
BID DOCUMENT
FOR
RENOVATION OF BLOCK 'A'
CHANDIGARH HOUSING BOARD OFFICE
BUILDING, SECTOR-9, CHANDIGARH
[COMPOSITE WORK]

Date of release / Publishing of tender _____/2024



Last Date of
Submission of document : _____,2024

Website: <http://etenders.chd.nic.in/nicgep>

Tel: 0172-2511128



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PART-I

**CHANDIGARH HOUSING BOARD
TENDER NOTICE
Notice Inviting e-Tenders**

Executive Engineer-III on behalf of the Chairman, Chandigarh Housing Board invites Percentage Rate Tenders through e-Procurement process from the enlisted Agencies/Firms/Contractors/Tenderer having valid enlistment certificate issued by any one of the specified departments i.e. UT Engineering Department/ Municipal Corporation Chandigarh / CPWD / MES / Punjab PWD / Haryana PWD / Himachal PWD/other State Govt. Departments, Boards / Corporations and PSUs for the work of Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work].

Estimated Cost:- Rs.2,81,53,809/- (Composite work of Civil work, PII and Elect. Components). Earnest Money:-Rs.5,63,100/- Period of Completion:- 5 Months. Last date of submission of bid online is ____/____/2024. Date of opening bid is ____/____/2024.

For detail Milestone dates of Electronic Tendering are given at the website <http://etenders.chd.nic.in/niegep>. Tel: 0172-2511128


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Detail Regarding Tendering Process

| Detail Regarding Tendering Process | | | |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--|
| Name of work | Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work] | | |
| Estimated cost | Total Composite Cost: Rs.2,81,53,809/- 1. Major component Rs. 1,32,96,409/- (Civil Work) 2. Minor Component PH Component - Rs. 10,52,246/- Electrical Component- Rs.1,38,05,154/- | | |
| Period of completion | 5 Months | | |
| Name of the Employer | Chandigarh Housing Board | | |
| Adress of the Employer | 8 Jan Marg, Sector 9 D Chandigarh | | |
| Mode | E-Tendering | | |
| Website | https://etenders.chd.nic.in/niegep/app | | |
| Integrity Pact duly filled, signed & stamped | The bidder must upload the copy of Integrity Pact duly filled, signed & stamped in the presence of witness along with other bid documents on the web site. | | |
| Milestone Dates | | | |
| Downloading of e-tender document | Start date: | / / 2024 at 1000 Hrs. | |
| | End date: | / / 2024 upto 1700 Hrs. | |
| Clarification regarding plans specifications schedule of quantities & set of terms | Start date: | / / 2024 at 1000 Hrs. | |
| | End date: | / / 2024 upto 1700 Hrs. | |
| Date of submission of e-tender | Start date: | / / 2024 at 1000 Hrs. | |
| | End date: | / / 2024 upto 1700 Hrs. | |
| Opening of technical bid (Online) | / / 2024 upto 1130 Hrs. | | |
| Opening of price bid (Online) | To be intimated separately to all qualified bidders | | |
| Bid validity period | 75 Days | | |
| Earnest Money Deposit | Earnest money Deposit of Rs.5,63,100/- may be deposited by bank-to-bank transfer using SBI MOPS | | |



| | |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>or RTGS/NEFT transfer through https://etenders.chd.nic.in portal.</p> <p>Bidder can submit their bid only after depositing Earnest money Deposit online.</p> <p>The amount of Earnest money Deposit is refundable and adjustable.</p> <p>The Earnest money Deposit shall be refunded online to the bidder account in case of all unsuccessful e-bids, provided it is not forfeited.</p> <p>The bidder must upload the copy of UTR No/ Transaction slip on the web site.</p> |
| Performance Security | <p>The contractor, whose bid is accepted, will be required to furnish performance guarantee at specified percentage of the tendered amount as mentioned in Schedule F and within the period specified in Schedule F. This guarantee shall be in form of Insurance Surety, Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period specified in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.</p> |

LIST OF DOCUMENT TO BE UPLOADED BY THE BIDDERS

| | |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Fee |
| | i) EMD |
| 2. | Post Qualification /Technical |
| | i) Check List |
| | i. Form 'A' Letter of Transmittal as per attached proforma in Section-II. |
| | ii. Valid Enlistment certificate. |
| | iii. Form 'B' Similar works during the last seven years |
| | iv. Form 'C' Performance Report of works given in Form 'B'. |
| | v. Balance sheets duly audited/verified by the chartered Accountant & Profit/Loss statement during the last three years ending 31 st March of the previous year duly signed by the CA. |
| | vi. TDS Certificate of works given in Form 'B'. |
| | vii. Income tax returns |
| | viii. Affidavit as per Annexure-I regarding no criminal proceedings and confirmation that eligible similar works have not been got executed on back to back basis |
| | ix. Certified copy of the power of attorney by the applicant in case of Non Consortium member as per Annexure-II |
| | x. Certificate of Registration under GST |
| | xi. Copy of PAN |
| | xii. Certificate of registration with EPFO, ESIC if available. |
| | xiii. Any other document as specified in the bid document. |
| 3. | Finance |
| | i. Financial Bid |

NOTE: - Hard copies of the documents listed above except Financial Bid shall be submitted by the lowest bidder to the Executive Engineer-III, (CHB).

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[Signature]

'CHECK LIST TO ACCOMPANY THE 'ELIGIBILITY DOCUMENTS'

| S. No. | Description | Remarks |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 1. | Whether the Earnest Money as per the Tender Notice has been deposited by bank-to-bank transfer? | Yes / No |
| 2. | Whether valid Enlistment certificate issued by any one of the specified departments as per Tender Notice has been uploaded? | Yes / No |
| 3. | Whether definite proof from appropriate authority of having satisfactorily completed similar works during the last seven years ending last day of the month previous to the one in which tender is invited has been uploaded? | Yes / No |
| 4. | Whether the Form 'A' Letter of Transmittal as per attached proforma in Section-II has been uploaded? | Yes / No |
| 5. | Whether the Form 'B' - Details of similar works completed during last 7 years has been uploaded? | Yes / No |
| 6. | Whether the Form 'C' - Performance Report of works referred to in Form-B has been uploaded? | Yes / No |
| 7. | Whether the Affidavit as per Annexure-I have been uploaded? | Yes / No |
| 8. | Whether the Power of Attorney as per Annexure-II has been uploaded? | Yes / No |
| 9. | Whether the Balance sheets duly audited/verified by the chartered Accountant & Profit/Loss statement during the last three years ending 31 st March of the previous year duly signed by the CA has been uploaded? | Yes / No |
| 10. | Whether the balance sheets duly audited/verified by the CA and profit/loss statement during the last three years ending 31 st March of the previous year duly signed by the CA. has been uploaded? | Yes / No |
| 11. | Whether any additional condition in tender has been quoted? | Yes / No |
| 12. | Whether the Scanned copies of self attested documents related to E.M.D. & other eligibility document has been uploaded along with the Bid? | Yes / No |
| 13. | Whether all the statements, documents, certificates, uploaded owning responsibility for their correctness/ authenticity have been signed? | Yes / No |
| 14. | Whether the Copy of Certificate of Registration under GST or Undertaking as per Notice Inviting Tender has been uploaded? | Yes/ No |
| 15. | Whether the Copy of PAN has been uploaded? | Yes / No |
| 16. | Whether the Certificate of registration with EPFO and ESIC has | Yes / No |

| | |
|----------------|--|
| been uploaded? | |
|----------------|--|

DECLARATION

1. I/We _____ have carefully gone through all the conditions mentioned in the Bid Document and solemnly declare and affirm that I/we will abide by any penal action of CHB for disqualification or of black listing or determination of contract or any other action as deemed fit, taken by, the Department against me/us, in the event of any of the contents of our this application, the statements, documents, and certificates produced by me/us have been found/declared to be false/fabricated without any liability on CHB.
2. I/We hereby further declare that the Tender has been completed and submitted by us in the manner prescribed in the document and consider myself/ourselves eligible and in possession of all the documents required.
3. I/We hereby also declare that, I/We have not been blacklisted/ debarred/ Suspended/ demoted by any department of Chandigarh Administration or in of any state/Union Territory of the Republic of India for any reasons what so ever.

Date

Signature of the Bidder (s)
(Full name in capitals)
Designation

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**CHANDIGARH HOUSING BOARD
NOTICE INVITING TENDER**

| 1. Executive Engineer-III on behalf of the Chairman, Chandigarh Housing Board invites Percentage Rate Tenders through e-Procurement process from the enlisted Agencies/Firms/Contractors/Tenderer having valid enlistment certificate issued by any one of the specified departments i.e. UT Engineering Department/ Municipal Corporation Chandigarh / CPWD / MES / Punjab PWD / Haryana PWD / Himachal PWD/other State Govt. Departments, Boards / Corporations and PSUs for the following work:- | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Name of work and location. | Estimated cost put to Bid (in Lakh) | Earnest Money | Period of completion | Last date & time of submission of Bid, copy of receipt of deposition of original EMD & other documents as specified in the NIT | Time & date of opening of Technical Bid. |
| Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work] | Rs.2,81,53,809/- (Composite work for Civil, P.H. And Electrical work.) | Rs.5,63,100/- | 5 Months | / /2024 | / /2024 |
| *Website for detail of Milestones dates of Electronic Tendering please refer http://etenders.chd.nic.in/nicgep | | | | | |

- 1.1. Applicants who fulfill the following requirements shall only be eligible to apply.
- Should have valid Enlistment certificate issued by any one of the above specified departments on the last date of submission of the Bids
 - Should have satisfactorily completed during the last seven years ending last day of the month previous to the one in which tender is invited
 - Three similar works each costing not less than Rs.112.62 Lakh or two similar works each of costing not less than Rs.168.93 Lakh or one similar work of costing not less than Rs.225.23 Lakh
 - At the time of submission of bid, contractor uploads the balance sheets duly audited/verified by the CA and profit/loss statement during the last three years ending 31st March of the previous year duly signed by the CA

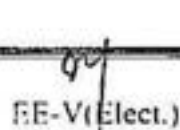
Similar work shall mean "Building/Civil Work"

Components of work executed other than those included in definition of similar work shall be deducted while calculating cost of similar work. Bidder shall submit abstract of cost of work in support of this.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to the last date of submission of bid.


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e. Firm(s)/Contractors against whom any criminal proceedings are pending in any court of law relating to any project executed by the firm, shall not be considered for post-qualification.

To become eligible, for e- tendering, the tenderer shall have to furnish an affidavit as per Annexure-I.

f. GST registration Certificate, if already obtained by the bidder.

If the bidder has not obtained GST registration as applicable, then he shall scan and upload following undertaking along with other bid documents.

"If work is awarded to me, I/we shall obtain GST registration Certificate as applicable within one month from the date of receipt of award letter or before release of any payment by CHB, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by CHB or GST department in this regard".

Note: All the documents shall be duly attested & counter signed by the Bidders.

2. For components of E&M works, the eligibility criteria for specialized agencies to be associated by the main contractor after award of work will be as detailed below:

| S. No. | Component of Electrical (E & M)- Specialized works | Estimated cost | Eligibility (**The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to the last date of submission of tender). |
|--------|----------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | DG Set 320 KVA | Rs.42,77,090/- | Should have successfully completed the works as mentioned below during the last seven years ending previous day of last date of submission of bids: Three similar works each **costing not less than Rs.17.11 Lakh Or Two similar works each **costing not less than Rs.25.66 Lakh Or One similar work **costing not less than Rs.34.22 Lakh |
| 2. | CCTV SURVEILLANCE SYSTEM | Rs.24,73,478/- | Should have successfully completed the works as mentioned below during the last seven years ending previous day of last date of submission of bids: Three similar works each **costing not less than Rs.9.89 Lakh Or Two similar works each **costing not less than Rs.14.84 Lakh Or One similar work **costing not less than Rs.19.79 Lakh |
| 3. | EPABX SYSTEM | Rs.5,65,280/- | Should have successfully completed the works as mentioned below during the last seven years ending previous day of last date of |

| | | | |
|----|------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | <p>submission of bids: Three similar works each **costing not less than Rs.2.26 Lakh Or Two similar works each **costing not less than Rs.3.39 Lakh Or One similar work **costing not less than Rs.4.52 Lakh</p> |
| 4. | LAN NETWORK | Rs.3,73,335/- | <p>Should have successfully completed the works as mentioned below during the last seven years ending previous day of last date of submission of bids: Three similar works each **costing not less than Rs.1.49 Lakh Or Two similar works each **costing not less than Rs.2.24 Lakh Or One similar work **costing not less than Rs.2.99 Lakh</p> |
| 5. | AUDIO/VIDEO SCREEN CONFERENCE ROOM | Rs.10,61,241/- | <p>Should have successfully completed the works as mentioned below during the last seven years ending previous day of last date of submission of bids: Three similar works each **costing not less than Rs.4.24 Lakh Or Two similar works each **costing not less than Rs.6.37 Lakh Or One similar work **costing not less than Rs.8.49 Lakh</p> |
| 6. | FIRE ALARM SYSTEM | Rs.3,34,228/- | <p>Should have successfully completed the works as mentioned below during the last seven years ending previous day of last date of submission of bids: Three similar works each **costing not less than Rs.1.34 Lakh Or Two similar works each **costing not less than Rs.2.01 Lakh Or One similar work **costing not less than Rs.2.67 Lakh</p> |
| 7. | UPS 2x20KVA | Rs.9,10,403/- | <p>Should have successfully completed the works as mentioned below during the last seven years ending previous day of last date of submission of bids: Three similar works each **costing not less than Rs.3.64 Lakh Or Two similar works each **costing not less than Rs.5.46 Lakh Or One similar work **costing not less than Rs.7.28 Lakh</p> |

- i The main contractor should either himself meet the eligibility criteria as defined in the bid document or he will have to associate with an agency for specialized works and has to submit details of such agencies confirming to the eligibility condition as defined in the bid document in Part A along with M.O.U. to Engineer-in-charge of minor component within 60 days from the date of commencement of work. Name of

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- the agency(s) to be associated shall be approved by Engineer-in-charge of minor component within 10 days after submission of complete documents. Within 10 days of approval by the Engineer-in-Charge of the minor component, the contractor shall enter into a tripartite agreement with the associate agency and the Engineer-in-Charge (minor component) failing which a penalty of Rs.5,000/- per day for each day of delay shall be levied and deducted from the dues of the main contractor.
- ii In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Engineer-in-Charge of minor component. The new agency/ agencies shall have also to satisfy the laid down eligibility criteria. In case Engineer-in-Charge is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
 - iii The main contractor has to enter in to agreement with the contractor(s) associated by him for execution of specialized works. Copy of such agreement shall be submitted to EEs in charge of minor component as well as to EEs in charge of Major component. In case of change of associated contractor, the main contractor has to enter into agreement with the new contractor associated by him.
 - iv Verifiable completion certificates of the work of registration/ approval documents as the case may be, duly attested by the applicant shall be submitted. Valid Electrical Contractor's license, as the case may be, duly attested by the applicant shall also be submitted.
3. Agreement shall be drawn with the successful Tenderer on the prescribed Format of CPWD Form 7/8, which is available for sale in the market. Tenderers shall quote their rates as per various terms and conditions of the said form which will form part of the agreement. However the definitions contained therein with regard to CPWD Department and other designated authorities may be read as under:-

| As per General Conditions of Contract for Central P.W.D Works | To be read as |
|---------------------------------------------------------------|------------------------------|
| CPWD | CHB |
| President of India | Chairman, CHB |
| Govt. of India | Chandigarh Housing Board |
| Director General | Chairman, CHB |
| Additional Director General | Chief Executive Officer, CHB |
| Department | Chandigarh Housing Board |

4. In this document the following words and expressions have the meaning hereby assigned to them:
- EMPLOYER means the Chairman, Chandigarh Housing Board, acting through the Executive Engineer.
- BIDDER/TENDERER/FIRM/ AGENCY/CONTRACTOR/APPLICANT means the individual, proprietary firm, firm in partnership, limited company private or public or corporation or Joint Venture Company.
- "Year" means "Financial Year" unless stated otherwise.
- CHB/ Board means "Chandigarh Housing Board"
1. The time allowed for carrying out the work will be 5 Months from the date of start as defined in Schedule 'F' of Financial Bid in Part-III of this document or from the first day of handing over of the site, whichever is later in accordance with the phasing, if any, indicated in the Tender Document.
5. (i) The Site for the work is available.

The architectural and structural drawings & other necessary documents, can be seen in the office of the Executive Engineer-III during submission of the Bid period between 11.00 AM. & 3.00 PM from _____ 2024 to _____ 2024 on everyday except on Saturdays, Sundays and Public Holidays.

6. Earnest money amount will have to be deposited as mentioned in Detail Regarding Tendering Process in shape as prescribed.
7. Downloading and submission of Tender including Financial Bid will be done by e-Procurement process through the Chandigarh Administration web site: <http://etenders.chd.nic.in/nicgep>.
The agency shall upload Scanned copy of documents (duly attested and counter signed by agency) related to "Earnest Money Deposit" and 'Eligibility Documents'. However, certified copy of all the scanned and uploaded documents as specified in e-tender notice shall have to be submitted by the lowest bidder within a week physically in the office of tender opening authority.
8. The bid submitted shall become invalid if:
 - a. The bidder is found ineligible.
 - b. The bidder does not upload scanned copies of all the documents stipulated in the bid document.
 - c. If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
 - d. If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section/ sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
 - e. Before proceeding further with the e- Procurement process, Earnest Money shall be opened first and 'Eligibility Document' of those agencies whose Earnest Money found in order shall be opened in the office of EE-IV, CHB by the committee.
 - f. The department reserves the right to reject any or all the prospective applications without assigning any reason and/or to restrict the list of qualified contractors to any number as deemed suitable by it, if too many bids satisfying the laid down criteria have been received.
9. The contractor, whose tender has been accepted, will be required to furnish 'Performance Guarantee' as mentioned in Detail Regarding Tendering Process. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee.
The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW (Building & Other Construction Workers) Welfare Board and Programme chart (Time and Progress) within the period specified in Schedule F.
10. The description of the work is as follows:

Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work].

Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the

site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidders shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

11. The competent authority on behalf of the Chairman, CHB does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without assigning any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, the same shall be summarily rejected.
12. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.
13. The competent authority on behalf of the Chairman, Chandigarh Housing Board reserves with himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
14. The contractor shall not be permitted to bid for works in the CHB Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the CHB. Any breach of this condition by the contractor would render him liable to be debarred in participating tender in CHB.
15. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Chairman, CHB in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Chairman, CHB as aforesaid before submission of the bid or engagement in the contractor's service.
16. The tenders for the work shall remain open for acceptance for a period of 75 days from the last date of receipt of technical bid.
 - i. If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department within 7 days after last date of submission of bids, then the CHB shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
 - ii. If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department after expiry

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- of 7 days after last date of submission of bids, then the CHB shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
- iii. In case of forfeiture of earnest money as prescribed in para (i) and (ii) above, the bidders shall not be allowed to participate in the rebidding process of the same work.
17. This 'Bid Document' shall form a part of the contract document. The successful tenderer/Bidder/contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of:
- The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as up loaded at the time of invitation of tender and the rates quoted on line at the time of submission of the Bid and acceptance thereof together with any correspondence leading there to.
 - General condition of contract for Central PWD works 2020, tender form of CPWD 7/8 as amended from time to time issued up to the last date of receipt of tender or other Standard C.P.W.D. Form as applicable.
18. For Composite Tenders:
- The Executive Engineer- in- charge of the major component of the work will call tenders for the composite work. The cost of tender document and Earnest Money will be fixed with respect to the combined estimated cost put to tender for the composite tender.
 - The Bid document includes following three components:
Part A:- CPWD form-6, CPWD form-7/8 including schedule A to F for major component of the work, standard General Conditions of Contract for CPWD 2020 as amended/ modified up to the last date of receipt of tender.
Part B:- General/specific conditions, specifications and schedule of quantities applicable to major component of the work.
Part C:- Schedule A to F for minor component of the work (competent authority under clause 2 and clause 5 shall be same authority as mentioned in schedule A to F for major components), General/specific conditions, specifications and schedule of quantities applicable to minor component(s) of the work.
 - The bidders must associate himself, with agencies as per NIT conditions.
 - The eligible bidders shall quote rates for all items of major component as well as for all items of minor components of work. It will be obligatory on the part of the tenderer to sign the tender document for all the components (The schedule of quantities, conditions and special conditions etc.).
 - After acceptance of the tender by the competent authority, the EE in charge of major component of the work shall issue letter of award on behalf of the Chairman, CHB. After the work is awarded, the main contractor will have to enter into one agreement with EE In charge of the Major component and has also to sign two/or more copies of the agreement depending upon number of EE's in charge of minor components. One such signed set of agreement shall be handed over to EEs in charge of minor components. EE of major component will operate Part A and Part B of the agreement. EEs in charge of minor components shall operate Part C along with Part A of the agreement.

