

DELHI DEVELOPMENT AUTHORITY

PRESS ENDER NOTICE

NIT No. 03/EE/SED-5/DDA/08-09

Sealed item rate tenders are invited for the Railways following works on behalf of DDA from the approved contractors of appropriate class of DDA, CPWD MES (Civil Works) and Civil Wing of P&T Department on the date mentioned upto 3.00 PM which shall be opened on the same day at 3.30 pm at Vikas Sadan, Press Building, DDA Office INA, New Delhi-110 013, by the respective EE in the presence of the contractor, their authorized representatives.

The tender documents can be obtained on any working day from the date of publication from the date of publication from the CAU/SEZ/Sale counter Press Building Vikas Sadan, between 11.00 AM to 3.00 PM on payment of cost tender (Non refundable) in cash as well as amount of Earnest Money mentioned against each work on Production o valid enlistment certificate of Registration with Contractor cell (SEZ)DDA and Centralized tender office at Vikas Sadan and a certificate from the contractor that up to date returns have been filed along with the copies of return submitted to the Department of Trade and Taxes.

Earnest money should accompany the tender in the form of Call Deposit Receipt or demand draft of Schedule bank guarantee by the Reserve Bank of India in favour of A.O. (CAU)/SEZ/DDA. Tender of the contractors who does not enclose the earnest money in the prescribed manner all shall be summarily rejected. The Agency shall submit a performance guarantee of 5% of the Tender amount in the form of Govt. Securities of FDR of Guarantee bond of any Scheduled Bank SBI within 15 days of issue of letter of award.

S.No.	Name of Divn. & Address	Name of work	Estimated Cost E.M. Deposit Cost of Tender	Last date of Sale/Dt. of opening	Time Allowed
1.	SED-5/DDA Sarita Vihar New Delhi	Construction of Additional Accomodation in Chaupal at Pilanji Village (1950)	Rs. 27,05,578/- Rs. 54,112/- Rs. 500/-	To be filled by F.O. to C.E.(SEZ)	Nine Months

AE

EE (P)

SE/CC-15

DELHI DEVELOPMENT AUTHORITY

NOTICE INVITING TENDERS

NIT No. 03/EE/SED-5/DDA/08-09

Division : SED-5

Tender in the prescribed form are hereby invited on behalf of the Delhi Development Authority for:-

Name of the work: **Constriction of additional Accomodation in Chaupal at Pijanji Village (1950)**

1. Estimated Cost: Rs. 27,05,578/-
2. Contract document consisting of the detailed plans complete specifications, schedule of quantities of the various item of work to be done and a set of conditions of contract can be seen/purchased at the CAU(SEZ)DDA Sale Counter Vikas Sadan between 11.00 am to 3.00 pm every day, except on Sundays and Public Holidays.

(a) The site of the work is available.

- 3.(a) The tenders shall be placed in sealed covers to be issued by the AO/CAU/SEZ & sale counter Vikas Sadan duly super scribed the name of work, estimated amount day and date of opening and name of contractor to whom the tender document are sold. These tender will be submitted by the contractor at Vikas Sadan (Ground Floor).

Separate boxes are available for submission of tenders for each of opening. The contractor should ensure that tender are placed in the proper boxes fixed and provided for a particular day upto 7(Seven) days in advance (including date of opening 10 a.m to 5 p.m. except the date of opening when it will be upon 3.00 p.m. only.

(b) The tenders should be opened by the concerned Ex. Engineers on the fixed at 3.30pm at Vikas Sadan. Only registered contractor or one of their authorized representative (having proper authority on letter head of the contractor) will be allowed to enter into the premises where tenders will be opened.

4. Tender documents consisting of plans, specifications, the schedule of quantities of the various clauses of work to be done the set of terms and conditions of necessary documents can be seen in the office between hours of 11.00 am and 3.00 pm from _____ to _____ on any working day. Tender

documents will be issued the above mentioned hours on any day from the office of CAU/South East Zone/Sale Counter of Vikas Sadan on payment of the following amount.

- (i) Rs. 500/- in cash as cost of tender (non-refundable)
- (ii) Earnest Money of Rs. 54112/- in cash/Receipt treasury Challan/Deposits at call receipt of a Scheduled bank/fixed deposit receipt of a scheduled bank/demand draft of a scheduled bank issued in favour of AO (CAU) South East Zone, DDA. When amount money is more than Rs. 5 Lakh, part or earnest money is acceptable in the form of bank guarantee also. In such minimum 50% of earnest money (but on less than Rs. 5 Lakh) shall be deposited in the shape as described above and for balance amount of earnest money, bank guarantee will also be acceptable in favour or AO/CAU/South East Zone DDA.

5. The Contractor should quote in figures as well as in word the rate amount tendered by them. The amount for each item, should be worked out and the requisite totals given.

6. When a contractor signs a tender in an Indian language the percentage above or below and the tendered amount in case of PWD-form No.7 and the total amount in the case of PWD form Nos. 8 and 12 Should also be written in the same language. In the case of illiterate contractor the rate/amounts tendered should attested by a witness.

7. Earnest money amounting to Rs. 54112/- in Currency Receipt Challan/Call Deposit Receipt/Demand Draft of a Scheduled Bank guarantee by the Reserve Bank of India must accompany with each tender and each tender is taken sealed cover addressed to **EE/SED-5**.

(a) The contractor whose tender is accepted shall execute an agreement on Rs.50/- stamp paper reiterating his acceptance of the execution of the work on the rate and conditions set in the contract documents.

(b) Each tender must be submitted to EE/SED-5 in seal cover and addressed wherein.

Material for which BIS had licensed use of BIS certification mark Material bearing BIS certification mark shall used. In case where articles of different makes and design bearing certification marks are available the decision of Engineer-in-charge about the design to be used in work shall be final and binding on the contractor

where articles with BIS certification mark are not available the quality shall confirm to the relevant CPWDS specifications/BIS specification or as approved by the Engineer-in-charge.

