DELIII DEVELOPMENT AUTHORITY OFFICE OF THE CHIEF ENGINEER (SZ) 12/1/09

No.CE(SZ)/FO/20(47)NIT/ 2007-08/ 88

Dated:- 12-1-09

To

The Advertising Manager, M/s. Inter Publicity Pvt. Ltd., 702, Mohan Dev Building, 13, Tolstoy Marg, New Delhi-110001.

Sub:- Publication of NIT in Press in respect of South Zone.

Please find enclosed Press Tender Notice No.13/FO/SZ/08-09/NIT with the request to make arrangements for publication of the same in the following News Papers on or before 14.01.2009, strictly according to DDA Circular/instructions issued from time to time and also as per Circular No.F1(11)2004/PR/DDA/30 dated 19.02.2007 and even No. 37 dated 26.02.2007. Proof of the PressTender Notice may be got approved from undersigned before publication.

1. Economic Times (English) 2. Dainik Jagran (Hindi)

It may be ensured that:-

- 1. After due formulating, editing if necessary, the advertisement Agency shall e-mail the copy of advertisement to the web site maintenance agency at [ddatender@dda.org.in] with copy to Director (System) [dirsystem@dda.org.in]. A certificate to this effect may be recorded on the bill.
- 2. The advertisement agency while submitting the Bill for payment shall be required to submit a hard copy of e-mail to prove that the e-mail has been sent to web site maintenance agency and down loaded copy of the advertisement which appeared on DDA web site. This shall be a prerequisite for relesing the payment to the Advertisement Agency.
- 3. In case the advertisement has not been posted on DDA web site, the Advertisement Agency shall bring the deviation to the notice of Director(System) who will inform the Commissioner (System).

ENCL: AS ABOVE.

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entens.

1. The Executive Engineer, SWD-2, 4 & 5 and SED-5, 8 & 11. They are requested to ensure that the tender documents are kept ready and available at the prescribed sales counters. concerned EE shall not execute the respective work without obtaining prior budgetory approval from DY.CAO(SWZ)/DDA. EEs concerned would ensure that respective NITs pertaining to their divisions are uploaded on DDA Website alongwith schedule of quantities.

2. ALL CEs, DDA..

3. SE/CC-1 & 15, and SE(P)-I(SZ), DDA.

4. Dir.(Systems), DDA, for taking action as per O.O.No.EM1(10)2005/4847 dated 20.07.2005 issued by E.O.-III to E.M and Circular dated 19.02.2007 & 26.02.2007 cited above.

5. Dir(PR)/DDA for taking action as per circular dated 19.02.2007 & 26.02.2007 cited above. Indian Pest Control Association, Flat No.11, Alishan Banquet Complex, 40, DLF Ind.Area Kirti Nagar, New Delhi-110065 (RAD).

6. DDA Contractor's Welfare Association, Block-A, Vikas Kuteer, New Delhi (RAD).

7. DDA Contractor's Association(Regd.)40-A/E-18, Vikas Kuteer, New Delhi (RAD).

8. Secy.CPWD Contractor's Association Y-Shape Building, I.P. Estate, New Delhi.

9. Delhi Contractors and Builders Association(Regd.)5503 Prem Raj Bhawan, New Chandrawal, Ch.Bhim Singh Road; New Delhi (RAD). 10. Delhi Contractors Welfare Association(Regd.)306, Masjid Moth, Rai Sahib Mkt. NDSE Pt.II New

Delhi-110049 (RAD). 11. Trans-Yamuna DDA Contractors Association(Regd.)11-12, Vir Sawarkar Market (Budh Bazar) Gandhi Nagar, Delhi-110031 (RAD).

12. East Deihi DDA Contractors Association(Regii.)45/2-C, East Azad Nagur, Delhi-110051 (RAD).

3. The labour Commissioner, 15, Rajpur Road, New Delhi.

- 14. The income Tax Office (Contractor Circle) I.T.O, New Delhi.
- 15. Tender Clerk, First Floor, Press Building, Vikas Sadan, New Delhi.

16. The Security Officer, DDA, Vikas Sadan, New Delhi.

- 17. The Executive Engineer (QC), DDA. Vikas Sadan, New Delhi.
- 18. The Executive Engineer, SED-11, DDA, Vikas Sadan, New Delhi.
- 19. The A.O.(CAU)SWZ, DDA, Vasant Kunj, New Delhi.

20. Notice Board.

F.O. TO C.E.(SZ)

OFFICE OF THE EXECUTIVE ENGINEER SOUTH EASTERN DIVISION NO: 8 D.D.A. (KALKAJI) NEW DELHI

No.F.8 (2)/SED: 8/A/DDA/2008-2009/ 73

Dated: 15/1) 09

Sub:

NIT No.19 /EE/SED: 8/DDA/2008-2009

Copy to: -

- 1. CE (SZ)/DDA.
- 2. SE/CC-15/DDA
- SE/CC-1/DDA
- Director System, DDA, Vikas Sadan, New Delhi for necessary action please. 4.
- Secv.DDA, contractor welfare association, barrick no.2, Bl.A, Room No.12A, Vikas Kutir, New Delhi.
- Secy. Delhi contractor welfare association (Regd.), 306, Masjid Moth, N.D.S.E.Part-II New Delhi-110049.
- Delhi contractors and builders association (Regd) H.No.5503 Ch.Prem Raj Bhawan New chandrawal, Ch.Bhim Singh Road, Delhi-07
- Secy. Delhi contractors association, Vikas Kutir, New Delhi.
- Secy. Trans Yamuna, DDA, contractors association (Regd) 11-12 Vir Sawarkar Market (Budh Bazar) Gandhi Nagar, New Delhi-31
- 10. All Delhi DDA &MCD contractor's welfare association 253, Pratap Khand Vishwakarma Nagar, Delhi.
- 11. Delhi Govt. Contractors Welfare Association (Regd), 179, Trivani Apartment, Near Police Station, Vivek Vihar, Delhi-95
- 12. Indraprasth Contractor Welfare Association (Regd) Pocket E/135-A,G.T.B Enclave, Delhi-93
- 13. F.O. (SZ)/DDA
- 14. A.O. (W)-I/DDA
- 15. All AEs, AE (P), HC, AAO/SED: 8
- 16. All EEs/DDA for kind placing on their notice board (Through UPC).
- 17. Security Officer, Vikas Sadan, New Delhi.
- 18. Tender clerk, Vikas Sadan & CAU/S.Z.
- 19. (CAU)/S.Z./DDA.
- 20. Notice Board, SED: 8

EXECUTIVÉ ENGINEER 15/1/09 SOUTH EASTERN DIVISION: 8

D.D.A. (KALKAJI) NEW DELHI

DELIII DEVELOPMENT AUTHORITY PRESS TENDER NOTICE No.13/FO/SZ/08-09/NIT

Sealed item rate tenders are invited for the following works from the approved and eligible contractors of D.D.A., C.P.W.D., Civil Wing of P & T, M.E.S. & Railways upto 3.00 P.M. which shall be opened on the same day at 3.30 P.M. at Vikas Sadan, DDA Office, New Delhi on indicated dates.

