

**NOTICE INVITING TENDERS**  
**(NATIONAL COMPETITIVE BIDDING)**  
**SHIVAJI COLLEGE, UNIVERSITY OF DELHI**  
**RING ROAD, RAJA GARDEN**  
**NEW DELHI -110027**

1. Online bids are invited on single stage two bid system for “CIVIL WORKS ” for the college premises . Manual bids shall not be accepted.
2. **Document Download:** Tender documents may be downloaded from Shivaji College, University of Delhi web site <http://www.shivajicollege.ac.in/tender.php> and CPPP site <https://eprocure.gov.in/eprocure/app> as per the schedule as given in CRITICAL DATE SHEET as under.

**CRITICAL DATE SHEET**

<b>Published Date</b>	<b>As per CPP portal</b>
<b>Bid Document Download / Sale Start Date</b>	
<b>Pre bid meeting</b>	
<b>Bid Submission Start Date</b>	
<b>Bid Submission End Date</b>	
<b>Bid Opening Date</b>	

**2. Bid Submission:**

**Bids shall be submitted online only at CPPP website: <https://eprocure.gov.in/eprocure/app>.**

Tenderer/Contractor are advised to follow “Instructions to Bidder for Online Bid Submission” provided in the Annexure “Civil work” for online submission of bids.

Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

3. Not more than one tender shall be submitted by one bidder or bidders having business relationship. Under no circumstances will father and his son(s) or other close relations who have business relationship with one another (i.e. when one or more partner(s)/director(s) are common) be allowed to tender for the same contract as separate competitor. A breach of this condition will render the tenders of both parties liable to ejection. Not more than one tender shall be submitted by any licensee / trust or societies / trusts having kinship relationships.

4. Tenderer who has downloaded the tender from the Shivaji College, University of Delhi website <http://shivajicollege.ac.in/Staffctrl/Tender> and Central Public Procurement Portal (CPPP) website <https://eprocure.gov.in/eprocure/app>, <https://eprocure.gov.in/epublish/app>, **shall not tamper/modify the tender form including downloaded financial Bid template in any manner**. In case if the same is found to be tempered/ modified in any manner, tender will be completely rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with Shivaji College.

5. Intending tenderers are **advised to visit** Shivaji College website <http://www.shivajicollege.ac.in/tender.php> and CPPP website <https://eprocure.gov.in/eprocure/app> **regularly till closing date of submission** of tender for any corrigendum / addendum/ amendment.

6. Applicant/ bidder must provide non-refundable demand draft of **Rs. 5,000/- (Rupees Five thousand only)** with their application/downloaded tenders as the cost of tender forms/ documents in favour of **Principal, Shivaji College, payable at New Delhi**, issued by any Nationalized/ Scheduled Bank having validity for three months. All applicable bank charges are to be borne by the applicant and the applicant shall have any no claim what so ever on this account on Government. In case of re-tendering, the firms, which have submitted the Demand Draft (DD) in earlier calls will require to submit DD along with their tender/application in subsequent calls also. Tender not accompanied with the cost of tender documents is liable to be rejected. However, public sector undertaking / Govt undertaking firms/SME are exempted from the payment towards cost of tender documents.

7. **Earnest Money Deposit of ₹ 1,60,000/-** is to be deposited through Demand Draft in favour of Principal, Shivaji College, payable at New Delhi. Bidders are required to submit the details of EMD (**bearing no interest**) payment at the time of Bid Preparation.

8. The **Hard Copy of original instruments** in respect of cost of tender document, earnest money and undertaking must be delivered to the **Principal, Shivaji College, Ring Road, Raja Garden, New Delhi – 110027 on or before bid opening date/time as mentioned in critical date sheet**. Tenderer will be rejected at the initial stage itself in case of non-submission of original payment instrument like DD etc., against the submitted bid. The Demand Draft attached/submitted for tender fee shall be non- refundable.

9. The bidders should have the AVERAGE ANNUAL FINANCIAL TURNOVER (Similar work) during the last 3 years, ending 31st March of the previous financial year, should be at least Rs. 80.00 lakh. Certificate from Chartered Accountant for the same shall be furnished.

**OR**

The Bidder should have EXPERIENCE in the similar field of providing civil works in the Government Departments/University for the last three years. Relevant proof for supporting the above shall be submitted.

a. Three similar completed works costing not less than the amount equal to Rs 25 lakh .