9. The person/persons, whose tender(s) may be accepted (hereinafter called the contractor) shall permit DDA at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 10% of the gross amount of each running bill till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. Such deductions will be made and held by DDA by way of Security Deposit unless he/they has/have deposited the amount of Security at the rate mentioned above in cash or in the form of Government Security at the rate mentioned above in cash or in the form of Government Securities or fixed deposit receipts. In case a fixed deposit receipt of any Bank is furnished by the contractor to the DDA as part of the security deposit and the Bank is unable to make payment against the said fixed deposit receipt the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the DDA to make good the deficit.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from or paid by the sale of a sufficient part of his security deposit or from the interest arising there from, or any sums which may be due to or may become due to the contractor by DDA on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid the contractor shall within 10 days make good in cash or fixed deposit receipt tendered by the State Bank of India or by Scheduled Banks or Government Securities (if deposited for more than 12 months) endorsed in favour of the Engineer-in-charge, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof, the Security Deposit shall be collected from the running bills of the contractor at the rates mentioned above and the Earnest Money if deposited in cash at the time of tenders will be treated a part of the Security Deposit.

(a) Government papers tendered as security will be taken @5% (five percent) below its market price or at its face value, whichever is less. The market price of Government paper would be as ascertained by Divisional Officer at the time of collection of interest and the amount to interest of the extent of deficiency in value of the Government paper will be withheld if necessary.

(b) Government securities will include all forms of securities mentioned in rule 274 of the GFR except fidelity Bonds. This will be subject to the observance of the conditions mentioned under this rule against each form of security.

10. The acceptance of a tender will rest with the competent authority who does not bind himself to accept the lowest tender and reserves to himself the authority to reject are liable to be rejected.

11. Canvassing in connection with tenders is strictly prohibited and the tender submitted by the contractor who resort to canvassing shall be liable to rejection.

12. All rates shall be quoted on the proper form of the tender in figure as well as in words.

13. Item rate tender containing percentage below/above will be summarily rejected.

13.(a) It may please be carefully noted that no condition whatsoever shall be accepted by the department and the contractor is strictly prohibited for giving conditional tender, if any contractor not prepared to execute the work at the terms and conditions contained in the tender documents, he is requested not to tender for this work. It may be noted that if any contractor choose to submit conditional tender inspite of clear direction given above, is tender shall be liable to rejected summarily and his full earnest money shall stand forfeited. He will also be liable for being debarred from tendering in DDA for a period of six months.

13.(b) Monthly payment to the contractor will be made when the gross amount of the work done during the previous months is not less than indicated below:

Amount of contract

Gross value of works since previous

Bill should exceed.

Over Rs.10 lacs value

Rs. 25,000/-

Over Rs. 2 Lacs upto Rs.10 Lacs

Rs. 10,000/-

Over Rs.50,000 upto Rs. 2 lacs

Rs. 5,000/-

Over Rs.50,000/-

Rs. 2500/-

14. On acceptance of the tender the name of the accelerated representative of the contractor who would be responsible for taking instructions from the Engineer-In-Charge shall be communicated to the Engineer-in-Charge.

15. Special care should be taken to write the rates in figures as well as in words and the amount in figures only in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figure the word Rs should be written before of Rupees and “P” after the decimal figure e.g. Rs. 2.15P and in case of words the word Rupees should precede and the word paise should be written at the end. Unless the rate is in whole Rupees and followed by the word only it should invariably be in two decimal places.

16. Delhi Development Authority does not bind itself to accept the lowest or any tender and reserves to itself of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at same at the rate quoted.

17. Sales Tax, VAT if any or any other tax and cess duty on material in respect of this contract shall be payable by the contractor and DDA will not entertain any claim whatsoever in this respect.

18. A contractor must produce valid certificate of Registration with works contracts call of sales tax department of GNCTD & the tax clearance certificate in form XI (under rule 8(2) of Delhi Sales Tax of Works contract rule 1999) issued by the said call before the tender papers can be sold to him.

19. A Contractor shall not be permitted to tender for works in the DDA Zone responsible for award and execution of contracts) in which any of his near relatives is posted as Divisional Accountant or as an officer in any capacity between the grades of CE and JE (both inclusive) in the DDA. He shall intimate the name of his near relations, if any, who are working as Gr. A,B or C officers in DDA. He shall also intimate the names of the persons who are working with him in any capacity or who are subsequently employed by him and who are near relatives of any Groups A,B or C officers in the DDA. Any breach of this condition by the contractor would render him liable to action under clause 3 of the agreement. In addition, he would also be liable to be debarred from rendering in future.

20. The contractor shall give a list of non gazetted DDA employees related to him.
21. No Engineer or Gazetted rank or other Gazetted Officer employed in Engineering of Administrative duties in an Engineering Department of the Govt. Service/Delhi Development Authority is allowed to work as contractor for period of two years of his retirement from Govt. Service/Delhi Development Authority. This contract is liable to be cancelled if either the contractor or any of his employees are found at any time to be such a person who had not obtained the permission of the Govt. of India/Delhi Development Authority as aforesaid before submission of the tender or engagement in the contractor's service. The Engineering Department of Govt. of India includes the Engineering Department of DDA, CPWD, MES, P&T, NDMC, MCD, DWS&SD.
22. The tender for works shall remain open for acceptance for a period of sixty days from the date of opening of tenders. If any tenderer withdraws his tender before the said period or issue of letter of acceptance whichever earlier or makes any modification in the terms and conditions of the tender which are not acceptable to the Department then the DDA shall without prejudice to other right or remedy be at liberty to forfeit 50% of the said earnest money as aforesaid.
23. The tender for the work shall not be witnessed by a contractor or contracts who himself/themselves has/have tendered for the same work. Failure to observe this condition would render the tender of the contractor tendering as well as witnessing the tender liable to summarily rejection.
24. Approved and eligible contractors of CPWD and those of appropriate class of DDA P&T Civil wins and MES are also eligible to tender. (Refer Press tender notice)
25. The facility of exemption from depositing the earnest money by virtue of executing the bond was withdrawn w.e.f. 20.12.1989 and all the bond stands cancelled from this date. Each intending tenderer has to deposit the required earnest money with individual tenders as mentioned in para-8.
26. While quoting the rate in schedule of quantities the work only should be written closely, following the amount and it should not be written in the next line.
27. The tender for the composite work includes the building portion, sanitary, water supply and drainage work.

28. The tenderer apart from being a class IB&R Contractor, must associate himself with agencies of the appropriate class which are eligible to tender for Sanitary and water supply installation.

