Municipal Corporation Gurgaon



TENDER

and

CONTRACT DOCUMENT

For Procurement of Civil/Mechanical/Electrical Works under Local Competitive Bidding Procedure

Name of Work: Construction of Community Center in Village Mullahera Ward No. 2, Gurgaon

App. Cost Rs. 73.33 lacs.

| Name of Agency | : | | | | | | | |
|-------------------------|------|---|--------|---|-------------------|---|-------|--------|
| | •••• | ••••• | ••••• | ••••• | • • • • • • • • • | • • • • • • • • • • • • | ••••• | ••••• |
| Agreement No. : | , | • | •••••• | • | •••••• | • | ••••• | ••• |
| -Sd- | | | | | | | | |
| Signature of Dy. Supdt. | | | | | | | , | Tender |
| Notice No | | | | | | | | |

PRESS NOTICE

| | Municipal Corporation Gurgaon | |
|--------|-------------------------------|--|
| | Notice Inviting Tender | |
| No | | |
| Dated: | | |
| | | |

1. Online bids are hereby invited on behalf of Commissioner MCG for the works mentioned below:-

Name of Work:- Construction of Community Center in Village Mullahera Ward No. 2, Gurgaon

App. Cost Rs. 73.33 lacs.

| Estt. Cost | Earnest | Time Limit | Tender | | | |
|-------------|----------|------------|------------|-----------------------|----------------------|--|
| Rs. in Lacs | Money in | in Months | Document | During date & Time | | |
| | Rs. | | Fee in Rs. | 8 | | |
| | | | | Downloading of | Submission of | |
| | | | | Tender | online bid | |
| | | | | Document and | (Re- | |
| | | | | online bid | Encryption of | |
| | | | | preparation / | Bids) | |
| | | | | hash | | |
| | | | | Submission | Date & time | |
| | | | | Date & Time | | |
| 73.33 | 147000/- | 10 Months | 1000 | 22.02.2014 | 22.02.2014 | |
| | | | | 21:01 to | 21:01 to | |
| | | | | 26.02.2014 | 26.02.2014 | |
| | | | | 17:00 | 17:00 | |

- 1. Tender will be opened on dated **03.03.2014**, **from 09:00 AM to 5:00 PM**
- 2. The detail tender notice can be seen on website: http://mcg.gov.in
- 3. Possession of Digital Signature Certificate (DSC) and registration of the contractors on the portal i.e. http://mcg.etenders.in is a prerequisite for e-tendering. Kindly contact o/o Nextenders (India) Pvt. Ltd., O/O MCG, Sec-39: Sh. Sanjay Kumar 8743042801
- **4.** For any other queries, please contact Executive Engineer, Div. No. 3, Municipal Corporation Gurgaon Tel (M) 8826794063 Address:- Near HUDA Community Centre, Sector 39, Gurgaon.
- **5.** The Contractor Should be enlisted up to the limit of tendered amount.
- 6. Earnest money will be deposited by the bidders/contractual agencies through on-line system. No original DD will be accept in this office

For further details and e-tendering schedule, visit website http://mcg.etenders.in

For & on behalf of Commissioner MCG

Sd/-

Executive Engineer Division No. 3, Municipal Coporation, Gurgaon

Municipal Corporation Gurgaon

NOTICE INVITING E-TENDER

Online bids are hereby invited for the following work:-

<u>Name of work</u>: Construction of Community Center in Village Mullahera Ward No. 2, Gurgaon

App. Cost Rs. 73.33 lacs.

| Estt. Cost | Earnest | Time | Limit | Tender | Downloading of | Submission of |
|-------------|----------|----------|-------|------------|------------------------------|----------------------|
| Rs. in Lacs | Money | in Montl | hs | Document | Tender Document | online bid (Re- |
| | in Rs. | | | Fee in Rs. | and online bid | Encryption of |
| | | | | | preparation / hash | Bids) |
| | | | | | Submission Date & | |
| | | | | | Time | Date & time |
| 73.33 | 147000/- | 10 Mont | ths | 1000 | 22.02.2014 21:01 to | 22.02.2014 21:01 to |
| | | | | | 26.02.2014 17:00 | 26.02.2014 17:00 |

- b) Tender documents can be downloaded online from the Portal: http://mcg.etenders.in by the Firms / Individual registered on the Portal.
- c) As the Bids are to be submitted online and are required to be encrypted and digitally signed, the Bidders are advised to obtain Digital Signature Certificate (DSC) at the earliest. For obtaining Digital Certificate, the Bidders should follow Point No.- 2 under "Annexure-A" Conditions of e-tendering.

d) Key Dates

| Sr. No. | MC Gurgaon Stage | Contractor Stage | Start Date and Time | Expiry Date and Time |
|------------|---------------------------------------|---|------------------------|-------------------------|
| 1 | Release of Tender document | - | 22.02.2014 09:00 | 22.02.2014 21:00 |
| 2 | - | Downloading of Tender Document & Payment Tender Document fees | 22.02.2014 21:01 | 26.02.2014 17:00 |
| 3 | - | Online Bid Preparation, Hash Submission & Earnest Money Deposit | 22.02.2014 21:01 | 26.02.2014 17:00 |
| 4 | Technical & Financial Lock | - | 27.02.2014 09:00 | 27.02.2014 17:00 |
| 5 | - | Re-encryption of Online Bids | 27.02.2014 17:01 | 28.02.2014 17:00 |
| 6 | | Manual Submission of EMD & additional documents | 27.02.2014 17:01 | 28.02.2014 17:00 |
| 7 | Open EMD & / Technical bid | - | 01.03.2014 09:00 | 01.03.2014 17:00 |
| 8 | Eligibility criteria Evaluation | - | 01.03.2014 09:00 | 01.03.2014 17:00 |
| 9 | Open Financial / Price-Bid | - | 03.03.2014 09:00 | 03.03.2014 17:00 |

e) The Bidders can download the tender documents from the Portal: http://mcg.etenders.in. Tender Documents Fees has to be paid online through payment gateway during the "Online Bid Preparation & Hash Submission" stage and Earnest Money Deposit has to be deposited through Demand Draft in the name of Municipal Corporation, Gurgaon.

Willing Contractors shall have to pay the Tender Document Fees through payment gateway during the "Online Bid Preparation & Hash Submission" stage. However, the details of the EMD are required to be filled at the time of Bid Preparation and Hash Submission Stage; the <u>Bidders are required to keep the EMD details ready</u> beforehand.

f) The tender shall be submitted by the bidder in the following two separate envelops online:

1. Earnest Money and all the documents

In support of eligibility criteria - Envelope 'T1'

2. Price Bid - Envelope 'C1'

Reference of the EMD is to be mentioned online

In the first instance, the Envelop – 'T1' of all the Bidders containing the statement of Earnest Money and documents supporting eligibility criteria shall be opened online. If the Earnest Money and eligibility of bidder is found proper, the Envelop 'C1' containing financial bids shall be opened online in the presence of such bidders who either themselves or through their representatives choose to be present. The financial bid shall be opened only if the bidders meet the eligibility criteria as per the Bid document.

Envelope 'T1' - Earnest Money Deposit and eligibility criteria Envelope

Physical Technical Envelope – Photocopies in support of eligibility criteria and photocopy of document of transaction made in support of deposit of Earnest Money.

Online Technical Envelope—Reference details of the Earnest Money Deposit instrument and scanned copy of documents supporting deposition of EMD and eligibility criteria.

Envelope 'CI' - Price Bid Envelope

To be submitted mandatory online-"Information related to Price Bid of the Tender".

The bidder can submit their tender documents as per the dates mentioned in the schedule above.

CONDITIONS:-

- 1. EMD of Societies 1% of DNIT Cost and Others Contractor shall be full Earnest Money
- 2. Conditional tenders will not be entertained & are liable to be rejected.
- 3. The undersigned reserves the right to reject any tender or all the tenders without assigning any reason.
- 4. The societies shall upload & produce a copy of the resolution authorizing the person to file the tender from the Co-Operative department for e-tendering.
- 5. The tender without earnest money payment will not be opened.
- 6. The jurisdiction of court will be at Gurgaon.
- 7. The tender of the bidder who does not satisfy the eligibility criteria in the bid documents will be rejected summarily without assigning any reason and no claim whatsoever on this account will be considered.
- 8. Bids shall be valid for 3 months from the date of expiry of online "Re-Encryption of online Bids" stage. The bid for the work shall remain open for acceptance during the bid validity period to be reckoned from the expiry date of "Re-Encryption of online Bids" stage. If any bidder withdraws his bid during bid validity period, any modifications in the terms and conditions of the bid, the said earnest money shall stand forfeited.