**Or**

b. Two similar completed works costing not less than the amount equal to Rs 40 lakh.

**Or**

c. One similar completed work costing not less than the amount equal to Rs 60 lakh.

**NOTE :-** Similar work means new building construction work and repair & renovation of Building work.

10. Bids will be opened as per date/time as mentioned in the Tender Critical Date Sheet. After online opening of Technical-Bid the results of their qualification as well Price-Bid opening will be intimated latter.

11. **BOQ RATES** includes material, labour charges , all require/necessary insurance, Electricity & water charges, administrative charges, margin, all statutory dues/obligations on civil work and any other charges by whatever name called etc, but excluding GST (as per applicable rates). The payment will be made to contractor on the basis of quoted amount plus GST only.
12. The college is required rates on 108 items on the basis of ONE “Unit of Measurement”(UoM). The college will give order for repair /renovation work to the contractor as and when require during the contract period. The contractor will submit proposal of actual UoM to be require and drawings for Good for construction (in case of renovation works) certified by architect.
13. The college will award the contract to the bidder who quoted maximum numbers of lowest rate of items out of total 108 items. In case of tie between two or more bidders, the bidder will be finalized on the basis of experience/turnover on recommendation of committee and with the approval of Principal.
14. Civil work means all repair and renovation work of college building premises.
15. **Period :-** The college will award “Civil work” contract for one year which may extended another one year subject to approval of competent authority on the basis of same terms & conditions.
16. **Security (Performance guarantee) :-** The finalized bidder will be required to furnish security of Rs 1,60,000/- value in the form DD in favour of Principal, Shivaji College before start of work. The said amount will be refunded only after six months of complication of work. No interest will be given on the security amount
17. The college with sufficient justifications at its discretion to relax any of the condition/s mentioned in tender document and/or increase any criteria to short list the bidders during scrutiny of tender.
18. Penalty In case of non-compliance of any terms & conditions of the agreement, the College reserves the right to impose penalty, forfeit the EMD or Security Amount and terminate the contract with immediate effect.
19. **The College reserves the right to cancel the tender at any stage without assigning any reason thereof.**



Acting Principal

## **Submission of Tender**

**The tender shall be submitted online in two part, viz., technical bid and price bid.**

All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.

The offers submitted by Telegram/Fax/email shall not be considered. No correspondence will be entertained in this matter.

## **TECHNICAL BID**

The following documents are to be furnished by the bidders along with **Technical Bid** as per the tender document:

- 1) Signed and Scanned Copy of Tender fee and EMD.
- 2) Signed and Scanned copy of statutory registration like GST certificate, PAN No., contractor registration from MES/any state of PWD/ CPWD etc.
- 3) Signed and Scanned Copy of Incorporation certificate shall be submitted. (partnership deed in case of partnership firm, Memorandum and Article of Association in case of limited company, ownership certificate in case of sole of proprietary firm and Power of Attorney in favour of authorized signatory in case the firm is not a proprietary firm, Registration certificate /Trade license certificate/ Enlistment certificate / Incorporation certificate in any Govt. deptt. / Statutory body / PSU).
- 4) Signed and scanned copy of supporting documents as mentioned at point 9 of NIT (Page No. 3).
- 5) Signed and Scanned copy of Tender Acceptance Letter. (**Annexure -I**) and technical specifications (**Annexure –II**)
- 6) Signed and Scanned Copy of an Undertaking duly attested by Notary on a non-judicial stamp paper of value of Rs.10/- (Rupees ten Only) regarding their non-blacklisting by any of the Govt. Departments, Public Sector Undertakings and/or by Central Vigilance Commission during the last three years.

## **FINANCIAL BID**

- (a) Financial Bid undertaking
- (b) Schedule of price bid in the form of BOQ\_XXXX .xls

## **FINANCIAL BID UNDERTAKING**

From:  
(Full name and address of the Bidder)

To,  
The Principal  
Shivaji College, University of Delhi Ring  
Road, Raja Garden  
New Delhi -110027

Dear Sir/Madam,

1. I submit the Price Bid for Tender for “**Civil work**” and related activities as envisaged in the Bid document.
2. I have thoroughly examined and understood all the terms and conditions as contained in the Bid document, and agree to abide by them.
3. I offer to work at the rates as indicated in the BOQ, inclusive of basic price and any other charges/cost by whatever name called.