29. The contractor shall submit the list of work which are in hand (progress).

PERFORMA FOR CLAUSE -29

Name of work	Name and particulars of division where the work is being executed	Amount of work	Position of work in progress	Remarks
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30. The tenderer shall inspect and study the drawings referred to in the tender documents in the office of the Executive Engineer before and for the purpose of submitting the tender.

30A. In the case of item rate tender invited on form PWD-8 the contractor should quote his rates only in one language, i.e. either in Hindi or English. Rates should be quoted in figures as well as in word. In case a contractor has quoted rates in both the languages and the rates so quoted differ or the rate quoted in words and figure differ, then the lowest rates quoted by the contractor shall be treated as the rate quoted by the contractor.

31. That only sealed tenders in the envelop duly prescribed name of work, date of opening and the name of division shall only considered and accepted. Envelop shall be given along with the tender by the tender clerk at sale counter.

32. It has further been observed by CTE that in particular tender the contractor did not quote rate for a particular item. However, as per tender condition, tender in which any of the prescribed conditions are not fulfilled or incomplete in any respect, such tender are liable to be rejected. Instead of rejecting such incomplete tender or adopting "Nil" rate where contractor did not quote, justified rate observed to have been paid to the contractor, thus extending undue benefit to the contractor.

ADDITIONAL CLAUSE

1. Cases of withdrawal of offer

(i) If the contractors modifies/withdraw their offer within 60 days of quoting the rates.

Action to be taken

The earnest money deposited by the contractor shall be forfeited 50% of the earnest money.

(ii) If the contractor withdraw his offer immediately after the award of work.

(iii) If the contractor/agency with draw his offer after award of work after taking over.

(iv) The work/supply shall remain open for a period of 60 days from the date of opening of quotation. The DDA shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money if any questioner withdraws this quotation before the said period or makes any modification in the terms and conditions of the offer which are not acceptable to the department and to forfeit the whole of the earnest money if the questioner whose quotation is accepted fails to commence the work/supply specify in the NIT along with changes in the scope if any) in the prescribed time or abandons the work/supply before its completion.

The earnest money deposited by the contractor shall be forfeited absolutely.

It is deemed that the contractor has entered into contract and the action under clause 2 & 3 of the agreement, the stipulated period will be taken against the contractor if he abandons the site after taking over the possessions of the site from the Engineer-in-charge. For taking action under clause 2 & 3 the only documentary proof required will be the documents showing signature of contractor or his authorized representative for taking over the possessions of site. It is further clarified that action under clause 2 & 3 of the agreement is attracted even though the contractor fails to sign the agreement of Rs.50/- non-judicial stamp paper but do not start the work from the tenth day after the date on which the order to commence the work is issued to contractor. The date of start of the work will be considered as date of taking over the possession of site. In case of tender for supply of material the documentary proof for start of work will be the submission of samples for approval to Engineer-in-charge i.e. in case the supply order is given to the contractor and if he fails to supply the material or submit the samples of Engineer-in-charge, then the action to be taken against the contractor is only the forfeiture of earnest money and if he submit the samples for supply and thereafter abandons the work or fails to supply the materials then action under clause 2 & 3 is attracted.

NIT No. 03/EE/SED-5/DDA/08-09

Signature of Divisional Officer

For and behalf of DDA

Dt. New Delhi 2007.

Copy forwarded to:

1. The Secretary, Contractor's Association, Vikas Kuteer, DDA & Central PWD "Y" shape building I.P. Estate, New Delhi. The receipt of this notice may please be acknowledged under seal of Association's Office.
2. The all SEs Circle No DDA, New Delhi.
3. The all EEs, Division No DDA, New Delhi.
4. Notice Board, Chief Engineer's New Delhi
5. Divisional Accountant, Division No DDA, New Delhi-6
6. Asst. Engineer, Sub Divn. No Division No DDA, New Delhi
7. Head Clerk for recording a copy in the work file.
8. Director (System), DDA for displaying the NIT on DDA website.

Executive Engineer

SED-5/DDA

Clause: 19

The contractor shall obtain a valid license under the Contract Labour (R&A) Act 1970 and the Contract Labour (Regulation and Abolition) Central Rules 1971 before the commencement of the work and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.

The Contractors shall comply with all the provisions of the Building and other construction Workers (Regulation of Employment and Conditions of Service Act, 1996. The Building and other construction worker's Welfare Cess Act, 1996. The Building and other construction workers (Regulation of Employment and conditions of Service) Central Rules, 1998 and the Building and other construction worker's welfare Cess Rules, 1998 as well as. The Delhi Building and other construction worker's (Regulations of Employment and conditions of Service), Rules, 2002 and the rules made there under and as modify from time to time.

1. As per above mentioned Act, a Cess @ 1% of the cost of construction/project is leviable at this notified Rate of 1% as revised by the Competent Authority from time to time.
2. The Cess Tax shall be deducted at source from the bills paid to the contractors and the proceeds of the Cess shall be released to the Building and other construction Worker's Welfare Board Constituted for the purpose by Govt. of NCT of Delhi.
3. All other terms/conditions as per above mentioned Acts as well rules made there under and modifications issued from time to time would also apply.
4. Any failure to fulfill these requirements shall attract the penal provision of this contract arising out of the resultant non-execution of the work.

C.S. No.3

Material for which BIS has licensed use of BIS certification mark Material bearing BIS certification mark shall used. In case where articles of different makes and design bearing certification marks are available the decision of Engineer-in-charge about the design to be used in work shall be final and binding on the contractor where articles with BIS certification mark are not available the quality shall confirm to the relevant CPWD specification/ BIS specification or as approved by the Engineer-in- charge.