- f. The work in General shall be carried out as per CPWD Specifications and other systems and procedures being followed in CPWD with respect to the provisions contained in DSR and CPWD Manuals etc.
 - g. Entire work under the scope of composite tender including major and all minor components shall be executed under one agreement.
 - h. Security deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of works by the respective EE's.
 - i. The main contractor has to associate agencies for specialized component(s) conforming to eligibility criteria as defined in the bid document and has to submit detail of such agency(s) to Engineer-in-Charge of relevant component(s) within two months of the commencement letter. Name of the agency(s) to be associated shall be approved by Engineer-in-Charge of relevant component(s).
 - j. In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Engineer-in-Charge of relevant specialized component(s). The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-Charge is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
 - k. The main contractor has to enter into MoU with agency(s) associated by him. Copy of such MoU shall be submitted to EE/ DDH in charge of each relevant component as well as to EE-in-charge of major component. In case of change of associate contractor, the main agency(s) has to enter into MoU/agreement with the new contractor associated by him.
 - l. Running payment for the major component shall be made by EE of major discipline to the main contractor. Running payment for minor components shall be made by the EE-in-charge of the discipline of minor components directly to the main contractor. The CMB shall be maintained independently by Engineer-in-Charge of major and minor components.
 - m. The composite work shall be treated as complete when all the components of the work are complete. The completion certificate of the composite work shall be recorded by Engineer-in-Charge of major component after record of completion certificate of all other components.
 - n. Final bill of whole work shall be finalized and paid by the EE of major component. Engineer(s) in charge of the minor components will prepare and pass the final bill for their component of work and pass on the same to the EE of major component for including in the final bill for composite contract.
19. The intending bidders are required to upload their bids well in advance of last date of submission of tender. Any issue related to updating profile/ uploading tender can be resolved through the concerned Executive Engineer/ Assistant Engineer (Phone no *0172-2511128(EE-III), 0172-2511165 (Sh.Harbhajan Singh, SDE-VI), 0172- 2511148 (Sh. Akashdeep Singh SDE-VII). The e- tendering bidders are also advised not to wait to raise any issues till the last date of submission of bid in their own interest.
 20. In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid online, then the bid submitted shall become invalid and the CHB shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said

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- earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the re-tendering process of the work.
21. The tenderer is liable to be blacklisted as per policy of Chandigarh Administration 2009 and the EMD will be forfeited if he has been found to have misled or has furnished false information in the forms / statements / certificates/online information submitted by him as proof in support of qualification requirements or record of performance such as abandoning of work not properly completed in earlier contracts and inordinate delays in completion of the present work etc. etc. Further, if this contract has been awarded, the same shall be rescinded including forfeiture of EMD and Performance Guarantee.
 22. While execution of the work, if found that the contractor had produced false/ fake certificates of experience he will be black listed and the contract will be terminated
 23. All disputes concerning in any way with this work are subject to Chandigarh jurisdiction only.
 24. Before the last date for submission of Tenders, the Tender Inviting Officer may modify any of the Contents of the Tender Notice, Tender documents by issuing amendment / Addendum.
 25. Any addendum/amendments issued by the Tender Inviting Officer shall be part of the Tender Document.
 26. To give prospective Tenderer reasonable time to take an addendum into account in preparing their bids, the Tender Inviting Officer may extend if necessary, the last date for submission of tenders.
 27. The Executive Engineer will evaluate whether each Tenderer is satisfying the eligibility criteria prescribed in the tender document and declares them as a qualified Tenderer and selected for next stage of opening of Price Bid.
 28. If the technical bid of a Bidder is not satisfying any of the eligibility criteria it will be rejected by the Executive Engineer.
 29. If any alteration is made by the Bidder in the Bid documents, the conditions of the contract, the drawings, specifications or statements / formats or quantities the tender will be rejected.
 30. The Executive Engineer will evaluate and compare the price bids of all the qualified Tenderer.
 31. The Bidder is advised to attach any additional information, which he thinks to be necessary in regard to his capabilities. No further information will be entertained after submission of application unless it is called for by the Board. The Board reserves the right to call for additional information & clarification of information submitted by the Tenderer.
 32. The cost incurred by the Bidder in preparing this application, in providing clarifications or attending discussions/ conferences in connection with this document shall be borne by the Tenderer and the Board in no case will be responsible or liable for these costs, regardless of the conduct or out come of the process.
 33. The CHB reserves the right to accept or reject any Bid and to annul the post-qualification process and reject all Bids at any time, without assigning any reason or incurring any liability to the Bidders.

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[Signature]

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[Signature]

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[Signature]

PART-II

**DOCUMENT RELATED
TO
ELIGIBILITY CRITERIA
AND
OTHER RELATED DOCUMENTS**

SECTION - I

Forms and Annexure


EE-III


EE-VI/PLN


EE-VI/PLN

Form-A

LETTER OF TRANSMITTAL

From:

To

Executive Engineer-III
Chandigarh Housing Board,
Chandigarh.

Sub: Submission of Bid for the work Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work].

Sir/Madam

Having examined the details given in the bid document for the above work, I/we hereby submit the relevant information.

1. I/we hereby certify that all the statements made and information supplied in the enclosed Forms B to C and accompanying statement are true and correct.
2. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. I/we submit the Following certificates in support of our suitability, technical know how and capability for having successfully completed the following eligible similar works:-

| Sr. No. | Name of work/Project and location | Certificate from |
|---------|-----------------------------------|------------------|
|---------|-----------------------------------|------------------|

1
2
3

Certificate:-

It is certified that the information given in the enclosed eligibility bids are correct. It is also certified that I/we shall be liable to be debarred, disqualified/ cancellation of enlistment in case of any information furnished by me /us found to be incorrect.

Enclosures:

Seal of bidder

Date of submission

SIGNATURE(S) OF BIDDER(S)

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FORM 'B'

DETAILS OF ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING THE LAST SEVEN YEARS ENDING LAST DAY OF THE MONTH PREVIOUS TO THE ONE IN WHICH TENDER IS INVITED.

| S. No. | Name of work / project and location | Owner or sponsoring organisation | Cost of work in crores of rupees | Date of commencement as per contract | Stipulated date of completion | Actual date of completion | Litigation / arbitration cases pending / in progress with details* | Name and address/ telephone number of officer to whom reference may be made |
|--------|-------------------------------------|----------------------------------|----------------------------------|--------------------------------------|-------------------------------|---------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

*Indicate gross amount claimed and amount awarded by the Arbitrator.
For details attached separate sheet.

SIGNATURE OF BIDDER(S)

 
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FORM 'C'

PERFORMANCE REPORT OF WORKS REFERRED TO IN FORM "B"

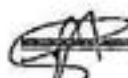
1. Name of work/Project & Location
2. Agreement No.
3. Estimated Cost
4. Tendered Cost
 - i. Allotted Amount
 - ii. Actual completed cost
5. Date of Start
6. Date of completion
 - (i) Stipulated date of completion
 - (ii) Actual date of completion.
7. a) Whether case of levy of compensation for delayed has been decided or not.
 b) if decided, amount of compensation levied for delayed completion if any.
8. Performance Report

| | |
|--------------------------|------------------------------------|
| 1) Quality of Work | Outstanding/Very Good/ Good / Poor |
| 2) Financial soundness | Outstanding/Very Good/ Good / Poor |
| 3) Technical Proficiency | Outstanding/Very Good/ Good / Poor |
| 4) Resourcefulness | Outstanding/Very Good/ Good / Poor |
| 5) General behavior | Outstanding/Very Good/ Good / Poor |


Certified that M/s has completed the above work as per details mentioned above.

Dated:

Executive Engineer or Equivalent


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ANNEXURE-I

SPECIMEN PROFORMA FOR THE AFFIDAVIT TO BE SUBMITTED BY THE APPLICANT ALONGWITH OTHER DOCUMENTS.

(On Judicial Stamp paper duly attested by 1st class Magistrate or Notary Public)

I, _____ S/o Sh. _____ authorized representative of _____ with its office at _____ solemnly affirm and declare as under on behalf of the firm:-

1. I/We in the name and style of 'Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work]'"
2. The undersigned hereby certify that there are no criminal proceedings pending ongoing in any court of law regarding any construction project executed by me/us.
3. The undersigned hereby certify that all the documents and information submitted with the tender/Bid are 'True' & I/We stands fully responsible as per law for their genuineness and correctness.
4. I/we undertake and confirm that the eligible similar works has/have not been got executed through another contractor on back to back basis. Further that if such a violation comes to the notice of the department then I/we shall be debarred for tendering in CHB in future forever. Also if, such a violation comes to the notice of the department before the date of start of work then the CHB shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee deposited.

Place: _____
Dated: _____

Authorized Signatory of
firm/Deponent

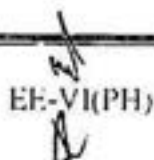
VERIFICATION:

I the above named signatory/deponent do hereby solemnly affirm & declare that the contents of this affidavit are true to the best of my knowledge & nothing has been concealed therein.

Place: _____
Dated: _____

Authorized Signatory of
firm/Deponent

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ANNEXURE-II

FORMAT FOR POWER OF ATTORNEY- by all individual Applicants
(on judicial Stamp paper duly attested by First Class Magistrate/Notary)

Dated: _____

To whomsoever it may Concern

Know all men by these presents, we _____ (name and registered office address of the Applicant) do hereby constitute, appoint and authorize Mr. _____ (Name of the Person(s)), domiciled at _____ (Address), acting as _____ (Designation and the name of the firm), as Authorized Signatory and whose signature is attested below, as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our request for prequalification work of _____, including signing and submission of all documents and providing information and responses to clarifications/enquiries etc. as may be required by CIIB and signing of agreement if awarded the said work.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

For _____

(Signature)

(Name, Title and Address)

Accept

(Attested signature of Mr. _____)

(Name, Title and Address of the Attorney) _____

Notes:

To be executed by the Applicant

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.

Also, wherever required, the executant(s) should submit for verification the extract of the charter documents and documents such as a resolution - power of attorney in favor of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the executant(s)

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ANNEXURE-III

On non-judicial stamp paper of minimum Rs.100/-
(Guarantee offered by Bank to CPWD in connection with the execution of contracts)
**Form of Bank Guarantee for Earnest Money Deposit /Performance Guarantee/Security
Deposit/Mobilization Advance**

1. Whereas the Executive Engineer _____ (name of division), on behalf of the Chairman, CHB (hereinafter called "The Government") has invited bids under _____ (NIT number) _____ dated _____ for _____ (name of work). The Government has further agreed to accept irrevocable Bank Guarantee for Rs. _____/- (Rupees _____ only) valid up to _____ (date)* _____ as Earnest Money Deposit from _____ (name and address of contractor) _____ (hereinafter called "the contractor") for compliance of his obligations in accordance with the terms and conditions of the said NIT.

OR**

- Whereas the Executive Engineer _____ (name of division) CHB, Chandigarh on behalf of the Chairman, CHB (hereinafter called "The Government") has entered into an agreement bearing number _____ with _____ (name and address of the contractor) _____ (hereinafter called "the Contractor") for execution of work _____ (name of work) _____. The Government has further agreed to accept an irrevocable Bank Guarantee for Rs. _____/- (Rupees _____ only) valid up to _____ (date)* _____ as Performance Guarantee/Security Deposit/Mobilization Advance from the said Contractor for compliance of his obligations in accordance with the terms and conditions of the agreement.
2. We, _____ (indicate the name of the bank) _____ (herein after referred to as "the Bank"), hereby undertake to pay to the Government an amount not exceeding Rs. _____/- (Rupees _____ only) on demand by the Government within 10 days of the demand.
3. We, _____ (indicate the name of the Bank) _____ do here by undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____/- (Rupees _____ only).
4. We, _____ (indicate the name of the Bank) _____, further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor in any suit or proceeding pending before any court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be a valid discharge of our liability for payment there under and the contractor shall have no claim against us for making such payment.
5. We, _____ (indicate the name of the Bank) _____ further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by

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reason of any such variation or extension being granted to the said contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. We, _____ (indicate the name of the Bank) _____ further agree that the Government at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the contractor and notwithstanding any security or other guarantee the Government may have in relation to the Contractor's liabilities.
7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8. We, _____ (indicate the name of the Bank) _____, undertake not to revoke this guarantee except with the consent of the Government in writing.
9. This Bank Guarantee shall be valid up to _____, unless extended on demand by the Government. Notwithstanding anything mentioned above. Our liability against this guarantee is restricted to Rs. _____/- (Rupees _____ only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date _____

Witnesses:

1. Signature _____
Name and address _____

Authorized signatory
Name _____
Designation _____
Staff code no. _____
Bank seal _____

2. Signature _____
Name and address _____

*Date to be worked out on the basis of validity period of 5 Months where only financial bids are invited and 180 days for two/three bid system from the date of submission of tender.

** In paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for earnest money or for performance guarantee/Security deposit/mobilization advance, as the case may be.

ANNEXURE-IV

To be signed by the bidder and same signatory competent/ authorised to sign the relevant contract on behalf of CHB.

INTEGRITY PACT

(Integrity Pact is applicable for all works of estimated cost put to the tender equal to or more than the threshold value given in Schedule-F)

This Integrity Agreement is made at..... on this day of..... 2024

BETWEEN

Chairman, Chandigarh Housing Board represented by the Engineer-in-Charge (hereinafter referred to as the Principal, which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assignees)

AND

(Name and address of the bidder)

(Hereinafter referred to as the Bidder/Contractor and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assignees)

Preamble

WHEREAS the Principal has floated the tender (NIT No.) (hereinafter referred to as Tender) and intends to award, under laid down organizational procedure, contract for Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work] hereinafter referred to as the "Contract".

AND WHEREAS the Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as Integrity Pact), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this integrity Pact witnesses as under:

Articles

Article 1: Commitment of the Principal

- 1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - (a) No employee of the Principal, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - (b) The Principal will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal will, in particular, before and during the Tender process, provide to a Bidder(s) the same information and we not provide to any Bidder(s)

- confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
- (c) The Principal shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/ Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

1. It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
2. The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - (a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - (b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - (c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - (d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participates in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/ parallel tender for the same item.

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- (c) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
3. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
4. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice, willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
5. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use coercive practices (which shall include the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property) to influence their participation in the tendering process.

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal under law or the contract or its established policies and laid down procedures, the Principal shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal absolute right:

1. If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal. Such exclusion may be forever or for a limited period as decided by the Principal.
2. Forfeiture of Earnest Money Deposit Performance Guarantee/Security Deposit: If the Principal has disqualified the Bidder(s) from the Tender process prior to the award of the contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal apart from exercising any legal rights that may have accrued to the Principal, may in its considered opinion forfeit the entire amount of Earnest Money Deposit Performance Guarantee and Security Deposit of the Bidder/Contractor.
3. Criminal Liability: If the Principal obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of PC Act, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

1. The Bidder declares that no previous transgressions occurred in the last 3 years with any other Company in any country confirming to the anticorruption approach or with Central

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- Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the tender process.
2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken for banning of business dealings/holiday listing of the Bidder/Contractor as deemed fit by the Principal.
 3. If the Bidder/Contractor can prove that he has resorted/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement by any of its Subcontractors/sub-vendors.
2. The Principal will enter into pacts on identical terms as this one with all Bidders and Contractors.

Article 6- Duration of the Pact

This Integrity Pact begins when both the parties have legally signed it. It expires for the Contractor 12 months after the completion of work under the contract or expiry of defect liability period or last payment made under the contract, whichever is later and for all other bidders, 6 months after the Contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this Integrity Pact as specified above, unless it is discharged/determined by the ADG/SDG, CPWD concerned.

Article 7- Other Provisions

1. This Integrity Pact is subject to Indian Law, place of performance and jurisdiction is the Head quarters of the Division of the Principal, who has floated the tender.
2. Changes and supplements as well as termination notice need to be made in writing.
3. If the Contractor is a partnership or a consortium, this Integrity Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Integrity Pact must be signed by a representative duly authorized by board resolution.
4. Should one of several provisions of this Integrity Pact turn out to be invalid: the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
5. It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Pact, any action taken by the Principal in accordance with this Integrity Pact or interpretation thereof shall not be subject to arbitration.
6. In view of the nature of integrity pact, the Integrity Pact is irrevocable and shall remain valid even if the main tender/contract is terminated till the currency of the integrity pact.

Article 8- Legal and Prior Rights

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For

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the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contract documents with regard to any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses;

(For and on behalf of Principal)

(For and on behalf of Bidder/Contractor)

WITNESSES:

1

(Signature, name and address)




2

(Signature, name and address)

Place:

Dated :

Note: To be signed by the Bidder and the Engineer-in-Charge


Super-ty
Chis Chis

FORMAT OF INDEMNITY BOND.

(To be furnished in Stamp paper as per Stamp Act)

(At presents not less than Rs.80/-Stamp paper)

This deed of indemnity executed by hereinafter referred to as Indemnifier which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, representative and assignees in favour of Chandigarh Housing Board, hereinafter to as the indemnified which expression shall unless repugnant to the context of meaning thereof, include its successors and assignees witness us to.

Whereas the indemnified herein has awarded to the Indemnifier therein a contract for the Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work].on terms and conditions set out interalia in contract/AwardNo. _____ valued at Rs. _____ only)

And whereas the above mentioned contract provides for ' _____ ' as per terms & conditions of the contract.

The indemnifier hereby irrevocably agrees to indemnify the indemnified that he shall be liable for and shall also indemnify the CHB and its employees against all liabilities, losses, claims, demands, proceeding, damages, costs, charges and expenses and further agrees to defend, indemnify and hold the Board and its employees harmless from any penalty whatsoever in respect of any injury or damage to any property of to personals during the execution of work or by the action of any central or state of local authority for violation by the contractor or sub-contractor engaged on the work in respect of his contractual obligations emanated from the contract already referred to the extent of Rs. _____/- Rupees _____ only)

This indemnity shall be in force up to the date of the item from our end.

Name

Designation

WITNESS:

1.

2.

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FINANCIAL BID

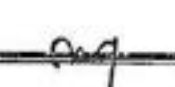

**Special Conditions and other
related documents for submission
of Financial Bid**




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INSTRUCTIONS FOR CONTRACTORS

1. Tender to be witnessed at page No. 39 of Tender Documents.
2. The tender/ tenders containing conditions contrary to those specified in this document shall be summarily rejected.
3. In Schedule - 'A' appended to the Tender Documents, the %age rate must be filled both in words and figures. Accordingly, the overall quoted amount of the tender should be worked out.
4. The contractor(s) shall quote the rates keeping in mind, 'General Conditions of Contract of CPWD Works-2023' as amended from time to time, special contract conditions and particular specifications enshrined under the Bid Document etc.
5. The contractor(s) shall quote the rates keeping in mind, all taxes, GST etc. etc.

