

**Construction of Civil Engineering Block Phase II at College of Engineering, Pathanapuram.**

**TENDER SCHEDULE**

<b>Sl.No.</b>	<b>Quantity</b>	<b>Description</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
1	750 m3	Earth work excavation by mechanical means (Hydraulic excavator)/Manual means over areas (exceeding 30 cm depth 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. <b>All kinds of soil (SH- 2.6.1)</b>	m3	Rs.169.80 (Rs. One Hundred and sixty nine and paise eighty)	127,350
2	950 M3	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift up to 1.5 m, including back filling, getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. <b>All kinds of soil (SH: 2.8.1)</b>	m3	Rs.172.00 (Rs. One hundred and seventy two only)	163,400
3	200 M3	Extra for every additional lift of 1.5m or part there of in excavation/banking excavated or stacked materials <b>All kinds of soil (SH: 2.26.1)</b>	m3	Rs.64.55 (Rs. Sixty four and paise fifty five)	12,910
	100 M3	Supplying and filling contractor's own cut earth gravel conveyed from convenient place with all lead and lift including ramming and consolidating in layers as per direction of Engineer-in charge	m3	Rs.515.10 (Rs. Five hundred and fifteen and paise ten)	51,510
4	143 M3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering. All work upto plinth level 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) <b>(SH: 4.1.8)</b>	m3	Rs.5,454.25 (Rs. Five thousand four hundred and fifty four and paise twenty five)	779,958
	140 M3	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth <b>(SH: 4.17)</b>	m2	Rs.564.25 (Rs. Five hundred and sixty four and paise twenty five)	78,995

325 m3	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - <b>All work upto to plinth level (SH: 5.1.2) (M-20) ( for footing, foundation, plinth beam etc,)</b>	m3	Rs.7,463.40 (Rs. Seven thousand four hundred and sixty three and paise forty)	2,425,605
500 m3	Do. Do for works <b>above plinth level upto floor five level (SH: 5.2.2) (M-20) (for lintels, beams, sunshade slab etc)</b>	m3	Rs.8,182.70 (Rs.Eight thousand one hundred and eighty two and paisee seventy)	4,091,350
37.5 m3	Providing and laying in position machine batched and machine mixed design <b>M-25 grade concrete</b> for reinforced cement concrete works,using cement content as per approved design mix including pumping of concrete to site of laying but excluding the cost of centering shuttering finishing and reinforcement including admixtures in recommended propotions ad per IS 9103 to acclerate/retard setting of concrete, improve workability without impairing strength and durability as per the direction of engineer in chargeNote:-Cement content considered in this item is @330 kg/cum.Excess/less cement used as per design mix is payable/recoverable seperately( <b>for all work upto plinth Level I ) (SH: 5.33.1) for columns</b>	m3	Rs.7664.40 (Rs. Seven thousand six hundred and sixty four and paise forty)	287,415
105.2 m3	Providing and laying in position machine batched and machine mixed design <b>M-25 grade concrete</b> for reinforced cement concrete works,using cement content as per approved design mix including pumping of cincrete to site of laying but excluding the cost of centering shuttering finishing and reinforcement including admixtures in recommended propotions ad per IS 9103 to acclerate/retard setting of concrete, improve workability without impairing strength and durability as per the direction of engineer in chargeNote:-Cement contnt considered in this item is @330 kg/cum.Excess/less cement used as per design mix is payable/recoverable seperately( <b>for all work above plinth Level to 5 th floor level ) (SH: 5.33.2) - ( for Column, septic tank, water tank, sump etc)</b>	m3	Rs.8,487.60 (Rs.Eight thousand four hundred and eighty seven and paie sixty)	892,896
350 m2	Centering and shuttering including strutting,propping etc and removal of form for: <b>Foundations,footings,bases of columns,etc</b> for mass concrete (SH: 5.9.1)	m2	Rs.214.95 (Rs. Two hundred and fourteen and paise ninety five)	75,233