Therefore, it is enjoined upon all concerned that the tender in which any of the prescribed conditions are not fulfilled and/or the tender which is incomplete in any respect, shall be rejected. Wherever the contractor has

SCHEDULE OF QUANTITY

Name of work: **C/o. Additional Accommodation in Chaupal at Pillanji Village, (1950).**

Item.	Description of Item	Qty	Unit	Rate	Amount (Rs.)
	EARTH WORK				
1.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 mt. in width or 10 sqm. on plan) i/c dressing of sides and ramming of bottoms lift upto 1.5m i/c getting out the excavated soil and disposal of surplus soil as directed within a lead of 50m a) All kinds of soil.	79.00 Cum	Cum		
1.2	Filling available excavated earth (excluding rock) in trenches sides of foundations etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering lead up to 50m and lift up to 1.5 m.	26.00 Cum	Cum		
1.3	Excavating trenches of required width for pipes cables etc. i/c excavation for sockets and dressing of sides ramming of bottoms depth up to 1.5m i/c getting out the excavated material, returning the soil as required in layers not exceeding 20cm in depth including consolidating each deposited layers by				

	ramming watering etc. and disposing of surplus excavated soil as directed within a lead of 50 M a) All kinds of soil i) Pipes cables etc. exceeding 80mm dia but not exceeding 300mm dia.	15.00 Mtr.	Mtr.		
1.4	Supply and filling in plinth with Jamuna sand under floors i/c watering, ramming, consolidating and dressing complete.	23.00 Cum	Cum		
1.	CONCRETE WORK				
2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering – All work upto plinth level. a) 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate. 40 mm nominal size	27.00 Cum	Cum		
	b) 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size)	2.00 Cum	Cum		
2.2	Extra for concrete work in superstructure above plinth level upto floor V level or part thereof.	2.00 Cum	Cum		
2.3	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns piers, abutments, pillar, posts, struts, buttresses, string or lacing courses, parapets copings, bed blocks, anchor blocks, plain window sills fillets etc. upto floor five level excluding the cost of centering and shuttering and finishing. a) 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size).	2.00 Cum	Cum		

2.4	Providing and laying damp proof coarse 40mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5mm nominal size)	16.00 Sqm.	Sqm.		
2.5	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7 kg. per sq.metr of damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	16.00 Sqm.	Sqm.		
3.	REINFORCED CEMENT CONCRETE				
3.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering shuttering, finishing and reinforcement- All work upto plinth level. a) 1: 1½ :3 1 cement: 1½ Coarse sand: 3 graded stone aggregate 20mm nominal size).	19.00 Cum	Cum		
3.2	Reinforcement cement concrete work in walls (any thickness including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts, and struts, etc. upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement a) 1:1½ :3 (1 cement: 1½ Coarse sand: 3 graded stone aggregate 20mm nominal size)	10.00 Cum	Cum		
3.3	Providing and laying in position machine batched machine mixed and machine vibrated design mix	43 Cum	Cum		

	cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centering shuttering finishing and reinforcement including admixtures in recommended proportion as per I.S.9103 to accelerate retard setting of concrete improve workability without impairing strength and durability as per direction of Engineer in charge M-25, grade reinforced cement concrete by using 410 kg. Of cement per cum of concrete- All work upto floor V level.				
3.4	Centering and shuttering including strutting, propping etc. and removal of form for. a) Suspended floors, roofs, landings, balconies and access platform.	273.00 Sqm.	Sqm.		
	b) Lintels, beams plinth beams girders, bressumers and cantilevers.	151.00 Sqm.	Sqm.		
	c) Columns, pillars, piers, Abutments, posts and struts.	87.00 Sqm.	Sqm.		
	d) Stairs (excluding landings) except spiral staircases	24.00 Sqm.	Sqm.		
	e) Whethers, Chajjas, corbels etc. including edges.	11.06 Sqm.	Sqm.		
	f) Foundation, Footings bases of columns etc. for mass concrete.	78.00 Sqm.	Sqm.		
3.5	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete a) Cold twisted bars/ Thermo mechanically treated bars.	8640.00 Kg	Kg		

4.	BRICK WORK:				
4.1	Brick work with FPS bricks of classes designation 75 in foundation and plinth in: a) Cement mortar 1:6 (1 cement: 6 coarse sand)	36.00 Cum	Cum		
4.2	Brick work with FPS bricks of classes designation 75 in super structure above plinth level upto floor five level in all shapes and sizes in cement mortar a) Cement mortar 1:6 (1 cement:6 coarse sand)	104.00 Cum	Cum		
4.3	Half brick masonry with FPS bricks of class designation 75 in super structure above plinth level upto floor five level. A) Cement mortar 1:4 (1 cement: 4 coarse sand)	9.00 Sqm	Sqm.		
4.4	Brick work with FPS bricks of class designation 75 in cement mortar 1:4 (2 cement: 4 coarse sand) in triangular portion of steps in superstructure with FPS bricks for all floor level.	1.00 Cum	Cum		
4.5	Extra for providing and placing in position 2 Nos. 6mm dia M.S. bars at every third course of half brick masonry (with FPS bricks)	9.00 Sqm.	Sqm.		
5.	WOOD WORK				
5.1	Providing and fixing I.S.I. Marked flush door shutters conforming to I.S:2202 (Part-I) non-decorative type core of block board construction with frame of 1 st Class hard wood & well Matched commercial ply veneering with vertical grains or cross bands face veneers on both faces of shutters. i) 35mm including I.S.I. marked stainless steel butt hinges with necessary screws.	52.00 Sqm.	Sqm.		

5.2	Providing and fixing M.S. grills of required pattern in frame of windows etc. with M.S. flats, square or round bars etc. all complete.				
	a) Fixed to steel windows by welding	1166.00 Kg.	Kg.		
	b) Fixed to openings/ Wooden frame with rawl plugs screws etc.	239.00 Kg	Kg.		
5.3	Providing and fixing ISI marked oxidized M.S. pressed butt hinges with necessary screws etc. complete a) 100x58x1.90 mm	113.00 Nos.	Each		
5.4	Providing and fixing ISI marked Oxidized M.S. sliding door bolts with nuts and screws etc. complete a) 300x16mm	17.00 Nos.	Each		
5.5	Providing and fixing ISI marked oxidized M.S. tower bolts black finish (Barrel type) with necessary screws etc. complete a) 250x10mm	17.00 Nos	Each		
	b) 150x10mm	41.00 Nos	Each		
5.6	Providing and fixing ISI Marked oxidized M.S. handles conforming to IS: 4992 with necessary screws etc. complete a) 125mm	16.00 Nos	Each		
	b) 100 mm	12.00 Nos.	Each		
5.7	Providing and fixing 24 gauge aluminum sheet on flush door shutters on bottom front and back face with necessary cp brass screws 20mm long of 10mm c/c in	6.00 Sqm.	Sqm.		