The enlistment of the contractor should be valid on the last date of sale of tenders. For eligibility criteria, please see footnote-1.

Tender documents can be obtained on payment of Cost of Tender (non-refundable) as well as amount of Earnest Money mentioned against each work in the appropriate form as given in PWD-6 attached with the tender documents and on production of valid enlistment Certificate from AO/CAU/SZ/DDA and Centralized Tender Office at Vikas Sadan. The intending tenderers may see the tender documents in the aforesaid offices of DDA before giving application for the same.

The tenderer can also download the tender document from the DDA's Website ddatender@dda.org.in. In such case, the tenderer shall

S.	NIT No.	Name & Address of	t of the same and earnest money along with the tender. Name of Work	Estimated cost	Last date of Sale
No.		Division.	The designation of the second second	Earnest Money	Date of Opening
				Cost of Tender	Time Allowed
	33/EE/SWD-2/	Executive Engineer,	M/o completed scheme under SWZ of NA-II (Hort.	Rs.2,28,167/-	21.01.2009
	-DDA/2008-09	SWD-2,DDA,	Work).	Rs.4,563/-	24.01.2009
	Re-invited.	Vasant Kunj, New Delhi.	SH:- Upgradation of Children Play area in Rose Garden, Hauz Khas.	Rs.500/-	02 Months.
)	23/EE/SWD-4/	Executive Engineer,	M/o completed scheme under SWZ of NA-II.	Rs.11,47,023/-	24.01.2009
	DDA/2008-09	SWD-4,DDA,	SH:- Upgradation/development of shopping centre/	Rs.22,940/-	28.01.2009
	Vasant Kunj, CSC at EPDP colony Kalkaji, C.R. Park on Plot No. New Delhi. 1598 Market No.4	Rs.500/-	02 Months.		
3	24/EE/SWD-4/	-do-	-do	Rs.7,03,643/-	21.01.2009
	DDA/2008-09		SH:-P/L RCC Pipe class NP2 by replacing/settled	Rs.14,073/-	24.01.2009
			deep S.W. Drain pipe along DFS school SecC, Vasant Kunj.	Rs.500/-	01 Month.
4	25/.EE/S\v 9-4/	-do-	-do	Rs.8,80,595/-	21.01.2009
	DDA/08-00		SH:- Upgradation/development of Shopping	Rs.17,612/-	24.01.2009
			Centre/CSC at EPDP Colony Kalkaji, C.R. Park on Plot No. 82 Market No.3.		02 Months.
5	26/EE/SWD-4/	-do-	D/o 92 Hact. of land at Vasant Kunj, PhII.	Rs.3,06,288/-	21.01.2009
	DDA/2008-09		SH:- Restoration of work Laying Natural Gas Pipe	Rs.6,126/-	24.01.2009
			Line along 18 M wide road panelled to Nelson Mandella Road from Plot No.1 to 5A at Shopping Mall (Deposit work).	Rs.500/-	01 Month.

S.	NIT No.	17.7	.:2::		
No.	NH NO.	Name & Address of	Name of Work	Estimated cost	Last date of Sale
140.		Division.		Earnest Money	Date of Opening
6	ACIECIOED SI	a de la companya de la	Control of the Contro	Cost of Tender	Time Allowed
O	05/EE/SED-5/ DDA/2008-09	Executive Engineer,	Protection/Acquisition of DDA land under SEZ.	Rs.13,75,580/-	24.01.2009
	Re-invited.	SED-5,DDA,	SH:- C/o boundary wall with Fly Ash cement bricks	Rs.27,512/-	28.01.2009
-		Sarita Vihar, New Delhi.	in various sites yet to be identified in North of MB Road for a period of six months.	Rs.500/-	06 Months.
7	42/EE/SWD-5/	Executive Engineer,	M/o various green area under SEZ.	Rs.13,82,049/-	24.01.2069
	DDA/2008-09	SD-5,DDA.	SH:- Raising of boundary wall along green area belt	Rs.27,641/-	28.01.2009
	The second second	Sarita Vihar,	in Panchsheel Enclave.	Rs.500/-	90 Days.
8	10/FF/FFF 0/	New Delhi.		113.500/-	70 Days.
0	19/EE/SED-8/ DDA/2008-09	Executive Engineer,	C/o Community Hall cum reading room in Pocket 9	Rs.57,52,986/-	31.01.2009
	DDA/2008-09	SED-8, DDA,	in Lajpat Nagar-IV (MOR land).	Rs.1,15,060/-	04.02.2009
		Near Pkt.A-14,	AND	Rs.1000/-	07 Months.
9	98/.EE/SED-11/	Kalkaji, New Delhi	STATE OF STA	La se Lubertenin	10,1,10,1,13,
	DDA/08-09	Executive Engineer. SED-11,DDA.	M/o various colonies under SEZ. Rs	Rs.4,06,056/-	: 21.01.2009
	DD1800-07	Vikas Sadan,	SH:- Repair of Grit wash and water proofing of walls	Rs.8,121/-	24.01.2009
		New Delhi.	and Roof etc. in Staff Flats at A.G.V.Complex.	Rs.500/-	02 Months.
10	99/EE/SED-11/	-dc	M/o scheme under Nazul A/c-II (SEZ).	Rs.4.45.8841-	21.01.2009
	DDA/2008-09		SH:- Repair of water Cascode in Millennium park at	Rs.8,918/-	24.01.2009
		in help in the state of	Sarai Kale Khan.	Rs.500/-	02 Months.
11	100/EE/SED-11/	-do-	-do		
	DDA/2008-09	do.		Rs.2,16.541/-	21.01.2009
			SH:- Filling sand in sand pits and removing and laying C.C. Paver in Millennium Park, Sar. i Kale	Rs.4.331/-	24.01.2009
			Khan.	Rs.500/-	02 Months
12	101/EE/SED-11/ DDA/2008-09	-do-	-do	Rs.4,90,846/-	21.01.2009
	DD///2709-09		SH:- Re-placement of damaged/broken C.C. Boliards	Rs.9,817/-	24.01.2009
			and C.C. Paver in Millennium Park, Sarai Kale Khan.	Rs.500/-	02 Months.
otno	te 1:-			N. North and S. D. Life	OZ MOHUIS.