Executive Engineer

- 7 -

ANNEXURE-A

CONDITIONS OF E-TENDERING

Instruction to Contractor on Electronic Tendering

These conditions will over-rule the conditions stated in the tender documents, wherever relevant and applicable.

1. Registration of contractors on E-tendering Portal:-

All the Contractors intending to participate in the tenders processed online are required to get registered on the Electronic Tendering System on the Portal http://mcg.etenders.in. For more details, please see the information on the Registration info link on the home page.

2. Obtaining a Digital Certificate:

- 2.1 The Bids submitted online should be encrypted and signed electronically with a Digital Certificate to establish the identity of the bidder bidding online. These Digital Certificates are issued by an Approved Certifying Authority, by the Controller of Certifying Authorities, Government of India.
- 2.2 A Digital Certificate is issued upon receipt of mandatory identity (i.e. Applicant's PAN Card) and Address proofs and verification form duly attested by the Bank Manager/ Charted Accountant/ Any Gazatted Officer whose stamp carrying emblem of Ashoka. Only upon the receipt of the required documents, a digital certificate can be issued.
- 2.3 The contractors may obtain Class-II digital certificate from any Certifying Authority or Sub-certifying Authority authorized by the Controller of Certifying Authorities or may obtain information and application format and documents required for the issue of digital certificate from:

M/s NexTenders (India) Pvt. Ltd. YUCHIT, Juhu Tara Road,

Mumbai – 400049

Email: Chandigarh@nextenders.com or

NexTenders (India) Pvt. Ltd.
O/o PWD (B&R) Haryana
Nirman Sadan Building (Basement)
Plot No.-1, Dakshan Marg
Sector - 33 A,
Chandigarh-160020

Tel. No. 0172-2618292

Email: chandigarh@nextenders.com.

- 2.4 Bid for a particular tender may be submitted online using the digital certificate, which is used to encrypt the data and sign the hash during the stage of bid preparation & hash submission. In case, during the process of a particular tender, the user looses his digital certificate (be it due to virus attack, hardware problem, operating system or any other problem) he will not be able to submit the bid online. Hence, the users are advised to keep a back up of the certificate and also keep the copies at safe place under proper security (for it's use in case of emergencies).
- 2.5 In case of online tendering, if the digital certificate issued to the authorized user of a firm is used for signing and submitting a bid, it will be considered equivalent to a no-objection certificate/power of attorney /lawful authorization to that User. The firm has to authorize a specific individual through an authorization certificate signed by all partners to use the digital certificate as per Indian Information Technology Act 2000. Unless the certificates are revoked, it will be assumed to represent adequate authority of the user to bid on behalf of the firm in MC GURGAON tenders as per Information Technology Act 2000. The digital signature of this authorized user will be binding on the firm.
- 2.6 In case of any change in the authorization, it shall be the responsibility of management / partners of the firm to inform the certifying authority about the change and to obtain the digital signatures of the new person / user on behalf of the firm / company. The procedure for application of a digital certificate however will remain the same for the new user.
- 2.7 The same procedure holds true for the authorized users in a private/Public limited company. In this case, the authorization certificate will have to be signed by the directors of the company.

3 Opening of an Electronic Payment Account:

For purchasing the tender documents online, contractors are required to pay the tender documents fees online using the electronic payments gateway service. For online payments, please refer to the Home page of the e-tendering Portal http://mcg.etenders.in

4 Set up of machine:

In order to operate on the electronic tender management system, the user's machine is required to be set up. A help file on setting up of the system can be obtained from M/s Nextenders (India) Pvt. Ltd. or can be downloaded from the home page of the website - http://mcg.etenders.in.

5 Online Viewing of Detailed Notice Inviting Tenders:

The contractors can view the detailed N.I.T and the time schedule (Key Dates) for all the tenders floated through the electronic tendering system on the MC GURGAON e-tenders website http://mcg.etenders.in

Download of Tender Documents:

The tender documents can be downloaded from the Electronic Tendering System through the Portal http://mcg.etenders.in

Key Dates:

The contractors are strictly advised to follow dates and times as indicated in the Notice Inviting Tenders. The date and time will be binding on all contractors. All online activities are time tracked and the system enforces time locks that ensure that no activity or transaction can take place outside the start and end dates and the time of the stage as defined in the Notice Inviting Tenders.

8 <u>Bid Preparation (Technical & Financial) Online Payment of Tender Document Fee</u> and Submission of Bid Seal (Hash) of online Bids:

- 8.1 The Payment can be made by eligible / contractors online directly through Credit Cards / Internet Banking Accounts / Cash Cards. The contractors have to pay the cost of the tender documents online by making online payment of tender document fees using the service of the secure electronic payment gateway. The secure electronic payments gateway is an online interface between contractors and credit card / online payment authorization networks.
- **8.2** Submission of bids will be preceded by submission of the digitally signed bid seal (Hash) as stated in the time schedule (Key Dates) of the Tender.

Generation of Super Hash:

After the submission of Bids (Hash) by the Contractors, the bidding round will be closed and a digitally signed Super Hash will be generated by the authorized Municipal Corporation GURGAON officers. This is equivalent to sealing the tender box.

10 Submission of actual online bids:

Contactors have to submit their encrypted bids online and upload the relevant documents for which they generated the hash at the stage of hash generation & submission after the generation of Super Hash. The process is required to be completed within the date and time as stated in the Notice Inviting Tenders (Key Dates). The electronic bids of only those contactors who have submitted their bid seals (Hashes) within the stipulated time, as per the tender time schedule (Key Dates), will be accepted by the system. A contractor who does not submit his bid seal (Hash) within the stipulated time will not be allowed to submit his bid.

Note:- Bidders participating in e-tendering shall check the validity of his/her Digital Signature Certificate before bidding in the Tenders floated online at e-tendering portal of MC Gurgaon website http://mcg.etenders.in.

GENERAL NOTES (A)

- 1. This contract schedule of rates is an extract of the relevant items from the Haryana PWD schedule of rates, 1988 and is to be read with another schedule attached hereto namely as the "SCHEDULE OF CEILING PREMIA". For the purpose of cross reference against each items the chapter no and the item no has been indicated.
- 2. The above rates are for the complete items including cost of all materials, labour, tools and plants etc. unless otherwise specified.
- 3. All clauses and notes given in the Haryana PWD schedule of rates 1988 with upto the date of tender shall be applicable on all above items where ever necessary.
- 4. The description rates, units etc. of the above items shall be corrected as per Haryana PWD schedule of rates, 1988 in case of any error or omission.
- 5. Nothing shall be paid for unforeseen delays on account of non-availability of any kind of material, drawing or design.
- 6. Nothing shall be paid for the damage done by rain, floor or any other act of God.
- 7. The whole work shall be carried out strictly in accordance with the Haryana PWD specifications 1990 edition with upto date correction slips.
- 8. In case contract schedule of rates. Only essential portion or items has been written it will deem to cover the entire items fully described in Haryana PWD schedule of rates subject to the foot notes and notes given in the Haryana PWD schedule of rates 1988.
- 9. The work shall be considered to be situated within the Municipal limits for all purposes.
- 10. No claims will be entertained from the contractor in case any mistake in description, rates or units accrue in any of the items taken in the schedule, while composing this schedule or on account of typing or comparison or over sighting. If there is any mistake, the same shall be rectifiable at any stage as per Haryana PWD schedule or rates, 1988 by the Engineer-in-charge alongwith the amendments of the same received from time to time.
- 11. Approximate quantities have been given in the contract schedule of rates and these can vary at the time of execution of the work. The payment will however be made according to the actual work done by the contractor and accepted by the Department.
- 12. The amount of work can be increased or decreased. The contractor will have no claims on this account.
- 13. The items given in the contract schedule of rates can be changed by the Engineer-in-charge and its execution will be handing over the contractor.
- 14. No claim on account of fluctuated in prices due to any reason what so ever will be considered.
- 15. The list of ceiling premia admissible on various items contained in various chapter of Haryana PWD schedule of rates 1988 is attached with the notice inviting tender and shall from the part and parallel of this contract schedule of rates. All those items which do not fall within Haryana PWD schedule of rates, 1988 the ceiling premia shall be "ZERO".
- 16.Payment only made to the contractor for the work actual done at site and accepted by the department.
- 17. All the items in the contract schedule of rates are subject to the foot notes as given in the Haryana PWD schedule of rates, 1988 regarding these items.
- 18. The department reserve the option to take away any item of work or any part thereof at any item during the currency of contractor and re-allot to another contractor with due notice to the contractor without liability of compensation.
- 19. The item of HSR 1988 is described very briefly but the description would mean the complete description in aforesaid PWD schedule of rates, 1988 regarding these items with upto date amendments.

