## STRENGTHENING OF FACULTY OF ORAL HEALTH SCIENCES (EXTERNAL DEVELOPMENT WORKS) BILL OF QUANTITIES

## **GENERAL ABSTRACT**

S. NO:	DESCRIPTION	TOTAL AMOUNT
1	EXTERNAL DEVELOPMENT WORKS	

CONT	<b>TRACT</b>	OR	

## PROJECT DIRECTOR

Planning & Development Department, Dow University of Health Sciences, Karachi

## STRENGTHENING OF FACULTY OF ORAL HEALTH SCIENCES (EXTERNAL DEVELOPMENT WORKS) BILL OF QUANTITIES

SR.#	DESCRIPTION	QTY	RATE	UNIT	AMOUNT (RS.)
1	Dismentling of Exsisting Block Masonary and disposal of rubbish materials by mean of Tractor Trolly or Dumper.	2,330.0		P.Cft	
2	Dismantling cement concrete reinforced seperating reinforcement and disposal of rubbish materials by mean of Tractor Trolly or Dumper			P.Cft	
3	Removing cement or lime plaster from walls and disposal of rubbish materials by mean of Tractor Trolly or Dumper.	1,200.0		P.Sft	
4	Excavation in foundation of buildings, bridges and other structures as per required section, including dag belling, dressing filling around structure with excavated earth watering ramming& compacting etc complete in all respects as per specifications provided and instruction given by the Engineer Incharge.Lead up to 300 Feet & lift up to 6 feet.  (i) IN ALL TYPE OF SOILS EXCEPT HARD ROCK			P.Cft	
5	Earth filling with off site material (brought from out side source) in plinth, depression and where ever required laid in 300 m m layer well watered, consolidated and compacted with mechanical means complete as per drawings and as directed by the Consultants.  Lead up to 06 Mile with in source and Lift up to 05 Feet			P.Cft	
6	Cement Concrete Plain including placing compacting, finishing and curing complete (including screening and washing of crush bajri) without form work . etc complete in all respects as per specifications provided and instructions given by the Engineer Incharge  Ratio 1:4:8 (CLASS 'E') (Under Foundation Using S.R Cement)			P.Cft	
	Providing and laying plain cement concrete Class "D" (1:3:6) in foundation having minimum works cube crushing strength of 1500 lbs per sq. inch at 28 daysfor blinding or under floors where required using approved quality 1" maximum size graded crushed stone or gravel with approved quality sand including all formwork, roding, leveling, compacting and curing etc. complete as per specifications, drawings and to the entire satisfaction of Engineer.  Ratio 1:3:6 (CLASS 'D') (Under Foundation Using S.R Cement)  Fabrication of Deformed Steel Bars, reinforcement for cement concrete work i/c cutting, bending, laying in proper	635.0		P.Cft	
	position, making joints & fastenings etc complete. This rate include cost of binding wire, over lapping, extra wastage, laboratory testing of steel and removing rust from bars. (Grade 60, Minimum Yield Strength 60000 Lbs / P.S.I.)  Ribbed Steel Bars (F.Floor)			P.Ton	
	INDEA SIECE DAIS (F.FIOUI)	3.30		1.1011	