Yours Faithfully,

Signature of authorized Representative

b. **SCHEDULE OF PRICE BID IN THE FORM OF BOQ\_XXXX.xls**

The below mentioned Financial Proposal/Commercial bid format is provided as BoQ\_XXXX.xls along with this tender document at <https://eprocure.gov.in/eprocure/app> . Bidders are advised to download this BoQ\_XXXX.xls as it is and quote their offer/rates in the permitted column and upload the same in the commercial bid. **Bidder shall not tamper/modify downloaded price bid template in any manner.** In case if the same is found to be tempered/modified in any manner, tender will be completely rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with the college .

1. The rates shall be quoted in Indian Rupee only.
2. GST extra as applicable.
3. In case of any discrepancy/difference in the amounts indicated in figures and words the amount in words will prevail and will be considered.
4. The payment will be made to the contractor at any Bank Account maintained in India by way of ECS/RTGS after deducting all statutory deductions as applicable.
5. The quoted rates shall remain same. firm throughout the tenure of the contract and no revision is permissible for any reason.

Authorized Signatory  
(Signature of the Authorized Person)

**TENDER ACCEPTANCE LETTER**  
**(To be given on Company Letter Head)**

**The Principal,  
Shivaji College, University  
of Delhi Raja Garden, Ring  
Road  
New Delhi - 110027**

**Sub: Acceptance in respect of Terms & Conditions of Tender Document of “  
Civil Work”**

**Ref: NIT NO- .....Dt. ....**

**Sir,**

- i. I/We have downloaded the tender document(s) for the above mentioned ‘Tender/Work’ from the web site <http://eprocure.gov.in/eprocure/app> .
- ii. I/We hereby certify that I/We have read all the terms and conditions of tender document (including all annexure(s), schedule(s), drawing(s), etc.), which shall form part of the contract and I/We shall abide hereby all terms & conditions contained therein.
- iii. The Corrigendum(s) issued from time to time by your department/ organization too has also been taken into consideration, while submitting this acceptance letter.
- iv. I/We hereby unconditionally accept all the terms and Conditions of above mentioned tender document and corrigendum(s) as applicable.
- v. In case, any provisions of this tender are found violated, then your department/ organization shall without prejudice to any other right or remedy be at liberty to reject my bid including the forfeiture of earnest money deposit.
- vi. I/We confirm that our bid shall be valid up to 120 days from the date of opening of cover-1, Techno-commercial Bid.
- vii. I/We confirm that our bid as indicated in the BOQ is BOQ rates as defined in NIT.
- viii. I/We hereby certify that all the statements made and information supplied in the enclosed Annexures and additional data etc. furnished herewith are true and correct.
- ix. I/We hereby certify that all technical specification will be strictly followed during the contract.
- x. I/We hereby understand that the college is not liable to pay any amount in case civil work would fail to meet technical criteria as per CPWD/PWD norms.

- x i. I/We understand that you are not bound to accept the highest or any bid you may receive.
- x ii. I/We certify that comply with the eligibility requirements are as per tender documents.
- x iii. I / We do hereby declare that our Firm has no any relative in your institution.
- x iv. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.

**Seal and Sign of Agency**



**TECHNICAL DATA SHEET**

- a) Contractor will submit the actual quantity of work to be done every time before start of work. The contractor will submit the drawing (Good for Construction) for renovation works certified by architect.
- b) Contractor should take work order before start any civil work in the college premises during the contact period.
- c) Bill will generate on actual quantity of work to be done time to time according to requirement of the college.
- d) Contractor will give quotations for extra items, if required for the civil work during the contact period.

S. No.	Item Description	UoM
1	<b>EARTH WORK</b>	
1.01	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 upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil	Cum
1.02	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum
1.03	Excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead	Cum

2	<b>CONCRETE WORK</b>	
2.01	1:4:8 (1 Cement: 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	Cum
2.02	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing : 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	Cum
3	<b>Reinforced CEMENT CONCRETE</b>	
3.01	Providing and laying in position ready mixed M - 25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately)	
3.02	All works up to plinth level	Cum
3.03	All works above plinth level up to floor V level.	Cum
3.04	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete up to plinth level . Thermo-mechanically treated bars of grade Fe-500 D or more	kg
3.05	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo-mechanically treated bars of grade Fe-500 D or more	kg