PART- A

Standard General Conditions
of Contract Construction
Works 2023

Available
in market
for sale/
CPWD
website.

C.H.B.-C.P.W.D - 7

CHANDIGARH HOUSING BOARD

| | | | |
|--------|------------------|--------------|----------|
| STATE | U.T., Chandigarh | CIRCLE | I |
| BRANCH | Civil | DIVISION | III. CHB |
| ZONE | Chandigarh | SUB DIVISION | VI/VII |

PERCENTAGE/ ITEM RATE TENDER & CONTRACTS FOR WORKS

- A Tender for the work Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work].
- i. To be opened in presence of tenderers who may be present at _____ Hours on _____ 2024 in the office of Executive Engineer-III, Chandigarh Housing Board, Chandigarh.

Downloaded by _____ (contractor)

COMPOSITE TENDER

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F. Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Chairman, CHB within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for Seventy Five (75) days from the last day of receipt of technical bid and not to make any modifications in its terms and conditions.

A sum of Rs.5,63,100/- is hereby deposited by bank-to-bank transfer using SBI MOPS or RTGS/ NEFT transfer through [https:// etenders.chd.nic.in](https://etenders.chd.nic.in) portal. A copy of UTR No/ Transaction slip is scanned & uploaded. If I/we, fail furnish the prescribed performance guarantee within prescribed period, I/we agree that the said Chairman, CHB or his successors in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said Earnest Money absolutely. Further, if I/we fail to commence work as specified, I/we agree that Chairman, CHB or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said Performance Guarantee absolutely, otherwise the said Performance Guarantee shall be a Guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2, 12.3 and 12.4 of the tender form.

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Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/we undertake and confirm that the eligible similar works has/have not been got executed through another contractor on back to back basis. Further that if such a violation comes to the notice of the department then I/we shall be debarred for tendering in CHB in future forever. Also if, such a violation comes to the notice of the department before the date of start of work then the Engineer-in-charge shall be free to forfeit the entire amount of Earnest Money/ Performance Guarantee.

I/We hereby declare that I/we shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information derived there from to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Signature of the contractor

Postal Address

Dated _____

Witness: _____

Address: _____

Occupation: _____

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the Chairman, Chandigarh Housing Board, for a sum of Rs. _____ (Rs. _____)

The letters referred to below shall form part of this contract Agreement--

- a)
- b)
- c)

For & on behalf of the Chairman,
Chandigarh Housing Board
Chandigarh.

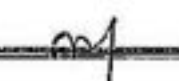
Signature

Dated

Designation


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PROFORMA OF SCHEDULES- For Civil Work

SCHEDULE "A"

Major Component Civil Work Part-A

Schedule of Quantities for Civil Work (Enclosed) which starts at page 46

SCHEDULE "D"

Extra schedule for specific requirements/documents for the work if Nil
any

SCHEDULE "E"

| | Reference to General Conditions of contract | General Conditions of Contract Construction Works 2023 |
|------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| i) | Name of Work | Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work] |
| i) | Composite estimated cost of Civil, PH & Electrical Works | Rs.2.81.53.809/- |
| ii) | Earnest Money (composite amount) | Rs.5.63.100/- |
| iii) | Performance Guarantee | 5% of the tendered value |
| iv) | Security Deposit | 2.5% of tendered value |

SCHEDULE "F"

| GENERAL RULES AND DIRECTIONS | |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Officers inviting tender :- | Executive Engineer-III Chandigarh Housing Board, Chandigarh. |
| Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clause 12.2, 12.3 | 100% |
| Definitions | |
| 2(v) Engineer-in charge | Executive Engineer-III Chandigarh Housing Board, Chandigarh. |
| 2(viii) Accepting Authority | Chandigarh Housing Board, Chandigarh. |
| 2(x) Percentage on cost of materials and labour to cover all overheads and profit | (7.5% CP & 7.5 % OH) 15 % |
| 2 (x)(b) | Delhi Schedule of Rates (DSR) 2023 |
| 2 (xi) Department | Chandigarh Housing Board, Chandigarh |

| | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------|
| 9(ii) Standard CPWD Contract form General Conditions of Contract Construction Works 2023, CPWD Form 7. | | Previous day of the last date of submission of the tender. | |
| Clause 1 | | | |
| i) Time allowed for submission of Performance Guarantee, programme chart (Time and progress) and applicable labour licenses, from the date of issue of letter of acceptance | | 7 Days | |
| ii) Maximum allowable extension beyond the period provided in (i) above. Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above | | 15 Days | |
| Clause 2 | | | |
| Authority for fixing compensation under clause-2 | | Superintending Engineer, CHB | |
| Clause 5 | | | |
| Number of days from the date of issue of letter of acceptance for reckoning date of start Mile stone(s) as per table given at page No | | 15 days | |
| Time allowed for execution of work | | 5 Months | |
| Authority to decide:- | | | |
| (i) Authority to convey the decision of shifting of milestone and Extension of time | | Executive Engineer | |
| (ii) Authority to decide rescheduling of mile stone and extension of time | | Superintending Engineer, CHB | |
| (iii) Shifting of date of start in case of delay in handing over of site | | Superintending Engineer, CHB | |
| PROFORMA OF SCHEDULES Clause 5 Schedule of handing over of site | | | |
| Part | Portion of site | Description | Time Period for handing over reckoned from date of issue of letter of intent. |
| Part-A | Portion without any hindrance | 100% | 15 Days |
| Part-B | Portions with encumbrances | NIL | - |
| Part-C | Portions dependent on work of other agencies | NIL | - |
| Clause 6 | | | |
| Computerised Measure Book (CMB) / Electronic Measurement Book (EMB) | | CMB | |
| Clause 7 | | | |
| Gross work to be done together with net payment/ adjustment of advances for materials collected, if any, since the last such payment for being eligible to interim payment. | | Rs.16,00,000/- subject to one payment per month. | |


| | |
|----------------------------------------------------------------------------------------------|--------------------------------------------------|
| Clause 7A | |
| Whether Clause 7A shall be applicable Clause 7A | Yes, Applicable |
| Clause 8A | |
| Authority to decide compensation on account, if Contractor fails to submit completion plans. | Executive Engineer in Charge of Major Component. |
| Clause 10 A | |

List of testing equipments to be provided by the contractor at site lab.

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------------------------------------------------------------------------------------------------------------------|
| 1. | 2. | 3. |
| 4. | 5. | 6. |
| Clause 10B (ii) | | Not applicable. |
| Clause 10 C Component of labour expressed as percent of value of work | | Not applicable. |
| Clause 10 CC | | Not Applicable |
| Clause 11 Specification to be followed for execution of work. | | CPWD Specifications with correction slips upto date. |
| 12.2 & 12.3 Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for Major Component i.e Building work | | 100% |
| 12.4 (i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items) | | |
| (ii) Deviation Limit for items mentioned in earth work subhead of DSR and related items | | |
| Clause 16 Competent authority for deciding reduced rates. | | Superintending Engineer, CHB |
| Clause 18 | | |
| List of mandatory machinery, Tools & Plants to be deployed by the contractor at site | | All Tool & Plants, Safety equipments, ladder etc., required to be deployed by the contractor at site at his own cost |
| Clause 19 Labour Laws to be complied by the Contractor | | |


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|----------------------------------------------------------------------------------------------|------------------------------------|
| (In case contractor fails to comply, make arrangement and provide necessary facilities etc.) | |
| Clause 19 C | Rs. 500/- penalty for each default |
| Clause 19 D | Rs. 500/- penalty for each default |
| Clause 19 G | Rs. 500/- penalty for each default |
| Clause 19 K | Rs. 500/- penalty for each default |
| Clause 25 | |
| i) Conciliator | CEO, CHB Conciliator. |
| ii) Arbitrator Appointing Authority | CE, CHB |
| v) Place of Arbitration | Chandigarh |

Clause 32

Requirement of technical representative(s) and recovery rates

| Requirement of Technical Staff Qualification | Numb or (of Major + Minor component | Minimum experience (Years) | Designation of Technical staf | Rate at which recovery shall be made from the contractor in the event of not fulfilling |
|----------------------------------------------|-------------------------------------|----------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Graduate Engineer or Diploma Engineer | 1 of major compo nent | 2 or 5 respectively | Project Manager cum planning quality Site billing Engineer | Rs. 15,000/- per month per person |

Clause 38

(i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Ratesprinted by C.P.W.D.

DSR -2023 (Updated) with correction slips issued up to the last day of the last date of submission of bid.

ii) Variations permissible on theoretical quantities:

(a) Cement: For works with estimated cost put to tender not more than Rs. 25 lakh. 3% plus/minus

For works with estimated cost put to tender more than Rs. 25 lakh. 2% plus/minus

(b) Bitumen All Works 2.5% plus & only & nil on minus side.

(c) Steel Reinforcement and structural steel sections for each diameter, section and category 2% plus/minus

(d) All other materials. Nil

APPROVED MAKES OF VARIOUS ITEMS (WHEREVER PRESCRIBED)

FOR USE UNDER THIS CONTRACT

| Sr. No. | Item | Makes |
|---------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1 | Cement | ACC, ULTRATECH, VIKRAM, SHREE CEMENT, AMBUJA, JAYPEE CEMENT, CENTURY CEMENT & JK CEMENT |
| 2 | Reinforcement Steel (TMT-Fe 500) | SAIL, TATA STEEL LTD, RINL, JINDAL STEEL & POWER LTD, PANTHER AND JSW STEEL LTD. |
| 3 | Structural Steel/M.s Tube | SAIL, RASHTRIYA ISPAT NIGAM, TATA, JINDAL STEEL & POWER LTD, JSW STEEL LTD |
| 4 | Water proofing compound (Crystalline) | ACCOPROOF, XYPEX, BASF, SIKA, PENETRON, KESHUN |
| 5 | Flush door Shutters/ Factory made Paneled door shutters | ARCHID, CENTURY, GREEN, MERINO, DURO |
| 6 | Hardware/ Fittings (SS) | DORMA, HETTICH, GODREJ, EVERITE, DORSET |
| | Hardware/ Fittings (Aluminium) ISI Marked | CLASSIC, NULITE AND CROWN. |
| 7 | Premium acrylic emulsion paints | DULUX-WEATHER SHIELD, NEROLAC EXCEL, ASIAN APEX PAINTS, BERGER-WEATHER COAT |
| 8 | Wall Putty | BIRLA WALL CARE, JK WHITE, SAINT GOBAIN, FERROUS CRETE |
| 9 | Steel/ Wood Primer | AKZONOBEL (DULUX) NEROLAC, ASIAN PAINTS, BERGER, JENSON & NICHOLSON |
| 10 | Synthetic Enamel paint | AKZONOBEL (DULUX), ASIAN (APCOLITE), KANSAI NEROLAC (SYNTHETIC ENAMEL), BERGER-LUXOL. |
| 11 | Float Glass | SAINT GOBAIN, MODIGUARD, ASAHI INDIA, GOLD PLUS. |
| 12 | Mirror | ATUL, BELGIUM GLASS HOUSE, SWASTIK |
| 13 | Concrete additive | SIKA, FOSROC, STP, CICO |
| 14 | Expansion/ Rebar/ Anchor Fastener | HILTI, FISCHER, DASH, ANCHOR, BOSCH FISHER |
| 15 | Aluminum Sections | INDIAN ALUMINIUM CO., HINDUSTAN ALUMINIUM JINDAL, BHARUKA |
| 16 | Glass processors for toughened/ insulating/ bevelled glass etc. | GOLD PLUS, ALLIED GLASS, GSC, GURIND, MIRAGE GLASSES, T.L. VERMA & CO. & SHIVA TUFF |

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| | | |
|----|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 17 | Tile Joint Filler | ROFF RAINBOW TILE MATE' OF ROFF CONSTRUCTION CHEMICALS PVT. LTD., WINSIL 20. SILICON SEALANT OF GE BAYER SILICON. MATRIX GROUP. |
| 18 | False Ceiling-Metal | SAINT GOBAIN, ARMSTRONG, HUNTER, DOUGLUS |
| 19 | Gyp Board | SAINT GOBAIN, LAFARGE, BORAL |
| 20 | Ceramic Tiles/ Glazed Tiles (Wall) | DIGITAL SERIES OF FIRST PREMIUM QUALITY OF KAJARIA, NITCO, RAK |
| 21 | Ceramic tiles(Floor) | ANTI-SKID OF FIRST PREMIUM QUALITY OF KAJARIA, NITCO, RAK |
| 22 | Vitrified tiles (antiskid/ Matt/ glazed) | PREMIUM QUALITY OF DOUBLE CHARGED, NITCO, RAK, KAJARIA |
| 23 | Mortice Locks | DORMA, HETTICH, GODREJ, EVERITE, DORSET |
| 24 | GI section for Door Frames | TATA, JINDAL, APL APOLLO |
| 25 | Polymer Bonding agent | SIKA, PIDILITE, NITOBOND, CICO |
| 26 | Sensor Door | GEZE, DORMA, OZONE |

The Agency is required to get prior approval of Engineer-in-charge for the make of the material to be used in the work. In case of non-availability of material from these manufacturers; the Chief Engineer may allow use of alternative BIS approved manufacturer makes.

COMPOSITE ABSTRACT OF COST

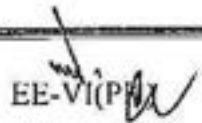
Name of Work:- Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work].

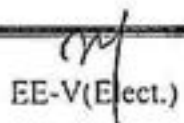
| S. No. | Name of work | Amount |
|--------|---------------------------------------------------------------------------------------------------------|-------------------|
| 1 | Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work] | |
| A | Civil Work | Rs.1,32,96,409.00 |
| B | P.H. Work | Rs. 10,52,246.00 |
| C | Elect. Work | Rs.1,38,05,154.00 |
| | Grand Total (A+B+C) | Rs.2,81,53,809.00 |


Executive Engineer-III.
Chandigarh Housing Board.
Chandigarh.




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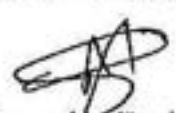


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ABSTRACT OF COST CIVIL

NAME OF WORK:- Renovation of Block 'A' Chandigarh Housing Board Office
Building, Sector-9, Chandigarh [Composite work]".

| Sr. No. | Description | Amount in (Rs) |
|------------|-----------------------------|--------------------------|
| 1. | Sub Head A | |
| | REINFORCED CEMENT CONCRETE | 29.681.00 |
| 3. | Sub Head B | |
| | MASONARY WORK | 6,09,033.00 |
| 4. | Sub Head C | |
| | CLADDING WORK | 9,40,663.00 |
| 5. | Sub Head D | |
| | WOOD AND PVC WORK | 21,83,919.00 |
| 6. | Sub Head E | |
| | STEEL WORK | 20,84,921.00 |
| 7. | Sub Head F | |
| | FLOORING | 25,93,800.00 |
| 8. | Sub Head G | |
| | ROOFING | 18,31,080.00 |
| 9. | Sub Head H | |
| | FINISHING | 15,21,603.00 |
| 10. | Sub Head I | |
| | REPAIRS TO BUILDING | 3,95,193.00 |
| 11. | Sub Head J | |
| | DISMANTLING AND DEMOLISHING | 3,39,370.00 |
| 12. | Sub Head K | |
| | ALUMINIUM WORK | 4,42,462.00 |
| 13. | Sub Head L | |
| | LABOUR | 72,825.00 |
| 14. | Sub Head L | |
| | MISCELLANEOUS | 2,51,859.00 |
| | Total | Rs.1,32,96,409.00 |


Executive Engineer-III.
Chandigarh Housing Board.
Chandigarh 

Schedule of Quantities for the work Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh
 [Composite work]
CIVIL COMPONENT

| Sr. No. | Description of Item | Qty | Unit | Rate | Amount |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------|--------|
| Sub Head : A | Reinforced cement concrete | | | | |
| 1 | Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources). | 1.12 Cum | Cum | 11250.26 | 12600 |
| 2 | Centering and shuttering including strutting, propping etc. and removal of form for | | | | |
| | Lintels, beams, plinth beams, girders, brusses and cantilevers | 12.78 Sqm | Sqm | 720.07 | 9202 |
| 3 | Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. | | | | |
| Sub Head : B | Thermo-Mechanically Treated bars of grade Fe-500D or more. | 74.72 Kg | Kg | 105.45 | 7879 |
| | Masonry work | | | | |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite work].

| | | | | | |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|---------|
| 4 | Brick work with common burnt clay I.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : | | | | |
| | Cement mortar 1:4 (1 cement : 4 coarse sand) | 7.83 | Cum | Cum | 9137.05 |
| 5 | Half brick masonry with common burnt clay I.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level. | | | | |
| | Cement mortar 1:4 (1 cement : 4 coarse sand) | 489.13 | Sqm | Sqm | 1098.87 |
| Sub Head : C | Cladding work | | | | 537490 |
| 6 | Providing and fixing 18 mm thick gang saw cut, mirror polished, pre-moulded and pre-polished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high glass finish etc. complete at all levels. | | | | |
| | Granite stone slab of colour black, Cherry/Ruby red | | | | |
| | Area of slab over 0.50 sqm | 78.15 | Sqm | Sqm | 5022.35 |
| 7 | Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy. | | | | 392497 |

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| | | | | | |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|----------|--------|
| | bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete. | 442.13 | Sqm | 1239.83 | 548166 |
| Sub Head : D | Wood and PVC work | | | | |
| 8 | Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fastlugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately) | | | | |
| | Kiln seasoned and chemically treated hollock wood | 0.27 | Cum | 81528.42 | 22013 |
| 9 | Providing and fixing flat pressed 3 layer particle board medium density exterior grade (Grade 1) or graded wood particle board IS : 3087 marked, to frame, backing or studding with screws etc. complete (frames, backing or studding to be paid separately): | | | | |
| | 18 mm thick | 82.01 | Sqm | 998.30 | 81871 |
| 10 | Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part 1) 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: | | | | |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite work].

| | | | | | |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------|---------|-------|
| | 35 mm thick excluding ISI marked Stainless Steel butt hinges but including necessary screws | 15.47 Sgm | Sgm | 2339.57 | 36193 |
| 11 | Providing M.S. Piano hinges ISI marked IS: 3818 finished with nickel chromium plating grade I as per IS: 1068 and fixing with necessary screws etc., complete. | | | | |
| | Overall width 35 mm | 113.39 Metre | Metre | 328.99 | 37304 |
| 12 | Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI. IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete | 61.00 Nos | Each | 961.34 | 58642 |
| 13 | Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete. | 8.00 Nos | Each | 976.20 | 7810 |
| 14 | Providing and fixing special quality chromium plated brass cupboard locks with six levers of approved quality including necessary screws etc. complete. | | | | |
| | Size 40 mm | 31.00 Nos | Each | 312.65 | 9692 |
| 15 | 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 : | | | | |
| | 150x10 mm | 31.00 Nos | Each | 80.72 | 2502 |

| | | | | | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|------|-------|------|
| 16 | 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 | | | | | |
| 17 | <p>Twin rubber stopper</p> <p>Providing and fixing partition upto ceiling height consisting of G.I. frame and required board, including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/sqm(both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre. The boards are to be fixed to the frame, work with joints staggered to avoid through cracks, M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm), joint finisher and two</p> | 60.00 | Nos | Each | 70.75 | 4245 |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite work].

| | | | | | |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|---------|--------|
| | coats of primer suitable for board as per manufacturer's specification and direction of engineer in charge all complete | 101.20 | Sqm | 1777.82 | 179915 |
| | 75mm overall thickness partition with 12.5 mm thick double skin tapered edged plain Gypsum plaster board conforming to IS: 2095; (part 1): 2011 (Board with BIS certification marks) | | | | |
| 18 | Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete. | | | | |
| | Double strip (horizontal type) | 62.00 | Nos | 138.82 | 2407 |
| 19 | Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality. | | | | |
| | 1.5 mm thick | 214.97 | Sqm | 1022.75 | 219861 |
| 20 | Providing and fixing, in position concealed al. section for wall paneling using board of required thickness fixed on the 'W' profile (0.55 mm thick) having a knurled web of 51.55 mm and two flanges of 26 mm each with lips of 10.55 mm, placed @ 610 mm 'C' in perimeter channel having one flange of 20 mm and another flange of 30 mm with thickness of 0.55 mm and web of length 27 mm. Perimeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610 mm 'C' with fully threaded self-tapping dry | | | | |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite work].

| | | | | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------|-----------|--------|
| | Wall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws @ 200 mm C/C.. all complete as per the drawing & directions of engineer-in-charge. the joints of the boards are finished with specially formulated jointing compound and 48mm wide jointing tape to provide seamless finish. | | | | |
| | Plain Gypsum plaster board conforming to IS: 2095 Part - 1:2011 (Board with BIS certification marks) | | | | |
| 21 | 12.5 mm thick Providing and fixing 25mm thick pre-laminated medium density fibre board exterior grade (Grade-I) IS:14587:1998 marked with one side decorative and other side balancing lamination for cupboard shutters edges to be sealed with PVC edge bending tape 2.00 mm thick of approved brand including ISI marked nickel plated bright finishing M.S. piano hinges conforming to IS:3818 marked with necessary screw etc all complete. | 11.71 Sqm | Sqm | 1279.82 | 14987 |
| | | 163.56 Sqm | Sqm | 2087.88 | 341494 |
| 22 | Providing and fixing stainless steel fancy handle of approved make fixed with SS screws etc. complete as per direction of Engineer-in-charge. | | | | |
| | 200 mm | 122.00 Nos | Each | 182.51 | 22266 |
| 23 | Providing and fixing of GLEZE I/C-90 Automatic sensor for door at site. Complete in all respects to the entire satisfaction of Engineer in charge. | 3.00 Nos | Each | 329032.15 | 987096 |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite work].