Footnote 1:-

Eligibility criteria for issue of tender documents for works would be as under:-

- (1) For works costing up to Rs.25.00 lacs, tencers shall be issued to contractor(s) registered with DDA only.
- (2) For works costing above Rs.25.00 lacs upto 2.00 crores, tenders shall be issued to DDA & CPWD enlisted contractors as per their enlistment. The tenders shall also be issued to non-DDA, non-CPWD contractors provided they have satisfactorily completed three similar nature of works, each of value not less than 40% of the estimated cost in the last five years.

(NOT TO BE PUBLISHED)

Lu 19/1/18

PRESS TENDER NOTICE

C.S.No. 1

Sealed item rate tenders are invited for the following works on behalf of DDA from the approved contractors of appropriate class of DDA, Railways, CPWD, MES (Civil works) and Civil Wing of P & T Department on the date mentioned below upto 3.00 P.M. which shall be opened on the same day at 3.30 P.M. at Vikas Sadan, Press Building, DDA office INA, New Delhi-13 by the respective E.E. in the presence of the contractors, their authorized representatives.

The tender documents can be obtained on any working day from the date of publication from the CAU/SEZ/ Sale counter Press Building Vikas Sadan, between 11.00 A.M. to 3.00 P.M. on payment of cost of tender(Non refundable) in cash as well as amount of Earnest Money mentioned against each work on production of valid enlistment certificate of Registration with contract cell of Sale Tax department of GNCTD and the Tax clearance certificate on Form XI from CAU(SEZ)DDA and Centralised tender office at Vikas Sadan and a certificate from the contractor that up to date returns have been filed along with the copies of returns 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 shall be summarily rejected. The Agency shall submit a performance guarantee of 5% of the tender amount in the form of Govt. Securities or FDR or Guarantee bond of any scheduled Bank S.B.I. within 15 days of issue of letter of award.

S.No.	Name divn. & address	Name of work	Estt. cost/Cost of tender	Last date of sale/Dt. Of opening	Time allowed
1	SED:8 Near Pkt.A-14 Kalkaji Extn,New Delhi.	C/O Community Hall cum reading room in Pocket-9 in Lajpat Nagar-IV (MOR land)	Rs.5752986/- Rs.1000/-		Seven Months

C.S. 2

Material for which BIS has licensed used 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.

C.S.-3 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 worker's (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 Services), Rules, 2002 and the rules made there under and as modify from time to time.

- 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.

Contd.P/3

- All other terms/conditions as per above mentioned Acts as well rules made there under & modifications issued from time to time would also apply.
- Any failure to fulfill these requirements shall attract the panel provision of this contract arising out of the resultant nonexecution of the work.

GENERAL SPECIFICATION

1. SPECIFICATION:

- The entire work shall be done as per CPWD Specification 1.1. 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 items 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 items is not available CPWD Specification referred above, relevant BIS specification shall be followed. In case, BIS specifications 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.
- 1.2 All mortars shall be mixed in Mechanical mixtures. No hand mixing shall be allowed for mixing of mortar.

2.0 **R.C.C.**

2.1. 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 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 strength, the de-shuttering shall be executed as

Follows:-

Walls, columns and vertical faces of structural members.

48 hrs.

Removal of props under slab:-

a) Spanning up to 4.5m 07 days b) Spanning over 4.5m 14 days

Removal of props under beams and arches:-

a) Spanning upto 6 m. 14 days b) Spanning over 6m. 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 of the slab beam of arch as the case may be together with any live load likely to occur during placing of concrete, curing or 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. A computerized automatic batching plant of minimum capacity 150cum per day (8 hours working) shall be installed at site.

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.

(b) The minimum quantity of cement for M-25 & M-35 grade RCC shall not be less than 360kg per cum and 378kg per cum respectively. The admixture, complying with I S: 9103 can be used for improving workability and their performance shall be monitored as per clauses 5.5 IS: 456-2000 and 4.1.3 of CPWD specification 2002. Admixture should not impair durability of concrete nor combine with the constituent to form harmful compounds nor increase the risk and corrosion of reinforcement. Nothing extra shall be paid for use of admixture 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:

TOTTO TTO	
M -25	0.50
M -30	0.45
M -35	0.45
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 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 of issue of letter of acceptance of the tender. No concreting shall be done until the mix design is approved.
- (f) The cost of packaging, sealing, transportation, loading, unloading cost of samples and the testing charges for mix design in all cases shall be born by the contractor.
- (g) The Engineer-in-charge reserve 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 & additional procedures for quality control & other parameters in respect of materials, production and transportation of concrete mix, which shall be binding on the contractor.
- (j) 43 grade OPC (Conforming to IS-8112) 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/RMC concrete shall be inclusive of all the ingredients including admixtures if required, labour, machinery T & P etc. (except shuttering which shall be measured & paid for separately) required for design mix concrete of required strength and workability. The rate quoted by the agency shall be net & 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.
- (1) Design mix concrete/RMC shall be arranged in quantity as required at site of work. The design mix concrete/RMC shall be supplied as per the pre agreed schedule approved by Engineer-in-charge.

(m) PRE-CASTING WORK:

CORRECTION SLIP:

- **3.00(n):** The RMC produced concrete shall be accepted by Engineer –in charge at site after receipt of the same after fulfilling all the requirements of mix mentioned in the tender documents.
- **3.00(o):** Premoulded cement mortar 1:2 mix (1 cement: 2 coarse sand) cubes will be placed between form work and reinforcement to achieve uniform and required cover of concrete in slab and beam bottom. for beam side and columns, factory made round type cover blocks shall be used.