- 20. All the pages of the tender for must be signed by the tenderer before submitting the tender failing which the tender shall be treated as invalid.
- 21. The validity of the tender shall be considered as three months and no lower limit even if quoted by the contractor shall be considered.
- 22. In the DNIT CSR means CONTRACT SCHEDULE OF RATES.
- 23.If water connection is given to the contractor by the department ½% (Half percent) charges shall be deducted from the bill of the work done. However, material required for water connection will be arranged by the contractor.
- 24. The work will be carried out according to IRC, MORT & H / PWD specification latest edition which will form a part and parcel of this contract schedule of rates.
- 25. Nothing extra shall be paid for any type of jungle clearance which the tenderer may have to carry out.
- 26.If any damaged is done by the contractor to any existing work during the coarse of excavation of the work. This shall have to be made good by him at his own cost.
- 27. The shall take all the precaution to avoid the accidents by providing and maintaining necessary caution boards, day and night speed limit breakers, red flags and red light and providing barriers as necessary at either end of the location. All these arrangements will be considered as incidental to the work and contractor responsibility and nothing shall be payable to him in this respects.
- 28. The contractor shall make his own arrangement for the electric connection of required and make necessary payment directly to the department concerned.
- 29. The work will be open to third party inspection arranged by the department and contractor will have no claims in this regard. The charges for third party inspection will be born by the department.
- 30. Any item of work not provided in the contract schedule of rates but require to be executed, will be at the Haryana PWD schedule of rates, 1988 together with the ceiling premium exhibited in the NIT for various chapters where the item exists in the Haryana PWD schedule of rates 1988 subject to premium or discount tendered by the contractor. In case of non scheduled item, this will be governed by clause 12 of the contract agreement.
- 31.MCG has right to negotiate the rates to explore lower rates if required.

TECHNICAL CONDITIONS (B)

- 1. The ISI marked OPC 43 Grade; Cement will be used and arranged by the Contractor/ Agency at his own cost.
- 2. The work will be open for third party inspection for quantity and quality as per prescribed relevant. IS specification as directed by the Engineer in charge.
- 3. The design mix to be used will be going approved by the agency from Engineer-in-charge at least 15 day in advance. The samples will be given by the agency free of cost.
- 4. Contractor shall provide suitable measuring arrangement and leveling instruments latest quality approved by Engineer-in-charge at the site of work.
- 5. No extra payment on account of quality control measures shall be paid to the contractor.
- 6. PERIOD OF DEFECTS LIABILITY. The contractor shall be responsible to make good and defect which may develop or may be noticed during period of one year from the certified date of completion and which is attributable to the contractor. All notices of such defects shall be given to the contractor promptly. In case the contractor fails to make good the defects, the Engineer-in –Charge may employ other means to make good such defects and all expenses consequent and incidental there to shall be borne by the contractor.
- 7. The contractor shall not occupy or obstruct by his operations more than ½ of the width of any road or street. However, in special conditions, the contractor shall obtain the consent of the Engineer-in-charge in writing before closing any road for vehicular traffic and footpath shall be kept clear at all times. The contractor shall make all the precaution to avoid any accidents and for proper guidance of the traffic bye providing necessary barriers, reflective cautionary sign/signal, speed limit boards, red and green flags, electric light focus type at night, with sufficient number of chowkidars and other measures while work is in progress or blocking the road wherever otherwise necessary. The material and the machinery shall be stocked/ placed at the site of work in such a way that there will be no obstruction to traffic and inconvenience to public. No claim shall be entertained on account of such faulty arrangement made by the contractor. The contractor shall be fully responsible for all accidents caused by the negligence of such precaution. In case the contractor fails to comply with the afore said arrangements the same shall be made by the Engineer-in-charge at the risk and cost of the contractor.
- 8. If directed by the Engineer-in-charge in writing the work shall be done during night time for which nothing extra shall be paid to the contractor.
- 9. Before tendering the tender shall inspect the site of work and shall fully acquaint/ satisfy himself about the condition with regard to site, nature of soil, availability of material, suitable location for construction of god owns stores and labour huts, the extent of leads and lifts is involved in the work (over the entire duration of contract) including local required for a satisfactory execution of work. This rate should take into consideration all such factors and contingencies. No claim what so ever shall be entertained by the department on this account.
- 10.Only actual quantities of work completed and accepted by the Engineer-in-charge shall be paid for if any damage is done by the contractor to any existing work during the course of execution of work, this shall have to be made good by him at his own cost.
- 11.At least one authorized representative of the contractor should always be available at site of work to take instruction from departmental officers and ensure proper execution of work should be done in the absence of the contractor.
- 12. The contactor shall be required to provide all such materials/ equipment's at site to conduct field tests and to ensure that the quality of aggregate shall be according to the prescribed specification and no payment for material required for samples for such tests shall be made to him. In case the material is not found up to mark, the same will be rejected.

- 13. For cement, bitumen, steel and similar other material there essential tests are to be carried out at the manufacturer's plants or at laboratories other then the site laboratory, the cost of samples, testing and furnishing of test certificates to the Engineer.
- 14. Nothing shall be paid for making and maintenance of service road required for the transportation of the material.
- 15.Irrespective of what is stated in para 6 of the preface of Hr. PWD/ schedules of rates 1988 general rules no carriage of cement, steel and bricks aggregate bitumen or any other type of material shall be admissible irrespective of lead involved.
- 16.No payment will be made to the contractor for damage caused by the rains or other natural claimants during the execution of the work and no claim on this account will be entertained.
- 17. This security shall be refunded after 3(three) months of completion of work but the contractor/ Agency shall submit deposit at call in the shape of bank Guarantee of equal amount for balance 09(nine) months in favour of Commissioner Municipal Corporation Gurgaon before release of security.
- 18. The aggregate & fine aggregate used shall be as per PWD/ Most specification and the water shall be as per IS 456 2000.
- 19.All aggregates including water etc. and furnished products in RMC will be tested as per relevant ISI standard.
- 20. The Fly ash may be used in mix designed for M-40 grade to max extent of 10% and design be got approved by the NCCB/CRRI with minimum cement content 420 Kg of 43 grade per cubic meter.

SPECIAL CONDITIONS (C)

- 1. Wherever in the description of the item in the bill of the quantities the specification clause No. of MORT&H is missing, the same shall be carried out strictly in accordance with the MORT&H (Road Wing) and latest revision/ amendment as applicable.
- 2. The contractor shall clear the site of work simultaneously as the work proceeds failing which the same shall be got cleared by the Engineer-in-charge at the risk and cost of the contractor.
- 3. Collection of material at site for the proper execution of work as per specification shall include all leads and lifts. The percentage rates quoted by the contractor shall hold good irrespective of the quarry/ sources form which materials are brought so long it conform to the specification. Clause/ change of any quarry/ source shall not entitle the contractor to claim any revision in rates.
- 4. The contractor shall store all materials in proper manner so as to avoid contamination, deterioration and any accidents. He shall not store or keep any materials are to be stored shall be subject to the approval of the Engineer-in-charge. At the places where the materials are stored by the contractor he will make his own arrangements to clear the place within such time as may be instructed by the Engineer-in-charge or the same shall be got clear by the Engineer-in-charge at the risk and cost of the contractor.
- 5. No compensation for any damage caused to the work/ materials by him, folds or other natural calamities shall be paid to the contactor. The contractor shall make good all such damages at his own cost as per directions of the Engineer-in-charge.
- 6. The contractor shall obtain prior approval of the Engineer-in-charge before installation of water and power system, electrical and mechanical equipment and plants and all temporary construction etc. at site of work. On completion of work, the contractor be made good the ground at his own cost as per directions of the Engineer-in-charge, failing which the same shall he made good by the Engineer-in-charge at the risk and cost of the contractor.
- 7. The contractor shall make arrangement at his own cost for at least two numbers of modern leveling instruments (wild type) for the purpose of carrying leveling operation failing which the same shall be arranged by the Engineer-in-charge at his risk and cost.
- 8. No work should be done in the absence of the contractor on his authorized representatives. A technician and surveyor will be provided/ made available for all working time by the contractor for carrying out quality control tests and surveying. Nothing extra will be paid on this account.
- 9. Nothing will be paid unforeseen delays on account of non-availability of any kind of material or drawing and design.
- 10. The contractor will be responsible for setting cut the work establishing benchmark, center line etc and will carry out all such works at his own cost.
- 11.Before start of the work, the contractor shall submit the program of execution of work, get it approved from Engineer-in-charge and strictly adhere to the same for timely completion of the project.
- 12. The contractor shall have to make approached to the site, if so required and keep them in good condition for transportation of labour and materials a well as inspection of work by Engineer-in-charge. Nothing extra shall be paid on this account.
- 13. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued to him by the department if any or his own material.
- 14. The rate quoted by the agency/ contractor shall including the entire cost of royalty, Municipal tax, direct or indirect including all loading, unloading, carriage on Kacha/ Pacca bed or road and stacking including all labour for supply of material at the destination and nothing extra shall be paid. The contractor shall quote his accordingly.