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|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|---------|--------|
| 24 | Providing and fixing of glass 12 mm clear toughened in the facade with Stainless steel fixtures to hold the glass from ceiling and walls and sensor door operator to be fixed in glass with magnets and door operable in bi parting ways as per design/ drawing site available. Complete in all respects to the entire satisfaction of Engineer in charge. | 29.89 | Sqm | Sqm | 5206.45 | 155621 |
| Sub Head : E | Steel Work | | | | | |
| 25 | Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. | | | | | |
| | In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works | 958.85 | Kg | Kg | 168.77 | 161825 |
| 26 | Providing and fixing of Compactors at different levels with each body of Size 900x400x2100mm with number of bodies ranging from 4 to 12. Providing and placing mechanically assisted drive mechanism Mobile compactor. The structure shall be made out of 0.8 mm thick high yield strength CRCA sheet of grade 'D' conforming to IS:513. Each unit have 5 loading levels formed by 4 nos. of adjustable shelves. Body units are bolted to undercarriage. Compactor height from ground should not be less than 2100 mm. The body including shelves shall be given anti-rust surface treatment & powder coated with epoxy polyester powder. It involves a 7 step treatment. Final finish consists of epoxy polyester powder coating of approved color & shade with a Dry Film Thickness of minimum 40 microns. It shall have load bearing capacity minimum of 60 kg uniformly distributed | | | | | |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite work].

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| <p>per shelf. Shelves shall be mounted on support brackets & shelf level can be adjusted. The Undercarriage shall be welded frame made of IIR sheet minimum 2.5 mm suitably fabricated to take the loads based on configuration. A Centralized locking arrangement shall be provided through Locking Stiffener mounted onto back of single last unit so that it gets locked on channels when all the units are brought together. This arrangement occupies a space of 100 mm. Each Drive type units have Locking Knob near the Drive wheel for manual locking of individual units when a person is using those units. End stoppers are provided at the end of channels to prevent derailment. The nuts & bolts are galvanized/ Zn Plated. Movement of units shall be achieved mechanically through a drive wheel and 'Sprocket-Chain-Tensioner' arrangement mounted rigidly onto body side, complete in all respect to the entire satisfaction of Engineer in charge.</p> | | | | |
| Sub Head : F | 1 Bay Compactor | 48.00 | Nos | Each |
| 27 | Flooring | 40064.50 | 1923096 | |
| <p>Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622. of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry at 3.3 kg/sqm including grooving the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, piler, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.</p> | | | | |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION CORPORATION

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh Composite work.

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|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----|---------|---------|
| Double charge vitrified tile polished finish of size | | | | | |
| | Size of Tile 600 x 600 mm | 1181.81 Sqm | Sqm | 1421.41 | 1679837 |
| 28 | Glazed Vitrified tiles Mau/Aniskid finish of size | | | | |
| | Size of Tile 600 x 600 mm | 108.45 Sqm | Sqm | 1432.35 | 155338 |
| 29 | Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete. | | | | |
| 30 | Size of Tile 600x600 mm | 204.84 Sqm | Sqm | 1587.04 | 325089 |
| | Providing and laying 9 mm wooden planking, tongued and grooved in flooring, including cutting, levelling & fixing with iron screws complete in all respect to the entire satisfaction of Engineer-in-charge. | 207.28 Sqm | Sqm | 2091.55 | 433536 |
| Sub Head : G | | | | | |
| Roofing | | | | | |
| 31 | Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of | | | | |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh (Composite work).

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| 25X10X0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate C.I. channels 45X15X0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to C.I. intermediate channel with connecting clips made | | | | |
| out of neer in Charge but excluding the cost of painting with 2.64 mm dia x 230 mm long C.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with : 12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I) :2011 (Board with BIS certification marks) | 1228.98 | Sqm | Sqm | 1325.72 |
| | | | | 1629283 |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION ORGANIZATION

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite work].

32

Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections galvanized @ 120 grams/sqm, both side

inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using Gil slotted cleats of size 27 x 37 x 25 x 1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm Gil adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION INITIATIVE

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh (Composite work).

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|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|-----|---------|--------|
| i) | G.I Metal Ceiling 1 lay in plain Tegular edge Global white color tiles of size 595x595 mm. and 0.5 mm thick with 8 mm drop; made of G.I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending. | 108.45 | Sqm | Sqm | 1860.74 | 201797 |
| Sub Head | Finishing | | | | | |
| : II | | | | | | |
| 33 | 12 mm cement plaster of mix : 1:4 (1 cement: 4 fine sand) | 1223.74 | Sqm | Sqm | 339.35 | 415276 |
| 34 | Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : | | | | | |
| | Two or more coats on new work | 45.60 | Sqm | Sqm | 152.44 | 6951 |
| 35 | Providing and applying white cement based putty of average thickness 1 mm. of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete. | 2187.65 | Sqm | Sqm | 152.59 | 333814 |
| 36 | Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour. | | | | | |
| | Two coats | 4819.57 | Sqm | Sqm | 134.4 | 647750 |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite work].

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|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|-----|---------|-------|
| 37 | Removing dry or oil bound distemper, water proofing cement paint and the like by scraping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete. | 2409.78 | Sqm | Sqm | 24.59 | 59257 |
| 38 | Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade | | | | | |
| | One or more coats on old work | 406.75 | Sqm | Sqm | 100.52 | 40887 |
| 39 | French spirit polishing : | | | | | |
| | One or more coats on old work | 80.38 | Sqm | Sqm | 219.81 | 17668 |
| Sub Head : 1 | Repairs to Building | | | | | |
| 40 | Renewing glass panes, with putty and nails wherever necessary including racking out the old putty: | | | | | |
| | Float glass panes of nominal thickness 5 mm (weight not less than 12.5kg/sqm) | 19.08 | Sqm | Sqm | 1384.73 | 26421 |
| 41 | Regrading terracing of mud phaska covered with tiles or brick, in cement mortar by dismantling tiles or bricks, removing mud plaster, preparing the surface of mud phaska to proper slope, relaying mud plaster gobi lepping and tiles or bricks, grouted in cement mortar 1:3 (1 cement : 3 fine sand), including replacing unserviceable tiles or bricks with new ones and disposal of unserviceable material to the dumping ground (the cost of the new tiles or brick excluded), all complete as per direction of Engineer-in-Charge. | 146.32 | Sqm | Sqm | 680.61 | 99588 |

| | | | | | |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------|---------|--------|
| 42 | Flush pointing with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska : | | | | |
| | With F.P.S. brick tiles | 1463.22 Sqm | Sqm | 134.64 | 197008 |
| 43 | Providing and fixing 1.5 mm thick polycarbonate sheet with rivets/screw @ 10" c/c spacing to the existing frame including cutting fixing in position on the existing frame complete in all respect to the entire satisfaction of Engineer-in-Charge. | 55.58 Sqm | Sqm | 1298.60 | 72176 |
| Sub Head : J | Dismantling and Demolishing | | | | |
| 44 | Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. | | | | |
| | Nominal concrete 1:4:8 or leaner mix (ie equivalent design mix) | 0.60 Cum | Cum | 1470.24 | 882 |
| 45 | Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. | | | | |
| | In cement mortar | 7.06 Cum | Cum | 2014.5 | 14228 |
| 46 | Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkats, architrave, holdfasts etc. complete and stacking within 50 metres lead : | | | | |
| | Of area 3 sq. metres and below | 88.00 Nos | Each | 359.06 | 31597 |
| 47 | Of area beyond 3 sq. metres | 9.00 Nos | Each | 491.6 | 4424 |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION PROJECT

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh (Composite work).

| | | | | | |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----|-------|--------|
| 48 | Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. | | | | |
| | For thickness of tiles 10 mm to 25 mm | 3169.04 Sqm | Sqm | 71.77 | 227442 |
| 49 | Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead. | 204.84 Sqm | Sqm | 53.44 | 10947 |
| 50 | Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material within 50 meters lead as directed by Engineer-in-charge. | 811.03 Sqm | Sqm | 55.1 | 44688 |
| 51 | Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved. | 20.00 Cum | Cum | 258.1 | 5162 |
| Sub Head : K 52 | Aluminium Work Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required J/P/M rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, milled and jointed mechanically wherever required including clean | | | | |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION ORIENTED BOARD

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite work].

| | | | | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----|---------|--------|
| | angle, Aluminium snap heading for glazing / paneling, C.P. brass / stainless steel screws, all | | | | |
| | complete as per architectural drawings and the directions of engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : | | | | |
| | For fixed portion | | | | |
| | Powder coated aluminium (minimum thickness of powder coating 50 micron) | 266.16 Kg | Kg | 519.12 | 138169 |
| 53 | For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of I.P.D.M rubber / neoprene gasket required (Fittings shall be paid for separately) | | | | |
| | Powder coated aluminium (minimum thickness of powder coating 50 micron) | 351.36 Kg | Kg | 620.38 | 217977 |
| 54 | Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with I.P.D.M rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap heading shall be paid in basic item): | | | | |
| | With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm) | 24.54 Sqm | Sqm | 1471.86 | 36119 |



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite work].

| | | | | | |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|---------|-------|
| 55 | Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc. to be paid separately) | 4.46 Sqm | Sqm | 5207.75 | 23227 |
| 56 | Hardware for Frameless Toughened glass Door Shutter | | | | |
| a) | Providing and fixing 600 mm high pull handle . polished SS pull handle 600 back to back adjustable fixing for glass wood and metal doors in stainless steel the pull handle should have supporting washer with raised bevelling on the outer surface length 600 x 40mm x 20mm | 2 Pairs | Pair | 5089.80 | 10180 |
| b) | Providing & fixing Top patch in 12mm thick Glass door including the rate of cutting of hole in glass complete in all respect to the entire satisfaction of Engineer-in-charge. | 1 No | Each | 1219.65 | 1220 |
| c) | Providing & fixing Bottom patch in 12mm thick Glass door including the rate of cutting of hole in glass complete in all respect to the entire satisfaction of Engineer-in-charge. | 1 No | Each | 2133.65 | 2134 |
| d) | Providing & fixing Dead Lock Set SS OZ/ML-DL- 0.50mm SSS+OMC - 22-HC-45 Normal keys Half Euro profile cylinder with key operation standard length 45mm in SSS/ gold finish with 3 keys set for 12mm thick Glass door including the rate of cutting of hole in glass complete in all respect to the entire satisfaction of Engineer-in-charge | 2 Nos | Each | 3549.80 | 7100 |
| 57 | Providing and fixing Door window jali with EPDM rubber / neoprene gasket for aluminium work for doors, windows, ventilators and partitions with extruded built up standard | 8.18 Sqm | Sqm | 774.60 | 6336 |

| Sub Head : L. | tubular sections complete in all respect to the entire satisfaction of Engineer in charge. | | | | |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|------|------------------|
| 58 | Labour Supply of labour for miscellaneous works (like cleaning, material shifting etc) to be carried out during execution of work complete in respects to the entire satisfaction of Engineer in charge. | 100.00 | Nos | Each | 728.25 |
| 59 | Providing and laying plaster of paris on floor 5mm to 7mm thick to protect the existing tile flooring for any type of damage during execution of work and removal/disposal of plaster of paris on final completion of work complete in all respects to the entire satisfaction of Engineer-in-charge | 1290.26 | Sqm | Sqm | 195.20 |
| | | | | | 251859 |
| | Total | | | | 13296.409 |

[Signature]
Executive Engineer-III,
Chandigarh Housing Board,
Chandigarh.

[Signature]

Milestone Program
(In Physical Terms)
Civil Work

| S. No. | Description of Milestone (Physical) | Time allowed in Days (from date of start) | Amount to be with-held in case on non achievement of respective milestone. |
|---------|-------------------------------------|-------------------------------------------|----------------------------------------------------------------------------|
| 1 | 1st Quarter | | |
| S.No | Description | During the quarter | Cumulative |
| 1. | Reinforcement | 40% | 40% |
| 2. | Masonry Work | 25% | 25% |
| 3. | Cladding Work | 20% | 20% |
| 4. | Wood & PVC Work | 5% | 5% |
| 5. | Steel Work | 10% | 10% |
| 6. | Flooring | 10% | 10% |
| 7. | Roofing | 15% | 15% |
| 8. | Finishing | 5% | 5% |
| 9. | Repair to Building | 5% | 5% |
| 10. | Dismantling And | 60% | 60% |
| 11. | Demolishing | 25% | 25% |
| 12. | Labour | 20% | 20% |
| 13. | Miscellaneous | 10% | 10% |
| 2 | | | |
| S.No | Description | During the quarter | Cumulative |
| 1. | Reinforcement | 20% | 20% |
| 2. | ceement concrete | 20% | 40% |
| 2. | Masonry Work | 20% | 45% |
| 3. | Cladding Work | 20% | 40% |
| 4. | Wood & PVC Work | 21% | 26% |
| 5. | Steel Work | 35% | 45% |
| 6. | Flooring | 20% | 30% |
| 7. | Roofing | 30% | 15% |
| 8. | Finishing | 25% | 30% |
| 9. | Repair to Building | 20% | 25% |
| 10. | Dismantling And | 20% | 80% |
| 75 Days | | | 1.251% of Tendered Amount |

| S.No | Description | During the quarter | | Cumulative |
|--------------------------|--------------------|--------------------|------|------------|
| | | 100% | 100% | |
| 1 | Reinforcement | 100% | 100% | 100% |
| 2 | Masonry Work | 150% | 100% | 100% |
| 3 | Casting Work | 20% | 100% | 100% |
| 4 | Wood & PVC Work | 20% | 100% | 100% |
| 5 | Steel Work | 150% | 100% | 100% |
| 6 | Flooring | 150% | 100% | 100% |
| 7 | Roofing | 150% | 100% | 100% |
| 8 | Finishing | 30% | 100% | 100% |
| 9 | Repair to Building | 150% | 100% | 100% |
| 10 | Demolishing And | 0% | 100% | 100% |
| 11 | Aluminium Work | 150% | 100% | 100% |
| 12 | Labour | 100% | 100% | 100% |
| 13 | Miscellaneous | 30% | 100% | 100% |
| 150 Months | | | | |
| 1.251% of Tenders Amount | | | | |

| S.No | Description | During the quarter | | Cumulative |
|--------------------------|--------------------|--------------------|------|------------|
| | | 100% | 100% | |
| 1 | Reinforcement | 30% | 90% | 90% |
| 2 | Masonry Work | 100% | 85% | 85% |
| 3 | Casting Work | 40% | 80% | 80% |
| 4 | Wood & PVC Work | 45% | 71% | 71% |
| 5 | Steel Work | 40% | 85% | 85% |
| 6 | Flooring | 25% | 55% | 55% |
| 7 | Roofing | 40% | 85% | 85% |
| 8 | Finishing | 40% | 70% | 70% |
| 9 | Repair to Building | 60% | 85% | 85% |
| 10 | Demolishing And | 20% | 100% | 100% |
| 11 | Aluminium Work | 40% | 87% | 87% |
| 12 | Labour | 30% | 90% | 90% |
| 13 | Miscellaneous | 20% | 70% | 70% |
| 113 Days | | | | |
| 1.876% of Tenders Amount | | | | |

| S.No | Description | During the quarter | | Cumulative |
|--------------------------|--------------------|--------------------|------|------------|
| | | 100% | 100% | |
| 1 | Reinforcement | 30% | 90% | 90% |
| 2 | Masonry Work | 100% | 85% | 85% |
| 3 | Casting Work | 40% | 80% | 80% |
| 4 | Wood & PVC Work | 45% | 71% | 71% |
| 5 | Steel Work | 40% | 85% | 85% |
| 6 | Flooring | 25% | 55% | 55% |
| 7 | Roofing | 40% | 85% | 85% |
| 8 | Finishing | 40% | 70% | 70% |
| 9 | Repair to Building | 60% | 85% | 85% |
| 10 | Demolishing And | 20% | 100% | 100% |
| 11 | Aluminium Work | 40% | 87% | 87% |
| 12 | Labour | 30% | 90% | 90% |
| 13 | Miscellaneous | 20% | 70% | 70% |
| 113 Days | | | | |
| 1.876% of Tenders Amount | | | | |

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Part B

| | |
|------------------------------------|-------|
| I - GENERAL / SPECIFIC CONDITIONS, | |
| II - FINANCIAL BID FOR QUOTING | RATES |

General/Specific Conditions as applicable.

Note: The order of preference in case of any discrepancy may be read as the following:-

- Nomenclature of items as per schedule of quantities.
- Particular specification and special condition, if any.
- CPWD/MORT&H specifications.
- Architectural Drawings.
- Indian standard specifications of B.I.S.
- Sound Engineering Practice.
- GCC for construction work 2023
- CPWD Manual.

1.0 General

1.1 Except for the items, for which Particular Specifications are given or where it is specifically mentioned otherwise in the description of the items in the schedule of quantities, the work shall generally be carried-out in accordance with the "CPWD-Specifications shall be followed and the rates should be all inclusive.

1.2 Any reference made to any Indian Standard Specifications, shall imply to the latest version of that standard, including such revisions / amendments as issued by the Bureau of Indian Standards up to last date of receipt of tenders. The Contractor shall keep at his own cost all such publications including relevant Indian Standard applicable to the work at site.

1.3 The work shall be executed and measured as per metric dimensions given in the Schedule of Quantities, drawings etc. (FPS units wherever indicated are for guidelines only).

1.4 The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors is minimized. The contractor shall ensure proper co-ordination of various disciplines viz. sanitary & water supply, hearthware & electrical etc.

1.5 All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested before covering.

1.6 Samples including brand/ quality of materials and fittings to be used in the work shall be got approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work.

1.7 The contractor, his agents/ representative, workman etc. shall strictly observe orders pertaining to fire precautions prevailing in the area.

1.8 Contractor(s) shall study the soil investigation report for the site, available in the office of the Engineer-in-Charge and satisfy himself about complete characteristics of soil and other parameters at site. However, no claim on the alleged inadequacy or incorrectness of the soil data supplied by the department shall be entertained.

1.9 The tenderer shall see the approaches to the site. In case any approach from main road is required at site or, existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost.