10.5 m3	Providing and laying cement concrete in retaining wall, return walls, wall (any thickness) including attached pilasters, columns, piers, abutments, pillars posts, truts, buttresses, string or lacing courses, paraapets coping, bed blocks, anchor blocks, plain windows sills, filets sunken floor etc. upto floor five level, excluding the cost of centering, shuttering and finishing: <b>1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20mm nominal size ) SH : 4.2.5 (for dummy column)</b>	m3	Rs.7,088.65 (Rs.Seven thousand and eighty eight and paise sixty five)	74,431
870 m2	Centering and shuttering including strutting,propping etc and removal of form for: <b>Walls (any thickness) including attached pilasters, butteresses,plinth and string courses etc (SH: 5.9.2)</b>	m2	Rs.424.40 (Rs.Four hundred and twenty four and paise forty)	369,228
2348 m2	Centering and shuttering including strutting,propping etc and removal of form for: <b>Lintels,beams,plinth beams,girders,bressumers and cantilevers (SH: 5.9.5)</b>		Rs.386.40 (Rs. Three hundred and eighty six and paise forty)	907,267
1000 m2	Centering and shuttering including strutting,propping etc and removal of form for: <b>Columns, Pillars, Piers Abutments, Posts and struts (SH: 5.9.6)</b>	m2	Rs.521.20 (Rs.Five hundred and twenty one and paise twenty)	521,200
2527 m2	Centering and shuttering including strutting,propping etc and removal of form for: <b>Suspended floor, roofs, landings, balconies and access platform (SH: 5.9.3)</b>		Rs.476.75 (Rs.Four hundred and seventy six and paise seventy five)	1,204,747
50 m2	Centering and shuttering including strutting,propping etc and removal of form for: <b>Stairs (excluding landings) except spiral stiarcases (SH:5.9.7)</b>	m2	Rs.434.60 (Rs. Four hundred nd thirty four and paise sixty)	21,730
1561 q	Steel reinforcement for RCC work including straightaning ,cutting ,bending ,placing in position and binding all complete level- <b>(Thermo-Mechanically-Treated bars)</b>	qtl	Rs.7,356.65 (Rs. Seven thousand three hundred and fifty six and paise sixty five)	11,483,731

500 m3	Providing and constructing solid cement concrete block masonry in CM 1:6(1 cement,6course sand) <b>of size 40 x 20 x15 cm</b> using factory made load bearing ,approved quality cement blocks of specified size of grade( D-4) Density of blocks not less than 1800 kg/cum ,Minimum average compressive strength 4 N/mm2 and minimum strength of individual unit 3.2 N/mm2 etc,confirming to IS 2185 part 1 1979 setting in position ,curing raking out joints ,including scaffolding etc <b>upto FLOOR LEVEL FIVE</b> with all lead and lift and all as per specifications and direction of Engineer-in-charge	m3	Rs.4,815.45 (Rs. Four thousand eight hundred and fifteen and paise forty five)	2,407,725
18.5 m3	Providing and constructing solid cement concrete block masonry in CM 1:6(1 cement,6course sand) <b>of size 40 x 20 x10 cm</b> using factory made load bearing ,approved quality cement blocks of specified size of grade( D-4) Density of blocks not less than 1800 kg/cum ,Minimum average compressive strength 4 N/mm2 and minimum strength of individual unit 3.2 N/mm2 etc,confirming to IS 2185 part 1 1979 setting in position ,curing raking out joints ,including scaffolding etc <b>upto FLOOR LEVEL FIVE</b> with all lead and lift and all as per specifications and direction of Engineer-in-charge	m3	Rs.5,621.45 (Rs. Five thousand six hundred and twenty one and paise forty five)	103,997
1.6 m3	Providing wood work(second class teak wood) in frames of doors,windows ,clerestory windows and other frames,wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia &length(hold fast lugs or dash fastener shall be paid for seperately)-(SH: 9.1.1)	m3	Rs.1,33,107.00 (Rs, One lakh thirty three thousand one hundred and seven only)	212,971
4570 kg	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to openings/ wooden frames with rawl plugs screws etc <b>(SH: 9.48.2)</b>	kg	Rs.136.50 (Rs. One hundred and thirty six and paise fifty)	623,805
100 Nos	Providing 40 x 5mm flat iron hold fast 40 cm long including fixing to frame with 10mm diameter bolts ,nuts and wooden plugs and embedding in cement concrete block 30 x 10 x 15 cm ,1:3:6 mix (1 cement:3 course sand :6 graded stone aggregate 20mm nominal size) <b>(SH: 9.53)</b>	Each	Rs.136.00 (Rs. One hundred and thirty six only)	13,600