4.0 SCAFFOLDING

Double steel scaffolding having two sets of vertical supports shall be provided for external wall finish, cladding etc. The supports shall 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. Measurements

Rates for all items quoted shall be inclusive of all work and items given in the above mentioned specifications and Schedule of Quantities and applicable for the work under floors, in shafts or at 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:**

1. 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/drain 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 the 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-I at page NIT P-84 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 of completion of the entire work under the agreement, if the performance of the work done is found satisfactory. If any defects 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 Aluminium 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.

J.E. (P)/SED: 8

A.E. (P)/SED: 8

EE/SED: 8/DDA

ABSTRACT OF COST

Name of work : Construction of Community Hall Cum Reading Room in pocket 9 in Lajpat Nagar-IV (MOR land)

S. NO.	SUB-HEAD	AMOUNT
1.0	Earth Work	Rs.
2.0	Concrete Work	Rs.
3.0	R.C.C. Work	Rs.
4.0	Brick Work	Rs.
5.0	Marble Work	Rs.
6.0	Wood Work	Rs.
7.0	Steel Work	Rs.
8.0	Flooring	Rs.
9.0	Roofing	Rs.
10.0	Finishing	Rs.
11.0	Road Work	Rs.
12.0	Sanitary Installation	Rs.

S. NO.	SUB-HEAD		AMOUNT
13.0	Water Supply		Rs.
14.0	Drainage		Rs.
15.0	Aluminium Work.		Rs.
16.0	Water Proofing.		Rs.
		Total	Rs.

- 1. Cement 160.70 MT shall be issued @Rs.5175 per MT from any DDA store at Delhi/ New Delhi.
- 2. Steel shall be issued from any DDA store at Delhi/ New Delhi as per details as under:-

a) 8mm dia	13.020 MT	@Rs.35498.00 per M.T.
b) 10mm dia	4.883 MT	@Rs.35493.00 per M.T.
c) 12mm dia	4.883 MT	@Rs.35283.00 per M.T.
d) 16mm dia	4.883 MT	@Rs.35283.00 per M.T.
e) 20mm dia	4.883 MT	@Rs.35431.00 per M.T.

J.E.(P)

AE(P)/SED:8

EE/SED:8

SCHEDULE OF QUANTITIES

Name of work : Construction of Community Hall Cum Reading Room in pocket 9 in Lajpat Nagar-IV (MOR land)

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
1.0	EARTH WORK				
1.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sqm on plan) including disposal excavated earth, lead upto 50m and lift upto 1.5m; disposed earth to be levelled and neatly dressed. a) All kinds of soil		Cum		
1.2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed within a lead of 50 m.				
	a) All kinds of soil	229.89 cum	Cum		
1.3	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5m, 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 of 50 m.				
	a) All kinds of soil i) Pipes, cable etc. exceeding 80 mm dia, but not exceeding 300 mm dia.	201.00 Mtr.	Metre		
1.4	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 upto 50 m and lift upto 1.5 m. Page 1		Cum		

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Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
1.5	Supplying and filling in plinth with jamuna sand under floors including, watering, ramming consolidating and dressing complete.	52.14 cum			
1.6	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m: a) All kinds of soil		100 sqm		
				Total : Rs.	

2.0	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) 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size)	2.00 cum	Cum	
	b) 1:5:10 (1 Cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size)	203.71 cum	Cum	
2.2	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 block, anchor blocks, plain window sills, fillets etc. upto floor five level, excluding the cost of centering, shuttering and finishing:			
	a) 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	9.01 cum	Cum	
2.3	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	16.02 Sqm		

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item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
2.4	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.		Sqm		
2.5	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.		Sqm		
2.6	Providing and laying at or near ground level factory made kerb stones of M-25 grade cement concrete in position to required line, level and curvature jointed with cement mortar 1:3 (1 cement : 3 coarse sand) including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm) including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).		Metre		
				Total : Rs.	

3.0	REINFORCED CEMENT CONCRETE WORK			*	
3.1	Centering and shuttering including strutting, propping etc. and removal of form for : a) Foundation, footings, bases of columns, etc. for mass concrete	48.00 Sqm	Sqm		
	b) Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	18.93 Sqm	Sqm		
	c) Suspended floors, roofs, landings, balconies, and access platform	185.50 Sqm	Sqm		

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Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
	d) Shelves (Cast in situ)	6.07 Sqm	Sqm		
	e) Lintels, beams, plinth beams, girders, bressumers and cantilevers	361.66 Sqm	Sqm		
	f) Columns, Pillars, Piers, Abutments, Posts and struts.	236.25 Sqm	Sqm		
	g) Stairs, (excluding landings) except spiral-staircases	18.08 , Sqm	Sqm		
	h) Arches, domes, vaults upto 6m span	11.00 Sqm	Sqm		
	i) Cornices and mouldings	81.00 Sqm	Sqm		
	j) Weather shade, Chajjas, corbels etc., including edges	19.12 Sqm	Sqm		
3.2	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and de-centering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured). a) Suspended floors, roofs, landings, beams and balconies (Plan area to be measured).		Sqm		
3.3	Providing, hoisting and fixing upto floor five level precast reinforced cement concrete in vertical and horizontal fins individually or forming box louvers, setting in cement mortar 1:2 (1 cement : 2 coarse sand) including the cost of required centering, shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).				
		1.00 cum	1.0000000000000000000000000000000000000		

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Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
3.4	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete. a) Thermo-Mechanically-Treated bars	32551.00 Kg	Kg		
3.5	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete work 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 proportions as per IS 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.	<i>r</i> .	Cum		
3.6	Deduct for using less cement than the quantity as provided in the item of batch mix concrete / RMC as arrived as per mix design.	58.00 Qtls.	Quintal		
				Total : R	S.

4.0	BRICK WORK			
4.1	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in : a) Cement mortar 1:4 (1 cement : 4 coarse sand)	4.38 cum	Cum	
	b) Cement mortar 1:6 (1 cement : 6 coarse sand)	189.95 cum	Cum	
4.2	Brick work with F.P.S. brick of class designation 75 in superstructure above plinth level upto floor V level in all shapes and sizes in : a) Cement mortar 1:6 (1 cement : 6 coarse sand)	250.16 cum	Cum	

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
4.3	Brick work 7 cm thick with F.P.S. brick of class designation 75 in cement mortar 1:3 (1 cement : 3 coarse sand) in superstructure.	5.00 Sqm	Sqm		
4.4	Brick work in plain arches in superstructure including centering and shuttering complete for span upto 6 metres with F.P.S. brick of class designation 75 in cement mortar 1:3 (1 cement : 3 coarse sand).	6.00 cum	Cum		
4.5	Half brick masonry with F.P.S. bricks of class designation 75 in superstructure above plinth level upto floor V level a) Cement mortar 1:4 (1 cement : 4 coarse sand)	147.03 Sqm	Sqm		
				Total : Rs.	