	that area like WC bath and balcony etc. complete as per direction of engineer-in-Charge.				
6.	STEEL WORK				
6.1	Providing and fixing T-Iron frames for door, windows and ventilators of mild steel tee sections, joints mitred and welded with 15x3mm lugs 10cm long embedded in cement concrete blocks 15x10x10xcm of 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with dash fasteners or width or fixing clips of with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.	347.00 Kg.	Kg.		
6.2	Steel work welded in built up sections/framed work including cutting hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. a) In gratings, frames, guard bars, ladders, railing, brackets< gates and similar works.	1063.00 Kg.	Kg.		
6.3	Providing and fixing hand rail by welding etc. to steel ladder railing, Balcony railing & stair case railing including applying a priming coat of approved steel primer. a) M.S. tube	345.00 Kg	Kg		
6.4	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3mm M.S. gusset plates at the junctions and corners all necessary fittings complete i/c applying a priming coat of approved steel primer using flats 30x6mm for diagonal braces and central cross piece.	2.00 Sqm.	Sqm.		

6.5	Providing and fixing ISI marked steel glazed doors, windows and ventilators of standard rolled steel sections joints mitered and welded with 15x3 mm lugs 10cm long embedded in C.C. blocks 15x10x10 cm of 1:3:6 (1 cement: 3 coarse sand: 6 graded stone agg. 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws of with fixing clips or with bolts and nuts as required providing and fixing of glass panes with glazing clips and specials metal sash putti of approved steel primer excluding the cost of metal beading and other fittings except necessary hinges of pivots as required. a) Windows fixed	6.00 Sqm	Sqm.		
7.	FLOORING				
7.1	Kota stone slab flooring over 20mm (average) thick base laid over and joined 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). a) 25mm thick	134.00 Sqm.	Sqm.		
7.2	Kota stone slab 25mm thick in risers of steps, skirting dedo and pillars laid on 12mm (average) thick cement mortar 1:3 (1 cement: 3coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs including rubbing and polishing complete.	13.00 Sqm.	Sqm.		
7.3	Providing and laying polished vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08%	146.00 Sqm	Sqm		

	and conforming to IS: 15622 of approved make in all colours and shades laid on 20 .mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete. (a) size of tile 60x60 cm				
7.4	Providing and fixing 1 st quality ceramic glazed wall tiles conforming to IS:15622 (thickness to be specified by the manufacturer) of approved make in al colours shades except burgundy, bottle green black of any size as approved by engineer-in-charge in skirting, riser of steps and dados over 12 mm thick bed of cement mortar 1:3 cement (1 Cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 Kg. Per sqm. Including pointing in white cement mixed with pigment of matching shade complete.	191.00 Sqm.	Sqm.		
7.5	Extra for making nosing in trades of steps of Kota stone/sand stone slab.	83.00 Mtrs.	Mtrs.		
8	ROOFING				
8.1	Making khurras 45x45cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) over PVC sheet 1m x 1m x 400 micron, finished with 12mm cement plaster 1:3 (1 cement: 3 course sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete.	6.00 No	Each		
8.2	Providing and fixing on wall face un plasticized rigid PVC rain water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 Leaving 10mm gap for thermal expansion (i) single	54.00 Mtrs.	Mtrs.		

	socketed pipes. a) 110mm diameter				
8.3	Providing and fixing on wall face un-plasticized PVC moulded fittings/ accessories for un-plasticized 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. a) Single Pushfit coupler i) 110mm	6.00 Nos.	Nos.		
	ii) 110mm bend	6.00 Nos.	Nos		
	iii) Shoe (Plain 110mm shoe)	6.00 Nos.	Nos		
8.4	Providing and fixing un-plasticized PVC pipe clips of approved design to un-plasticized-PVC rain water pipes by means of 50x50x50mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement: 4 coarse sand) and making good the walls etc. complete a) 110mm	30.00 Nos.	Nos.		
8.5	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15cm diameter and weighing not less than 440 grams.	6.00 Nos	Nos.		
8.6	10cm thick (average) mud Phuska of damped brick earth on roofs laid to slope consolidated and plastered with 25mm thick mud mortar mixed with bhusa at 35 kg/cum of earth and gobri leaping with mix 1:1 (1 clay: 1 cow dung) and covered with flat tile bricks of class designation 100 grouted with cement mortar 1:3 (1	83.00 Sqm.	Sqm.		

	cement: 3 fine sand) mixed with 2% of integral water proofing compound by weight a) With F.P.S. brick tiles				
8.7	Painting top of roofs with bitumen of approved quality at 17 kg per 100 sqm. Including cleaning the slab surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil complete. a) with residual petrolium bitumen of penetration 80/100	90.00	Sqm.		
9.	FINISHING				
9.1	12mm cement plaster of mix.				
	a) 1:6 (1 cement: 6 fine sand)	83.00 Sqm	Sqm.		
	b) 1:4 (1 cement: 4 fine sand)	82.000 Sqm	Sqm.		
9.2	15mm cement plaster on the rough side of single or half brick wall of mix.				
	a) 1:6 (1 cement: 6 fine sand)	353.00 Sqm.	Sqm.		
9.3	6 mm cement plaster of mix 1:3 (1 cement: 3 fine sand)	160.00 Sqm.	Sqm.		
9.4	White washing with lime to give an even shade. a) New work three or more coats.	442.00 Sqm.	Sqm.		
9.5	Finishing wall with water proofing cement paint 'Snowcem-Plus' of M/s Snowcem India Ltd. or equivalent of required shade.				
	a) New work (two or more coats applied @ 3.84 kg/ 10 sqm.)	81.00 Sqm.	Sqm.		