- 15. The contractor will arrange and use its own all type of machinery and T&P incidental to all operation for the work. The rates to be quoted should be inclusive of the same.
- 16. The stacking will be done at hot mix plant site for various type of material in the sequence as approved by the Engineer-in-charge, which will have to be maintained.
- 17. The contractor shall remove all bituminous on kerbs and channels and all heaps of wasted mix from gully grating, bell mount and other installation at the end of the day work, failing which the same shall be done at his risk and cost.
- 18.In case of important roads where the intensity of traffic is high, the contractor shall be constructed by the Engineer-in-charge, restrict the work to non peak period as determined by the Engineer-in-charge. No claim/ compensation on account of the same shall be entertained.
- 19. Collection of material should be so planned that it is commensurate with physical progress.
- 20. The quality control for road work and materials will be exercised as per section 900 of MORTH specification latest revision/ amendment and for determining the quality of bitumen used by extraction method as per procedure laid for doing such tests by IRC. The frequency of sampling will be exercised as per clause of MORT&H Specifications.
- 21.At the time of start of work, the contractor shall get a sample work done in presence of Engineer-in-charge who shall fix up the degree of compaction/ consolidation required for a particular item of work and conduct suitable tests at regular intervals to determine for the work done approaches the desired limit. In case tests reveal any deficiency, the contractor shall made good the same without extra payment or work will be rejected if not according to required specification.
- 22. The contractor shall progress on different parts simultaneously to ensure completion of the road so that minimum breakage and repairs are involved.
- 23. To arrive at the desired grading of materials, the exact quantities of material of different gauges shall be determined and stacked on the basis of laboratory tests from time to time. The extra payment on this account worked not be admissible.
- 24. To ensure quality of intermediate traction test check may be carried out and sample taken from materials. In case that is not found according to specification the work may be rejected. However, the engineer-in-charge if considered it expedient and in the interest of work, he may ask the contractor to supply the missing fraction up to quantity as determined by him separately, free of cost.
- 25. Weather and seasonal limitation: The work of laying shall not be taken up during rainy or foggy weather or when base course is damp or wet or during dust storm or when atmospheric temperature is 10 degree C or less at site of work of particular reach.
- 26. The rate quoted should include hire charges of land or purchase of land for installation of Hot Mix Plant etc.
- 27. Samples will also be got tested from CRRI/ Shree Ram Test House/ IIT`s or any other reputed test house & testing laboratory. Samples will be given by the agency free of cost and testing charges will be borne by the contractual agency.
- 28.Before start of the work contractor will get his machinery inspected and approved from the Engineer-in-charge of the work.

QUALITY CONTROL (D)

- 1. a) Identify defects: The Engineers-in-charge or his representative shall check the contractor's any work and notify the contractor any defects that are found. Such checking shall not relieve the contractor/contractor's responsibility/ responsibilities. The engineer-in-charge may instruct the contractor to search for defect and to uncover any work that the engineer-in-charge or his authorized representative considers may have a defect.
 - b) Correction of defects: The Engineers-in-charge shall give notice to the contractor of any defects before the end of defects liability period/ maintenance period which will be one year after completion. The defect liability period/ maintenance shall be extended as long as defects remain to be corrected. Every time notice of a defect is given, the contractor shall correct the notified defect within the limit of time specified by the Engineer-in-Charge's notice. If the contractor has not corrected a defect within the time specified in Engineer-in-charge's notice, the Engineer-in-charge will assess the cost of having the defect corrected and the contractor will pay the amount.
 - c) The contractor shall have to provide a field laboratory fully equipped at work site and at hot mix plant for conducting all the relevant tests mentioned in the MORTH&H specification subject to the approval of the Engineer-in-charge or his representative. The record of such tests is to be maintained in proper register duly signed by the contractor or his representative, which will become the property of Deptt. The contractor will bear all the running expenses for conducting such tests. All the tests will be carried in the presence of Engineer-in-charge or his authorized representative. All the entries are to be signed by the contractor and such authorized representative of Engineer-in-charge.
- 2. The quality control tests will be got done by department and the material for such tests will be supplied by the contractor free of cost. In case the material is not found upto the requirement, the same will be rejected. Cost of such tests will also be biome by contractual agency.
- 3. Various quality control operations will be maintained as per clause No. 901, 902, and 903 of MORT&H (Road wing) specification (IVth revision) of 2001 / latest edition.
- 4. Contractor shall provide suitable measuring arrangement and leveling instruments of latest quality approved by Engineer-in-charge at the site of work.
- 5. No extra payment on account of quality control measures shall be paid to the contractor.
- 6. The Engineer-in-charge at his discretion can get any type and nos. of tests carried out from any other approved laboratory for his satisfaction for which all the expenses incurred would be biome by the contractual agency. The results so obtained from the laboratory would be acceptable/ binding to the agency.
- 7. The riding quality of each and every reach will be strictly as per specifications.
- 8. Work will be also be opened to third party inspection also shall be stocked/ placed at the site of work in such a way that there will be no obstruction to traffic and inconvenience to public. No claim shall be entertained on account of such faulty arrangement made by the contractor. The contractor shall be fully responsible for all accidents caused by the negligence of such precaution. In case the contractor fails to comply with the aforesaid arrangements the same shall be made by the Engineer-in-charge at the risk and cost of the contractor.

| | | DNIT | | | | | | | |
|------------|-------------|--|--------|------------|-------------|--|--|--|--|
| Nan | ne of | DETAILED DNIT FOR COMMUNITY CENTER VILLAGE MULLAHERA, GURGAON. | | | | | | | |
| Wo | rk | | | | | | | | |
| | 1 | Sub Head -1 | | | | | | | |
| Sr. No. | Item No. | Description | Qty | Units | Rate+CP | | | | |
| 1 | 8.3 | Dismantling Stone Spalls or Brickbats Filling in-wire crates including opening of crates and stacking crate material. | 60.35 | cum | 14.65+550% | | | | |
| 2 | 8.5 | Dismantling Brick work in cement | 93.37 | cum | 35.6+550% | | | | |
| 3 | 8.6 (b) | Dismantling of concrete work b) Cement Concrete plain 1:4:8 | 20.12 | cum | 37.40+550% | | | | |
| 4 | 8.6 | e) Reinforced cement concrete with cleaning and straightning and cutting of bars if required | 49.48 | cum | 108.05+550% | | | | |
| 5 | 8.18 | Removing doors and windows (wood or steel) with chowkats by making recesses in walls when the wall is not to be dismantlled. | 6 | cum | 11.9+550% | | | | |
| 6 | 8.26 | Dismantlling cement conglomerate/terrazzo- floors 25mm to 50mm thick without concrete base. | 188.10 | sqm | 3.05+550% | | | | |
| 7 | 6.6 | Earth work in excavation in foundations, tranches, etc. in all kinds of soils, not exceeding 2 meters depth including excavated soil, clear from the edge of excavation and subsequent filling arroundmeasonry, in 15 cm layer | 318.15 | 100 Cum | 1108.1+425% | | | | |