50 m2	62 mm thick <b>cement concrete flooring</b> with concrete hardener topping, under layer 50mm thick cement concrete 1:2:4, (1 cement, 2 course sand, 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of	m2	Rs.691.75 (Rs. Six hundred and ninety one and paise seventy five)	34,588
5350 m2	Plastering (cement plaster) with CM 1:4 (1 cement, 4 fine sand), 12mm thick, to the internal and external walls including all costs of materials and labour charges watering, curing etc complete (SH: 13.1.1)	m2	Rs.195.55 (Rs. One hundred and ninety five and paise fifty five)	1,046,193
2700 m2	Plastering (cement plaster) <b>with CM 1:3</b> (1 cement, 3 fine sand) 6mm thick, to the under side of roof slab including all cost of materials and labour charges, watering, curing etc complete (SH: 13.16.1)	m2	Rs.154.00 (Rs. One hundred and fifty four only)	415,800
555 m2	Plastering (cement plaster) with <b>Cement Mortar 1:4</b> (1 cement, 4 fine sand) <b>finished with a floating coat of neat cement</b> , 12 mm thick, to top of sun shade etc., including all cost of materials and labour charges etc complete (SH: 13.7.2)	m2	Rs.238.00 (Rs. Two hundred and thirty eight only)	132,090
1015 m2	Plastering (cement plaster) <b>with CM 1:3</b> (1 cement, 3 fine sand) finished <b>with a floating coat of neat cement</b> , 12 mm thick, to the top of roof slab including all cost of materials and labour charges etc complete (SH: 13.7.1)	m2	Rs.251.70 (Rs. Two hundred and fifty one and paise seventy)	255,476
1570 m2	Extra for providing and mixing <b>water proofing material</b> in cement plaster work in proportion recommended by the manufacturer <b>(SH: 13.21)</b> on the top of roof slab and sunshade etc	m2	Rs.5.55 (Rs. Five and paise fifty five)	8,714
79	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, including ISI marked MS pressed butt hinges bright finished of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge <b>(Second class teakwood-35mm thick shutters)-(SH: 9.5.1.1)</b>	m2	Rs.3600.85 (Rs. Three thousand six hundred and paise eighty five)	284,467
55.5 m2	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured) Panelling for panelled or panelled and glazed shutters <b>25mm to 40mm thick- using 2 nd class teak wood) (SH: 9.7.1)</b>	m2	Rs.2900.80 (Rs. Two thousand nine hundred and paise eighty)	160,994

2 m2	Providing and fixing 12mm thick panelling or panelling and glazing in panelled or panelled and glazed shutters for doors ,windows and clerestory windows(Area of opening for panel inserts excluding portion inside grooves or rebates to be measured )Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick -- <b>Marine plywood conforming to IS- 710 (SH- 9.126.1)</b>	m2	Rs.1,481.00 (Rs. One thousand four hundred and eighty one only)	2,962
6.5 m2	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors ,windows and clerestory windows(Area of opening for panel inserts excluding portion inside grooves or rebates to be measured )Panelling for panelled or panelled and glazed shutters 25mm to 40mm thick- (Float glass panes - 5.5mm thick glass panes) (SH: 9.7.7.2) - Weight of float glass not less than 13.5 kg/m2	m2	Rs.1,406.50 (Rs. One thousand four hundred and six and paise fifty)	9,142
3.5 m2	Providing and fixing bright finished best quality <b>brass square rods of size 5mm x 5 mm</b> inserting in the slot already made on the surface of door shutters as per drawing including all labour and materials etc complete (0.75m x 2.05m) - <b>for Front door</b>	m2	Rs.1,727.00 (Rs. One thousand seven hundred and twenty seven only)	6,045
45m	Providing and fixing 12mm square rod of required pattern as per drawing in frame of front door including all labour, materials etc complete	m	Rs.88.60 (Rs. Eighty six and paise sixty)	3,987
115 m	Providing and fixing factory made door frame (single rebate) made out of single piece extruded solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 62 mm width & 32 mm thickness, frame will be mitred & Jointed with self driven self tapping screws of size 38 mm x 4 mm & PVC solvent cement , including fixing the frame to wall with suitable dia & length anchor fastener as per manufacturer's specification and direction of Engineer-in-charge (SH: 9.122)	m	Rs.429.70 (Rs. Four hundred and twenty nine and paise seventy)	49,416

