</b>	<b>420423.26</b>
<b>15</b>		<b>Super Structure Columns</b>				
a	24+136 C- 114	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm2 ) at 28 days with a mix not leaner than 1:2:4 in columns of square or rectangular shape of regular section including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in the ground floor	100 Cft.	<b>715.00</b>	<b>52,698.67</b>	<b>376795.4905</b>

b	114-24 + 136+92	<b>First floor</b>	100 Cft.	<b>50.00</b>	<b>55,510.13</b>	<b>27755.065</b>
<b>16</b>		<b>Super Structure Beams</b>				
a	114-38 + 136	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in straight beams, lintels cantilever beams of required shape or section including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement and ground floor.	100 Cft.	<b>1,780.00</b>	<b>47,322.89</b>	<b>842347.442</b>
b	114-38 + 136 + 92	<b>First floor.</b>	100 Cft.	<b>55.00</b>	<b>50,134.35</b>	<b>27573.8925</b>
<b>17</b>		<b>Sills</b>				
a	114- 42+136	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in sill and bed plates of straight or circular walls including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement and goround floor.	100 Cft.	<b>25.00</b>	<b>46,441.66</b>	<b>11610.415</b>
<b>18</b>		<b>COUNTER TOP</b>				
a	114- 55+136	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in ordinary slab 3 inches (76 mm) to less than 5" (127 mm) thick including form work and its removal compacting and curing etc, complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft.	<b>52.00</b>	<b>51,313.57</b>	<b>26683.0564</b>
<b>19</b>		<b>Slab</b>				
	114-57 + 136	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in ordinary slab more than 6 inches (152 mm) thick including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft.	<b>565.00</b>	<b>43,716.64</b>	<b>246999.016</b>

20 a	114-56 + 136	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in ordinary slab 5 inches (127 mm) to 6 inches (152 mm) thick Including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor	100 Cft.	3,065.00	45,586.77	1397234.501
b	114-56 + 136 + 92	<b>First floor</b>	100 Cft.	143.00	48,398.23	69209.4689
<b>21</b>		<b>Stair Case</b>				
a	114-50 + 136	Providing and laying reinforced cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in straight stairs and landing of required section including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft.	125.00	57,830.03	72287.5375
22		UGWT				
a	114- 101+13 6	Providing and laying reinforced cement concrete using, screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq. inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in walls of rectangular underground water tank or septic tank including form works and its removal, compacting and curing etc. complete, but excluding the cost of reinforcement..	100 Cft.	400.00	54,533.03	218132.12
23	114- 104+13 6	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3000 lbs. per sq. inch (20.69 N/mm <sup>2</sup> ) at 28 days with a mix not leaner than 1:2:4 in top slab of rectangular underground water tank or septic tank its removal, compacting and curing ate. complete but excluding the cost of reinforcement .	100 Cft.	125.00	46,752.23	58440.2875
24	124-93	Providing and fixing plain polyvinyle chloride (PVC) water stops 12" (305 mm) wide in vertical or horizontal expansion joints including cutting and jointing etc. complete in all floors .	Rft	63.00	592.81	37347.03
		<b>Plaster UGWT and OHWT</b>				
25	122-2 +87+90	1/4" (6.4 mm) thick cement plaster 1:4 on soffits of ceiling, cantilever slabs, sides and soffits of beams etc., in 2nd Floor including making edges, corners and curing etc., complete.	100 Sq.ft.	212.00	4,396.34	9320.2408