5.0	MARBLE WORK				
5.1	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 of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with 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.				
	a) Raj Nagar plain white marble / Udaipur Green marble / Zebra black marble. i) Area of slab upto 0.50 sqm	7.79 Sqm	Sqm		
				Total : Rs.	

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
6.0	WOOD WORK	,			
6.1	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked black enameled MS butt hinges with necessary screws excluding, panelling which will be paid for separately. a) Kiln seasoned and chemically treated hollock wood. i) 35 mm thick		Sqm		
6.2	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick. a) Kiln seasoned and chemically treated hollock wood.		Sqm		
6.3	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: 35 mm thick including ISI marked Stainless steel but hinges with necessary screws.		1,5		
6.4	Providing and fixing 35 mm thick wire gauge shutters using galvanized M.S. wire gauge of average width of aperture 1.4 mm with wire of dia 0.63 mm for doors, windows and clerestory windows including ISI marked stainless steel butt hinges with necessary screws. a) Kiln seasoned and chemically treated Hollock wood.	•	Sqm		
6.5	Providing and fixing MS grills of required pattern in frames of windows etc. with MS flats, square or round bars etc. all complete: a) Fixed to steel window by welding		Kilogram		

Item No.	Description of Item	Quantity	Unit	Rate	Amoun
6.6	Providing and fixing fly proof galvanised M.S. wire gauge to windows and clerestory windows using galvanised M.S. wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm.			Rs.	Rs
	a) With 12 mm mild steel U beading.	5.00 Sqm			
6.7	Deduct for not providing and fixing ISI marked M.S. pressed butt hinges bright finished with necessary screws etc. complete.				
	a) 125x65x2.12 mm	46.00 Nos.	Each		
6.8	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete.				
	a) 300 mm weighing not less than 200 gms	54.00 Nos.	Each		
6.9	Providing and fixing ISI marked aluminium butt hinges ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete.				*
	a) 75x45x3.2 mm	64.00 Nos.	Each		
6.10	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete.				
	a) 300x16 mm	6.00 Nos.	Each		
6.11	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:				
	a) 250x10 mm	22.00 Nos.	Each		
	b) 200x10 mm	8.00 Nos.	Each		

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tem	Description of Item	Quantity	Unit	Rate Rs.	Amount
NO.	c) 150x10 mm	18.00 Nos.	Each		
	d) 100x10 mm	64.00 Nos.	Each		-
5.12	Providing and fixing aluminium pull bolts lock anodised ISI marked (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade with necessary screws bolts, nuts and washers etc. complete:	18.00 Nos.	Each		
6.13	Providing and fixing aluminium handle ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc. complete: a) 125 mm	22.00 Nos.	Each		
	b) 100 mm	32.00 Nos.	Each		
6.14	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete: a) Single rubber stopper	14.00 Nos.	Each		
6.15	Providing and fixing aluminium casement stays ISI marked anodised (anodic coating no less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete:	t d 32.00 Nos.			
6.16	Providing and fixing bright finished brass 100mm mortice latch and lock ISI marked with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS 1868) aluminium lever handles with necessary screws etc. complete: (Best make capproved quality)				

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
6.17	Providing and fixing oxidised M.S. casement window fastener with necessary welding and machine screws etc. complete as approved by Engineer-in-charge. (Weight not less than 80 gms including nuts, bolts and washers.)	46.00 Nos.	Each		
				Total : Rs.	

7.0	STEEL WORK			AL.	
7.1	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. a) In stringers, treads, landings etc. of staircases, including use of chequered plate wherever required, all complete.	418.35 Kg	Kg		
	b) In gratings, frames, guard bar, ladders, railing, brackets, gates & similar works.	1802.00 Kg	Kg		
7.2	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing balcony railing & staircase railing including applying a priming coat of approved steel primer. a) M.S. tube.	166.90 Kg	Kg		
				Total : Rs.	

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
8.0	FLOORING WORK				
8.1	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 31mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) and top layer 9mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 4mm to 7mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume including cement slurry etc. complete. a) Ordinary cement without any pigment.		Sqm		
8.2	Marble chips skirting (upto 30 cm height) rubbed and polished to granolithic finish, top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from smallest to 4mm nominal size laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume : a) 18 mm thick with under layer 12 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) i) Dark shade pigment with ordinary cement.		Sqm		
8.3	Providing and fixing glass strip in joints of terrazo / cement concrete floors. a) 40 mm wide and 4 mm thick	497.78 Mtr.	Metre		
8.4	Extra for laying terrazo flooring on staircase treads not exceeding 30 cm in width including cost of forming, nosing etc.	19.00 Sqm	The state of the s		
8.5	Extra for pre finished nosing to treads of steps of marble stone.	6.00 Mtr.	Metre		

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
8.6	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) :				
	a) 25 mm thick	44.00 Sqm	Sqm		
8.7	Kota stone slab 25 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 slab, including rubbing and polishing complete.		Sqm		
8.8	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS:15622 (thickness to be specified by manufacture) 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 12mm thick bed of cement mortar 1:3 (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.		Sqm		
8.9	Providing and laying ceramic glazed floor tiles 300x300 mm (thickness to be specified by manufacturer) of 1st quality conforming to 1S:15622 of approved make in colours such as White, Ivory, Grey, Fume red brown laid on 20mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement and matching pigment etc. complete.				
				Total : Rs.	