40 m2	Providing and fixing factory made 30 mm thick door shutter made of solid PVC foam profile. The styles & rails shall be of size 75 mm x 30 mm having wall thickness 5 mm. The styles, top & bottom rails shall have one side wall thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power. The styles and rails shall be reinforced with M.S. tubes of size 33 mm x 17 mm x 1mm, painted with primer, all four corners of reinforcement to be welded or sealed. Solid PVC extruded bidding (push fit type) will be set inside the styles and the rails with a cavity, to receive single piece extruded 5 mm PVC sheet as panel. The styles and rails will be mitred cut and joint with the help of PVC solvent cement & self driven self tapping screws. Single piece extruded solid PVC lock rail of size 100mm x 30 mm with wall thickness 5 mm & 15 mm integrally extruded in the middle of the lock rail & fixed with styles with the help of PVC solvent cement & self driven self tapping screws of size 100 mm x 8 mm complete as per manufacturer's specifications and direction of Engineer-in-	m2	Rs.2,691.40 (Rs.Two thousand six hundred and ninety one and paise forty)	107,656
50 Nos.	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete: Size: 125 mm <b>(SH- 9.100)</b>	Each	Rs.67.35 (Rs.Sixty seven and paise thirty five)	3,368
30 Nos.	Providing and fixing casement handle suitable for uPVC casement door/windows with necessary screws etc. complete	Each	Rs.25.20 (Rs. Twenty five and paise twenty)	756

4480 kg	<p>Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :</p> <p>Powder coated aluminium (minimum thickness of powder coating 50 micron) <b>(SH.21.1.1.2)</b></p>	kg	<p>Rs.358.15 (Rs.Three hundred and fiftyeight and paise fifteen)</p>	1,604,512
4560 kg	<p>For shutters of doors, windows &amp; ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately).</p> <p>Powder coated aluminium (minimum thickness of powder coating 50 micron) <b>(SH: 21.1.2.2)</b></p>	kg	<p>Rs.423.10 (Rs. Four hundred and twenty three and paise ten)</p>	1,929,336
25 Nos	<p>Providing and fixing aluminium sliding door bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete:</p> <p>Size: 300x16 mm <b>(SH: 9.96.1)</b></p>	Each	<p>Rs.226.40 (Rs.Two hundred and twenty six and paise forty)</p>	5,660
250 m2	<p>Providing and fixing glazing aluminium doors, windows, ventilator, shutters &amp; partitions etc. with EPDM rubber/ neoprene gasket etc complete as per architectural drawings and directions of Engineer-in-charge (Cost of aluminium snap beading shall be paid in basic item): with float glass panes of 4.0 mm thickness <b>(SH: 211.3.1)</b></p>	m2	<p>Rs.891.10 (Rs. Eight hundred and ninety one and paise ten)</p>	222,775
	<p>Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ), transparent or dyed to required colour or shade, with necessary screws etc. complete: <b>(SH:9.97)</b></p>			



	50 Nos.	Size: 300 x 10 mm	Each	Rs.108.40 (Rs. One hundred and eight and paise forty)	5,420
	930 Nos	Size : 150 x 10 mm	Each	Rs.64.85 (Rs. Sixty four and paise eighty five)	60,311
	50 Nos.	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete. <b>Twin rubber stopper (SH: 9.101.2)</b>	Each	Rs.72.50 (Rs. Seenty two and paise fifty)	3,625
	200 Nos	Providing and fixing MS fan clamp type I or II of 16mm dia bar bent to shape with hooked ends in RCC slabs or beams during laying, including painting the exposed portion of loop etc complete as per standard design (SH:	Each	Rs.141.35 (Rs. One hundred and forty one and paise thirty five)	28,270
	750 kg	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes,channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer in-charge, ( for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.). <b>(SH : 10.28)</b>	kg	Rs.592.30 (Rs. Five hundred and twenty nine and paise thirty)	444,225
	220 m	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10 mm gap for thermal expansion, <b>(i) Single socketed pipes. 110 mm diameter (SH: 12.41.2)</b>	m	Rs.244.90 (Rs. Two hundred and forty four and paise ninety)	53,878
	20 Nos.	Providing and fixing to the inlet mouth of rainwater pipe cast iron grating 15cm diameter and weighing not less than 440 grams. <b>(SH: 12.44)</b>	Each	Rs.32.75 (Rs. Thirty two and paise seventy five)	655