26	122-07 +88+91	3/4" (19 mm) thick cement plaster 1:3 on walls and columns etc. in OHWT internal including making edges, corners, and curing etc., complete.	100 Sq.ft.	580.00	6,523.75	37837.75
27	117-07	Providing and laying floors of 3 inches (76 mm) thick 1:2:4 cement concrete using graded screened bajri 3/4 inch (19 mm) and down gauge in ground floor laid in panels including form work, consolidation, finishing and curing etc. complete.	100 Sq.ft.	212.00	9,562.54	20272.5848
28	130- 1287	<b>Pudlo</b>	lbs	200.00	81.30	16260
29	124-141	P/L 3"X3" cement concrete 1:2:4 using graded screened bajri at junction of roof slab & walls & finished with cement plaster 1:4 including curing etc complete	% Rft	100.00	3,202.36	3202.36
30		<b>Block Massonary</b>				
a	110- 44+92+ 100	Providing and laying 1:3:6 cement concrete solid block masonry (machine made) 4 to 6 inches (102 mm to 152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in cement mortar 1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft.	3,000.00	35,217.52	1056525.6
b	110-70	<b>First Floor</b>	100 Cft.	540.00	37,074.70	200203.38
31		<b>Steel Reinforcement</b>				
	114-166	Providing and laying hard grade ribbed deformed (minimum yield point 60,000 psi) reinforcement bars with & including the cost of straightening, cutting, bending, binding, wastage, and such overlaps as are not shown in the drawings, placing in position on cement concrete 1:2:4 precast or m.s. chairs, tying with binding wire, cost of chairs and wires etc. in all kinds of RCC work in foundation, basement, plinth and ground floor of building including septic tanks and under ground tanks and in projections for future extension .				
a	114-166	<b>G.Floor</b>	cwt	543.00	14,349.01	7791512.43
b	114- 166 + 174	<b>F.Floor</b>	cwt	14.00	14,574.64	204044.96
32	15	Providing and laying in ground floor roof, plastic bitumen no 3, 30 lb % sft blinded with coarse sand at 1.5 cft per % sft in 1st coat and 25 lbs % sft of bitumen blinded with 1.5 cft of coarse sand % sft in 2nd coat over a coat of light diesel oil priming at 15 lbs per % sft i/c light ramming thappies	% sft	6,965.00	5,152.88	358898.092
					<b>TOTAL</b>	<b>16,488,716</b>



**UPGRADATION OF ASF ACADEMY AT KARACHI**

**MEDICAL CENTER**

**ENGINEERS ESTIMATE**

**PLUMBING WORKS**

S.No	Sub Head Code	Description	Units	Quantity	Rate (Rs)	Amount (Rs)
<b>S.H;- WATER SUPPLY &amp; SANITARY FITTINGS</b>						
1	306-29	Providing and fixing PPRC pipe PN-20 with specials, and clamps etc, including cutting and fitting complete with and including the cost of breaking through walls and roof and making good etc; after cleaning the pipe and cartage within 10 miles 20mm dia	Rft	170.00	153.45	26086.5
	306-30	<b>25mm dia</b>	Rft	255.00	215.32	54906.6
	306-31	<b>32mm dia</b>	Rft	258.00	320.26	82627.08
	306-32	<b>40mm dia</b>	Rft	305.00	433.66	132266.3
	306-33	<b>50mm dia</b>	Rft	35.00	747.61	26166.35
2		Providing and fixing un platized polyvinyl chloride pipe (P.V.C) "D" class and specials etc. including cutting and fitting complete with and including the cost of cutting trench upto 1-1/2 feet deep refilling, watering, ramming, and disposal of surplus earth within one chain and after cleaning the pipe and cartage within 10 miles (16.09 km.) (working pressure 12 kg/cm <sup>2</sup> )				
	306-23	<b>Do. 2 inches (50 mm) dia pipe</b>	P.Rft	64.00	434.72	27822.08
	306-24	<b>Do. 3 inches (80 mm) dia pipe</b>	P.Rft	370.00	503.47	186283.9
	306-25	<b>Do. 4 inches (100 mm) dia pipe</b>	P.Rft	408.00	600.01	244804.08
	306-26	<b>Do. 6 inches (150 mm) dia pipe</b>	P.Rft	175.00	716.62	125408.5
3	315-13	Providing manhole type 'A' size 2 feet x 1-1/2 feet or 610 mm x 457 mm (inside dimensions) x 2 feet (610 mm) deep as per approved design and specifications complete for 4 inches to 12 inches (100 mm to 305 mm) dia. Pipes up to 3 feet-11 inches (1.19m) in depth with 16 inches (406 mm) dia. (inside) cast iron cover and frame (weights =1 Cwt. 1 Qrs.) or 63.5 kg, fixed in R.C.C.1:2:4 slab 4 inches (152 mm) thick, 9 inches (229 mm) thick burnt brick masonry walls set in 1:4 C.M., 6 inches (152 mm) thick 1:3:6 C.C. in foundation, 1:2:4 C.C. in benching and 1/2 inch (13 mm) thick cement plaster in 1:3 C.M., to all inside wall surfaces, channels and benching etc. and to top including making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff, manhole cover and frame.	Each	10.00	10,617.49	106174.9
4	315-14	Add for extra dept beyond 2 feet (610mm) and upto 3 feet - 11inches (1.19 ) for A type manholes (for depth lesser then 2 feet or 610mm deduct at the same rate.)	Each	1.00	200.16	200.16
5	315-25	Providing & fixing C.I Cover & Frame 16" dia (460 mm) weight 1 cwt 3 Qtr (88.90 Kg.)	Each	10.00	22,876.56	228765.6
6	S-456	<b>PPRC Ball Valve 20 mm.</b>	Each	24.00	643.15	15444
7	S-457	<b>PPRC Ball Valve 25 mm.</b>	Each	32.00	783.00	25056
8	S-458	<b>PPRC Ball Valve 32 mm.</b>	Each	8.00	928.00	7424
<b>TOTAL OF SCHEDULE ITEM</b>						<b>1,289,437</b>