1.10 Contractor shall take all precautionary measure to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost.

1.11 The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused due to negligence on his part. Contractor shall ensure that no hindrances shall be caused to traffic during the execution of the work.

1.12 The contractor shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, compound wall, services etc are to be constructed.

1.13 The contractor shall provide at his own cost suitable weighing, surveying and leveling and measuring arrangements as may be necessary at site for checking. All such equipments shall be got calibrated in advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.

1.14 Contractor shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.

1.15 The work shall be carried out in accordance with the Architectural drawings and Structural drawings, to be issued from time to time, by the Engineer-in-Charge. Before commencement of any of work, the contractor shall co-relate all the relevant architectural and structural drawings issued for the work, nomenclature of items, Specifications etc. and satisfy himself that the information available there from is complete and unambiguous. The figures & the written dimensions of the drawing shall supersede the measurement by scale. The discrepancy, if any, shall be brought to the notice of the Engineer-in-Charge for immediate decision before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any

erroneous and/ or incomplete information and no claim, whatsoever shall be entertained on this account.

1.16 The Architectural drawings other than those indicated in nomenclature of items are only indicative of the nature of the work and materials/fitings involved unless and otherwise specifically mentioned.

1.17 The contractor should submit the shop drawing of staging and shuitering for approval of Engineer-in-Charge before actually commencing the execution of work under the item. Nothing extra shall be payable on this account.

1.18 Other agencies may also simultaneously execute and install the works and the contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings, trenches etc. as may be required for such related works (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be available as specified elsewhere in the contract) and the contractor shall fix the same at the time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.

1.19 The contractor shall conduct his work, so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.

1.20 All material shall only be brought at site as per program finalized with the Engineer-in-Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.

1.21 The contractor shall procure the required materials in advance so that there is sufficient time for testing of the materials and approval of the same before use in the work.

1.22 Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services encountered in the course of the execution of work shall be protected against the damage by the contractor at his own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services. In case temporary supporting/ shifting of such services is required to facilitate the work, the same shall be done by the contractor at no extra cost.

In case the existing services are to be shifted permanently, then before dismantling the existing services, alternate/diversion of service lines has to be laid by the contractor so that there is no interruption in use of existing

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services. The contractor has to plan the alternate suitable route for diversion/shifting of service lines and get the same approved from the Engineer-in-Charge before starting shifting of services. Nothing extra shall be paid except the payment of dismantling and laying of new service lines as per conditions of contract

1.23 The contractor shall be responsible for the watch and ward / guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period, of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.

1.24 The contractor shall be fully responsible for the safe custody of materials brought by him/ issued to him even though the materials may be under double lock key system.

1.25 For construction works which are likely to generate malba / rubbish to the tune of more than a tempo / truck load, contractor shall dispose of malba, rubbish & other unservicable materials and wastes at his own cost to the notified specified dumping ground and under no circumstances these shall be stacked / dumped even temporarily, outside the construction premises.

1.26 ~~The excavated surplus earth of the building shall be disposed off by the contractor for all leads and lifts free of cost within Campus-Dumping site/ premises shall be got approved from Engineer-in-Charge. The contractor will not be permitted to take the surplus earth outside the Campus.~~

1.27 The contractor shall take all necessary measures for the safe flow of traffic during construction including providing / maintaining such barricades all around construction area without hindering free flow of traffic as per directions of Engineer in Charge. Nothing extra shall be payable on account of providing and maintaining the barricading in good condition. The contractor shall be responsible for all damages and accidents caused due to negligence on his part.

1.28 Nothing extra shall be paid for making groove/cut of any kind in the item/items of plastering work.

1.29 M.S. hooks shall be provided for G.I. pipes/PF-AL-PF composite pipe/conduit pipes in chase wherever required as directed by E.L.C. and nothing extra shall be payable on this account.

1.30 The rates for all items of work shall unless clearly specified, include the cost of labour, materials and other inputs involved in the execution of the items.

1.31 The agency shall be responsible for comply with the provision of the Payment of wages Act 1936, minimum wages Act 1948, Employees Liability Act 1938, Workman Compensation Act 1923, Industrial Act

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Dispute Act 1947, maternity Benefit Act 1961 and the Contractor's labour (Regulation and Abolition) Act 1970, ePI & Miscellaneous provision Act 1952 or the modifications thereof or any other law relation thereto and the rules made there under time to time at their own.

- 1.32 As per instructions of the Excise and Taxation Officer, UT, Chandigarh contractors who are engaged in contract work in UT, Chandigarh are liable for registration under the provision of Punjab General Sales Tax Act 1948 as applicable in UT, Chandigarh. For non compliance they are liable to penal action under the above said Act.
- 1.33 The contractor shall responsible for the implementation of all the provisions under Rule 4 of Chandigarh Municipal Corporation (Sanitation and Public Health) Bye Laws, 1999 and bear all the fines, penalties and prosecutions in case of failures. CHB reserves the right to recover any damages/penalties imposed from the payments due to the contractor.
- 1.34 Justified amount (X) shall be worked out by the Board at the time of award of work while analyzing the bids received. The allotment amount (excluding escalation) (Y) shall be at a %age $O = (Y-X)/X$ above or below the said justified amount which will be called "original %age above or below" as the case is.

Revised justified amt (X'), on the same parameters as worked out at the time of award of work, shall be worked out at the time of every bill with the actual quantities. The actual amount of work (excluding escalation) (Y') at the time of every Bill shall be at a %age $A = (Y'-X')/X'$ above or below the said revised justified amount which will be called "actual %age above or below" as the case is.

Suitable reduction will be made in the running/final bill, in case the "actual %age" (A) exceeds the "original %age" (O) so that the "actual %age" remains at par or with in the "original %age".

- 1.35 In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/ below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.

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If the revised tendered amount of two more contractors received in revised offer is again found to be equal, the lowest tender, among such contractors, shall be decided by draw of lots in the presence of SE of the circle, or CE of the zone EE(s) in-charge of major & minor component(s) (also DDH in case Horticulture work is also included in the tender), & the lowest contractors those have quoted equal amount of their tenders.

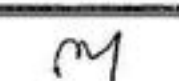
In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor.

Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.

- 1.36 The competent authority on behalf of CHB reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
- 1.37 The Board reserves its right to bifurcate the work between one or more agencies and further reserves its right to withdraw a part of a work of a particular item at any stage during the execution of work without prejudice to the right of the Board to recover, liquidated damages under various provisions of the contract agreement.
- 1.38 The quantities of various items ~~and the number of houses~~ can be increased or decreased at any stage unless and otherwise specified. No claim on account of such changes will be entertained. However the payment to the contractor under running/final bills shall be governed by actual quantities of the various items executed at site at the rate prescribed in the DNIT plus or minus quoted percentage by the agency.
- 1.39 The contractor shall be liable for and shall also indemnify the CHB and its employees against all liabilities, losses, claims, demands, proceeding, damages, costs, charges and expenses and further agrees to defend, indemnify and hold the Board and its employees harmless from any penalty whatsoever in respect of any injury or damage to any property of to personals during the execution of work or by the action of any central or state or local authority for violation by the contractor or sub-contractor engaged on the work.
- 1.40 The work during its progress and subsequently at any stage shall be open for Inspection by Third Party/Quality Assurance Independent Agency appointed by CHB for Technical Examination/Audit on behalf of Engineer-In Charge and agency shall be responsible for compliance of the observation raised by it and including any compliance recovery proposed thereof. In case of non compliance in 15 days further payment would be stopped.


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- 1.41 **Supply of Water and Electric Power:** Unless otherwise provided elsewhere in the Contract, the Contractor shall be responsible for making arrangements at his own cost for obtaining supply of water and/or electrical power, necessary for the execution of the works and during defect liability period. If the agency arranges temporary water connection from MC, Chandigarh for construction purpose, the recovery of water charges shall be made as per Chandigarh Gazette notification issued on 28 September 2006. If the contractual agency arranges water through water tanker from MC, Chandigarh in case of non-availability of water supply lines at the site by the MC, then he will produce bill/payment receipt of water charges and recovery of such balance of 1.50 % after deducting receipt of MCC will be effected from the agency provided the agency submit no objection certificate from the MC, Chandigarh in this regard. If the contractual agency uses the water from the public stand post, through private tanker or any of the existing sources, panel rate recovery shall be made from the running bills/final bill. In the event the CHB is in a position to supply water or electrical power, or both, required for works, such supply shall be given only at one point. The cost of making necessary arrangements to the Engineer's distribution system and laying of necessary pipe line, specials, valves, meters etc. for water supply or the laying of underground/overhead conductor, circuit protection, electric power meters and transmission structures in case of electric power shall be borne by the Contractor. The Contractor shall also bear the running cost of water and power supplied, the rates for which shall be determined and notified by the Competent Authority. Presently the water charges @ 1.5% of the project cost which shall be deducted from bills of the agency instead of 1% as defined in Clause-31A (i) GCC. Any increase in water/power tariff by supplying agencies shall also be borne by the Contractor. The decision of CHB on such cost shall be final and binding. Before the release of security, the contractor will submit no due certificate from Electricity department.
- 1.42 **Unauthorized occupation:** It shall be the responsibility of the contractor to see that the building site under construction is not occupied by anybody unauthorized during construction, or afterwards till it is handed over to the Engineer-in-charge with vacant possession of complete building site. If such building site through completed is occupied illegally, then the Engineer-in-charge shall have the option to refuse to accept the said building/building site in that position. Any delay in acceptance on this account will be treated as the delay in completion of work and for such delay a levy up to ½ % of tendered value of work per week, may be imposed by the Chief Engineer, whose decision shall be final and binding both with regard to the justification and quantum and be binding on the contractor. This decision of Chief Engineer will not be open to any arbitration/litigation. However, the Chief Engineer, through a notice, may

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
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require the contractor to remove the illegal occupation anytime on or before construction and delivery.

- 1.43 In addition to the conditions laid down in the "General Condition of Contract Document of Chandigarh Housing Board" for release of security deposit, the contractor shall have to make compliance of the following:-
- (i) To produce no due certificate from Electricity department.
- 1.44 Deduction on account of Income Tax shall be made at the rate prescribed by law from the gross payment due to the contractor in accordance with section 194 C of Income Tax Act 1961, in force.
- 1.45 For the materials other than mentioned in the list of the approved makes in this Document, preference will be given to the ISI marked materials.
- 1.46 Earth required by the contractor shall not be dug from any part near the area of the work. The site from wherein the earth is to be brought is subject to the prior approval of the Engineer-in-charge.
- 1.47 All royalty sales and other taxes are included in the rates and are the liability of the contractors. The rates are inclusive of cost of material, machinery, fuel, lubricant & labour complete and shall be firm and nothing extra shall be payable over and above.
- 1.48 The rates given in the attached schedule of the rates are for finished work nothing extra shall be paid for any local carriage and re-handling of material irrespective of lead and lift.
- 1.49 All T&P required for the labour will have to be arranged by the agency.
- 1.50 The traffic shall have to be regulated during day as well as night time. The contractor will be responsible for any accident or damage caused due to negligence or improper arrangements of traffic regulation. Nothing extra shall be payable on this account. The Engineer-In-charge will assist the contractor for diverting the traffic with the help of local authorities.
- 1.51 No payment will be made to the contractor for damage caused by flood, rain, local disturbance, war, epidemic or either natural calamities during execution of work and no such claim on this account will be entertained.
- 1.52 The work during its progress and subsequently at any stage can also be inspected by the Chief Vigilance Officer/Chief Technical Examiner on behalf of the Engineer-in-Charge and agency shall be responsible for compliance of the observation raised by Chief Vigilance Officer/Chief Technical Engineer and including any recoveries proposed thereof.
- 1.53 Any material left at the site one month after completion of work shall be become the property of the department and no payment shall be made to the contractor for the material.


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- 1.54 All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested before covering.
- 1.55 The claims in bills regarding wages/ salary, Employees state Insurance, Provident Fund, EDLI etc. should be necessarily accompanied with documentary proof pertaining to the concerned month bill. A requisite portion of the bill/whole of the bill amount shall be held up till such proof is furnished, at the discretion of CHB.
- 1.56 The executing agency shall maintain all statutory registers under the applicable law. The executing agency shall produce the same, on demand, to the concerned authority of Chandigarh housing Board or any other authority under law.
- 1.57 In case, the executing agency fails to comply with any statutory/ taxation liability under appropriate law, and as a result thereof the Chandigarh Housing Board is

put to any loss/obligation, monetary or otherwise, the Chandigarh Housing Board will be entitled to get itself reimbursed out of the outstanding bills or the Performance Security Deposit of the agency, to the extent of the loss or obligation in monetary terms.

2.0 Unless otherwise specified in the schedule of quantities, the rates for respective items shall be all inclusive and apply to the following: -

- i. The rates quoted by the applicants in the Financial Bid should be inclusive of GST and all other taxes/levies and Cess as per Building & other construction Workers Welfare Cess ACT 1996 as extended to Chandigarh vide notification dated 17.09.2009. Nothing extra on this account shall be paid.

Further, the ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor shall be reimbursed by the Engineer-in-charge to the contractor on actual basis.

- ii. All lifts & all heights, floors including terrace, leads and depths.
- iii. All labour, material, tools and plants and other inputs involved in the execution of the item.
- iv. Any of the conditions and specifications mentioned in the tender documents.
- v. Pumping /bailing out surface water/ rain water, if necessary for any reason.
- vi. Any legal or financial implications resulting out of disposal of earth, if any.
- vii. Performance test of the entire installation(s) before the work is finally accepted.

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- viii. Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been built in the items.
- ix. All incidental charges for cartage, storage and safe custody of materials brought to site.

3.0 TESTING OF MATERIAL:

- 3.1 **Testing of Materials:** When required by the Engineer-in-Charge, the contractor shall supply, for the purpose of testing, samples of all materials proposed to be used in the works. Samples submitted either to govern bulk supplies or required for testing before use shall be provided free of charge by the contractor. All testing charges shall be borne by the contractor unless otherwise mentioned in the document. All mandatory test as per specification shall be carried out at laboratories as directed by Engineer-in-Charge.


All other expenditure required to be incurred for taking samples; Conveyance, packing etc. shall also be borne by the contractor himself.

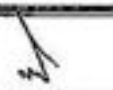
- 3.2 However, if any ultrasonic pulse velocity/ load testing or special testing is to be done for concrete whose strength is doubtful, the cost of the same shall be borne by the contractor.
- 3.3 In case there is any discrepancy in frequency of testing as given in list of mandatory tests and that in individual sub-heads of work as per CPWD Specifications higher of the two frequencies of testing shall be followed and nothing extra shall be payable on this account.
- 3.4 The contractor shall ensure quality construction in a planned and time bound manner. Any substandard material, work beyond set-out tolerance limit shall be summarily rejected by the Engineer-in-Charge & contractor shall be bound to replace/ remove such sub-standard /defective work immediately.

Laboratory/ Field equipment referred in the CPWD works Manual is to be arranged and maintained by the contractor at the site of work. In case the equipment required for any test is not available at site, the department shall get the test conducted from the third party. However in that event, besides providing free materials of sample, the cost of taking of sample, packing, transportation, testing charges etc. shall be borne by the contractor irrespective of the results.

4.0 SECRECY

- 4.1 The contractor shall take all steps necessary that all persons employed on any work in connection with the contract have notice that the Indian Official Secrets Act 1923 applies to them & will continue so to apply even after the execution of such works under the contract.


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- 4.2 The contract is confidential and must be strictly confirmed to the contractor's own use (except so far as confidential disclosure to sub-contractors or suppliers as necessary) and to the purpose of the contract.
- 4.3 All documents, copies thereof & extracts there from furnished to the contractor shall be returned to the Engineer-in-Charge on the completion of the work/works or the earlier determination of the contract.

5.0 PROGRAM CHART: -

- 5.1 The Contractor shall prepare an integrated program chart in MS project/ Primavera software for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfillment of the program within the stipulated period or earlier and submit the same for approval of the Engineer-in-Charge within 15 days of the issue of letter of commencement of work.
- 5.2 The work has to be completed in stages as indicated in the Milestones under Schedule 'F' and the program should be prepared in such a manner to achieve these Milestones as indicated therein or earlier.
- 5.3 The program chart should include the following:
- a) Descriptive note explaining sequence of various activities.
 - b) Network (PERT / CPM / BAR CHART) which will indicate resources in financial terms, manpower and specialized equipment for every important stage.
 - c) Program for procurement of materials by the contractor.
 - d) Program of procurement of machinery / equipments having adequate capacity, commensurate with the quantum of work to be done within the stipulated period, by the contractor.
- 5.4 If at any time, it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved program referred above, the contractor shall produce a revised program showing the modifications to the approved program by additional inputs to ensure completion of the work within the stipulated time.
- 5.5 The submission of revised program or approval by the Engineer-in-Charge of such program or the furnishing of such particulars shall not relieve the contractor of any of his duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.

Notwithstanding the fact that the contractor will have to pay to the labourers and other staff engaged directly or indirectly on the work according to the -provisions of the labour regulations and the agreement entered upon and/or extra amounts for any other reason.



6.0 SAMPLE OF MATERIALS:-

- 6.1 All materials and fittings brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work. If a particular brand of material is specified in the item of work in Schedule of Quantity, the same shall be used after getting the same approved from Engineer-in-Charge. Wherever brand / quality of material is not specified in the item of work, the contractor shall submit the samples for approval of Engineer-in-charge. For all other items, ISI Marked materials and fittings shall be used with the approval of Engineer-in-Charge. Wherever ISI Marked material/ fittings are not available, the contractor shall submit samples of materials/ a fitting manufactured by firms of repute conforming to relevant Specifications or IS codes for the approval of Engineer-in-Charge.
- 6.2 To avoid delay, contractor should submit samples as stated above well in advance so as to give timely orders for procurement. If any material, even though approved by Engineer-in-Charge is found defective or not conforming to specifications shall be replaced / removed by the contractor at his own risk & cost.
- 6.3. BIS marked materials except otherwise specified shall also be subjected to quality test besides testing of other materials as per the specifications described for the item/material. Wherever BIS marked materials are brought to the site of work, the contractor shall furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the material procured by the contractor for incorporation in the work satisfies the provisions of specifications relevant to the material and / or the work done.
- BIS marked items (except cement & steel for which separate provisions have been made in the Tender Document) required on the work shall be got tested, for only important tests, which govern the quality of the product, as decided by the Engineer-In-Charge. The frequency of such tests (except the mandatory test) shall be 5% of the frequency as specified in BIS. For mandatory test, frequency shall be as specified in the CPWD Specifications
- 6.4 For certain items, if frequency of tests is neither mentioned in the CPWD Specifications & BIS, then tests shall be carried out as per decision of Engineer-in-Charge.

7.0 CEMENT & STEEL REINFORCEMENT (IF NOT STIPULATED TO BE SUPPLIED BY THE DEPARTMENT).

- 7.1 Contractor has to produce manufacturers test certificate for each lot of Cement &. Steel Reinforcement procured at site.
- 7.2 CEMENT:-

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- 7.2.1 The contractor shall procure 43 Grade (conforming to ISI 8112) Ordinary Portland Cement and/or Portland Pozzolana Cement (Fly Ash based), as required in the work from reputed manufacturers of cement having a production capacity not less than one million tones or more per annum, such as ACC, Shree, Ultratech, Vikram, Birla, JK Cement, JP Rewa *or from any other reputed cement Manufacturer having a production capacity not less than one million tonnes per annum* as approved by the Ministry of Industries, Govt of India, and holding license to use ISI certificate mark for their product. The Tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves right to accept or reject name(s) of cement manufacturer(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufacturers, given by the tenderer, fully or partially.

The supply of cement shall be taken in 50 kg. bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-charge and got tested in accordance with provisions of relevant BIS codes. In case the test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected, and it shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-charge to do so.

clause 10 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein. In case the cement consumption is less than theoretical consumption including permissible variation, recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to made.