20 Nos.	Providing and fixing on wall face unplasticised-PVC moulded fittings / accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A,including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion. <b>110 mm bend ( SH : 12.42.5.2)</b>	Each	Rs.205.75 (Rs. Two hundred and five and paise seventy five)	4,115
920 kg	Steel work in built up tubular (round,square, or rectangular hollow tubes etc )including cutting ,hoisting , fixing in position and applying a priming coat of approved steel primer,including welding and bolted with special shaped washers etc complete.(Hot finished welded type tubes) (Based on SH: 10.16.1)	kg	Rs.99.75 (Rs. Ninety nine and paise seventy five)	91,770
125 m2	Providing non-asbestos high impact Polypropylene reinforced cement 6 mm thickcorrugated sheets (as per IS : 14871) roofing up to any pitch and fixing with polymercoated J or L hooks, bolts and nuts 8 mm dia G.I. plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete (excluding the cost of purlins,rafters and trusses), including cutting sheets to size and shape wherever required. <b>(SH: 12.8)</b>	m2	Rs.431.65 (Rs. Four hundred and thirty one and paise sixty five)	53,956
7850 m2	Providing white cement wash one coat to newly plaster surface as priming coat including duting and cleaning the suraface,scaffolding charges etc complete	m2	Rs.21.10 (Rs.Twenty one and paise ten)	165,635
3650 m2	Distempering with 1st quality acrylic washable distemper (ready mixed) of approved brand and manufacture to give an even shade-New work (two or more coats) over thepriming coat already done ewtc. Asper the direction of the Engineer-in-charge <b>(SH: 13.42)</b>	m2	Rs.55.00 (Rs.Fifty five only)	200,750
1500 m2	Finishing walls with Acrylic Smooth <b>exterior paint</b> of required shade - <b>New work - two or more coats</b> applied @ 1.67 lit/10 sqm over priming coat applied already done etc. as per the direction of the Engineer-in-charge <b>(Based on SH: 13.46.1)</b>	m2	Rs.75.90 (Rs. Seventy five and paise ninety)	113,850
2700 m2	Finishing <b>underside of roof slab, sun shade bottom</b> etc., with <b>plastic emulsion</b> paint of approved brand and manufacture to given an even shade - <b>Two or more coat</b> on new work <b>(SH: 13.60.1)</b>	m2	Rs.80.90 (Rs.Eighty and paise ninety)	218,430

160 m2	Polishing on wood work with <b>Ready mixed wax polish</b> of approved brand and manufacture -New work-in the teak wood door including all cost of materials and labour etc. complete <b>(SH: 13.69.1)</b>	m2	Rs.84.00 (Rs. Eighty four only)	13,440
50 m2	Painting <b>steel work</b> with Deluxe Multy Surface Paint to give an even shade, two or more coat applied @ 0.9 lit/10 sqm over an undercoat of primer applied @ 0.8 lit/10sqm of approved brand and manufacture <b>(SH: 13.48.3)</b>	m2	Rs.92.25 (Rs.Ninety two and paise twenty five)	4,613
180 m2	Providing and laying <b>granite flooring using 18 mm thick</b> granite , flooring laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing,curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. <b>Black granite area of slab upto 0.50sqm (SH: 8.2.1.1)</b>	m2	Rs.3,764.90 (Rs.Three thousand seven hundred and sixty four and paise ninety)	677,682
240 m	Extra for pre finished nosing to treads of steps of granite stone <b>(SH: 8.3.2)</b>	m	Rs.313.35 (Rs.Three hundred and thirteen and paise thirty five)	75,204
2870 m2	Providing and laying <b>vitrified floor tiles</b> in defferent sizes (thickness to be specified by the manufacturer)with water absorption less than 0.08% and conforming to IS 15622,of approved make,in all colours and shades,laid on 20mm thick cement mortar 1:4(1 cement ,4 course sand),including grouting the joints with white cement and matching pigments etc,complete <b>(Size of tile 600 x 600 mm) (SH:11.41.2)</b>	m2	Rs.1,547.40 (Rs.One thousand five hundred and forty seven and paise forty)	4,441,038
100 m2	Providing and laying Ceramic glazed <b>floor tiles</b> of size 300 x 300mm (thickness to be specified by the manufacturer), of 1st quality confirming to IS :15622, of approved make, in colours such as White,Ivory,Grey,Fume Red Brown,laid on 20mm thick cement mortar 1:4 (1 cement:4 course sand),including pointing the joints with white cementand matching pigment ,etc complete <b>(SH:11.37)</b>	m2	Rs.988.00 (Rs. Nine hundred and ninety eight only)	98,800