3.06	<b>Centring and shuttering including strutting, propping etc. and removal of form for all heights:</b>	
3.07	Foundations, footings, bases of columns, etc. for mass concrete.	sqm
3.08	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	sqm
3.09	Columns, Pillars, Piers, Abutments, Posts and Struts.	sqm
3.1	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead	sqm
4	<b>STEEL WORK</b>	
4.01	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 grating, frames, guard bar, railing, brackets, gates and similar works.	Cum
4.02	Concentena wire	Cum
4.03	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired ngineerin- charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	sqm

4.04	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top /centre hung, with beading and all members such as F7D, F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings, complete all as per approved design, (sectional weight of only steel members shall be measured for payment). Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	kg
4.05	Providing and fixing angle iron frames for doors, windows and ventilators of mild steel Angle sections of size 35x35x5 mm, joints mitred and welded by angle iron 35x35x5 mm or 35x 5 mm flat pieces to the existing T-iron frame or to the wall with dash fastener, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer, all complete as per the direction of Engineer-In-charge	kg
4.06	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections ( galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from	sqm
5	<b>Barbed wire</b>	
5.01	Providing and fixing barbed wire on iron post placed at Required distance emdedded in cement conc. Provided with horizontal lines and two diagonal interwoven with horizontal wire of barbed wire weighing 9.38 Kg per 100 mtr.(minimum) between two posts fitted and fixed with G.I. Staples, turn buckels etc. Complete in all respect. Payment to be made per metre length of barbed wire used.with G.I. barbed wire	R.Mtr
6	<b>BRICK WORK</b>	

6.01	Brick work with common burnt clay F.P.S. (Non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:4 (1 cement : 4 coarse sand)	Cum
6.02	Brick work with common burnt clay F.P.S. (Non modular) bricks of class designation 7.5 in super structure above plinth level upto floor V level in all shapes and sizes in : Cement mortar 1:4 (1 cement: 4 coarse sand)	Cum
6.03	Brick work with non modular fly ash bricks conforming to IS:12894, class designation 10 average compressive strength in super structure above plinth level up to floor V level in : Cement mortar 1:4 (1 cement : 4 coarse sand)	Cum
6.04	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in perstructure above plinth level up to floor V level Cement mortar 1:3 (1 cement :3 coarse sand)	sqm
7	<b>FINISHING</b>	
7.01	12 mm cement plaster of mix: 1:4 (1 cement : 4 Fine sand)	sqm
7.02	12 mm cement plaster of mix: 1:6 (1 cement : 6 Fine sand)	sqm
7.03	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1 cement : 6 Fine sand)	sqm
7.04	6 mm cement plaster of mix: 1:3 ( 1 cement : 3 fine sand)	sqm
7.05	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge,, With cement mortar 1:4 (1 cement : 4 fine sand)	sqm
8	<b>DISMANTLING WORK</b>	
8.01	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar	cum

8.02	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured) : From Brick work in Cement Mortar	1000 nos
8.03	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge ( all grade concrete)	cum
8.04	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	cum
9	<b>Painting work</b>	
9.01	Applying one coat of cement primer of approved brand and manufacture on wall surface. Water thinnable Cement primer	sqm
9.02	Finishing walls with water proofing cement paint of required shade :New work (Two or more coats applied @ 3.84 kg/10 sqm)	sqm
9.03	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade ,one or more coats on old work	sqm
9.04	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade: one or more coats on old work	sqm
9.05	French spirit polish one or more coats on old work.	sqm
9.06	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering the surface smooth including necessary repairs to scratches etc.complete	sqm
9.07	Wall painting with premium acrylic emulsion paint of interior grade having VOC (Volatile organic compound) content less than 50 grams/litre of approved brand and manufacture,including applying additional coats wherever required to achieve even shade and colour of Two coats	sqm
9.08	Finishing walls with Acrylic Smooth exterior paint of required shade :old work (Two or more coat applied @ 1.67 ltr/10 sqm) on existing cement paint surface	sqm