- 7.2.6 The cement brought to the site and the cement remaining unused after completion of the work shall not be removed from site without the written permission of the Engineer-in-charge.
- 7.2.7 The damaged cement shall be removed from the site immediately by the contractor on receipt of a notice in writing from the Engineer-in-charge. If he does not do so within 3 days of receipt of such notice, the Engineer-in-charge shall get it removed at the cost of the contractor.

7.3 STEEL REINFORCEMENT: -



- 7.3.1 The contractor shall procure TMT bars of Fe 500D grade from primary producers such as SAIL, TISCO, Rashtrya Ispat Nigam Ltd. or any other producer as approved by CPWD who are using iron ore as the basic raw material/input and having crude steel capacity of 2.0 Million tonnes per annum as approved by Ministry of Steel
- 7.3.2 The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.
- 7.3.3 Samples shall also be taken and got tested by the Engineer-in-charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time of written orders from the Engineer-in-charge to do so.
- 7.3.4 The steel reinforcement bars shall be brought to the site in bulk supply of 10 tonnes or more, or as decided by the Engineer-in-charge.
- 7.3.5 The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting the checking.
- 7.3.6 For checking nominal mass, tensile strength, bend test, re-bend test etc. specimens of sufficient length shall be cut from each size of the bar at random, and at frequency not less than that specified below:

| Size of bar | For consignment below 100 tonnes | For consignment above 100 tonnes |
|-----------------------|-----------------------------------------------|------------------------------------------------|
| Under 10mm dia bars | One sample for each 25 tonnes or part thereof | One sample for each 40 tonnes or part thereof |
| 10mm to 16mm dia bars | One sample for each 35 tonnes or part thereof | One sample for each 45 tonnes or part thereof |
| Over 16mm dia bars | One sample for each 45 tonnes or part thereof | One sample for each 50 tonnes or part thereof. |

- 7.3.7 The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor/Department in the manner indicated below:
- By the contractor, if the results show that the steel does not conform to relevant BIS Codes.
 - By the department, if the results show that the steel conforms to relevant BIS Codes.

- 7.3.8 The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of Steel shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein. In case the steel consumption is less than theoretical consumption including permissible variation, recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to made.
- 7.3.9 The steel brought to the site and the steel remaining unused after completion of the work shall not be removed from site without the written permission of the Engineer-in-charge.
- 7.3.10 The contractor shall submit original vouchers from the manufacturer for the total quantity of steel supplied under each consignment to be incorporated in the work. All consignment received at the work site shall be inspected by the Site staff along with the relevant documents before acceptance. The contractor shall obtain Original Vouchers and Test Certificates and furnish the same to the Engineer-in-Charge in respect of all the lots of steel brought by him from approved supplier to the site of work. The original vouchers and test certificates shall be defaced by the site staff and kept on record in the site office.
- 7.3.11 Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-Charge.
- 7.3.12 In case the contractor bring surplus quantity of steel, the same after completion of the work will be removed from the site by the contractor at his own cost after approval of the Engineer-in-Charge.
- 7.3.13 Reinforcement including authorized spacer bars and lappages shall be measured in length of different diameters as actually (not more than as specified in the drawings) used in the work nearest to a centimeter. Wastage and unauthorized overlaps shall not be measured.
- 7.3.14 The standard sectional weights referred to as in Table 4 in para 5.3.3 in CPWD Specifications will be considered for conversion of length of various sizes of M.S. Bars, Tor Steel Bars and T.M.T. bars into Standard Weight.
- 7.3.15 Records of actual Sectional weights shall also be kept dia-wise and lot-wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer-in-Charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as Derived Actual Weight. However for the stipulated issue of steel



reinforcement up to and including 10mm diameter bars, the actual weight of steel issued shall be modified to take into account the variation between the actual and the standard coefficients and the contractors' accounts will be debited by the cost of modified quantity.

7.3.16

a) If the Derived Weight as in sub-para (7.3.15) above is less than the Standard Weight as in Sub-para (7.3.14) above then the Derived Actual Weight shall be taken for payment.

b) If the Derived Actual Weight is found more than the Standard Weight, the Standard Weight as per in sub-para (7.3.14) above shall be taken for payment. In such case nothing extra shall be paid for the difference between, the Derived Actual Weight and the Standard Weight.

8.0 SPECIAL CONDITION FOR CEMENT CONCRETE:

- 8.1 The contractor has to arrange at site sufficient centering /shuttering before start of work. Only M.S. centering / shuttering and scaffolding material unless & otherwise specified shall be used for all R.C.C. work to give an even finish of concrete surface. However, marine-ply shuttering in exceptional cases as per site requirement may be used on specific request from contractor as approved by the Engineer-in-charge.
- 8.2 Nothing extra shall be paid for the centering & shuttering, circular in shape whenever the form work is having a mean radius exceeding 6m in plan.
- 8.3 In order to keep the floor finish as per architectural drawings and to provide required thickness of the flooring as per specifications, the level of top surface of R.C.C. shall be accordingly adjusted at the time of its centering, shuttering & casting for which nothing extra shall be paid to the Contractor.
- 8.4 As per general engineering practice, level of floors in toilet/bath, balconies, shall be kept 12 to 20mm as required lower than general floors, shuttering should be adjusted accordingly.

9.0 MEASUREMENT -

- (i) As per CPWD Specifications.
- (ii) In respect of all projected slabs at all levels including cantilever, canopy, the payment for the RCC work shall be made under the item RCC slabs. The payment for shuttering at the edges shall be made under item of centering and shuttering for RCC slabs. Nothing extra shall be paid for the side shuttering at the edge of these projected balconies/ projected verandah slabs.
- 9.1 TOLERANCES - As per CPWD Specifications.
- 9.2 RATES:-

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- (i) The rate includes the cost of materials, labour and T&P, including mixing, placing, transportation involved in all the operations described above except for the cost of centering, shuttering & reinforcement which will be paid for separately.
- (ii) In case of rejection of concrete on account of unacceptable compressive strength, governed by para "Standard of Acceptance" as above, the work for which samples have failed shall be redone at the cost of contractor. However, the Engineer-in-charge may order for additional tests (like cutting cores, ultrasonic pulse velocity test, load test on structure or part of structure, etc) to be carried out at the cost of contractor to ascertain if the portion of structure wherein concrete represented by the sample has been used, can be retained on the basis of results of individual or combination of these tests. The Contractor shall take remedial measures necessary to retain the structure as approved by the Engineer-in-charge without any extra cost. However, for payment, the basis of rate payable to contractor shall be governed by the 28 days, cube test results and reduced rates shall be regulated in accordance with CPWD Specifications.

10.0 DEFECT / WATCH & WARD LIABILITY:

- 10.1 The contractor's liability during the defect liability period from the final date of completion as per clause 17 shall be limited to rectification of defects including replacement as follows which in the opinion of Engineer-in-Charge are not man made. The agency shall be responsible for watch and ward of completed work for the period upto the 'Defect liability Period' or till the physical possession is handed over to the other agency whichever is earlier. Nothing extra shall be payable on this account.

| S. No. | Description | Defect Liability of the items, if executed under this contract. |
|--------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (i) | Concrete | <p>a) Rectification of structural/ superficial/ non-structural cracks.</p> <p>(b) Rectification of dampness/ seepage in base slab/ junctions & sunken portion.</p> <p>(c) Rectification of Slopes, uneven joints by relaying.</p> |
| (ii) | Steel & Iron work | (a) Redoing of defective portion in fabrication welding etc.. |
| (iii) | General | (a) All manufacturing defects of structures/ fixtures/ fittings of Civil, PH & Electrical items other than listed above. |



11 FOR COMPLIANCE UNDER ENVIRONMENT PROTECTION ACT 1986

- 10.1 Resident labour shall be provided with proper hygienic and ventilated accommodation.
- 10.2 The contractor shall provide adequate drinking water and sanitary facilities to the workers employed during the construction period. The contractor is responsible for making arrangements for the safe disposal of wastewater and solid wastes generated during the construction.
- 10.3 All the top soil excavated during construction activities should be stored as directed by the engineer in charge for further use in horticulture /landscape development work within the project site.
- 10.4 The contractor is responsible for making arrangements for the safe disposal of muck including excavated material during construction. It shall not create any adverse effects on the neighboring communities and disposed off taking the necessary precautions for general safety and health aspects, to the approved sites with the approval of competent authority.
- 10.5 Use of diesel generator sets during construction phase should be of low sulphur diesel type and should conform to Environment (Protection) rules prescribed for air and noise emission standards. The contractor shall submit the requisite permission from the CPCC for setting up the same.
- 10.6 Vehicles hired for bringing construction material at site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non peaking hours. The engineer in charge has the right to ban entry of such vehicle/ vehicles which, in the opinion of the Engineer in-charge is/are causing pollution to the environment. The decision of the EIC shall be final and binding to the contractor.
- 10.7 The agency shall ensure that the ambient noise levels should conform to residential standards both during day and night. The contractor shall submit the monitoring report of actual noise levels at site once in a quarter to the EIC. The monitoring shall be got executed from the Laboratory / consultant approved by MOEF.
- 10.8 The contractor is responsible for taking steps to avoid contamination of watercourses and ground water by such material like construction spoils including bituminous material and other hazardous materials. He shall be responsible to make secure dumps of such materials so that they should not leach into the ground water.
- 10.9 The contractor shall make provisions for the supply of kerosene or cooking gas / pressure cooker to meet with the cooking needs of the during construction phase. Burning of wood shall not be allowed under any circumstances.
- 10.10 The Environmental committee of the CHB or the members of the monitoring officials of the MOEF can inspect the labour camps as well as the construction

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site at any time. The contractor is responsible to bear the penalties or fines if any imposed for the violation of the provisions of the Environment Protection Act 1986. The decision of the EIC will be the final and binding over the contractor.

- 10.11 The contractor shall ensure that the constructional activities shall not cause dust pollution. He shall make arrangements for water sprinkling within the 1 km radii of the project site to subsidize the dust.
- 10.12 A First Aid Room will be provided by the agency during construction.
- 10.13 All labour to be engaged for construction shall be screened for health and adequately treated before engaging them to work at the site.
- 10.14 For disinfection of waste water, the contractor will use ultra violet radiation and not chlorination.

Note: - The conditions of environment have been taken as per already executed project adjoining to site. If GOI imposed any additional condition, then the same will be applicable on this project.

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PROFORMA OF SCHEDULES - FOR PH WORK

SCHEDULE "A"

Minor Component P.H. Work Part-C

Schedule of Quantities for PH Work (Enclosed) which starts at page _____

SCHEDULE "D"

Extra schedule for specific requirements/documents for the work if Nil
any

SCHEDULE "E"

| Reference to General Conditions of contract | General Conditions of Contract Construction Works 2023 |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| i) Name of Work | Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh- PH Component [Composite work] |
| vi) Composite estimated cost of Civil, PH & Electrical Works | Rs.10,52,246/- |
| vii) Earnest Money (composite amount) | As per major component |
| viii) Performance Guarantee | 5% of the tendered value |
| ix) Security Deposit | 2.5% of tendered value |

SCHEDULE "F"

GENERAL RULES AND DIRECTIONS

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| Officers inviting tender :- | Executive Engineer-III Chandigarh Housing Board, Chandigarh. |
| Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clause 12.2, 12.3 | 100% |
| Definitions | |
| 2(v) Engineer-in charge | Executive Engineer-VI(PH) Chandigarh Housing Board, Chandigarh. |
| 2(viii) Accepting Authority | Chandigarh Housing Board, Chandigarh. |
| 2(x) Percentage on cost of materials and labour to cover all overheads and profit | (7.5% CP & 7.5 % OH) 15 % |
| 2 (x)(b) | Delhi Schedule of Rates (DSR) 2023 |
| 2 (xi) Department | Chandigarh Housing Board, Chandigarh |
| 9(ii) Standard CPWD Contract form | Previous day of the last date of |

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| | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------------------|-------------------------------------------------------------------------------|
| General Conditions of Contract Construction Works 2023, CPWD Form 7 as modified & corrected upto | | submission of the tender. | |
| Clause 1 | | | |
| i) Time allowed for submission of Performance Guarantee, programme chart (Time and progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW welfare board or proof of applying thereof from the date of issue of letter of acceptance | | As per major component | |
| ii) Maximum allowable extension beyond the period provided in (i) above. Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above | | As per major component | |
| Clause 2 | | | |
| Authority for fixing compensation under clause-2 | | Superintending Engineer, CHB | |
| Clause 5 | | | |
| Number of days from the date of issue of letter of acceptance for reckoning date of start Mile stone(s) as per table given at page No | | 15 days | |
| Time allowed for execution of work | | 5 Months | |
| Authority to decide:- | | | |
| (iv) Authority to convey the decision of shifting of milestone and Extension of time | | Executive Engineer | |
| (v) Authority to decide rescheduling of mile stone and extension of time | | Superintending Engineer, CHB | |
| (vi) Shifting of date of start in case of delay in handing over of site | | Superintending Engineer, CHB | |
| PROFORMA OF SCHEDULES Clause 5 Schedule of handing over of site | | | |
| Part | Portion of site | Descripti on | Time Period for handing over reckoned from date of issue of letter of intent. |
| Part-A | Portion without any hindrance | 100% | As per major component |
| Part-B | Portions with encumbrances | NIL | - |
| Part-C | Portions dependent on work of other agencies | NIL | - |
| Clause 6 | | | |


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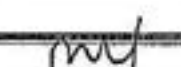

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| | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|----|
| Computerised Measure Book (CMB) / Electronic Measurement Book (EMB) | CMB | |
| Clause 7 | | |
| Gross work to be done together with net payment/ adjustment of advances for materials collected, if any, since the last such payment for being eligible to interim payment. | Rs.1.00.000/- subject to one payment per month (if required). | |
| Clause 7A | | |
| Whether Clause 7A shall be applicable Clause 7A | Yes, Applicable | |
| Clause 8A | | |
| Authority to decide compensation on account, if Contractor fails to submit completion plans. | Executive Engineer in Charge of Major Component. | |
| Clause 10 A | | |
| List of testing equipments to be provided by the contractor at site lab. | | |
| 1. | 2. | 3. |
| 4. | 5. | 6. |
| Clause 10 B (ii) | Not applicable | |
| Clause 10 C | Not applicable. | |
| Component of labour expressed as percent of value of work | | |
| Clause 10 CC | Not Applicable | |
| Clause 11 | | |
| Specification to be followed for execution of work. | CPWD Specifications with correction slips upto date. | |
| 12.2 & 12.3 Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for Major Component i.e. Building work | 100% | |
| 12.4 | | |
| (i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items) | | |
| (ii) Deviation Limit for items mentioned in earth work | | |


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| subhead of DSR and related items | |
| Clause 16 | |
| Competent authority for deciding reduced rates. | Superintending Engineer, CHB |
| Clause 18 | |
| List of mandatory machinery. Tools & Plants to be deployed by the contractor at site | All Tool & Plants, Safety equipments, ladder etc., required to be deployed by the contractor at site at his own cost |
| Clause 19 | |
| Labour Laws to be complied by the Contractor (In case contractor fails to comply, make arrangement and provide necessary facilities etc.) | |
| Clause 19 C | Rs. 500/- penalty for each default |
| Clause 19 D | Rs. 500/- penalty for each default |
| Clause 19 G | Rs. 500/- penalty for each default |
| Clause 19 K | Rs. 500/- penalty for each default |
| Clause 25 | |
| i) Conciliator | CEO, CHB Conciliator. |
| ii) Arbitrator Appointing Authority | CE, CHB |
| x) Place of Arbitration | Chandigarh |

Clause 32

Requirement of technical representative(s) and recovery rates

| Cost of Work (Rs. In Crores) | Requirement of Technical Staff | Minimum experience (Years) | Designatio n of Technical staff | Rate at which recovery shall be made from the contractor in the event of not fulfilling |
|---------------------------------|-----------------------------------|-------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------|
| | Qualification | Numbe r (of Major + Minor component | | |
| | | | | |

Not Applicable

Clause 38

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- (i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Ratesprinted by C.P.W.D. DSR -2023
- ii) Variations permissible on theoretical quantities:
- (e) Cement: For works with estimated cost put to tender not more than Rs. 25 lakh. 3% plus/minus
For works with estimated cost put to tender more than Rs. 25 lakh. 2% plus/minus
- (f) Bitumen All Works 2.5% plus & only & nil on minus side.
- (g) Steel Reinforcement and structural steel sections for each diameter, section and category 2% plus/minus
- (h) All other materials. Nil

ABSTRACT OF COST

Abstract of Cost for the work of Renovation of Block "A" CHB Office Building, Sector-9, Chandigarh - (PH Component).

| S. No. | DESCRIPTION OF ITEM | Sub Head Total |
|--------------|-----------------------|----------------|
| Sub Head : A | Concrete | 7319.00 |
| Sub Head : B | Sanitary Installation | 508933 |
| Sub Head : C | Water Supply | 533346 |
| Sub Head : D | Drainage | 2648 |
| Total | | 1052246 |

Executive Engineer-VI(PH)
Chandigarh Housing Board
Chandigarh

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**CHANDIGARH
HOUSING BOARD**
A CHANDIGARH ADMINISTRATION UNDERGRADING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh (Composite
work).

**Schedule of quantities for the work of Renovation of Block 'A' Chandigarh Housing Board office Building Sector-9, Chandigarh
(Composite Work)**

(PH-Component).

| S. No. | DESCRIPTION OF ITEM | Qty | Unit | Rate | Amount |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|---------|----------|
| Sub Head : A - Concrete | | | | | |
| 1 | Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering-All work up to plinth level: | | | | |
| | 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources). | 0.95 Cum | Cum | 7703.73 | 7319.00 |
| Sub Head : B - Sanitary Installation | | | | | |
| 2 | Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm. including painting of fittings and brackets, cutting and making good the walls wherever require | | | | |
| | Kitchen sink without drain board | | | | |
| | 610x460 mm bowl depth 200 mm | 4.00 Nos. | Each | 3787.87 | 15151.00 |
| 3 | Providing and fixing water closet squatting pan (Indian type) | | | | |
| | Orrisa pattern WC pan of size 580x 440mm | 5.00 Nos. | Each | 3098.75 | 15494.00 |

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FILE-V (Effect.)