	760 m2	Providing and fixing 1st quality ceramic glazed <b>wall tiles</b> confirming to IS :15622(thickness to be specified by manufacturer),of approved make,in all colours,shades except burgundy,bottle green, black of any size as approved by Engineer -in charge ,in skirting ,risers or steps and dados,over 12 mm thick bed of cement mortar 1:3 (1 cement :3 course sand)and jointing with grey cement slurry @3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete <b>(SH: 11.36)</b>	m2	Rs.977.40 (Rs. Nine hundred and seventy seven and paise forty)	742,824
	290 m2	Providing and laying interlocking cobbles 75mm thick (standard) minimum strength 4 kg sqm over sand bed 30mm including all labour, materials etc as per direction of engineer-in-charge	m2	Rs.842.00 (Rs. Eight hundred and forty two only)	244,180
1		Providing and fixing poly vinyl chloride(PVC) pipes,having thermal stability for hot & cold water supply, including all PVC plain&brass threaded fittings .This includes jointing of pipes & fittings,with one step PVC solvent cement ,trenching,re-filling & testing of joints complete as per direction of Engineer-in-charge, <b>internal work work exposed on walls</b>			
	50 m	15 mm nominal outer dia PVCpipe (12 kgf/cm2)	m	Rs.118.30 (Rs.One hundred and eighteen and paise thirty)	5,915
	430 m	20 mm nominal outer dia PVCpipe (12 kgf/cm2)	m	Rs.129.30 (Rs.One hundred and twenty nine and paise thirty)	55,599
	150 m	25 mm nominal outer dia PVCpipe (12 kgf/cm2)	m	Rs.142.70 (Rs. One hundred and forty two and paise seventy)	21,405
	50 m	50 mm nominal outer dia PVCpipe	m	Rs.262.70 (Rs. Two hundred and sixty two and paise seventy)	13,135

		Providing and fixing poly vinyl chloride(PVC) pipes,having thermal stability for hot & cold water supply, including all PVC plain&brass threaded fittings i/c fixing the pipe with clamps at 1m spacing.This includes jointing of pipes & fittings,with one step PVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer- in- charge, <b>concealed work</b> ,including cutting chases and making good the wall etc			
	150 m	15 mm nominal outer dia PVCpipe (12 kgf/cm2)	m	Rs.220.80 (Rs.Two hundred and twenty and paise eighty)	33,120
	100 m	20 mm nominal outer dia PVCpipe(12 kgf/cm2)	m	Rs.223.50 (Rs. Two hundred and twenty three and paise fifty)	22,350
	100 m	25 mm nominal outer dia PVCpipe (12 kgf/cm2)	m	Rs.236.85 (Rs. Two hundred and thirty six and paise eighty five)	23,685
		Providing and fixing poly vinyl chloride(PVC) pipes,having thermal stability for hot & cold water supply, including all PVC plain&brass threaded fittings .This includes jointing of pipes & fittings,with one step PVC solvent cement ,trenching,re-filling & testing of joints complete as per direction of Engineer-in-charge <b>external work</b>			
	80 m	50 mm nominal outer dia pipes(10kgf/cm2)	m	Rs.172.00 (Rs. One hundred and seventy two only)	13,760
	80 m	62.5 mm nominal inner dia pipes (10kgf/cm2)	m	Rs.231.40 (Rs. Two hundred and thirty one and paise forty)	18,512
	150 m	100 mm nominal inner dia pipes (10kgf/cm2)	m	Rs.516.10 (Rs. Five hundred and sixteen and paise ten)	77,415
	70 Nos	Providing and fixing <b>CP brass stop cock (concealed)</b> of standard design and of approved make coforming to IS:8931-(15mm nominal bore)	Each	Rs.502.00 (Rs. Five hundred and two only)	35,140