| | | with compaction, including disposal of all surplus soil, as directed within a lead of 30mt (U.G.W.+G.F.) 18.85+299.3=318.15 | | | |
|----|-----------------|---|--------|-----|---------------|
| 8 | 10.38 | Cement Concrete 1:4:8 with stone aggregate 20 mm nominal size in foundation and plinth.(CW+U.G.W.+G.F.) 2.45+1.27+45.45=49.17 | 49.17 | Cum | 420+450% |
| 9 | 11.2 | First class brick work laid in cement sand mortar 1:6 in foundation and plinth. (CW+GF) 5.73+85.33=91.06 | 91.06 | Cum | 393.45 + 600% |
| 10 | 11.2 | First class brick work laid in cement sand mortar 1:6 in foundation and plinth. (GWT)=4.73 | 4.73 | Cum | 393.45 + 600% |
| 11 | 10.82+ 10.95 | Cement concrete 1:1.5:3 with stone aggregate 20 mm nominal size for reinforced concrete work in slabs with inclination not excedding 25 degree with horizontal, excluding steel reinforcement, but including steel centring and shuttering, laid in position, complete in all respect. (GWT+GF+FF+MUMTY) 1.46+16.18+16.18+3.74 997.90 + 86.90 = 1084.80 | 37.56 | Cum | 1084.80+450% |
| 12 | 18.22 | Fe-500 EQR TMT steel bars for RCC works, where not including in the complete rate of RCC including bending, binding, and placing in position complete. for total concrete work in plinth + above plinth taking @110 kg/Cum mean @1.1 qtl/cum(U.G.W+G.F.+F.F+MUMT Y+CW)1.60+160.99+55.50+13.58+14 3.06 | 374.73 | Qtl | 917.05+500% |

| | | - 19 - | | | |
|----|------------------|---|--------|------------|------------------------------|
| 13 | 15.8 + 15.75 | 15 mm thick Cement Plaster 1:2 on rough side of single or Half brick Wall and Cement Rendering on plaster 1 mm thick (GWT) | 13.35 | Sqm | 20.50+4.25 = 24.75 + 500% |
| 14 | 14.62 | Kotah stone flooring 34 mm to 40mm thick in any pattern as specified over 12 mm thick base of cement coarse sand mortor 1:3 laid and jointed with neat cement slury mixed with pigment to match the shade of stone including rubbing and polishing. (GF+FF) 213.93+213.93 | 427.86 | Sqm | 201.95+400% |
| 15 | 13.61 | Providing and laying four courses of water proofing treatment with bitumen felt over roofs consisting of first and thrid courses of blown type bitumen grade 85/25 applied hot at 1.20kg per sqm of area for each course, second course on roofing felt type 3 grade-1 (Hessian base self finished bitumen felt) and fourth and final course of stone grit 6 mm and down size or pea size grit spread at 0.006 cum per sqm including prepration of surface compete.(GWT+FF)265.83+20.41 | 286.34 | Sqm | 27.85+240% |
| 16 | 6.13 a | Earth work (exclusive of compensation for earth) in excavation in ordinary soil, and filling in 15 cm layers, in foundtion and plinth including ramming , watering and consolidation under floor with earth brought from a distance not exceeding 30 m. (GF) =83.84 | 83.84 | 100 Cum | 343.40+370% |
| 17 | 10.90 + 10.95 | Cement concrete 1:1.5:3 with stone aggregate 20mm nominal size for RCC in footings, strips, foundations, beams, raft, pedestals excluding steel reinforcement but including centring& shuttering, laid in position complete in all respects. (GF+CW)81.33+10.02=91.35 | 91.35 | Cum | 687.10+86.90 =774+450% |

| 18 | 10.86+ | Cement concrete 1:1.5:3 with stone | 72.76 | Cum | 1101.85+86.90 |
|-----|--------|---------------------------------------|--------|-----|---------------|
| | '10.95 | aggregate 20mm nominal size for | | | =1188.75+450 |
| | | RCC in beams, girders, columns, | | | % |
| | | stairs excluding steel reinforcement | | | |
| | | but including centring& shuttering, | | | |
| | | laid in position complete in all | | | |
| | | respects.(GF+FF+MUMTY+CW)29. | | | |
| | | 74+29.74+8.61+4.67=134.37 | | | |
| 19 | 11.28 | First class brick work laid in | 284.07 | Cum | 448.7+600% |
| | | cement, stone dust (from crusher) | | | |
| | | mortar 1:5 in first storeyupto 4 | | | |
| | | metres above plinth | | | |
| | | level.(CW+G.F+F.F+MUMTY) | | | |
| | | 21.11+114.10+114.10+35.56=284.07 | | | |
| 20 | 11.51 | 11.43 cm thick brick wall with | 24.44 | Sqm | 65.1+600% |
| | | every,fourth course, reinforced | | | |
| | | with hoop-iron, laid in 1:4 cement | | | |
| | | stone dust (from crusher) mortar | | | |
| | | in super | | | |
| | | structure.(GF+FF)12.22+12.22=24.4 | | | |
| | | 4 | | | |
| 21 | 15.11 | 15 mm thick cement plaster 1:5 on | 157.90 | sqm | 14.25+500% |
| | | the rough side of single or half | | | |
| | | brick wall. (MUMTY) | | | |
| | | | | | |
| | | | 40-11 | | 10.15 |
| 22 | 15.7 | 12 mm thick cement plaster 1:6 | 1034.8 | Sqm | 10.65+500% |
| | | INTERNAL (GF+FF) | 2 | | |
| | | 484.45+484.45+65.10=1034.82 | | | |
| | | | | | |
| | | | | | |
| 23 | 16.24 | Preparation of Plastered surface for | 1192.7 | Sqm | 11.15+230% |
| | | painting including sand papering | 3 | | |
| | | & applying filling with approved | | | |
| | | quality filers including finishing to | | | |
| | | required finish | | | |
| | | complete.(G.F+F.F+MUMTY) | | | |
| 2.4 | 16.55 | 484.45+484.45+224.73=1192.73 | 455.00 | C | (0.0000) |
| 24 | 16.57 | Distempering with washable oil | 157.90 | Sqm | 6.3+230% |
| | | bound distemper (of approved | | | |
| | | manufacture) two coats excluding | | | |
| | | priming coat on new work | | | |
| | | (MUMTY) | | | |
| | - | | | | |

|)E | 16.26 | Dainting true and a with well- | 24.27 | C~ | 12 /E + 2200/ |
|----|-------|--|--------|------|---------------|
| 25 | 16.26 | Painting two coats with ready mixed exterior paint in all shades on newly plastered or concrete surface of walls (MUMTY) | 24.27 | Sqm | 13.45+230% |
| 26 | 16.27 | Painting two coats with ready mixed emulsion paint in all shades for interior use on bricks, plaster, cement, fibre-board etc.(GF+FF) 484.45+484.45=968.90 | 968.90 | Sqm | 10.90+230% |
| 27 | 18.34 | Pressed steel sheet frames (Chwkhats) consisting if 2 mm thick steel sheet of the specified section including iron lugs (hold fasts) iron hinges conforming to P.W.D. specifications including bolts for fixing stops locknotch provision for receiving tower bolts and finished with one coat of readymixed paints red lead non setting primer of approved quality fixed in position including the cost of cement concrete 1:3:6 for filling in the frame and cement concrete 1:3:6 for lugs complete:- (c) door and window frame of size 127 mm x 50 mm with 40mm wid double rebate (GF+FF+MUMTY) 341.32+341.32+35.27=717.91 | 717.91 | Rmt. | 76.8+500% |
| 28 | 17.92 | Factory manufactured wire gauze door and window shutters of commercial hard wood such as hollock, champ, chikrassy and chaplash, etc. (non-coniferous timber other teak conforming to I.S. specification No. 1003, kiln seasoned) with 100 mm wide vertical styles, 150 mm wide lock rail 200 mm wide bottom rail, and wire gauze of 140 G or 120 G designation including cost of iron hinges, screws, chock/cleats, stops nails etc., complete fixed in position (excluding the cost of any fittings, other than specified above, but including labour for fixing the | 236.90 | sqm | 347.55+300% |