SR.#	DESCRIPTION	QTY	RATE	UNIT	AMOUNT (RS.)
(i)	Providing and laying R.C.C Class 'C'(1:2:4 having a minimum crushing strength of 3000 PS I at 28 days), using 6mm to 18mm sizes graded crushed aggregate and fine aggregate including approved quality form work and its removal, all operations of vibrating, leveling, consolidating, curing and cube / cylinder lab tests of pouring material at 07 days & 28 days etc.complete in all respects as per specifications and drawings and approval of Engineer Incharge .This rate does not includes the cost of steel bars and its erection which will be paid separately Footings Plinth Beam			P.Cft P.Cft	
10	Providing and laying R.C.C Class 'B'(Ratio 1:1-1/2:3 having a minimum crushing strength of 4000 P S I at 28 days), using 6mm to 18mm sizes graded crushed aggregate and fine aggregate including approved quality form work and its removal, all operations of vibrating, leveling, consolidating, curing and cube / cylinder lab tests of pouring material at 07 days & 28 days etc.complete in all respects as per specifications and drawings and approval of Engineer Incharge .This rate does not includes the cost of steel bars and its errection which will be paid separately				
	(a) Padestal Columns in Super Structure (b) Columns in Super Structure	78.0 285.0		P.Cft P.Cft	
11	Providing and laying Class 'D' 1:3:6 cement concrete Solid Block Masonary wall 4" to 8" in thickness and above set in 1:6 cement sand mortar in ground floor superstructure i/c racking of joints and curing, etc, complete.(Minimum crushing strength 1300-lbs/P.S.I)  150 mm Thick 200 mm Thick	2,250.0 1,135.0		P.Sft P.Sft	
12	Cement Plaster in Ratio 1:6 (15 mmThick) i/c floating coat of cement in proper design & profile on walls/beams & columns .This rate also i/c providing expanded metal at the joint of R.C.C.members and block masonary where as reqiured etc complete in all respects as per specifications and drawings and approval of Engineer Incharge				
(i)	15 mm thick Internal / External	3,450.0		P.Sft	
13	Cement Plaster in Ratio 1:4 (13 mmThick) i/c floating coat				
	of cement in proper design and profile on walls, beams &				
	columns etc complete in all respects as per specifications				
(i)	and drawings and approval of Engineer Incharge  13 mm thick Internal / External	3,450.0		P.Sft	
14	P/Applying 3 Coats of Wheather Sheild Paint of superior quality i/c preparing base surface and filling etc complete in all respects as per directives of Engineer In charge.	3,450.0		P.Sft	

SR.#	DESCRIPTION	QTY	RATE	UNIT	AMOUNT (RS.)
15	Providing and fixing Printed Glazed Ceramic Hala Pattern Tiles i (Size 8" x 8") on wall facing or in dado jointed in white cement and laid over bed of 1/2"thick grey cement send mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect. (Premium Quality costing Rs 1000 per square meter or above)			P.Sft	(/
16	Supplying and fixing special heavy type steel doors for Medical Colleges with angle iron frame of 2-1/2" * 2-1/2" * 3/8" size and shutter of 2" * 2" * 3/8" with 1" diameter M.S bars Placed @ 4" center to center with a seperate locking box having size of 12" * 12" of M.Steel sheet embeded in masonry with proper locking arrangement as per approved design including cost of erection of steel work, painting one coat of red oxide paint and two coats of enamel paint over steel gate, fixing in masonry wall in cement concrete 1: 2: 4 etc, complete as per instructions of Engineer Incharge.			P.Sft	
17	Making and fixing grating in opening including fixing at site with flat iron 2"*3/8" and 3/4" square bars at 4" center to center as per approved design including cost of erection of steel work,painting one coat of red oxide paint and two coats of enamel paint over steel gate, fixing in masonry wall in cement concrete 1: 2: 4 etc, complete as per instructions of Engineer Incharge.			P.Sft	
18	Providing and fixing JUNG-SHAHI Stone Tile on Face Elevation (Plain Stone Tile Duly Mixed With Ornamental Emborced Stone Tile as per Design Requirements) (12" x6" x 3/4") jointed in white cement and laid over bed of 3/4"thick grey cement send mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect			P.Sft	
19	Providing and fixing Stone Coping (12"x 2") with linning of 2" Thick jointed in white cement and laid over bed of 1/2"thick grey cement send mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect			P.Rft	
20	Providing and fixing Stone Tile flooring as per Design Reqiurements (12"x 12"x 1") jointed in white cement and laid over bed of 1"thick C.C ratio 1:2:4 i/c washing / filling of joints with white cement etc: complete in all respect.			P.Sft	
21	Providing and fixing Roof Shade made of Fiber Glass Sheet 3 mm rest over frame structure of tubular pipe frame consisting of various pipes having sizes 38mm x 18mm, 18mm x 18mm and 25mm x 25mm (16guage) fixed with G.I pipe posts of 60 mm dia painted G.I pipes 10 'high above ground and 2' buried under ground . This rate i/c all type of work such as cutting and fixing Fiber Sheet with tubular pipe frame fixing with nuts ,bolts, bitumen washers etc complete in all respects i/c painting one coat of red oxide and two coats of enamel paint over metal iron work as per matching shade etc complete in all respects as per directives of Engineer Incharge.				
		550.0		P.Sft	