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
9.0	ROOFING				
9.1	Painting top of roof with bitumen of approved quality at 17 kg per 10 sqm impregnated with a coat of coarse sand at 60 cudm per 10 sqm including cleaning the slab surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil complete.				
	a) with residual type petroleum bitumen of penetration 80/100	189.94 Sqm	Sqm		
9.2	10 cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25mm thick mud mortar mixed with bhusa at 35 kg per cum of earth and gobri leaping with mix 1:1 (1 clay : 1 cow dung) and covered with flat tile brick of class designation 100 grouted with cement mortar 1:3 (1 cement :3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finished neat :				
	a) With FPS brick tiles	175.71 Sqm	Sqm		
9.3	Extra for additional 1 cm thickness of mud phaska	154.00 Sqm	Sqm		
9.4	Providing and laying brick tiles of class designation 100 over mumty roof grouted with cement mortar 1:3 (1 cement :3 fine sand) mixed with 2% of integral water proofing compound by weight of cement, over a 12 mm layer of cement motor 1:3 (1 cement : 3 fine sand) and finished neat : a) With FPS brick tiles		Sqm		
9.5	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :				
	a) In 75x75mm deep chase	100.98 Mtr.	Metre		

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
9.6	Making khurras 45x45cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20mm nominal size) over PVC sheet 1mx1mx400 micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edges and making and finishing				
	the outlet complete :	4.00 Nos.	Each		
9.7	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 a) 110 mm diameter	33.00 Mtr.	Metre		
9.8	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised - Rigid PVC rain water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10 mm gap for thermal expansion.				
	a) Bend 87.5" 110 mm bend	12.00 Nos.	Each		
	b) Shoe (Plain) 110 mm Shoe	12.00 Nos.	Each		
9.9	Providing and fixing unplasticised - PVC pipe clips of approved design to unplasticised - 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 wall etc. complete.				
	a) 110 mm	20.00 Nos.	Each		
				Total : Rs.	

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
10.0	FINISHING				
10.1	12 mm cement plaster of mix : a) 1:6 (1 cement : 6 fine sand)	644.93 Sqm	Sqm		
10.2	15 mm cement plaster on rough side of single or half brick wall of mix : a) 1:6 (1 cement : 6 fine sand)	797.13 Sqm	Sqm		
10.3	6 mm cement plaster of mix : a) 1:3 (1 cement : 3 fine sand)	460.07 Sqm	Sqm		
10.4	6 mm cement plaster 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement and thick coat of Lime wash on top of walls when dry for bearing of RCC slabs and beams.	25.00 Sqm			
10.5	Neat cement punning	3.00 Sqm			
10.6	Extra for plastering done on moulding cornices or architraves including neat finish to line and level: In one coat	98.00 Sqm			
10.7	Extra for lining out plaster to imitate stone or concrete blocks walling.	61.00 Sqm	1 1 1		
10.8	White washing with lime to give an even shade : a) New work (three or more coats)	834.00 Sqm			

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
10.9	Distampering with oil bound washable distemper of approved brand and manufacture to give an even shade. a) New work (two or more coats) over and including priming coat with cement primer	947.00 Sqm	Sqm		
10.10	Finishing walls with water proofing cement paint of required shade : a) New work (two or more coats applied @ 3.84 kg/10 sqm)	910.00 Sqm	Sqm		
10.11	Applying priming coat : a) With ready mixed pink or grey primer of approved brand and manufacture on wood work (hard and soft wood)	98.00 Sqm	Sqm		
	b) With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/steel works.	150.00 Sqm	Sqm		
10.12	Painting (two or more coats) on rain water, soil, waste and vent pipes and fittings with black anticorrosive bitumastic paint of approved brand and manufacture over and including a priming coat of ready mixed zinc chromate yellow primer on new work: a) 100 mm diameter pipes	24.90 Mtr.	Metre		
10.13	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : a) Two or more coats on new work	98.00 Sqm	Sqm		
10.14	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade: a) Two or more coats on new work over and under coat of suitable shade with ordinary paint of approved brand and manufacture.				-

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs
10.15	Washed stone grit plaster on exterior walls of height upto 10 M. above level in two layers, under layer 12mm cement plaster 1:4 (1 cement : 4 coarse sand) furrowing the under layer with scratching tool, applying cement slurry on the under layer @ 2 kg of cement per square metre, top layer 15mm cement plaster 1:1/2:2 (1 cement : 1/2 coarse sand : 2 stone chipping 10mm nominal size) in panels with groove all around as per approved pattern including scrubbing and washing, the top layer with brushes and water to expose the stone chippings, complete as per specification and direction of Engineer-in-charge (payment for providing grooves shall be made separately)		Sqm		
10.16	Forming Groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specification and direction of Engineer-in-charge. a) 15 mm wide and 15 mm deep groove		Metre		
10.17	Extra for washed stone grit plaster on circular work not exceeding 6 m in radius (in two coats).	18.00 Sqm	Sqm		
				Total : Rs.	

11.0	ROAD WORK				The second la
11.1	Supplying and stacking at site. a) Good Earth	103.02 cum	Cum		
11.2	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction and of approved size and design / shape laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with coarse sand etc. all complete as per direction of Engineer-in-charge.	869.00 Sqm	Sqm		
				Total : R	s.

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
12.0	SANITARY INSTALLATION				
12.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast iron P or S trap, 10 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixture complete including cutting and making good the walls and floors wherever required				
	a) White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests	3.00 Nos.	Each		
12.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixture complete including cutting and making good the walls and floors wherever required		*		
ē	a) W.C. pan with ISI marked white solid plastic seat and lid	3.00 Nos.	Each		
12.3	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes 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 wall and floors where ever required.				
	a) Range of three urinal basins with 10 litre white P.V.C automatic flushing cistern.	3.00 Nos.	Each		
12.4	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white P.V.C. automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fittings as per IS: 2556, C.I. trap with outlet grating and other coupling in C.P. brass including painting of fittings and cutting and making good the walls and floors where ever required.				
	a) Range of three half stall urinal with 10 litre P.V.C automatic flushing cistern.	3.00 Nos.	Each		

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
12.5	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls where ever required. a) White Vitreous China Wash basin size 630 x 450 mm with a pair of 15 mm C.P. brass pillar taps.	3.00 Nos.	Each		
12.6	Providing and fixing kitchen sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste complete, including painting the fittings and brackets, cutting and making good the walls where ever required. a) White glazed fire clay kitchen sink of size 600x450x250 mm	1.00 Nos.	Each		
12.7	Providing and fixing 600 x 450 mm bevelled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P brass screws and washers complete.	3.00 Nos.	Each		
12.8	Providing and fixing soil, waste and vent pipes: a) 100 mm dia - Sand cast iron S&S pipe as per IS: 1729.	10.00 Mtr.	Metre		
	b) 75 mm dia - Sand cast iron S&S pipe as per IS: 1729.	14.00 Mtr.	Metre		
12.9	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 block 10x10x10cm of 1:2:4 mix (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 dia pipe		Each		
	b) For 75 mm dia pipe	5.00 Nos.	Each		