9.09	Removing painting with synthetic enamel paint and like by scrapping ,sand papering the surface smooth including necessary repairs to scratches etc.complete	sqm
9.1	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade New work (two or more coats) over and including water thinnable priming coat with cement primer As per direction of Site in charge	sqm
9.11	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	sqm
9.12	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade : two or more coats Old works	sqm
10	<b>Stainless Steel</b>	
10.01	Providing and fixing stainless steel ( Grade 304) gate 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.)	kg
10.02	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.)	kg

11	<b>Plumbing work</b>	
11.01	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc., 50 mm dia nominal bore	mtr
11.02	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc., 40 mm dia nominal bore	mtr
11.03	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc., 32 mm dia nominal bore	mtr
11.04	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc., 25 mm dia nominal bore	mtr
11.05	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc., 20 mm dia nominal bore	mtr
11.06	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc., 15 mm dia nominal bore	mtr
11.07	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, (i) Single socketed pipes. 110 mm dia	mtr
11.08	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.	mtr



11.09	Constructing masonry Chamber 120x120x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :	nos
12	<b>Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete</b>	
12.01	15 mm nominal bore	each
12.02	20 mm nominal bore	each
12.03	25 mm nominal bore	each
13	<b>Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :</b>	
13.01	15 mm nominal bore	each
13.02	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	each
13.03	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. 15 mm nominal bore	each
13.04	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour. 15 mm nominal bore with 45 cm length	each
13.05	providing and fixing of concealed stop cock jaquar make model no FLR 5433N or equeled make model as per approved by site in charge ,	nos
13.06	providing and fixing of concealed stop cock jaquar make model no FLR 5441NK or equeled make model as per approved by site in charge	nos
13.07	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	rmtr

13.08	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design. With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each
14	<b>SANITARY FIXTURES FITTINGS &amp; INSTALLATION.</b>	
14.01	Providing, installing and testing of jet spray consisting of jet spray, triangular spacer attached with toilet seat hinges, C.P. brass angle stop cock with filter C.P brass flow regulator (flow 8 LPM), C.P. brass wall flange and flexible pipe complete as required complete. Make : Jaquar/Parryware/Hindware or equivalent	each
14.02	Providing and fixing sensor urinal white vitreous china battery based infrared sensor operated urinal of approx. having pre & post flushing with water, having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification, as per complete item direction of Engineer-in-charge. (make jauqar, hindware,parryware or equilent)	nos
14.03	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required( hindaware parryware ,jaquar, or approved make )	nos
15	<b>Structural strengthening and Retrofitting</b>	
15.01	Providing and placing in position Micro-concrete <b>(RENDEROC RG of FOSROC or equivalent)</b> having minimum compressive strength 50 N/mm <sup>2</sup> ..... reinforcement in order to decide on the requirement and addition of reinforcement.) 25 mm average thickness for slabs	sqm

15.02	Providing and placing in position Micro-concrete (RENDEROC RG or FOSROC or equivalent) having minimum compressive strength 50 N/mm <sup>2</sup> ..... reinforcement in order to decide on the requirement and addition of reinforcement.) 50 mm average thickness for beams	sqm
15.03	Providing and placing in position Micro-concrete (RENDEROC RG or FOSROC or equivalent) having minimum compressive strength 50 N/mm <sup>2</sup> ..... reinforcement in order to decide on the requirement and addition of reinforcement.) 60 mm average thickness for columns	sqm
16	<b>Introducing new reinforcement bars for structural connections in RCC beams</b>	
16.01	For 10mm dia bar ( Dia of hole 12mm and depth of hole 100 mm)	Each
16.02	For 16mm dia bar ( Dia of hole 18mm and depth of hole 160 mm)	Each
16.03	For 20mm dia bar ( Dia of hole 24mm and depth of hole 200 mm)	Each
16.04	Providing and fixing 12mm dia Galvanized iron injection nipples.....complete as per direction of Engineer-in-Charge.	Each
16.05	Making groove of size 12 mm X 12 mm along the crack line and .....making the crack dust free by blowing compressed air and washing with water.	Metre
16.06	Injecting cement slurry 1:3 ( 1 Cement: 3 water ) by weight..... as per direction of Engineer-in -Charge.(Fixing of GI nipples shall be paid for separately)	Per bag of cement
16.07	Providing,mixing and applying the epoxy bonding .....The rate of application shall be as per manufacturers recommendations.)	Sqm
16.08	Providing and fixing hard drawn steel wire fabric of size 50mmX 50mm ,..... complete as per direction of Engineer-in -charge.	Kg