<b>MARKET RATE ITEM</b>						
<b>17</b>	<b>M.R</b>	<b>Ball Valve with Handle</b>				
a)	M.R	Supply and fixing Ball Valve with handle 40 mm dia for PPR pipe.	<b>Nos.</b>	<b>12.00</b>	<b>10,775.00</b>	<b>129300</b>
b)	M.R	Supply and fixing Ball Valve with handle 50 mm dia for PPR pipe.	<b>Nos.</b>	<b>2.00</b>	<b>15,095.00</b>	<b>30190</b>
<b>TOTAL OF NON SCHEDULE ITEM</b>						<b>159490</b>

**UPGRADATION OF ASF ACADEMY AT KARACHI (MEDICAL CENTER)****(SH: ELECTRICAL WORK )****ABSTRACT**

<b>S.No</b>	<b>Sub Head No.</b>	<b>Name Of Work</b>	<b>Rate Based On S/R</b>	<b>Rate Based On M/R</b>	<b>N.I.T Amount</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
			<b>(A)</b>	<b>(B)</b>	<b>(A+B)</b>
1	Sub Head -I ,Item No.1 To 12 (20%) above	MAIN OR SUB MAIN WIRING AND DISTRIBUTION BOARDS	1,436,458	-	1,436,458
2	Sub Head -II ,Item No.1 (10%) above	FAN CLAMP BOX	39,702	-	39,702
<b>Total Rs:</b>					<b>1,476,160</b>