| | | same in position) (Styles and rails of windows | | | |
|----|-------|---|--------|-----|-------------|
| | | shutter shall be 75 mm wide) (ii) 35 mm thick (GF+FF+MUMTY) 131.90+92.85+12.15=236.90 | | | |
| 29 | 17.93 | Factory manufactured solid flush door shutters with block board core as per IS no. 1659-1969 bonded with water proof type phenol formaldehyde synthetic resin, hotpressed, conforming to I.S. 2202 part I & II, fixed in fixed in position including iron hinges, screw, chocks/cleats & stops etc. (excluding the cost of any fittings other than specified above, but including labour for fixing the same in position) (a) Commercial veneering with vertical grains or cross bands and face veneer on both sides commercial facing with laminated core and lipped edges - 35 mm thick (GF+FF+MUMTY) 69.27+69.27+12.69 | 150.69 | Sqm | 448+165% |
| 30 | 18.30 | Supplying and fixing glass panes including special metal sash putty of approved make. (b) glass panes 4 mm thick, excedding 40 sq. dm areas. (GF+FF) 92.85+92.85=185.71 | 185.71 | Sqm | 115.40+500% |
| 31 | 13.61 | Providing and laying four courses of water proofing treatment with bitumen felt over roofs consisting of first and thrid courses of blown type bitumen grade 85/25 applied hot at 1.20kg per sqm of area for each course, second course on roofing felt type 3 grade-1 (Hessian base self finished bitumen felt) and fourth and final course of stone grit 6 mm and down size or pea size grit spread at 0.006 cum per sqm including prepration of surface complete.(GF+FF) 265.83+265.83=531.65 | 531.65 | Sqm | 27.85+240% |

| | | - 23 - | | | |
|----|--------|---|--------|-----|-------------|
| 32 | 10.114 | Damp proof course 40 mm thick of CC 1:2:4 using stone aggregate 20mm nominal size as per HSR. (GF) | 30.72 | Sqm | 35.05+450% |
| 33 | 14.1 | Base course of floors consisting of 100 mm thick cement concrete 1:8:16 and 100 mm sand or stone dust filling (GF) | 230.72 | sqm | 36.95+400% |
| 34 | 14.91 | Providing & fixing ceramic tiles/anti skid tiles of size 400 mm x 400 mm or above size of approved make in flooring, laid in any pattern as specified over base of 20 mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of tiles. (GF+FF) 20.79+20.79=41.58 | 41.58 | Sqm | 624 -15% |
| 35 | 14.62 | Kotah stone flooring 34 mm to 40mm thick in any pattern as specified over 12 mm thick base of cement coarse sand mortor 1:3 laid and jointed with neat cement slury mixed with pigment to match the shade of stone including rubbing and polishing. (GF+FF) 213.93+72.80=286.73 | 286.73 | Sqm | 201.95+250% |
| 36 | 14.66 | Kotah stone 20mm thick in skirting risers of steps, dados pillars and wall facing (lining) in any pattern as specified 12 mm thick cement coarse sand plaster 1:3 laid and jointed with neat cement slurry, mixed with pigment to match the shades of stone including rubbing and polishing including labours for mixing cramps, dowels and pins etc. | 11.84 | Sqm | 237+250% |
| 37 | 14.92 | Providing and fixing 1st quality ceramic glazed wall tiles confirming to I.S. 15622 (thickness to be specified by the manufacture) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Enginner-In-Charge | 220.16 | Sqm | 501.75+0% |

| | <u> </u> | | | 1 | |
|----|----------|---------------------------------------|-------|-------|--------------|
| | | in skirting, rizers of steps and | | | |
| | | dados over 12 mm thick bed of | | | |
| | | cement mortar 1:3 coarse and | | | |
| | | jointed with grey cement mixed | | | |
| | | with pigment of matching shades | | | |
| | | complete. (GF+FF) | | | |
| | | 110.08+110.08=220.16 | | | |
| 38 | 18.12 | worght iron and mild steel (using | 17.55 | Qtl | 1040.35+500% |
| | | angles, flats, swuare bars, tee and | | | |
| | | channels)ladders grills, gratting | | | |
| | | frames, window guards, iron doors | | | |
| | | openable or fixed stair case or | | | |
| | | parapet or any other type of railing, | | | |
| | | gates and tree guards etc., | | | |
| | | including cost of screws and | | | |
| | | welding rods or bolts and nuts | | | |
| | | complete fixed in position(CW) | | | |
| 39 | 18.17 | Providing and fixing G.I. sheet 0.80 | 6.37 | Sqm | 487.40+500% |
| | | mm thick sliding shutters, with | | 1 | |
| | | 40mm x 40mm x 6mm angle iron | | | |
| | | frame with diagonal braces 3 mm | | | |
| | | gusset plates at the junctions, hooks | | | |
| | | at the top and 25mm dia, pulleys, | | | |
| | | at the bottom and 40 mm x 40 mm | | | |
| | | x 6 mm angle iron top and bootom | | | |
| | | guides including locking | | | |
| | | arrangements with handles, etc | | | |
| | | complete.(CW) | | | |
| 40 | 18.13 a | Stair case railing of 40 mm internal | 11.35 | Qtl | 1157+500% |
| | | dia G.I. pipe class B as per IS no. | | ~ | |
| | | 1239 as hand rail using flats and | | | |
| | | square bar as supporting members | | | |
| | | and base plate welded as per | | | |
| | | design specified including cutting, | | | |
| | | welding rods and complete fixed in | | | |
| | | position. (GF+FF)5.67+5.67=11.35 | | | |
| 41 | 30.2 | providing and fixing in position | 4.00 | No. | 925+340% |
| 11 | 30.2 | best indian make (to the approval | 1.00 | 1 10. | 720.01070 |
| | | of the Engineer-in-charge) best | | | |
| | | indian make Orissa or orya type | | | |
| | | water closet suite consisting of :- | | | |
| | | (a) Closet set viitreous Chinaware | | | |
| | | W.C. pan with horizontalinlet for | | | |
| | | sinking into floor with a pair of | | | |
| | | footrests 100mm HCL P trap with | | | |
| | | or without vent as required and | | | |
| | | suitable joint for closet inlet. | | | |
| | | Suriable joint for closet fillet. | | | |

| (b) 8 ltr capacity magginita proof D | | | |
|---|--|--|--|
| (b) 8 ltr capacity mosquito proof P V C flushing system best indian make ISI marked (to the approval of the Engineer-in-charge) with all accessories such as 20mm G.I. over flow pipe with special and clamps upto 15 cm above flool level of WC room and brass prforated mosquito proof cap 32 mm outlet 15 mm ISI marked ballcock R.S. or C.I painted bracket and mosquito proof coupling for outlet and oter flow pipe etc (c) 32 mm telescopic 125 mm thick galvanized inside and outside steel flush pipe with chips completed in all respect including cutting and making good the wall and floor and painting of fitting etc. a) size 580 mm i) white (GF+FF) 2+2=4 Providing and fixing in position best Indian make (as approved by the Engineer in charge) European type water closet suite, syphonic type consisting of- i) Vitreous chinaware syphonic suite with 15 litres capacity matching chinaware cistern and all internal brass fittings complete with 'p' or 's' trap with or without vent (as approved bu Engineer-Incharge) ii) One piece seat and lid in hollow black or white plastic fitted with chromium plated hings and rubber buffers, (to the approval of the Engineer-In-charge). complete in all respects including | 8.00 | No. | 1542+340% |
| buffers, (to the approval of the Engineer-In-charge). | | | |
| | make ISI marked (to the approval of the Engineer-in-charge) with all accessories such as 20mm G.I. over flow pipe with special and clamps upto 15 cm above flool level of WC room and brass prforated mosquito proof cap 32 mm outlet 15 mm ISI marked ballcock R.S. or C.I painted bracket and mosquito proof coupling for outlet and oter flow pipe etc (c) 32 mm telescopic 125 mm thick galvanized inside and outside steel flush pipe with chips completed in all respect including cutting and making good the wall and floor and painting of fitting etc. a) size 580 mm i) white (GF+FF) 2+2=4 Providing and fixing in position best Indian make (as approved by the Engineer in charge) European type water closet suite, syphonic type consisting of- i) Vitreous chinaware syphonic suite with 15 litres capacity matching chinaware cistern and all internal brass fittings complete with 'p' or 's' trap with or without vent (as approved bu Engineer-Incharge) ii) One piece seat and lid in hollow black or white plastic fitted with chromium plated hings and rubber buffers, (to the approval of the Engineer-In-charge). complete in all respects including cutting and making good the walls and floors. | make ISI marked (to the approval of the Engineer-in-charge) with all accessories such as 20mm G.I. over flow pipe with special and clamps upto 15 cm above flool level of WC room and brass prforated mosquito proof cap 32 mm outlet 15 mm ISI marked ballcock R.S. or C.I painted bracket and mosquito proof coupling for outlet and oter flow pipe etc (c) 32 mm telescopic 125 mm thick galvanized inside and outside steel flush pipe with chips completed in all respect including cutting and making good the wall and floor and painting of fitting etc. a) size 580 mm i) white (GF+FF) 2+2=4 Providing and fixing in position best Indian make (as approved by the Engineer in charge) European type water closet suite, syphonic type consisting of-i) Vitreous chinaware syphonic suite with 15 litres capacity matching chinaware cistern and all internal brass fittings complete with 'p' or 's' trap with or without vent (as approved bu Engineer-Incharge) ii) One piece seat and lid in hollow black or white plastic fitted with chromium plated hings and rubber buffers, (to the approval of the Engineer-In-charge). complete in all respects including cutting and making good the walls and floors. | of the Engineer-in-charge) with all accessories such as 20mm G.I. over flow pipe with special and clamps upto 15 cm above flool level of WC room and brass prforated mosquito proof cap 32 mm outlet 15 mm ISI marked ballcock R.S. or C.I painted bracket and mosquito proof coupling for outlet and oter flow pipe etc (c) 32 mm telescopic 125 mm thick galvanized inside and outside steel flush pipe with chips completed in all respect including cutting and making good the wall and floor and painting of fitting etc. a) size 580 mm i) white (GF+FF) 2+2=4 Providing and fixing in position best Indian make (as approved by the Engineer in charge) European type water closet suite, syphonic type consisting of-i) Vitreous chinaware syphonic suite with 15 litres capacity matching chinaware cistern and all internal brass fittings complete with 'p' or 's' trap with or without vent (as approved bu Engineer-Incharge) ii) One piece seat and lid in hollow black or white plastic fitted with chromium plated hings and rubber buffers, (to the approval of the Engineer-In-charge). complete in all respects including cutting and making good the walls and floors. |