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
12.10	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. a) 100 mm dia Sand cast iron S&S as per IS: 1729.	4.00 Nos.	Each		
	b) 75 mm dia Sand cast iron S&S as per IS: 1729.	4.00 Nos.	Each		
12.11	Providing and fixing plain bend of required degree. a) 100 mm dia Sand cast iron S&S as per IS: 1729.	4.00 Nos.	Each		
	b) 75 mm dia Sand cast iron S&S as per IS: 1729.	4.00 Nos.	Each		
12.12	Providing and fixing heel rest sanitary bend a) 100 mm dia Sand cast iron S&S as per IS: 1729.	1.00 Nos.	Each		
6	b) 75 mm dia Sand cast iron S&S as per IS: 1729.	1.00 Nos.	Each		
12.13	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick with ,bolts and nuts complete. a) 100 x 100 x 100 mm Sand cast iron S&S as per IS: 1729.	2.00 Nos.	Each		
	b) 75 x 75 x 75 mm Sand cast iron S&S as per IS: 1729.	2.00 Nos.	Each		
12.14	Providing and fixing terminal guard a) 100 mm dia - Sand cast iron S&S as per IS: 1729.	1.00 Nos.	Each		
	b) 75 mm dia - Sand cast iron S&S as per IS: 1729.	1.00 Nos.	Each		

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Providing and fixing collar a) 100 mm dia - Sand cast iron S&S as per IS: 1729. b) 75 mm dia - Sand cast iron S&S as per IS: 1729. Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter: a) 100 mm b) 75 mm	4.00 Nos. 4.00 Nos.	Each Each		
Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter: a) 100 mm	Nos.			
fittings of diameter: a) 100 mm	38.00	Each		
b) 75 mm				
	28.00 Nos.	Each		
Providing and fixing M.S. stays and clamps for sand cast iron /centrifugally cast (spun) iron pipes of diameter: a) 100 mm	2.00 Nos.	Each		
b) 75 mm	2.00 Nos.	Each		
Providing and fixing trap of self cleansing 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) 100 mm inlet and 100 mm outlet i) Sand cast iron S&S as per IS: 1729.		Each		
Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour. a) 600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms.		Each		
F / 6 6 ii	Providing and fixing trap of self cleansing 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) 100 mm inlet and 100 mm outlet b) Sand cast iron S&S as per IS: 1729. Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour. a) 600mm long towel rail with total length of 645mm, width 78mm and effective height of	2.00 Nos. Providing and fixing trap of self cleansing 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) 100 mm inlet and 100 mm outlet) Sand cast iron S&S as per IS: 1729. Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour. a) 600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms. 3.00	2.00 Nos. Providing and fixing trap of self cleansing 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) 100 mm inlet and 100 mm outlet) Sand cast iron S&S as per IS: 1729. Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour. a) 600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms. Each 3.00 Each	2.00 Nos. Each Nos. Providing and fixing trap of self cleansing 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) 100 mm inlet and 100 mm outlet) Sand cast iron S&S as per IS: 1729. Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour. a) 600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms. 3.00 Each

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
13.0	WATER SUPPLY				
13.1	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work - Exposed on wall a) 15 mm dia. nominal bore	75.00 Mtr.	Metre		
	b) 20 mm dia. nominal bore	45.00 Mtr.	Metre		
13.2	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. (External work) a) 20 mm dia. nominal bore	38.00 Mtr.	Metre		
13.3	Providing and fixing brass bib cock of approved quality a) 15 mm nominal bore	9.00 Nos.	Each		
13.4	Providing and fixing brass stop cock of approved quality a) 15 mm nominal bore	9.00 Nos.	Each		1
	b) 20 mm nominal bore	4.00 Nos.	Each		
13.5	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete a) 20 mm nominal bore	2.00 Nos.	Each		
13.6	Providing and fixing brass ferrule with C.I. Mouth cover including boring and tapping the main. a) 15 mm nominal bore	1.00 Nos.	Each		

Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet a) 100 mm diameter	3.00 Nos.	Each		
Painting G.I. pipes and G.I. fittings with synthetic enamel white paint over already mixed priming coat, both of approved quality for new work. a) 20 mm dia. nominal bore	45.00 Mtr.	Metre		
Painting G.I. pipes and fittings with two coats of anti- corrosive bitumastic paint of approved quality. a) 15 mm diameter pipe	75.00 Mtr.	Metre		
b) 20 mm diameter pipe	45.00 Mtr.	Metre		
Providing and filling sand of grading zone V or coarser grade alround the G.I. pipes in external work. a) 20 mm diameter pipe		Metre		
Providing and fixing G.I. Union in G.I. pipes including cutting and threading the pipe and making long screws etc. complete. (New work) a) 15 mm dia. nominal bore		Each		
b) 20 mm dia. nominal bore	10.00 Nos.	Each		
1.12701 marked with cover and suitable locking arrangement and making necessar	1000.00	and the second s		
	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet a) 100 mm diameter Painting G.I. pipes and G.I. fittings with synthetic enamel white paint over already mixed priming coat, both of approved quality for new work. a) 20 mm dia. nominal bore Painting G.I. pipes and fittings with two coats of anti- corrosive bitumastic paint of approved quality. a) 15 mm diameter pipe Providing and filling sand of grading zone V or coarser grade alround the G.I. pipes in external work. a) 20 mm diameter pipe Providing and fixing G.I. Union in G.I. pipes including cutting and threading the pipe and making long screws etc. complete. (New work) a) 15 mm dia. nominal bore Providing and placing on terrace (at all floor level) polyethylene water storage tank IS: 12701 marked with cover and suitable locking arrangement and making necessar holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet a) 100 mm diameter Painting G.I. pipes and G.I. fittings with synthetic enamel white paint over already mixed priming coat, both of approved quality for new work. a) 20 mm dia. nominal bore Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality. a) 15 mm diameter pipe Providing and filling sand of grading zone V or coarser grade alround the G.I. pipes in external work. a) 20 mm diameter pipe Providing and fixing G.I. Union in G.I. pipes including cutting and threading the pipe and making long screws etc. complete. (New work) a) 15 mm dia. nominal bore Providing and placing on terrace (at all floor level) 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.	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet a) 100 mm diameter Painting G.I. pipes and G.I. fittings with synthetic enamel white paint over already mixed priming coat, both of approved quality for new work. a) 20 mm dia. nominal bore Painting G.I. pipes and fittings with two coats of anti- corrosive bitumastic paint of approved quality. a) 15 mm diameter pipe Providing and filling sand of grading zone V or coarser grade alround the G.I. pipes in external work. a) 20 mm diameter pipe Providing and fixing G.I. Union in G.I. pipes including cutting and threading the pipe and making long screws etc. complete. (New work) a) 15 mm dia. nominal bore Providing and placing on terrace (at all floor level) 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.	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet a) 100 mm diameter Painting G.I. pipes and G.I. fittings with synthetic enamel white paint over already mixed priming coat, both of approved quality for new work. a) 20 mm dia. nominal bore Painting G.I. pipes and fittings with two coats of anti- corrosive bitumastic paint of approved quality. a) 15 mm diameter pipe Providing and filling sand of grading zone V or coarser grade alround the G.I. pipes in external work. a) 20 mm diameter pipe Providing and fixing G.I. Union in G.I. pipes including cutting and threading the pipe and making long screws etc. complete. (New work) a) 15 mm dia. nominal bore Providing and fixing G.I. Union in G.I. pipes including cutting and threading the pipe and making long screws etc. complete. (New work) a) 15 mm dia. nominal bore Providing and placing on terrace (at all floor level) polyethylene water storage tank ISI 12.00 Nos. Providing and placing on terrace (at all floor level) polyethylene water storage tank ISI 12.00 Nos. Providing and placing on terrace (at all floor level) polyethylene water storage tank ISI 12.00 Nos. Providing and placing on terrace (at all floor level) polyethylene water storage tank ISI 12.00 Nos. Providing and placing on terrace (at all floor level) polyethylene water storage tank ISI 12.00 Nos. Providing and placing on terrace (at all floor level) polyethylene water storage tank ISI 12.00 Nos. Providing and placing on terrace (at all floor level) polyethylene water storage tank ISI 12.00 Nos.

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Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
NO.	b) 10000 liters tank (1 No. tank)	10000.00 Liters	Per litre capacity		
13.13	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. a) 15 mm nominal bore	2.00 Nos.	Each		er -
13.14	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS: 8931 a) 15 mm nominal bore	6.00 Nos.	Each		
13.15	Providing and fixing unplasticised PVC connection pipe with PTMT Nuts collar and bush of approved quality and colour. a) 15 mm nominal bore with 30 cm length	9.00 Nos.	Each		
				Total : Rs	

14.0	DRAINAGE			
14.1	Providing, laying and jointing glazed stone ware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete. a) 150 mm diameter	8.00 Mtr.	Metre	
14.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40mm nominal size) alround S.W. pipes including bed concrete as per standard design : a) 150 mm dia. S.W. Pipe	8.00 Mtr.	Metre	
	b) 250 mm dia. SW / RCC Pipe	50.00 Mtr.	Metre	

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
14.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40mm nominal size) upto haunches of S.W. pipes including bed concrete as per standard design : a) 300 mm dia. S.W. Pipe	140.00 Mtr.	Metre		
14.4	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design. a) 150 x 100 mm size P type i) With FPS bricks of class designation 75		Each		
14.5	Providing and laying non-pressure NP2 class (light duty) RCC pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete. a) 300 mm dia RCC pipe	143.00 Mtr.	Metre		
14.6	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) R.C.C top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design. a) Inside size 90 x 80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg weight of frame 15 kg). i) With FPS bricks of class designation 75		Each		

tem No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
14.7	Constructing brick masonry circular type manhole 0.91m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand), inside cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size), and making necessary channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design. a) 0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560mm internal diameter conforming to IS 12592, total weight of cover and frame to be not less than 182kg, fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) i) With F.P.S bricks of class designation 75	2.00 Nos.	Each		
14.8	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement, and making necessary channels for the drain etc. complete: For pipes 250 to 300 mm diameter		Each		
14.9	Constructing brick masonry road gully chamber 50x45x60 cm with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450mm precast R.C.C horizontal grating with frame complete as per standard design.				
	With F.P.S. bricks	18.00 Nos.	Each		
14.10	Providing and laying non-pressure NP2 class (light duty) S&S RCC pipes jointed with rubber ring including testing of joints etc. complete. a) 250 mm dia pipe	50.00 Mtr.	Metre		
				Total : Rs.	

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
15.0	ALUMINIUM WORK				
15.1	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, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottoms and sides with required PVC / neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and directions of Engineer-in-charge. (Glazing and panelling to be paid for separately).				
	a) For fixed portion i) Anodised aluminium (anodised transparent or dyed to required shade according to IS 1868, Minimum anodic coating of grade AC 15).	522.80 Kg	Kg		
15.2	Providing and fixing 12mm thick pelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminium doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and direction of engineer-incharge.				w
	a) Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side.	15.00 Sqm	Sqm		
15.3	Providing and fixing glazing in aluminium doors, windows, ventilator shutters and partitions etc. with PVC / neoprene gasket etc. complete as per architectural drawing and the direction of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item.)				
	With float glass panes of 4.0 mm thickness.	54.00 Sqm	Sqm		

Item No.	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.
15.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS:6315 marked, for doors, including cost of cutting floors as required, embedding in floors 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. a) With stainless steel cover plate		Each		
		1403.		Total : Rs.	

6.0	WATER PROOFING				
6.1	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C, kitchen and the like consisting of: (i) Ist course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding of junction of vertical and horizontal surface. (ii) Ilnd course of 20mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding of junction of vertical and horizontal surface. (iii) Illrd course of applying blown or/residual bitumen applied hot at 1.7 kg per sqm of				
	area. (iv) IVth course of 400 micron thick PVC sheet (Overlaps at joints of PVC sheet should be 100mm wide and pasted to each other with bitumen @ 1.7 kg/sqm).	10.32 Sqm	Sqm		
	<u> </u>			Total : Rs.	

JE(P)/SED:8

AE(P)/SED:8

EE/SED:8