9.6	Applying priming coat: with ready mixed pink or grey primer of approved brand and manufacture on wood work (hard and soft wood)	97.00 Sqm.	Sqm.		
9.7	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade.				
	a) Two or more coats on new work	142.00 Sqm.	Sqm.		
9.8	Distempering with 1 st quality acrylic washable distemper (ready made) of approved Manufacture and to required shade and colour complete as per manufacturer's specification				
	a) Two or more coats on new work	412.00 Sqm.	Sqm.		
10.	SANITARY INSTALLATIONS:				
10.1	Providing and fixing water closet squatting pan (Indian type W.C. Pan) with 100mm sand cast iron long body P trap or S trap. 10 litre low level white PVC flushing cistern with manually controlled device (handle lever) conforming to IS: 7231 Parryware/ Hindware/ Seabird/ Orient (Coral;) with all fittings and fixtures complete including cutting and making good the walls and floors wherever required.				
	a) White vitreous China Orient Pattern w.c. pan of size 580x440mm with integral type footrests.	2.00 No.	Each		
10.2	Providing and fixing white vitreous China flat back of				

	wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm size respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required.				
	a) One urinal basin with 5 litre white PVC automatic flushing cistern.	2.00 No.	Each		
10.3	Providing and fixing wash basin with C.I. brackets 15mm C.P. brass pillar taps, (Kingston/ Gem/ Techno/Parko), 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets , cutting and making god the walls wherever required white vitreous Flat back wash basin size 450x300mm with single 15mm C.P brass pillar tap.	2.00 Nos	Each		
10.4	Providing and fixing 600x450mm beveled edge mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	2.00 Nos	Each		
10.5	Providing and fixing soil waste and vent pipes.				
	a) 100mm diameter centrifugally cast (spun) iron S & S Pipe as per IS: 3989.	16.00 Mtrs.	Mtrs.		
	b) 75mm diameter centrifugally cast (spun) iron S & S Pipe as per IS: 3989.	14.00 Mtr	Mtrs.		
10.6	Providing and fixing M.S. holder bat clamps of approved design to sand cast iron/ cast iron (spun)				

	pipe embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc.				
	a) For 100 mm pipe	6.00 Nos	Each		
	b) For 75mm dia pipe	6.00 Nos	Each		
10.7	Providing and fixing terminal guard				
	a) 100mm sand cast iron S & S	1.00 No	Each		
	b) 75mm sand cast iron S & S.	1.00 No	Each		
10.8	Providing and fixing collar				
	a) 100mm sand cast iron S & S as per I.S 1729.	6.00 No	Each		
	b) 75mm sand cast iron S & S as per I.S 1729	6.00 No	Each		
10.9	Providing and fixing M.S. stays and clamps for sand cast iron centrifugally cast (spun) iron pipes of diameter.				
	a) 100mm	1.00 No	Each		
	b)75mm	1.00 No	Each		

10.10	Providing fixing trap of self cleaning design with screwed down or hinged grating with or without vent arm complete including cost of cutting and making good the walls and floors.				
	a) 100mm inlet and 75mm outlet sand cast iron S&S as per I.S. 1729.	6.00 No	Each		
10.11	Painting sand cast iron/ centrifugally cast (spun) iron soil. Waste vents pipes and fittings with paint of any colour such as chocolate grey or buff etc. over a cost of primer (of approved quality) for new work.				
	a) 100mm diameter pipe	10.00 Mtrs.	Mtrs.		
	b) 75mm diameter pipe	10.00 Mtrs.	Mtrs.		
10.12	Providing and fixing PTMT Towel Rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality colour and make (Prayag or equivalent) 600 mm long towel rail with total length of 645 mm width 78mm and effective height of 88mm, weighing not less than 190grms.	2.00 Nos	Each		
10.13	Providing lead caulked joints to sand cast iron / centrifugally Cast (Spun) iron pipes of diameter				
	a) 100mm	10.00 Nos	Each		
	b) 75mm	10.00 Nos	Each		

10.14	Providing and fixing PVC waste pipe for sink or wash basin including PVC waste fittings complete				
	a) Flexible pipe 32mm dia	2.00 Nos	Each		
10.15	Supplying pig lead at site of work.	0.25 Qtl	Qtl		
10.16	Painting G.I. pipes and fittings with two coats of anticorrosive bit mastic paint of approve quality.				
	a) 15mm diameter pipe	35.00 Mtrs.	Mrs.		
10.17	Providing and fixing G.I. union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (new work)				
	a) 15mm nominal bore	4.00 Nos.	Each		
	b) 20mm nominal bore	4.00 Nos	Each		
10.18	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI: 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet outlet and overflow pipes but without fittings and the base support for tank.	1000 Lit.	Lit.		
10.19	Providing and fixing single equal plan junction of required degree with access door, insertion rubber washers 3mm thick, bolts, nuts complete.				
	a) 100 x 100x 100mm sand cast iron S&S as per I.S. 1729	2.00 No	Each		
	b) 75x75x75mm sand cast iron S&S as per I.S. 1729	2.00 Nos	Each		

11.1	WATER SUPPLY				
11.1	Providing and fixing G.I. pipe complete with G.I. fittings and clamps i/c cutting and making good the walls etc. (internal work)				
	A) Exposed on wall	30.00 Mtrs.	Mrs.		
	a) 15mm nominal bore				
	b) 20mm nominal bore	30.00 Mtrs.	Mtrs.		
	B) Concealed pipe including painting with anti corrosive bitumastic paint, cutting chases and making good the wall.				
	a) 15mm dia nominal bore	30.00 Mtrs.	Mtrs.		
11.2	Providing and fixing C.P.brass long body bib cock of approved quality conforming to IS standards and weighting not less than 690 gms.				
	a) 15mm nominal bore	4.00 Nos	Each		
11.3	Providing and fixing brass stop cock of approved quality				
	a) 15mm nominal bore	5.00 Nos.	Each		
	B) 20mm nominal bore	2.00 No	Each		
11.4	Providing and fixing unplasticised PVC connection				

	pipe with PTMT nuts, collar and bush of approved quality and colour.				
	a) 15 mm nominal bore with 45 cm length	4.00 Nos	Each		
12.	DISMANTLING AND DEMOLISHING				
12.1	Demolishing R.C.C. work manually / by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 meter lead as per direction of Engineer-in-charge.	0.41 Cum	Cum		
12.2	Demolishing brick work manually / mechanical means including stacking of serviceable material and disposal of unserviceable material within 50m lead as per direction of Engineer-in-charge.				
	a) in cement mortar	49.00 Cum	Cum		
12.3	Demolishing brick tile covering in terracing i/c stacking of serviceable material and disposal of unserviceable material within 50m lead.	135.00 Sqm.	Sqm.		
12.4	Demolishing Mud Phuska in terracing and disposal of material within 50 m lead.	17.00 Cum	Cum		
12.5	Dismantling stone slab roofing over wooden karries or R.C.C. bottom (Dismantling Karries and bottom to be paid separately i/c. stacking of serviceable material and disposal of un-serviceable material within 50 mtrs. lead.	5.00 Cum	Cum		
12.6	Dismantling wood work in frames, trusses, purlins and				