| 43 | 30.76 | Providing and fixing in position C.P. brass stop cocks (as approved by the Engineer-in-charge (GF+FF) 8+8=16 | 16.00 | No. | 130+340% |
|----|-------|---|-------|-----|-----------|
| 44 | 30.26 | providing and fixing in position best indian make a range of two urinals large flat back or angular lipped front 610 mm high in vitreous chinaware with 5 litres capacity best indian make C.I. automatic flushing cistern with fittings ad flush pipe etc. complete as fully describeinrtem No.30.25 above (i) white (GF+FF) 3+3=6 | 6.00 | No. | 1827+340% |
| 45 | 30.40 | providing and fixing 25 mm thick marble partitions for different type of urinals (a) size 375 mm x 750 mm (GF+FF) 2+2=4 | 4.00 | No. | 98+340% |
| 46 | 30.41 | Providing and fixing in position best Indian make (ordinary) lavatory suites consisting of:- Lavatory in vitreous chinaware size as given below (to the approval of the Engineer-in-charge) including china plug for tap hole where necessary. R.S. or C.I. brackets for building into wall including painting. 32 mm C.P. Brass waste with C.P. brass chain and rubber plug. 15 mm C.P. Brass screw down pillar tap with jamnuts or couplings best design (as approved by the Engineer-in-charge). All fittings best Indian make and to the approval of the Engineer-in-charge. All brass work chromium plated and complete in all respects including cutting and making good the wall floors and painting of fittings etc.(iv) 550 mm x 400 mm (GF+FF) 5+5=10 | 10.00 | No. | 407+340% |

| | | - 27 - | | | |
|----|---------|---|-------|------|----------|
| 47 | 30.75 | providing and fixing in position 15 mm i/d C.P. brass bib cocks of best quality (as required by Engineer in charge) (a) bib cock long body (GF+FF) 12+12=24 | 24.00 | No. | 116+340% |
| 48 | 30.89 | providing and fixing H.C.I. floor traps I.S.I. marked of the self cleaning design with C.P. brass hingrd grating with frame or without vent arm and including cement concrete 1:2:4 under and around the floor trap where required upto floor level comlete in all respects including cutting and making good the walls and floors, etc., minimum depth of water should be 150mm with a minimum seal of 50mm. (b) with 75 mm i/d outlet (GF+FF) 7+7=14 | 14.00 | No. | 105+350% |
| 49 | 30.114 | providing and fixing in position gully traps ficed in cement concrete 1:4:8 complete HCI grating 150 mm x 150 mm cast iron cover weighting approximately 7.26 kg and frame clear opening 300 mm x 300 mm and outside size 330 mm x 330 mm and chamber including cost all brick work in cement mortar 1:5 cement concrete 1:8:6 in foundations and cement concrete 1:2:4 in coping around C.I. cober and frame etc .with three coats of black bitumastic superior paint of approved manufacture on all C.I. work as per standard design minimum depth of water should be 150 mm with a minimum seal 50 mm. (b) 100 mm internal diameter H.C.I gull trap (GF+FF) 4+4=8 | 8.00 | No. | 208+350% |
| 50 | 30.84 b | Providing and fixing in position H.C.I. soil waste vent or antisyphonage pipes to I.S.I. specifications of E.L.C. manufacture or of any other | 82.00 | Rmt. | 83+350% |

| 51 | 30.84 a | reputed firm including cutting and wastage etc. and making good to its original condition but excluding cost of lead jointing. Waste Pipe - 75 mm dia (GF+FF)41+41=82 Providing and fixing in position H.C.I. soil waste vent or antisyphonage pipes to I.S.I. specifications of E.L.C. manufacture or of any other | 72.00 | Rmt. | 97.5+350% |
|----|--------------|--|--------|------|-----------|
| | | reputed firm including cutting and wastage etc. and making good to its original condition but excluding cost of lead jointing. Soil waste Pipe - 100 mm dia (GF+FF) 36+36=72 | | | |
| 52 | 13.50 | Top khurra 0.6m x 0.6m for rain water pipe in 25 mm thick cement concrete 1:2:4 over 50 mm thick cement concrete 1:8:16 (GF+FF) 5+5=10 | 10.00 | no. | 12.3+240% |
| 53 | 13.57 | Bottom khurra on ground 1.2m x 0.6m consisting of brick-on-edge laid in cement mortar 1:3 over 75mm cement concrete 1:8:16 including 12mm thick cement plaster 1:3 (GF+FF) 5+5=10 | 10.00 | no. | 64.3+240% |
| 54 | 13.89 (a) | Providing and fixing PVC Rain Water pipe 6 kg. pressure of ISI mark in cement mortor during masonry work. 100 MM dia PVC pipe 6kg. Pressure.Rain water Pipe - 100 mm dia (GF+FF) 101+101=202 | 202.00 | Rmt. | 182+20% |
| 55 | 29.84 | constructing brick masonry inspection chamber sizes as given below upto 0.60 meter average depth in cement mortar 1:5 lime concrete with 40 percent lime mortar 2:3 in foundation cement concrete 1:2:4 benching 12 mm thick cement plaster 1:2with a floating coat of 1mm thick of neat cement R.C.C 1:2:4 slab 100 mm thick/C.C topping 50 mm thick with 455 mm x 455 mm/455mm x610mm inside light duty C.I. | 1.00 | No. | 582.00 |

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| | | inspection chamber cover and frame weight as per I.S.I. specifications painted with 3 coats of black bitumastic superior paint complete as pwe standard design (b) size 450 mm x 600 mm in side (with 455 mm x 610 mm cover and frame single seal pattern 1 weighing 38 kg with C.C. topping) | | | |
| 56 | 29.95 | Providing SALT GLAZED STONE WARE PIPES GRADE 'A' IN STANDARD LENGTH OF 600 MM EACH PIPE MARKED WITH IS: 651 and their lowering, cutting, jointing and testing as described in HSR item no. 29.38, 29.39, 29.40 including the cost of jointing materials ae well as carriage, loading, unloading, staking, handling, re-handling etc. complete in all respects to the satisfaction to the Enginneer-in-Charge. Rain water Pipe - 100 mm dia 94.87 | 94.87 | Rmt | 128+5% |
| 57 | 30.119 | Providing and fixing HDPE water storage tanks of sintex, Diplast, O.K. Supreme make with covers/lids marked with IS:12701 on roof top of buildings including cost of hoisting and placing in position, making connections with inlet and outlet pipes, providing overflow and scour provisions with suitable plugs on scour pipe including cost of nipples, washers, flanges for connections in tanks complete in all respects to the satisfaction to the Engineer-incharge (Except civil work). 3000 li capacity | 1.00 | No. | 15484.00 |
| 58 | 30.53 | Providing and fixing in position best quality stainless steel sinks with complete fitting as fully described in item No. 30.51 above. (a) 600 mm x 450 mm x 200 mm (GF+FF) 1+1=2 | 2.00 | No. | 1500+30% |