**CHANDIGARH
HOUSING BOARD**
A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite
work].

| S. No. | DESCRIPTION OF ITEM | Qty | Unit | Rate | Amount |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------|---------|----------|
| 4 | Providing and fixing PVC low level flushing cistern with manually controlled device (handle lever) conforming to IS:7231 with all fittings and fixtures complete | | | | |
| | 10 litre capacity-White | 5.00 Nos. | Each | 1164.23 | 5821.00 |
| 5 | Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge. | 13.00 Nos | Each | 1011.84 | 13154.00 |
| 6 | Providing and fixing PVC Waste pipe for sink or wash basin including PVC waste fitting complete | | | | |
| | Semi rigid Pipe | | | | |
| | 32mm dia | 6.00 Nos | Each | 101.59 | 610.00 |
| 7 | Providing and fixing toilet paper holder | | | | |
| | C.P. brass | | | | |
| 8 | Providing and fixing soil, waste and vent pipes : 100 mm dia. | 10.00 Nos | Each | 785.87 | 7859.00 |
| | Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 | 12.25 Metre | Metre | 1143.36 | 14006.00 |

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| S. No. | DESCRIPTION OF ITEM | Qty | Unit | Rate | Amount |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|---------|
| 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 blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. ; | | | | |
| 10 | For 100 mm dia. Pipe Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. 100 mm dia. | 3.00 Nos | Each | 354.80 | 1064.00 |
| 11 | Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 Providing and fixing plain bend of required degree. 100 mm dia. | 1.00 No | Each | 554.62 | 555.00 |
| 12 | Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905 Providing and fixing shielded coupling for Hubless centrifugally cast iron pipe 100 mm | 1.00 No | Each | 359.83 | 360.00 |
| | SS 304 grade coupling with EPDM rubber gasket | 8.00 Nos | Each | 422.47 | 3380.00 |

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CHANDIGARH HOUSING BOARD

2 CHANDIGARH ADMINISTRATION AND FREELANCE

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh (Composite
work).

| S. No. | DESCRIPTION OF ITEM | Qty | Unit | Rate | Amount |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------|-----------|
| 13 | 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 : | | | | |
| | 100 mm inlet and 100 mm outlet | | | | |
| | Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905 | 3.00 Nos | Each | 835.59 | 2507.00 |
| 14 | Providing and fixing floor mounted, white vitreous china single piece, double traps syphonic water closet of approved brand/make, shape, size and pattern including integrated white vitreous china cistern of capacity 10 liters with dual flushing system, including all fittings and fixtures with seat cover, cistern fittings, nuts, bolts and gasket etc including making connection with the existing P/S trap, complete in all respect as per directions of Engineer-in-Charge. | 10.00 Nos | Each | 17808.87 | 178089.00 |
| 15 | Providing and fixing Soap dispenser Push Button type of Capacity 0.80 liters of ABS material, fixed to the walls with cleats and C.P. brass screw including cutting and making good the walls wherever required complete in all respects to the entire satisfaction of Engineer-in-charge. | 4.00 No. | Each | 1664.80 | 6659.00 |
| 16 | Providing and fixing Soap dish fixed to the walls with cleats and C.P. brass screw including cutting and making good the walls wherever required complete in all respects to the entire satisfaction of Engineer-in-charge. | 7.00 No. | Each | 672.70 | 4709.00 |

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| S. No. | DESCRIPTION OF ITEM | Qty | Unit | Rate | Amount |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----------|----------|
| 17 | Providing and fixing fully automatic "No Touch" hand drier flash touch free infrared hand drier with 1150V rated power and carbon brush motor of Stain less steel body complete in all respects to the entire satisfaction of Engineer-in Charge | 4.00 No. | Each | 10658.90 | 42636.00 |
| 18 | Providing and fixing C.P. Towel ring round complete in all respects to the entire satisfaction of Engineer-in-charge. | 7.00 No. | Each | 551.60 | 3861.00 |
| 19 | Providing and fixing white wash basin with half pedestal 32 mm C.P. brass waste of standard pattern and making good on the counter slab wherever required complete in all respects to the entire satisfaction of Engineer-in Charge. | | | | |
| | (i) White Vitreous China Wash Basin Size 550x400mm | 7.00 Nos | Each | 5231.60 | 36621.00 |
| 20 | Providing and fixing testing and commissioning of white colour vitreous china below counter wash basin circular basin size 560x450mm with 32 mm C.P. brass waste assembly complete and making good on the counter slab wherever required complete in all respects to the entire satisfaction of Engineer-in Charge. | 6.00 Nos | Each | 4178.80 | 25073.00 |

EE-III

EE-VI(PH)

EE-V(Reflect.)



**CHANDIGARH
HOUSING BOARD**
A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh (Composite
work).

| S. No. | DESCRIPTION OF ITEM | Qty | Unit | Rate | Amount |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------|----------|
| 21 | Providing and fixing curved shaped Urinal partition with frosted glass of thickness 8mm of Size 900 mm x 450 mm fixed with expandable anchor fasteners with CP brass Bolts and washers, embedded in wall and set in concrete including cutting and making good the walls wherever required complete in all respects to the entire satisfaction of Engineer-in Charge. | 3.00 Nos | Each | 6192.20 | 18577.00 |
| 22 | Providing and fixing white vitreous china battery based infrared Sensor operated urinal of Size 575mmx325x295 mm having water inlet from back side including fixing to wall with suitable brackets all as per manufacture specifications etc complete in all respects to the entire satisfaction of Engineer-in Charge. | 5.00 Nos | Each | 14971.10 | 74856.00 |
| 23 | Providing and fixing Stainless steel grating 125 mm dia with Complete in all respects to the entire satisfaction of the Engineer - in - charge. | 39.00 Nos | Each | 132.80 | 5179.00 |
| 24 | Providing and fixing in position C.P. Brass overhead Shower round shape with arm & wall flange complete in all respect to the entire satisfaction of Engineer-in-charge. (i) Size 15 mm i/d | 3.00 Nos | Each | 906.70 | 2720.00 |
| 25 | Providing and fixing in position C.P. Brass Health Faucet thumb operated with 1 meter long easy flex tube and wall hook with NRV complete in all respect to the entire satisfaction of Engineer-in-charge. Size 15 mm i/d | 10.00 Nos | Each | 617.40 | 6174.00 |

EE-III

EE-VI(BH)

EE-V (Elect.)

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**CHANDIGARH
HOUSING BOARD**
A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite
work].

| S. No. | DESCRIPTION OF ITEM | Qty | Unit | Rate | Amount |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|---------|----------|
| 26 | Providing and fixing looking mirror of superior quality of approved make 4mm thickness with grinding & rounding the mirror. 10mm thick ply board with C.P. brass studs and washers complete in all respects to the entire satisfaction of the Engineer-in-Charge. | 8.42 | Sqm | 2828.80 | 23818.00 |
| Sub Head : C - Water Supply | | | | | |
| 27 | Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. | | | | |
| | Internal work - Exposed on wall | | | | |
| | 32 mm dia nominal bore | 19.26 | Metre | 652.20 | 12561.00 |
| | 50 mm dia nominal bore | 4.20 | Metre | 1025.09 | 4305.00 |
| 28 | Providing and fixing GI pipes complete with G.I fittings and clamp i/c making good the walls etc. concealed pipe including painting with anticorrosive bitumastic paint .cutting chases and king good the walls same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc. | | | | |
| | 15 mm nominal bore | 72.00 | Metre | 567.57 | 40865.00 |
| | 20 mm nominal bore | 45.00 | Metre | 621.10 | 27950.00 |
| 29 | Providing and fixing uplasticised PVC connection pipe with brass | | | | |

EP-III

EE-V (P)

EE-V (Elect.)

| S. No. | DESCRIPTION OF ITEM | Qty | Unit | Rate | Amount |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|--------|---------|
| | unions : | | | | |
| | 45 cm length | | | | |
| | 15 mm nominal bore | 41.00 Nos | Each | 95.58 | 3919.00 |
| 30 | Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) : | | | | |
| | 15 mm nominal bore | 4.00 Nos | Each | 311.29 | 1245.00 |
| | 20 mm nominal bore | 3.00 Nos | Each | 339.11 | 1017.00 |
| 31 | Providing and fixing C.P. Brass extension nipple (size 15mmx50mm) of approved make and quality as per direction of Engineer-in-charge | 77.00 Nos | Each | 73.14 | 5632.00 |
| 32 | Cutting holes up to 30x30 cm in walls including making good the same: | | | | |
| | With common burnt clay F.P.S. (non modular) brick | | | | |
| 33 | Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof. | 3.00 Nos | Each | 407.55 | 1223.00 |
| | | 4.00 Nos | Each | 441.98 | 1768.00 |

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EE-III

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EE-VI(PH)
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EE-V(Elect.)

| S. No. | DESCRIPTION OF ITEM | Qty | Unit | Rate | Amount |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|----------|-----------|
| 34 | Providing and fixing C.P. brass bib cock with wall flange of standards design & approved make complete in all respects to the entire satisfaction of Engineer-in Charge.(i) 15 mm nominal bore | 5.00 Nos | Each | 1404.80 | 7024.00 |
| 35 | C.P brass bib Cock Providing and fixing C.P. brass Bib Tap Two way with flange complete in all respects to the entire satisfaction of Engineer-in Charge. | 10.00 Nos | Each | 1694.10 | 16941.00 |
| 36 | 15mm nominal bore Providing and fixing C.P. brass angle cock with wall flange of approved make complete in all respects to the entire satisfaction of Engineer-in Charge. | 48.00 Nos | Each | 1114.30 | 53486.00 |
| 37 | 15mm nominal bore Providing and fixing C.P. Brass pillar Sensor tap for Basin with battery & Electrical operated complete in all respects to the entire satisfaction of Engineer-in Charge. | 13.00 Nos | Each | 11997.10 | 155962.00 |
| 38 | Providing and fixing in position C. P. brass single lever Sink mixture 15mm with swinging spout (Wall mounted) with 450 mm long braided hoses with flange complete in all respect to the entire satisfaction of Engineer - in - charge. | 4.00 Nos | Each | 5013.40 | 20054.00 |
| | 15 mm dia nominal bore | | | | |

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EE-V(PH)

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EE-V(Plect.)

| S. No. | DESCRIPTION OF ITEM | Qty | Unit | Rate | Amount |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----------|----------|
| 39 | Providing and fixing in position C. P. brass wall mixture 15mm with provision of over head shower with flange complete in all respect to the entire satisfaction of Engineer - in - charge. | | | | |
| | 15 mm dia nominal bore | 3.00 Nos | Each | 6254.20 | 18763.00 |
| 40 | Providing and fixing C.P. Brass Push bib cock complete in all respects to the entire satisfaction of Engineer-in Charge. | 3.00 No | Each | 2087.00 | 6261.00 |
| 41 | Providing and fixing Brass Nozzle 15 mm i/d complete in all respects to the entire satisfaction of Engineer-in Charge. | 16.00 No | Each | 278.20 | 4451.00 |
| 42 | Providing and fixing in position storage type hot water electrical heater (Gyser) ISI Marked with container insulation and stove enameled M.S. jacket thermostatically controlled immersion heater with pilot lamp 15/20mm dia inlet with non return valve and 15/20mm dia outlet including making connections complete in all respect to the entire satisfaction Engineer -in -Charge. (i) Cap 25 Ltr | 5.00 No | Each | 10181.00 | 50905.00 |
| 43 | Providing fixing and testing in position water purifier RO including making connections with all necessary accessories complete in all respect to the entire satisfaction Engineer -in -Charge. | | | | |
| | i) Water purifier UV including making connections with all necessary accessories complete | 2.00 No | Each | 17681.20 | 35362.00 |

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E.E.-II

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E.E.-V (E/PH)

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E.E.-V (Elect.)

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| S. No. | DESCRIPTION OF ITEM | Qty | Unit | Rate | Amount |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|----------|----------------|
| | ii) Water purifier RO including making connections with all necessary accessories complete | 3.00 | No | 19380.90 | 58143.00 |
| 44 | Providing and fixing PVC water tank lid with hinges complete in all respects to the entire satisfaction of Engineer-in Charge. | | | | |
| | For 1000 Liters Capacity | 12.00 | No | 459.10 | 5509.00 |
| Sub Head : D - Drainage | | | | | |
| 45 | Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 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: | | | | |
| | 100x100 mm size P type | | | | |
| | With common burnt clay F.P.S. (non modular) bricks of class designation 7.5 | 1.00 | No | 2647.58 | 2648.00 |
| | Total | | | | 1052246 |

Executive Engineer-VI(PH)
Chandigarh Housing Board
Chandigarh

**APPROVED MAKES OF VARIOUS ITEMS (WHEREVER PRESCRIBED)
FOR USE UNDER THIS CONTRACT**

PH COMPONENT: -

| Sr. No. | Description of Item | Makes |
|---------|-------------------------------------------------------------------|-----------------------------------------------------------------------|
| 1 | White Vitreous Chinaware Wash basin with half pedestal | Hind ware (Mario)/ Parry ware (Flair) |
| 2 | White Vitreous Chinaware Wash basin under counter | Hind ware (Zen)/ Parry ware (Cascade NXT) |
| 3 | EWC with Solid plastic seat & Lid | Hind ware (Estella)/ Parry ware (Aquiline) |
| 4 | Urinal with integrated sensor | Hind ware (Flow with Integrated Sensor)/ Parry ware (Integrated N) |
| 5 | CP Brass Fixtures & Fittings | JAQUAR (Lyric)/Jal (Nalini)/Prima (Aura) |
| 6 | Cast Iron Hubless pipes & fittings (ISI Marked as per IS 15905) | NECO or any reputed make |
| 7 | SS grating for floor trap | Chilly/Jayna/Jal/Viking |
| 8 | GI Pipes (ISI Marked) | Tata/Jindal (Hissar) |
| 9 | GI Fittings (ISI Marked) | AVR/ R/ NVR |
| 10 | Salem Stainless Steel Sink (ISI Marked) | Neelkanth/Nirali/Jayna/Silver Line (Bluestar Sanitary Ind Pvt Ltd) |
| 11 | Polyethylene Water Storage Tanks (ISI Marked) | Sintex/Kaveri/Diplast |
| 12 | Brass fitting (ISI Marked) i.e. Brass stop cock, Brass ball valve | KPR,PRIMA or Any other reputed make |

The Agency is required to get prior approval of Engineer-in-charge for the make of the material to be used in the work. In case of non-availability of material from these manufacturers; the Chief Engineer may allow use of alternative BIS approved manufacturer makes.

MILESTONE SCHEDULE FOR PUBLIC HEALTH WORK
(In Physical Terms)

| Mile stone Programmer (In Physical Terms) | | | | | | |
|-------------------------------------------|------------------------------------|-----------------------|--------------------|------------|-------------------------------------------|---------------------------------------------------------------------------|
| S.No | Description of Milestone(Physical) | | | | Time allowed in Days (From date of start) | Amount to be with-held in case on non achievement of respective milestone |
| 1 | 1st Quarter | | | | | |
| | S.No | Description | During the quarter | Cumulative | | |
| | 1 | Sanitary installation | 0 | 0 | 37 Days | 0.000% |
| | 2 | Water supply | 0 | 0 | | |
| | 3 | Drainage | 0 | 0 | | |
| 2 | 2nd Quarter | | | | | |
| | S.No | Description | During the quarter | Cumulative | | |
| | 1 | Sanitary installation | 0 | 0 | 75 Days | 0.000% |
| | 2 | Water supply | 0 | 0 | | |
| | 3 | Drainage | 0 | 0 | | |
| 3 | 3rd Quarter | | | | | |
| | S.No | Description | During the quarter | Cumulative | | |
| | 1 | Sanitary installation | 30% | 30% | 112 Days | 1.500% of Tendered Amount |
| | 2 | Water supply | 30% | 30% | | |
| | 3 | Drainage | 30% | 30% | | |
| 4 | 4th Quarter | | | | | |
| | S.No | Description | During the quarter | Cumulative | | |
| | 1 | Sanitary installation | 70% | 100% | 150 Days | 3.500% of Tendered |

| | | | | | | |
|--|---|--------------|-----|------|--|--------|
| | 2 | Water supply | 70% | 100% | | Amount |
| | 3 | Drainage | 70% | 100% | | |

General/Specific Conditions for Minor Component (Public Health) Part-C of work as applicable.

A: General/Specific Conditions for Major Component of work is also be applicable to Minor work.

Note: The order of preference in case of any discrepancy may be read as the following:-

- a. Nomenclature of items as per schedule of quantities.
- b. Particular specification and special condition, if any.
- c. CPWD specifications.
- d. Architectural Drawings.
- e. Indian standard specifications of B.I.S.
- f. Sound Engineering Practice.
- g. GCC.
- h. CPWD Manual.

B: General/Specific Conditions for Public Health Component in addition to S. No. A above.

1. General

- 1.1. General/Specific Conditions for major Component of work shall be applicable to the Public Health component.
- 1.2. Water tanks, taps; sanitary, water supply and drainage pipes, fittings and accessories should conform to byelaws of Municipal Body / Corporation where CPWD Specifications are not applicable. The contractor should get the materials (fixtures/fittings) tested by the Municipal Body/ Corporation authorities wherever required at his own cost.
- 1.3. The contractor shall use the white cement with pigment to match the shade of flooring/ dado and for installation of P.H. fixtures where ever required without claiming anything extra.
- 1.4. On completion of work, the contractor shall submit at his own cost four prints of "as built" drawings to the Engineer-in-Charge. These drawings shall have the following information.
 - a) Run off of all piping and their diameters including soil, waste pipes and vertical stacks.
 - b) Ground and invert level of all drainage pipes together with locations of all manholes and connections, up to out fall.
 - c) Run off of all water supply lines with diameters, location of control valves, access panels etc.


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EE-VI(PH)


EE-V(Elect.)



In case the contractor fails to supply "as built drawing" aforesaid within 30 days of the date of completion, then the recovery @ RS.10,000/- each for such set of drawings shall be made from the contractor's final bill.

- 1.5. All china ware to be used on the work shall be of first quality.
- 1.6. The layout of sanitary can be changed at any stage if required by the concerned Executive Engineer and no claim in this connection will be entertained. However, the payment shall be made as per actual work done.
- 1.7. Pre-cast concrete G.T./ I.C. covers and frames shall have CHB logo and brand name engraved on them.
- 1.8. All the hidden items such as water supply lines, drainage pipes, sewers etc. are to be properly tested before covering.
- 1.9. A copy of plumber's license will be supplied by the firm at the time of allotment of work.
- 1.10. M.S. hooks shall be provided for CPVC pipes/G.I. pipes/PE-AL-PE composite pipe in chase wherever required as directed by E.I.C. and nothing extra shall be payable on this account.

PROFORMA OF SCHEDULES - FOR ELECTRICAL WORK

SCHEDULE "A"

Minor Component i.e Electrical (E&M) work- **PART C1**

Schedule of Quantities for **PART C1- (E&M Works)**

(Start at Page No.120)

| Part | Name of work | Estimated Cost of work |
|------|-----------------------------------------------|------------------------|
| A | Building -E.I. Work | 38,10,099.00 |
| B | DG Set 320 KVA (E& M Work) | 42,77,090.00 |
| C | CCTV SURVEILLANCE SYSTEM (E&M work) | 24,73,478.00 |
| D | EPABX SYSTEM (E& M work) | 5,65,280.00 |
| E | LAN NETWORK (E& M works) | 3,73,335.00 |
| F | AUDIO/VIDEO SCREEN CONFERENCE ROOM (E&M work) | 10,61,241.00 |
| G | FIRE ALARM SYSTEM (E&M work) | 3,34,228.00 |
| H | UPS 2x20KVA | 9,10,403.00 |
| | Total | 1,38,05,154.00 |

SCHEDULE "D"

Extra schedule for specific requirements/ documents for Nil the work if any:-

SCHEDULE "E"

Reference to General Conditions of contract of 2023 with amendments upto date

- | | | |
|------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| i) | Name of Work | RENOVATION OF BLOCK 'A' CHANDIGARH HOUSING BOARD OFFICE BUILDING SECTOR 9 CHANDIGARH- (COMPOSITE WORK) |
| ii) | Estimated cost of Work Electrical(E& M) work - PART C1 | Rs. 1,38,05,154/- |
| iii) | Earnest Money (for composite work) | As mentioned in Detail regarding Tendering Process. |
| iv) | Performance Guarantee | 5% of the tendered value |
| v) | Security Deposit | 2.5% of the tendered value |

SCHEDULE "F"

GENERAL RULES AND DIRECTIONS

Officers inviting tender :-

Executive Engineer-III Chandigarh Housing Board, Chandigarh.

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clause 12.2, 12.3

100%

Definitions

2(v) Engineer-in charge

Executive Engineer-V(Elect). Chandigarh Housing Board, Chandigarh.

2(viii) Accepting Authority

Chandigarh Housing Board, Chandigarh.

2(x) Percentage on cost of materials and labour to cover all overheads and profit

(7.5% C/P & 7.5 % OH) 15%

2(x)(b)

DSR(E&M) 2022 with correction slips

2(xi) Standard CPWD Contract Form General Conditions of Contract Construction works 2023, CPWD Form 7 as modified & corrected upto

Previous day of the last date of submission of tender.