	rafters upto 10 meter span and 5 meters height including stacking the material within 50 m lead				
	a) of sectional area 40 sq.m and above	0.29 Cum	Cum		
12.7	Dismantling doors windows and clearstory windows (Steel or wood) shutters i/c chowkhats, architrave, hold fasts etc. complete and stacking within 50m lead.				
	a) Of Area 3 sqm. And below	4.00 Nos	Each		
12.8	Demolishing cement concrete manually /by mechanical means i/c. disposal of material within 50 mtrs. lead as per direction of Engineer-in-charge.				
	a) 1:3:6 or richer mix	20.00 Cum	Cum		
13.1	Stone work (Machine cut edge) for wall lining etc. (veneer work)backing filled with grout of 12 mm thick cement mortar 1:3 (1 cement 3 coarse sand) including pointing in white cement mortar 1:2 (1 white cement: 2 stone dust) with an admixture of pigment matching the stone shade (to be secured to the backing by means of cramps which shall be paid separately).				
	Red sand stone ex-posed face fine dressed with rough backing. a) 40 mm thick	429.00 Sqm.	Sqm.		
13.2	Providing and fixing gun metal cramps of required shape for anchoring stone wall lining to the backing or				

	securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement: 2 fine sand)				
	a) 25x6mm – 30cm long	2120.00 Nos.	Each		
13.3	Providing and fixing copper pins 7.5 cm long 6mm dia meter for securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement: 2 fine sand) including making the necessary chases.	2120.00 Nos.	Each		
13.4	Removal of malba / building rubbish by mechanical transport i/c loading, unloading for all leads and lift.	60.00 Cum	Cum		

E.E/SED-5/DDA.

GENERAL SPECIFICATION

I. SPECIFICATION

II. The entire work shall be done as per CPWD Specifications 1996 vol.I to VI with correction slips No. 1 to 19 and Revised CPWD Specification 2002 for cement mortar, cement concrete and RCC works (which supersedes the chapter 3,4 & 5 of CPWD Specification 1996 vol. II) and particular specifications attached herewith, till the date of opening of the tender. However, in case of schedule of quantities appended with the tender and the specification relating to the relevant item that shall be sorted out as per CPWD Specification 1996 vol. I to VI correction slip 1 to 19 and Revised CPWD Specification 2002 for cement mortar, cement concrete and RCC work, the former shall prevail over, if the specification for any item is not available (PWD Specification referred above, relevant BIS specification shall be followed. In case, BIS Specification is also not available, the decision of the Engineer-in-charge shall be final. Whenever, any reference to any Indian standard, specification occurs in the documents relating to the contract the same shall be CPWD Specifications. DSR-2007 is applicable.

All mortars shall be mixed in mechanical mixtures. No hand mixing shall be allowed for mixing of mortar.

III. R.C.C.

FORM WORK:

(a) Cleaning and Treatment of Works:

All rubbish, particularly chipping, shaving and saw dust shall be removed from the interior of the forms before the concrete is placed. The form work in contact with the concrete shall be cleaned and thoroughly wetted or treated with an approved composition to prevent adhesion between form work and concrete. care shall be taken that such approved composition is kept out of contact with the reinforcement.

(b) For the execution of centering and shuttering the contractor shall use shuttering oil as per direction of Engineer-in-charge and nothing extra shall be paid on this account.

(c) Stripping Time:

In case the concrete gain the required strengths, the de-shuttering shall be executed as

Follows:-

Walls columns and vertical faced faces of structural members 48 hrs.

Removal of props under slab:-

a) Spanning upto 4.5 m 07 days

b) Spanning over 4.5 m 14 days

Removal of props under beams and arches:

a) Spanning up to 6 m 14 days

b) Spanning over 6 m 21 days

In case of hot weather or cold weather these periods may be varied at the discretion of Engineer-in-charge. The number of props left under their size and disposition shall be such as to be able to safely carry full dead load or the slab beam of arch as the case may be together with any live load likely to occur during placing of concrete, curing of further construction.

d) **Removal of Form Work:-**

Form work shall be removed in such a manner as it would not cause any shock or vibration that would damage the concrete. Before removal of soffits and props concrete surface shall be exposed to ascertain that the concrete has sufficiently hardened.

3.00 **DESIGN MIX/READY MIX CONCRETE:**

a) Design mix/Ready mix concrete shall be used in the work for all structural members. Concrete for all reinforced concrete works in columns, wall footings, beams, slab and the like shall be deposited and well consolidated by vibrating using portable mechanical vibrator.

The minimum quantity of cement for M-25 & M-35 grade RCC shall not be less than 360 Kg. per Cum and 378 Kg. per Cum respectively. The admixture complying with IS: 9103 can be used for improving workability and their performance shall be monitored as per clause 5.5 IS: 456-2000 and 41 of CPWD specification 2002. Admixtures should not impair durability of concrete nor combine with the constituent to form harmful compounds not increase the risk and corrosion of reinforcement. Nothing extra shall be paid for use of admixtures improving the workability and for pumping the concrete.

The maximum water cement ratio for a particular concrete grade shall be kept as specified in IS: 10262 and shall not exceed the value given in Table

IS: 456-2000 which are as follows:

M-25	0.50
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M-30	0.45
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M-35	0.45
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M-40 0.40

(c) The concrete mix design with and without admixture will be carried out by the contractor through one of the following laboratories/Test houses and design mix/ready mix concrete shall conform to accepted design mix.

- (i) IIT Delhi
- (ii) National Council for Cement & Building Materials, Ballabhgarh.
- (iii) CRRI, Delhi

(d) In the event of all the above three laboratories being unable to carry out the requisite design/testing the contractor shall have to get the same done from any other laboratory with prior approval of the Engineer-in-charge.

(e) The contractor shall submit the mix design report from any of above approved laboratories for approval of Engineer-in-charge within 30 days from the date c issue of letter of acceptance of the tender. No concreting shall be done unt the mix design is approved.