Executive Engineer  
Karachi Center E/M Division II  
Pak PWD Karachi

**UPGRADATION OF ASF ACADEMY AT KARACHI (MEDICAL CENTER)**

**ENGINEER'S ESTIMATES**

**ELECTRICAL WORK**

S.No		Description	Units	Quantity	Rate (Rs)	Amount (Rs)
		<b>SCHEDULE RATE ITEM</b>				
		<b>SUB HEAD I</b>				
	<b>SH I-S/R</b>	<b>MAIN OR SUB MAIN WIRING AND DISTRIBUTION BOARDS</b>				
1	02-11-01	Wiring for light or fan point with 1.5 mm <sup>2</sup> single core, PVC insulated wire copper conductor wire in 20 mm (3/4")dia uPVC conduit recessed in the wall or column, roof etc. including 1 mm <sup>2</sup> single core PVC insulated wire as ECC as required.	Point	179	<b>2,945.00</b>	<b>527,155.00</b>
2	02-11-01	Wiring for fan point with 1.5 mm <sup>2</sup> single core, PVC insulated wire copper conductor wire in 20 mm (3/4")dia uPVC conduit recessed in the wall or column, roof etc. including 1 mm <sup>2</sup> single core PVC insulated wire as ECC as required.	Point	26	<b>2,945.00</b>	<b>76,570.00</b>
3	02-11-03	Wiring for two way light point with 1.5 mm <sup>2</sup> single core, PVC insulated wire copper conductor wire in 20 mm (3/4")dia uPVC conduit recessed in the wall or column, roof etc. including 1 mm <sup>2</sup> single core PVC insulated wire as ECC as required.	Point	7	<b>3,825.00</b>	<b>26,775.00</b>
4	2-13-01	Extension/Additional wiring for light, fan or call bell point controlled with existing switch with 1.5mm <sup>2</sup> PVC insulated wire in 20 mm (3/4") uPVC conduit fitted on surface including 1mm <sup>2</sup> PVC insulated wire as ECC as required.	P/Point	55	<b>1,139.00</b>	<b>62,645.00</b>
5	2-35-01	Wiring for sub-main with 2x 1.5 mm <sup>2</sup> , PVC insulated wire 300/500 volts grade, single core, stranded copper conductor wire in 20 mm (3/4")dia uPVC conduit recessed in the wall, column and roof etc including 1 mm' PVC insulated wire single core wire as ECG as required	Rft	1495	<b>99.00</b>	<b>148,005.00</b>
6	2-35-02	Wiring for sub-main with 2x 2.5 mm <sup>2</sup> , PVC insulated wire 300/500 volts grade, single core, stranded copper conductor wire in 20 mm (3/4")dia uPVC conduit recessed in the wall, column and roof etc including 1.5 mm <sup>2</sup> PVC insulated wire single core wire as ECC as required.	Rft	1368	<b>137.00</b>	<b>187,416.00</b>
7	2-61-01	Supply & fixing 20mm ( 3/4") dia uPVC conduit with all especial such as bends, sockets, Junction etc fitted on surface as required.	P/Rft	1495	<b>45.00</b>	<b>67,275.00</b>
8	2-61-02	Supply & fixing 25m (1") dia uPVC conduit with all especial such as bends, sockets, Junction etc fitted on surface as required.	P/Rft	2410	<b>58.00</b>	<b>139,780.00</b>
9	2-61-03	Supply & fixing 30mm (1 1/4") dia uPVC conduit with all especial such as bends, sockets, Junction etc fitted on surface as required.	P/Rft	15	<b>73.00</b>	<b>1,095.00</b>
10	2-61-05	Supply & fixing 50mm (2") dia uPVC conduit with all especial such as bends, sockets, Junction etc fitted on surface as required	P/Rft	60	<b>231.00</b>	<b>13,860.00</b>
11	2-73-01	Providing & fixing Cubical type metal sheet Distribution board with locking arrangement as per drawing ,vermin protected duly powder coated paint i/c all fastening material including wiring with suitable gauge PVC x PVC wire complete as required.	P/Sft	20	<b>6,006.00</b>	<b>120,120.00</b>

12	03-08-02	Providing and fixing Earthing set with 2'x2'x1 /4" copper plate buried in the ground at a depth of 12 feet or less if water comes out from the ground level (with salt and charcoal, or Earthing chemical Powder) etc making the pit 12 feet deep by excavation of all type of soil (except soft or hard rock) i/c fixing of 8 SWG copper wire in 1/2 " G.I conduit complete in all respect as required.	Job	1	<b>65,762.00</b>	<b>65,762.00</b>
<b>SH-I Item # 1 to 12 (Wiring &amp; Distribution Board) TOTAL</b>						<b>1,436,458.00</b>
<b>SUB HEAD II</b>						
<b>FAN CLAMP BOX</b>						
1	2-87-05	Providing & fixing 3"x4"x5" size 1/8" thick recessed type fan clamp box with 5/8" dia MS bar fan clamp fixed in roof at casting time as required	Each	26	<b>1,527.00</b>	<b>39,702.00</b>
<b>SUB HEAD II Item # 1 (Fan Clamp Box)TOTAL</b>						<b>39,702.00</b>