60 Nos	Providing and fixing <b>CP brass Angle valve</b> for basin mixer and geyser points of approved quality conforming to IS :8931 - (15mm nominal bore)	Each	Rs.519.00 (Rs. Five hundred and nineteen only)	31,140
30 Nos.	Providing and fixing CP brass <b>long body bib cock</b> of approved quality coforming to IS standards and weighing not less than 690gms- 15mm nominal bore	Each	Rs.506.10 (Rs. Five hundred and six and paise ten)	15,183
15 Nos	Constructing brick masonry manhole in cement mortar 1:4,(1 cement,4 course sand) with RCC top slab with 1:2:4 mix (1 cement,2 course sand,4 graded stone aggregate 20 mm nominal size) foundation concrete 1:4:8 mix (1 cement,4 course sand,8 graded stone aggregate 40mm nominal size) - slab thickness-15cm, inside plastering 12 mm thick with cement mortar 1:3,(1 cement :3 course sand) finished with neat cement flushing coat and making channels in cement concrete 1:2:4'(1 cement:2course sand :4 graded stone aggregate 20 mm nominal size )finished with neat cemeent flushing coat etc. complete as per standared design:Inside size 90 x 80cm and 45 cm deep including CI cover with frame (light duty) 455 x 610 mm intenal dimensions,total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)With common burnt clay FPS (non modular) bricks of class designation 7.5	Each	Rs.10,262.00 (Rs. Ten thousand two hundred and sixty two only)	153,930
25 Nos	Providing and fixing CP brass bib cock of approved quality coforming to IS::8931-(15 mm nominal bore) <b>(SH: 18.49.1)</b>	Each	Rs.414.90 (Rs.Four hundred and fourteen and paise ninety)	10,373
25 Nos	Providing and fixing CP brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms (15mm nominal bore) (SH:18.50.1)	Each	Rs.463.70 (Rs.Four hundred and sixty three and paise seventy)	11,593
	Providing and fixing gun metal gate valve with CI wheeel of approved quality (screwed end):as per the direction of Engineer - in-charge			
10 Nos	a. 25mm size bore	Each	Rs.600.60 (Rs.Six hundred and paise sixty)	6,006
11 Nos	b. 50mm size bore	Each	Rs.1,784.15 (Rs.One thousand seven hundred and eighty four and paise fifteen)	19,626

25 Nos	Providing and fixing white vitreous china pedestal type <b>water closet(Europian type)</b> with seat and lid ,10 litre low level white vitreous china flushing cistern & Cflush bend with fittings & CI brackets,40mm flush bend overflow arrangement with specials of standared make and mosquito proof coupl,ing of approved municipal design complete ,including painting of fittings and brackets,cutting and making good the walls and floors wherever required - WCpan with ISI marked white solid plastic seat and lid <b>(SH: 17.2.2)</b>	Each	Rs.4,197.90 (Rs.Four thousand one hundred and ninety seven and paise ninety)	104,948
28 Nos	Providing and fixing wash basin with CI brackets ,15 mm CP brass pillar taps,32mm CP brass waste of standared pattern ,including painting of fittings and brackets ,cuttings and making good the walls wherever require - <b>White vitreous china wash basin size 630 x 450mm with 15 mm CP brass pillar tap (SH: 17.7.1)</b>	Each	Rs.2,149.00 (Rs.Two thousand one hundred and forty nine only)	60,172
28 Nos	Providing and fixing PVC waste pipe for sink or wash basinincluding PVC waste fittings - flexible pipe-32 mm dia. <b>(SH: 17.28.2.1)</b>	Each	Rs.50.20 (Rs.fifty and paise twenty)	1,406
10 Nos	Providing and fixing 100mm sand cast iron grating for Gully trap <b>(SH: 17.29)</b>	Each	Rs.24.60 (Rs.Twenty four and paise sixty)	246
10 Nos	Providing and fixing ball valve (brass) of approved quality,High or low pressure,with plastic floats complete: 15mm nominal bore <b>(SH: 18.18.1)</b>	Each	Rs.309.00 (Rs.Three hundred and nine only)	3,090
30 Nos.	Providing and fixing 100 mm PVC multi floor trap of approved quality in the toilet room	Each	Rs.112.90 (Rs.One hundred and twelve and paise ninety)	3,387
15 Nos	Supplying and fixing PTMT 600 mm Towel rod of approved quality including all cost of materials and labour charges for fixing etc complete <b>(SH:17.73.2)</b>	Each	Rs.327.60 (Rs.Three hundred and twentyseven and paise sixty)	4,914
15 Nos	Supplying and fixing PTMT 138 x 102 x 75 mm soap dish of approved quality in the toilet room including all cost of materials and labour charges for fixing etc complete <b>(SH.18.65)</b>	Each	Rs.183.60 (Rs.One hundred and eightythree and paise sixty)	2,754