17	<p><b>Guniting with cement and coarse sand mortar in 1:3 ratio ejected under a pressure of 2 to 3 kg/ sqcm from a cement gun on RCC / Brick masonry/Stone masonry after removing plaster on RCC work/ Brick masonry/Stone masonry , RCC surface shall be roughened by hacking about 6 mm deep at a close interval not greater than 10 mm C/C (average) including opening all cracks up to maximum possible depth in V form, including removing/cleaning of all loose surface, losse deteriorated concrete.In case of masonry work , joints shall be raked to a depth of 10 mm for brick masonry and 20 mm for stone masonry.All corroded reinforcement shall be cleaned properly to remove all the scales and rust by wire brush and by rubbing with emery papers and a coat of Zinc primer shall be applied as per manufacture specifications to the reinforcement after cleaning. Epoxy bonding agent (NITOBOND EP of FOSROC or equivalent) shall be applied to suitably prepared old concrete surface as per manufacture specifications and guniting shall be done as soon as possible with in the "open time" of Epoxy bonding agent:</b></p>	
17.01	As a cement plaster 30mm -50mm for walls, columns,and balconies etc.	Sqm
17.02	As a cement plaster 25mm -30mm for soffits of slabs and beams etc.	Sqm
18	(Dekguard Standard of FOSROC or equivalent)	

18.01	<p>Applying two coats of anti carbonation coating (<b>Dekguard Standard of FOSROC or equivalent</b>) by spraying on RCC exposed surface of minimum wft of 100 micron per coat and second coat at right angle to first coat when first coat will become dry over primed surface . The total dry film thickness of two coats shall be not less than 100 microns and shall be capable of providing good carbon dioxide diffusion resistance. The permeability shall be Nil when tested at 24 hours as per BS 1881. One coat of primer (<b>Dekguard Standard Primer of FOSROC or equivalent</b>) shall be applied on prepared RCC exposed surface by spraying and allowed to cure for a minimum of 2 hours @ 20°C or 1 hour @ 35°C before first coat of anti cabonation coating. The surface shall be prepared by cleaning the contamination like oil, grease &amp; treatment of algae etc. and filling of blowholes by filling suitable cementitious Acrylic putty ( <b>Renderoc FC of FOSROC or equivalent</b>) . Price includes all operation i.e. primer coat &amp; two coat of anti-carbonation coating , preparation of surface &amp; filling of blowholes by cementitious Acrylic putty, all material and labour etc.</p>	Sqm
19	<b>Aluminium work</b>	

19.01	<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) : Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)</p>	Sqm
19.02	<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) Powder coated aluminium (minimum thickness of powder coating 50 micron)</p>	Sqm
19.03	<p>Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5.50 mm thickness</p>	Sqm
19.04	<p>Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick &amp; 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge Powder coated minimum thickness 50 micron aluminium tubular handle bar</p>	nos

19.05	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete Anodized (AC 15 ) aluminium as per direction of Engineer-in-charge	nos
19.06	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete	nos
19.07	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. With stainless steel cover plate minimum 1.25 mm thickness	nos
19.08	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete. 355 X 19 mm	nos
19.09	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc. complete as per direction of Engineer-in-Charge Powder coated minimum thickness 50 micron aluminium tubular handle bar	nos
19.1	Providing and fixing of HPL (high pressure laminates) with booth side decorative look approved color and shade make marino/century/royal touch/decorative lam etc as per approved by Site in charge,	sqm
20	<b>Stone &amp; tiles work</b>	

20.01	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand)	Sqm
20.02	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete,	Sqm
20.03	Providing and laying vitrified floor tiles in different 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 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.	Sqm
20.04	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including pointing the joints with white cement and matching pigments etc., complete	Sqm
20.05	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the 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 of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	Sqm



20.06	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture 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. Granite of any colour and shade : Area of slab over 0.50 sqm	Sqm
20.07	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory paction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge	Sqm
20.08	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.	Sqm
20.09	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS:15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cementmortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns	Sqm
21	<b>other works</b>	
21.01	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs balconies, terraces etc consisting of following operations Applying a slurry coat of neat cement using 2.75 kg/sqm of	Sqm

21.02	<p>light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections galvanising@ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of (24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture in the grid, including, cutting/ making opening“for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I.</p>	Sqm
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