(f) The cost of packaging, sealing, transportation, loading, unloading cost of sample and the testing charges for mix design in all cases shall be borne by

(g) The Engineer-in-charge reserves the right to exercise control over the:

(i) Ingredients, water and admixtures purchased, stored and to be used in the concrete including conducting of tests for checking quality of materials, recordings of test results and declaring the materials fit or unfit for use in production of mix.

(ii) Weight and quality check on the ingredients, water and admixtures added for batch mixing.

(iii) Time of mixing of concrete.

(iv) Testing of fresh concrete, recording of results and declaring the mix fit or unfit for use. This will include continuous control on the workability during production and taking corrective action.

For exercising such control the Engineer-in-charge shall periodically depute his authorized representative at the batch mix plant. It shall be responsibility of the contractor to ensure that all necessary equipment manpower & facilities are made available to Engineer-in-charge/or his authorized representative at batch mix plant.

(h) Ingredients, admixtures and water declared unfit for use in production of mix shall not be used. A batch mix found unfit for use shall not be loaded in to the transit mixer for transportation.

(i) All required relevant records of batch mix concrete shall be made available to the Engineer-in-charge or his authorized representative. Engineer-in-charge shall, as required, specify guidelines and additional procedures for quality control and other parameters in respect of materials, production and transportation of concrete mix, which shall be binding on the contractor.

(j) 43 Grade OPC (confirming to IS:812) of brand/make/source as approved by Engineer-in-charge shall only be used for production of concrete.

(k) The item of Design mix cement concrete shall be inclusive of all the events including admixtures if required, labour, machinery, T&P etc. shuttering which shall be measured and paid for separately)

.....of required strength and workability. The rate quoted by the agency shall be net and nothing extra shall be paid on account of change in quantities of concrete ingredients like cement and aggregates and admixtures etc. as per the approved mix design.

(l) Design mix concrete shall be arranged in quantity as required at site of work. The design mix concrete shall be supplied as per the pre agreed schedule approved by the Engineer-in-charge.

(m) **Pre-casting works:**

The precast kerb stone, paver blocks, SFRF Covers/Frames as given in the schedule of quantities shall be procured by the contractor from one of the approved list of manufacturers. Before execution of work, contractor shall submit Engineer-in-charge the name of the firms along with their quality assurance system. The engineer-in-charge have right to inspect the factories of the manufacturers before and during production of precast members. During manufacturing of precast members at least six cubes of size 150X150X150 mm. out of the concrete mix shall be casted in the factory of pre-casting for each day of manufacturing in the presence of representative of Engineer-in-charge. The three cubes shall be tested after 7 days of casting and balance 3 cubes shall be tested after 28 days of casting. After manufacturing and curing of precast members and their supply at site engineer-in-charge shall have right to do conduct any nondestructive test on precast

members to assure the quality of members, if found necessary by tests. However minimum of one number non-destructive test/rebound hammer test shall be done by Engineer-in-charge on one precast member out of 500 members/kerb stones so produced and supplied.

4.0 **SCAFFOLDING**

Double steel scaffolding having two sets of vertical supports shall be provided for external wall finish, cladding etc. The supports shall be bound and strong, tied together with horizontal pieces over which scaffolding platform shall be fixed. The holes for horizontal scaffolding pole shall be provided in header course only and nothing extra is payable on this account.

5. Rates for all items quoted shall be inclusive of all work done given in the above mentioned specifications and schedule of quantities and applicable for the work under floors in shell of ceiling level at all heights and depths. All rates are inclusive of cutting holes and chases in RCC and masonry work and making good the same.

All rates are inclusive of pre testing and on site testing of the installations, materials and commissioning.

All above fittings shall be paid in numbers.

6. **WATER PROOFING:**

All areas where water proofing is to be done the water proofing shall be got done through firms specialized in water proofing.

The item of water proofing in schedule of quantities pertaining to the building works, shall be guaranteed against seepage leakage for a period of ten years. The contractor shall have to execute a performance bond in the prescribed proforma enclosed with tender documents.

2. The proportion of the water proofing compound of approved makes to be used in cement shall be as per the nomenclature of the items as mentioned in the schedule of quantities.

GUARANTEE BOND:

Ten years. Guarantee bond in prescribed proforma attached at Annexure at page no..... herewith shall be submitted by the contractor which shall also be signed by both the specialized agency and the contractor to meet their liability/liabilities under the guarantee bond. However, the sole responsibility about efficiency of water proofing treatment shall rest with the building contractor.

Ten percent of the cost of water-proofing work shall be retained as additional security deposit and the amount so withheld would be released after ten years from the date completion of the entire work under the agreement, the performance of the work done is found satisfactory. If any defect is noticed during the guarantee period, it shall be rectified by the contractor within seven days of receipt of intimation of defects in the work. If the defects pointed out are not attended to within the specified period, the same will be got done from another agency at the risk and cost of the contractor.

However, the security deposit deducted may be released in full against bank guarantee of equivalent amount in favour of Engineer-in-Charge, if so decided by the Engineer-in-Charge.

The security deposit against this item of work shall be in addition to the security deposit mentioned elsewhere in contract form.

7. **EXPANSION JOINTS:**

7.1 Expansion joints are to be covered with A3 Aluminum sheet as per item of schedule of quantity.

8.0 **CONSTRUCTION JOINTS:**

8.1 The contractor shall be give his proposal for location and treatment of construction joints. The construction joints shall be provided only at places and in the manner as approved by Engineer-in-charge.

8.2 Except where shown otherwise on the drawing, reinforcement shall continue through construction joints.

8.3 The foreign matter and laitance shall be cleaned properly by compressed air before starting further work.

STIPULATED MATERIALS:

Name of Work :- Construction of additional accommodation in chaupal at Pijanji village (1950)

S.No.	Description of item	Qty No.	Rate in Unit	Place of delivery
1.	Ordinary Portland/Cement	69.86 M.T.	5175/- M.T	Any D.D.A. Store at Delhi, N. D
2.	Twisted Deformed bars			

20mm dia	2 00 M.T.	35283/- M.T
16mm dia	2 00M.T.	35283/- M.T
12mm dia	2.00M.T.	35283/- M.T
10mm dia	064 M.T.	35493/-M.T
8mm dia	2.00 M.T.	35498/- M.T

EE/SED5/ DDA