15000 ltr.	Providing and placing on terrace (at all floor levels)polyethylene water storage tank ISI ; 12701 marked ,with cover and suitable locking arrangements and making necessary holes for inlet ,outlet and over flow pipes but without fittings and the base support for tank.750 litre capacity <b>(SH: 18.48)</b>	Litre	Rs.5.60 (Rs.five and paise sixty)	84,000
10 Nos	Providing and fixing square-mouth S.W.gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 30 x 300 mm size (inside) the weight of cover to be not less than 4.5kg aand frame to be not less than 2.7 kg a per standard design 100 x 100 mm sixe P type - with common burnt clay F.P.S (non-modular) bricks of class designation 7.5 <b>(SH: 19.4.1.1)</b>	Each	Rs.1,995.40 (Rs.One thouand nine hundred and ninetyfive and paise forty)	19,954
2 Nos	Making soak pit 2.5m diameter 3.0metre deep with 45x45 cm dry brick honey comb shaft with bricks and S.W.drain pipe 100mm diameter,1.8m long complete as per standard design <b>(SH: 19.32.1.)</b>	Each	Rs.17,815.50 (Rs.Seventeen thousand eight hundred and fifteen and paise fifty)	35,631
250 m2	Providing and fixing poly vinyl chloride(PVC) pipes of dia 110 mm having thermal stability for hot & cold water supply, including all PVC plain&brass threaded fittings .This includes jointing of pipes & fittings,with one step PVC solvent cement ,trenching,re-filling & testing of joints complete as per direction of Engineer-in-charge. - <b>external work</b> 110mm dia pipe (4 kgf/cm2 - for sewage line)	m	Rs.225.00 (Rs.Two hundred and twentyfive only)	56,250
	Supplying and providng 110mm dia PVC Specials for line work			
25Nos	a. 110 mm dia bend	Each	Rs.157.60 (Rs.One hundred and fiftyseven and paise sixty)	3,940
25Nos	b. 110 mm dia Boor bend	Each	Rs.211.00 (Rs.Two hundred and eleven Only)	5,275
10 Nos	c. 110 mm dia Tee.	Each	Rs.205.25 (Rs.Two hundred and five and paise twentyfive)	2,053
10 Nos	d. 110 mm dia Vent cowl	Each	Rs.89.10 (Rs.Eightynine and paise ten)	891



25 Nos	Providing <b>M.S.foot rests</b> including fixing in position with 20x20x10mm cement concrete block 1:3:6 (1 cement: 3 Coarse sand : 6 graded stone aggregate 20 mm nominal ize ) as per standard design as per direction of engineer-in-charge (SH: 19.15.1) <b>with 20 x 20mm square bar</b>	Each	Rs.323.90 (Rs.Three hundred and twentythree and paise ninety)	8,098
5 Nos	Supplying and fixing C.I.Cover without frame for man hole/water tank: <b>455 x 610 mm rectangular C.I. cover (light duty)</b> the weight of the cover to be not less than 23 kg.	Each	Rs,1,216.30 (Rs.One thousand two hundred and sixteen and paise thirty)	6,082
3 Nos	Providing Over flow with PVC Pipe of 50mm dia., 50 cm longembedeed in taqnk wall with cement concrete 1:2:4 and finished with cement grout mixed with water proofing compound inclusive of all cost of material,labour, etc complete as per the direction of Engineer-in-charge	Each	Rs.77.20 (Rs.Seventyseven and paise twenty)	232
50 kg	Steel work welded in built up section/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required In gratings, frames, guard bar, <b>Ladder</b> railing bracket gates and similiar works <b>(SH: 10.25.2)</b>	Kg	Rs,102.80 (Rs.One hundred and two and paise eighty)	5,140
50 kg	Providing and fixing hand rail of approved size by welding etc. to steel ladder railling, balcony railing, staircase ralling and similar works, including applying priming coat of aproved steel primer <b>Using G.I. pipes (SH: 10.26.3)</b>	Kg	Rs.98.75 (Rs.Ninetyeight and paise seventyfive)	4,938
1 No.	Supplying and providing G.M.Ball valve of approved quality, high pressure or low pressure with plastic float to suit 25mm nominal bore (SH. 18.18.3)	Each	Rs.511.10 (Rs.Five hundred and eleven and paise ten)	511
60 m3	Dry rubble masonry with hard tone in foundation and plinth neatly paacked as per direction of the Engineering-in-charge	m3	Rs.2,831.80 (Rs.Two thousand eight hundred and thirtyone and paie eighty)	169,908

	175 m3	Random rubble masonry with hard stone in superstructure above plinth level and upto floor five level, including levelling up with cement concrete 1:6:12 ( 1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) etc using Cement mortar 1:6 (1 cement : 6 coarse sand) (SH: 7.2.1)	m3	Rs.5,709.30 (Rs.Five thousand seven hundred and nine and paise thirty)	999,128
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**Total Estimate P.A.c**

**43,108,497**

**(Rs. Four crore thirtyone lakh eight thousand four hundred and ninety seven only)**