SR.#	DESCRIPTION	QTY	RATE	UNIT	AMOUNT (RS.)
22	Providing and fixing Printed Glazed Ceramic Tiles on Floor or Dado (12"x18"x1/4" or above) jointed in white cement and laid over bed of 1/2"thick grey cement send mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect (Imported Premium Quality costing Rs 1600 per square meter or above)	285.0		P.Sft	
23	P/F Hand made Naserpur Kashi Screen Jali with white cement and pigment as per approved design and specification acoroved by the Engineer.Incharge			P.Sft	
24	Suppy & Laying of Pacca Brick tiles 12" x12"size as approved by the Engineer Incharge.	400.0		P.Sft	
25	P/F warning tape	450.0		P.Rft	
	Earting & Light Protection System				
	Providing, fixing and connecting of PVC/PVC Pure Copper Conductor unarmored <b>Pakistan Cables</b> 440/1000V grade in PVC/RCC conduit with digging work, Bricks work, UPVC Pipes Work, Warning Tape Work, Main Holes work, Road Crossing complete in all respect as per drawings and specifications through Professional Engineers.  02x 240mm 4Core 01x 70mm 1Core (For all Earth Pits)	370 120		meter meter	
27	Earthing Pits  Providing, Fixing, Testing and Commissioing of 13 x meters long, 100mm dia of UPVC Pipe with Cover, Copper Rod 01" x 10', Copper Conductor for holding Rod in 120mm with lugs, Copper Strip 1' x 1.5" x 3/8" including heavy insulators, all related chemicals compounds as per drawing and specifications. Main Whole with Cover in all respect. Result of Earth Pit MUST be less than 01 Ohm and 01 Volt.			Nos	
28	Main Distribution Board (MDB) Supplying, installation, connection testing & commisioning of Main Distribution Board double powder quoted Panel Color, in 16 SWG, should be factory assembled Ready complete controlled Wired/Standard Capacity Copper Bus Bars, ACB (ATS) Breakers, LED Indications, Digital Volt Meters, Digital Ampere Meters with CT's, Neutral & Earth Copper Bus Bars & Complete as per Electric Drawing, should Be Original Schneider/Terasaki JAPAN made MCCB Breakers OR approved / equalant in all respect.				
b c	01x 800Amp ACB Breaker (Complete) 01x 600Amp MCCB (Adj)/ Breaker 01x 250Amp MCCB (Adj)/ Breaker PFI Panel for K Electric Supply	2.00 1.00 1.00		Nos Nos Nos	
	01x 600KVA PFI Panel as per Electric Drawing	1.00		Nos	
29	GI Cable Tray GI Cable Tray in 16 SWG perforated with 18 SWG Cover as need on SITE conditions in all respect as per Electric Drawing. Size width 12 inch and depth 06 inch (12 x 06).	30.00		Meter	

SR.#	DESCRIPTION	QTY	RATE	UNIT	AMOUNT (RS.)
30	Providing and laying Pre-Polished best quality imported granite beveled edges on Wall Facing of 20mm Thick polished laid over concrete base over 40 mm thick concrete base (1:4) complete in all respect as per detail/drawing and as directed by the Consultants. (Basic cost of Granite Should be Rs.800.00 per Sq ft or above).				
	On Wall Facing	660.00		P.Sft	
	S/F in position M.S Staircase i/c foundation, welding, scaffolding, M.S Ancor bolts, S.M steps M.S. Landing M.S Railing. Steps: M.S Angle iron 1-1/2" 3/16 gauge for M.S Chaker Plate 12 SWG. Landing Area: M.S Channel 4" 2swg. Railing: M.S pipe 1-1/2" dia, 16swg, post pipe 1" dia 16swg & horizantal pipe 1/2" dia 16swg. Spiral Centre Pipe: M.S 5" dia 10swa  providing making and fixing aluco bond .05 mm thick F/R.(USA) with aluminum base fram i/c wastage as per design or diretion by architect and engineer complete.	240.00		Rft	
	1) lift front faceing	800.00		Sft.	
TOTAL (RS.)					