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| 59 | 30.67 | Providing and fixing in position best Indian make paper holder fixed into wall with C.P. brass screws complete in all respects including cutting and making goods with walls etc. Recessed Vitreous Chinawarev (i) white (GF+FF) 2+2=4 | 4.00 | No. | 50+340% |
| 60 | 31.1 (i) (c) | Wiring in 1.5 sq. mm PVC insulated aluminium conductor cable in 1.6 mm thick conduit pipe (i) Fan point (c) long point (G.F+F.F) 14+14 | 28.00 | No. | 179+130% |
| 61 | 31.1 (ii) (c) | Wiring in 1.5 sq. mm PVC insulated aluminium conductor cable in 1.6 mm thick conduit pipe (ii) Light Point (c) Long point (G.F+F.F+MUMTY) 46.00+50.00+10.00=106.00 | 106.00 | No | 147+130% |
| 62 | 31.1 (iii) (c) | Wiring in 1.5 sq. mm PVC insulated aluminium conductor cable in 1.6 mm thick conduit pipe (iii) Twin Control light point with 2way 5amp single pole switch (c) long point (G.F+F.F+MUMTY) 2+2+1=5.00 | 5.00 | No. | 153+130% |
| 63 | 31.1 (vi) | Wiring in 1.5 sq. mm PVC insulated aluminium conductor cable in 1.6 mm thick conduit pipe (vi) Call bell point including M.S. box of size 180mm x 100mm x 60mm deep for call bell long point (G.F+F.F) 1+1=2 | 2.00 | No. | 166+130% |
| 64 | 31.1 (vii) (b) | Wiring in 1.5 sq. mm PVC insulated aluminium conductor cable in 1.6 mm thick conduit pipe (vii) 3 pin 5 amp, plug point including earthing the 3rd pin etc. (b) medium point (G.F+F.F+MUMTY) 13+13+1 | 27.00 | No. | 120+130% |
| 65 | 31.1 (viii) (a) | Wiring in 1.5 sq. mm PVC insulated aluminium conductor cable in 1.6 mm thick conduit pipe (viii) 3 pin 15 amp. Plug point including earthing the 3rd pin etc. with 4 sqmm PVC insulated | 17.00 | No. | 93+130% |

| | | aluminium conductor cable. (a) short point (G.F+F.F+MUMTY) 8+8+1 | | | |
|----|----------------|--|--------|------|-----------|
| 66 | 31.8 (iii) | Wiring mains and sub mains in two single core PVC sheathed cable 1100 volts grade on 10mm thick pyma wood batten of suitable size including painting as required (iii) size 4 sqmm (1/2.24) (G.F+F.F+MUMTY) 5+5+5 = 15 | 15.00 | Rmt | 7+130% |
| 67 | 31.9 (i) (d) | (i) Supply and erection of PVC copper insulated and sheathed 2 core circular flexible wire (G.F+F.F+MUMTY) 240+240+15 | 495.00 | Rmt. | 10.3+130% |
| 68 | 31.1 (iii) | supply and erection of PVC unsheathed aluminium conductor cable single core 1100 volts grade in pipe of suitables size excluding cost and erection of pipe (iii) size 1.5 sqmm (1/1.40 mm) (G.F+F.F MUMTY) 53+53+5 | 111.00 | Rmt. | 0.7+130% |
| 69 | 31.2 (viii) | Supply and erection of pipe for wiring purposes including bends inspection boxes etc. where necessary and painting as required. (viii) Galvanised iron pipe 15 mm dia flushed (G.F+F.F+MUMTY)293+293+20 | 606.00 | Rmt. | 27.6+350% |
| 70 | 31.12 (x) | Main switch - Supply and erection of metal clad switches/B.D.Bs with rag bolts on wall or on existing angle iron board/pedestal including bonding to earth and necessary connections (x) Triple pole switch 100 amp 415 volts (G.F+F.F) 1+1 = 2 | 2.00 | No. | 839+300% |
| 71 | 31.13 (ii) | Supply and erection of M.S. angle iron frame duly welded for housing M.S. sheet & main switches on it, fixed on wall by means of suitable size of rag bolts | 2.00 | Mtr | 46.5+250% |

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| | | with cement concrete, duly painted with three coats of approved paint including one coat of red oxide. (ii) Size 40 mm x 40 mm x 6 mm(G.F+F.F) 1+1 = 2 | | | |
| 72 | 31.15(iii | Supply and erection of sheet steel enclosure 2 pole/ 3 pole with earth plug and socket suitable for incorporating single pole/tripole MCB on wall/ on existing pedestal complete with necessary connections etc. (iii) T.P.N. enclosure for tripole MCB 20 amp (G.F+F.F) 1+1 = 2 | 2.00 | No. | 486+60% |
| 73 | 31.17 (a) (ii) | Supply and erection of miniature circuit breaker/isolator 240/415 V in the existing distribution board including board including making necessary connections (a) Miniature Circuit Breakers of 9 K.A. breaking capacity. (ii) 6 amp. To 32 amp. Tripole pole with neutral pole (G.F+F.F+MUMTY) 8+8+1 | 17.00 | No. | 403+30% |
| 74 | 31.18 (vi) | (vi) Wall type bracket of 15 mm diameter G.I. pipe complete with double cone reflector brass lamp holder with 60 cm over hang and 45° inclination for bend including cost of 1.5 sqmm PVC sheathed cable. (G.F+F.F+MUMTY) 17+17+3 | 37.00 | No. | 44+200% |
| 75 | 31.18 (vii) | (vii) Call bell 220/230 volts A.C. bakelite with double coil. (G.F+F.F) 1+1 = 2.00 | 2.00 | No. | 21+200% |
| 76 | 31.31 (i) | Supply and erection of metal clad bus bar chamber made from 1.6 mm thick M.S. sheet fixed with rag bolts on wall or on existing pedestal/angle iron frame including bonding to earth, detachable top and bottom painting and necessary connections etc. (Copper bars duly tinned). (i) 100 | 2.00 | No. | 257+300% |

| | | amp. 2 bars of 40 cm each (cross section 25mm x 3mm), chamber over all size 45cm x 20cm x 18cm. (G.F+F.F) 1+1=2.00 | | | |
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| 77 | 31.22 (i) | Earthing with G.I. earth pipe 4.5 m long and 40 mm dia with masonry enclosures on the top etc. as required | 2.00 | No. | 378+350% |
| 78 | 31.22 (xii) | Pdg. And laying earth connections from earth electrode with 4.00 mm dia GI wire in 15 mm. dia G.I. pipe from earth electrode as required. | 1.00 | No. | 24.50+350% |

NS Item

| | | SUB HEAD 2 | | | |
|------------|-------------|--|---------|-------|------|
| Sr. No. | Item No. | Description | Qty | Units | Rate |
| 1 | N S Item | Providing and Fixing Pump Texmo of 1 Hp | 1.00 | No. | |
| 2 | N S Item | Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and good the walls etc. (internal work) Concealed pipe including painting with anti corrosive bitumastic paint, cutting chases and making good the walL-15 MM (G.F+F.F) 58.00+24.00=82.00 | 82 | rmt | |
| 3 | N S Item | Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including trenching and refilling etc. (external work)-25 MM (G.F+F.F) 45.00+45.00=80.00 | 90 | rmt | |
| 4 | N S Item | Providing and laying grit wash consisting of 12 mm cement coarse sand plaster 1:1 base and 5 mm to 10 mm Narazul/Dehradun/Pauta Sahib/Nathdwar/etc. quarry mix with in 3 part of cement 1 part of Marble powder and 4:7 ratio of cement marble powder and chips in white colour set to pattern per design. | 427.59 | Sqm | |
| 5 | NS item | Providing and fixing of aluminium channel of size 12 mm x 12 mm x 1 mm with steel screw on face of wall with grit wash including cost of all material all taxes, crriage, labour for fixing aluminium channel cost of shuttering and scafolding and labour for preparation of surface complete as per direction of Engineer-in-Charge. | 1710.36 | rmt | |