Clause 1

i) Time allowed for submission of Performance Guarantee , programme chart (Time and progress) and applicable labour licenses , registration with EPFO, ESIC and BOCW welfare board or proof of applying thereof from the date of issue of letter of acceptance

As per Major component

ii) Maximum allowable extension beyond the period provided in 'i.' above Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above

As per Major component

Clause 2

Authority for fixing compensation under clause-2

Superintending Engineer, CHB

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start Mile stone(s) as per table given at

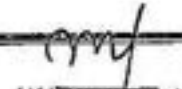
As per Major Component
Mile stone at Page No.190

Time allowed for execution of work

5 Months


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EE-VI(PH)


EE-V(Elect.)

Authority to decide:

- | | | |
|-------|--------------------------------------------------------------------|------------------------------------------------------|
| (i) | Extension of time | Superintending Engineer in Charge of Major Component |
| (ii) | Rescheduling of mile stones | Superintending Engineer in Charge of Major Component |
| (iii) | Shifting of date of start in case of delay in handing over of site | Superintending Engineer in Charge of Major Component |

Proforma of Schedule clause 5

As per Major component

Schedule of handing over of site

Clause 6

Computerized Measurement Book(CMB)/ Electronic Measurement Book(EMB)

CMB

Clause 7

Gross work to be done together with net payment/ adjustment of advances for materials collected, if any, since the last such payment for being eligible to interim payment.

Rs.16.00 Lakh subject to one payment per month. (However bill of lesser amount may be paid as per discretion of EIC)

Clause 7A

Whether Clause 7A shall be applicable.

Yes Applicable

Clause 8A

Authority to decide compensation on account, if Contractor fails to submit completion plans.

Executive Engineer in Charge of Major Component.

Clause 10 A

List of testing equipments to be provided by the contractor at site lab.

Equipments for Testing of Materials & Concrete at Site Laboratory

All necessary equipment for conducting all necessary tests shall be provided at the site laboratory by the contractor at his own cost. The following minimum laboratory equipments shall be set up at site office laboratory:-

| Sl. No. | Equipment | Numbers (Minimum) |
|-----------------------------------------------------------|-----------|-------------------|
| Testing equipments as per CPWD specification as required. | | |

Clause 10 B (i)

Whether Clause 10 B (i) shall be Yes Applicable

Clause 10 B (ii)

Whether Clause 10 B (ii) shall be No Applicable

Clause 10 C

Not applicable.

Component of labour expressed as percent of value of work

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Clause 10 CC

Not Applicable

Clause 11

Specification to be followed for execution of work.

CPWD's general specification for Electrical Works Part-I Internal 2013 & Part-II (External) 1994, with up to date correction /amendments, relevant IE rules, and as per directions of Engineer-in-charge. For electrical panels, CPWD General Specifications for Electrical Works Part - IV shall be applicable

12.2 & 12.3 Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for building work

100%

12.4

(i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items)

(ii) Deviation Limit for items mentioned in earth work subhead of DSR and related items

Clause 16

Competent authority for deciding reduced rates.

Superintending Engineer, incharge of Major component

Clause 18

List of mandatory machinery, Tools & Plants to be deployed by the contractor at site

Minor Component -Electrical (E & M) Works

Chase Making Machines

All Electrical Tool & Plants, Safety equipments, High rise ladder, Crimping tool kit etc., required to be deployed by the contractor at his own cost.

Note: The above listed T&P can be modified as per site requirement and direction of Engineer-in-Charge.

Clause 19

Clause 19 C

Clause 19 D

Clause 19 G

Clause 19 K

Clause 25 Settlement of Dispute by

Rs. 500/- penalty for each default

Rs. 500/- penalty for each default

Rs. 500/- penalty for each default

Rs. 500/- penalty for each default

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Conciliation and Arbitration

i) Conciliator:

CEO, CHB

ii) Arbitration Appointing Authority

CE, CHB

iii) Place of Arbitration

Chandigarh

Clause 32

Requirement of technical representative(s) and recovery rates

Requirement of Technical Staff

Minimum Experience (Years)

Designation of Technical staff

Rate at which recovery shall be made from the contractor in the event of not fulfilling

Qualification Number (of Major + Minor component)

Graduate Engineer or Diploma Engineer

1+1

2 or 5 respectively

Project Manager-cum planning/quality / Site/billing Engineer

Rs. 15,000/- (Rs. Fifteen thousand) per month per person

Clause 38

Not applicable

**APPROVED MAKES OF VARIOUS ITEMS (WHEREVER PRESCRIBED)
FOR USE UNDER THIS CONTRACT**

| Sr. No. | Material/ Equipment | Makes |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 1. | XLPE Cable : 11 KV , PVC insulated XLPE aluminium conductor armoured cables 1100V grade, Control Cable, Copper Conductor PVC Insulated Wires/ Stranded Flexible Wires (FRLS), Telephone Wires/ Telephone Cables, Communication Cables/ Signal Cable, FRLS Cables / Wires | Finolex/Polycab/RR Kabel/KEI |
| 2. | MCCB | ABB (Tmax)/Schneider (NSX)/ L&T (Dsine)/Siemens(3VL) |
| 3. | MCB/DBS/RCCB/SPD | Leagrand/ Siemens /Hager /L&T/ Schneider /ABB |
| 4. | LT Panels and Meter Boards | Control Well Switchgear/Precision system control/Neptune/ EMCO |
| 5. | Flexible Coupling | Resistoflex/Easyflex |
| 6. | Termination Cable Lugs & Glands | Commnet/Dowell /HMI |
| 7. | MS Black Stove Enameled ERW Conduits(ISI Approved) | AKG/BEC |
| 8. | PVC Conduit (FRLS) & Accessories | AKG/BEC/Precision |
| 9. | Modular Switches, Socket Outlets And Wiring Accessories With Moulded Cover Plate. | Legrand Arter/Schenider Opale Goldmedal- Nixon/Hager- Insysta Wipro- Platia |
| 10. | Metal Clad Plug & Socket (Industrial), MCB/RCCB/ SPD, Distribution Boards(MCB DBs) | Siemens/Legrand/Anchor-Panasonic/L&T/ Schneider |
| 11. | Telephone Outlet | Legrand Arter/ Schenider opale Goldmedal- Nixon/Hager- Insysta Wipro- Platia |
| 12. | Light Fixtures (General) | Philips/ Panasonic /Trilux |
| 13. | Network Switching | Extreme/ Entrasys/Cisco/Legrand/ Tyco |
| 14. | Desktop PC | IIP/ Dell/ Panasonic |
| 15. | Professional Display Panel | Sony/Panasonic/Sharp |
| 16. | Network Switching | Cisco/ Entrasys/ Extreme/ |

EE-III
for

EE-VI(PH)

EE-V(Elect.)

17. PA and Music System

18. Diesel Engine

19. Alternators

20. Battery

21. CCTV Cameras



Notifier / Edwards/ Siemens/ Heinrich

Cummins/ Caterpillar/ MTU


Stamford/Marathon /Leroy Somer/Crompton

Exide / Luminus/ Tata Power / Okaya

Honeywell/Bosch/Nordan/Samsung/Hikvision


EE-III


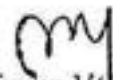

EE-V (PH)



EE-V (Elect.)

ABSTRACT OF COST

Name of Work: - **RENOVATION WORK IN BLOCK-A CHB OFFICE COMPLEX, SECTOR 9, CHANDIGARH- (DEPOSIT WORK)**

| Part-C1 | Name of work | Estimated Cost of work |
|---------|-----------------------------------------------|------------------------|
| A | Building -E.I. Work | 38,10,099.00 |
| B | DG Set 320 KVA (E& M Work) | 42,77,090.00 |
| C | CCTV SURVEILLANCE SYSTEM (E&M work) | 24,73,478.00 |
| D | EPABX SYSTEM (E& M work) | 5,65,280.00 |
| E | LAN NETWORK (E& M works) | 3,73,335.00 |
| F | AUDIO/VIDEO SCREEN CONFERENCE ROOM (E&M work) | 10,61,241.00 |
| G | FIRE ALARM SYSTEM (E&M work) | 3,34,228.00 |
| H | UPS 2x20KVA | 9,10,403.00 |
| | Total | 1,38,05,154.00 |


Executive Engineer-V(Elect.)
Chandigarh Housing Board.
Chandigarh

**SCHEDULE OF QUANTITIES FOR THE WORK RENOVATION OF BLOCK 'A' CHANDIGARH HOUSING BOARD OFFICE
BUILDING SECTOR 9 CHANDIGARH- (COMPOSITE WORK) PART CI-(A) E.I. Work**

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|------------------|-----------------------|
| WIRING IN STEEL & PVC CONDUIT | | | | | |
| 1 | Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire 2 X 4 sq. mm + 1 X 4 sq. mm earth wire | 687 152 | Metre Metre | 247.00 355.00 | 169689.00 53960.00 |
| 2 | Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel/PVC conduit including dismantling as required. | | | | |
| 3 | Group C Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. 2x 1.5 sq. mm | 170 | Point | 948.00 | 161160.00 |
| 4 | Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including | 428 | Metre | 74.00 | 31672.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|----------|
| | connections but excluding modular plate etc. as required. | | | | |
| | 5/6 A switch | 565 Nos | Each | 109.00 | 61585.00 |
| | 15/16 A switch | 75 Nos | Each | 165.00 | 12375.00 |
| | 3 pin 5/6 A socket outlet | 329 Nos | Each | 129.00 | 42441.00 |
| | 6 pin 15/16 A socket outlet | 75 Nos | Each | 209.00 | 15675.00 |
| | TV antenna socket outlet | 10 Nos | Each | 157.00 | 1570.00 |
| | Bell push | 40 Nos | Each | 148.00 | 5920.00 |
| 5 | Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required. | 29 Nos | Each | 43.00 | 1247.00 |
| 6 | Supplying and fixing following size/ modules. GI box alongwith modular base & cover plate for modular switches in recess etc. as required. | | | | |
| | 1 or 2 Module (75mmX75mm) | 3 Nos | Each | 316.00 | 948.00 |
| | 3 Module (100mmX75mm) | 31 Nos | Each | 347.00 | 10757.00 |
| | 4 Module (125mmX75mm) | 5 Nos | Each | 364.00 | 1820.00 |
| | 6 Module (200mmX75mm) | 94 Nos | Each | 426.00 | 40044.00 |
| | 8 Module (125mmX125mm) | 25 Nos | Each | 482.00 | 12050.00 |
| | 12 Module (200mmX150mm) | 25 Nos | Each | 580.00 | 14500.00 |
| 7 | Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. | | | | |
| | 1 or 2 Module | 9 Nos | Each | 141.00 | 1269.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|----------|
| 3 | Module | 7 Nos | Each | 160.00 | 1120.00 |
| 4 | Module | 3 Nos | Each | 167.00 | 501.00 |
| 6 | Module | 13 Nos | Each | 193.00 | 2509.00 |
| 8 | Module | 16 Nos | Each | 224.00 | 3584.00 |
| 12 | Module | 4 Nos | Each | 288.00 | 1152.00 |
| 8 | Supplying and fixing brass batten/ angle holder including connection etc. as required. | 10 Nos | Each | 139.00 | 1390.00 |
| 9 | Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required. | 28 Nos | Each | 105.00 | 2940.00 |
| 10 | Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required. | 80 Point | Point | 910.00 | 72800.00 |
| 11 | Group C Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required. | | | | |

[Signature]

E.F.-III

E.F.-V(UPH)

E.F.-V(Elect.)

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| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|-------------------|--------------------|
| | MCCB, MCB & DB'S | 54 Nos | Each | 772.00 | 41688.00 |
| 12 | Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MOB DB complete with connections, testing and commissioning etc. as required. Single pole Triple pole and neutral | 24 Nos 4 Nos | Each Each | 271.00 1303.00 | 6504.00 5212.00 |
| 13 | Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required. | 8 Nos | Each | 1240.00 | 9920.00 |
| 14 | Supplying and fixing Cable End Box (Loose Wire Box) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 Volts, on surface/ recess, complete with testing and commissioning etc. as required. For 4 way, Double door TPN MCBDB CABLE TRAYS | 4 Nos | Each | 1146.00 | 4584.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|---------|------------|
| 15 | Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5% in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required. 450 mm width X 50 mm depth X 2.0 mm thickness MV CABLE LAYING | 88 | Metre | 1206.00 | 106128.00 |
| 16 | Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/HUMF/METAL pipe as required. Upto 35 sq. mm NS ITEMS | 123 | Metre | 39.00 | 4797.00 |
| 17 | Supply, Installation, testing and commissioning of FULLFIT CR recess ultra slim functional recessed 2'x2' panel LED light 30watt5700KCTNONDIM white (PC) indoor luminaire suitable for recessed mount application. The luminaire shall have a rated system lifetime of 40,000 burning hours at L70. The fitting shall be installed in the existing false ceiling to the entire satisfaction of the engineer in Charge. | 234 | Nos | 5309.00 | 1242306.00 |
| 18 | Supply, Installation, testing and commissioning of LED light 36watt6500K 1150 mm lamp efficacy 100 lumen/watt. | 80 | Nos | 841.00 | 67280.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----------|-----------|
| 19 | Aluminium housing fitting. The luminaire shall have a rated system lifetime of 50,000 burning hours at L70. The fitting shall be installed in the existing false ceiling to the entire satisfaction of the engineer in Charge. Supply, Installation, testing and commissioning of GreenPerform Sleek (DN295B LED 10S-6500 PSU WH) is high performance low height LED downlighter suitable for any modern professional workspace. The fitting shall be installed in the existing false ceiling to the entire satisfaction of the engineer in Charge. | 15 Nos | Each | 1504.00 | 22560.00 |
| 20 | S/E of Exhaust Fan Heavy duty of 12" sweep (300mm) . 900rpm complete with motor blades and louvers to be installed on the existing hole in wall/glazing with suitable arrangement. The rates includes all the labour, carriage to site, testing and commissioning of the exhaust fan. | 13 Nos | Each | 3539.00 | 46007.00 |
| 21 | Supplying, installing, Testing and Commissioning of split type air conditioner 1.0 Ton inverter type with rotary compressor (R-32 refrigerant) nominal cooling/ heating capacity 5125/ 5175 (Watts) , dual filter, 3M micro protection filter, digital remote, air circulation (in/out) (CFM) 530/1600 noise level 36 db with indoor unit and outdoor unit shall be fitted with angle iron stand complete in all respect. The AC shall be of Voltas/ Blue Star/Daikin/ O- | 5 Nos | Each | 37936.00 | 189680.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----------|-----------|
| 22 | general make. The job shall be completed to the entire satisfaction of Engineer-in charge. Supplying, installing, Testing and Commissioning of split type air conditioner 1.5 Ton inverter type with rotary compressor (R-32 Refrigerant) nominal cooling/ heating capacity 5125/ 5175 (Watts) , dual filter, 3M micro protection filter, digital remote, air circulation (in/out) (CFM) 530/1600 noise level 36 db with indoor unit and outdoor unit shall be fitted with angle iron stand complete in all respect. The AC shall be of Voltas/ Blue Star/Daikin/ O-general make. The job shall be completed to the entire satisfaction of Engineer-in charge. | 4 Nos | Each | 46366.00 | 185464.00 |
| 23 | Supplying, installing, Testing and Commissioning of split type air conditioner 2.0 Ton inverter type with rotary compressor (R-32 Refrigerant) nominal cooling/heating capacity 5125/ 5175 (Watts), dual filter, 3M micro protection filter, digital remote, air circulation (in/out) (CFM) 630/2000 noise level 36 db with indoor unit and outdoor unit shall be fitted with angle iron stand complete in all respect. The AC shall be of Voltas/ Blue Star/Daikin/ O-general make. The job shall be completed to the entire satisfaction of Engineer-in charge. | 11 Nos | Each | 71657.00 | 788227.00 |
| 24 | Supplying, installing, Testing and Commissioning of Self | 2 Nos | Each | 56202.00 | 112404.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|---------|----------|
| 25 | contained drinking water cooler with (non CFC refrigerant) Energy efficient compressor cooling capacity Litrs/Hr. 150. Type: Storage. Storage Capacity Litrs: 150. Rate of Maximum Energy Consumption Watts: 1550 of Blue Star /Sidwal/ Voltas/Usha make. The job shall be completed to the entire satisfaction of Engineer-in-charge. Supplying, installation and commissioning of 4KVA (140- 250 volt) wall mounted Stabilizer for 1.0/1.5 Ton split type air conditioner. The stabilizer shall have Ammeter, Volt meter, MCB, Timer bypass switch etc. and shall be of V- Guard/ Jewel/ Packard make with 3 year warranty. The stabilizer shall be installed with the A.C. to the entire satisfaction of Engineer-in-charge. | 9 Nos | Each | 4637.00 | 41733.00 |
| 26 | Supplying, installation and commissioning of 5KVA (140- 250 volt) wall mounted Stabilizer for 2 Ton split type air conditioner. The stabilizer shall have Ammeter, Volt meter, MCB, Timer bypass switch etc. and shall be of V-Guard/ Jewel/ Packard make with 3 year warranty. The stabilizer shall be installed with the A.C. to the entire satisfaction of Engineer-in-charge. | 11 Nos | Each | 5620.00 | 61820.00 |
| 27 | Supply of Armoured Power Copper Cables of size 4 x 6.0 sq.mm as per specification. | 123 Meter | Metre | 601.00 | 73923.00 |
| 28 | Supplying, installation and commissioning of PVC trunking | 34 Meter | Metre | 1678.00 | 57052.00 |

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EF-VI(Elect.)

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| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|---------|--------------|
| 29 | of size 105mm x50mm with cover complete in all respect to the entire satisfaction of the engineer in charge. Supplying and making indoor end termination with cast resin compound including copper lugs and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE copper conductor cable of 1.1 KV grade as required. Size 4x6 sq.mm | 8 set | set | 317.00 | 2536.00 |
| 30 | Supplying and fixing Ding Dong bell suitable for single phase, 230 V. complete as required. | 12 Nos | Each | 344.00 | 4128.00 |
| 31 | Supplying and fixing of 1 No. Digital automatic changeover timer wall mounted display LCD with 2 Pole AC1 Contactor 30 Amp/230 Volt with Toggle switch fitted complete as required. | 2 Nos | Each | 5734.00 | 11468.00 |
| | Total | | | | 38,10,099.00 |

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EE-VI(RH)

EE-V(Elect.)

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SCHEDULE OF QUANTITIES FOR THE WORK RENOVATION OF BLOCK 'A' CHANDIGARH HOUSING BOARD OFFICE BUILDING SECTOR 9 CHANDIGARH- (COMPOSITE WORK) PART CI-(B) D.G. Set 320 KVA

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|---------|----------|
| Earthing | | | | | |
| 1 | Providing and fixing 25mmx5mm copper strip on surface or in recess for connection etc. as required | 30 | Metre | 1232.00 | 36960.00 |
| 2 | Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size on cable tray as required. Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp) | 90 | Metre | 196.00 | 17640.00 |
| 3 | Supplying and making cable end termination with brass compression glands and aluminium lugs including inhibiting compound to be used in each lug, for the following XLPE aluminium conductor armoured cables of 1.1 KV grade etc. complete as required. 3½ core X 300 Sq.mm. | 4 | Nos | 1268.00 | 5072.00 |
| 4 | Steel Work (For DG Exhaust Chimney) Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. | 200 | Kg | 114.75 | 22950.00 |
| 5 | DG SETS 320 kVA (With AE) Supply, transporting, loading, unloading, erecting, testing | | | | |



**CHANDIGARH
HOUSING BOARD**
A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite
work].

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------|--------|
| | and commissioning etc. of Radiator cooled Diesel Generating Set of 300 kVA, 3 phase & neutral, 50 c/s, 415 A.C. rating, comprising of following Diesel Engine, Alternator, as required and with other associated accessories fully compliant to CPCB -IV norms: | | | | |
| | A. DIESEL ENGINE: | | | | |
| | 1. Type: Multi-cylinder radiator cooled, Turbo charged. | | | | |
| | 2. No. of strokes : 4 | | | | |
| | 3. Fuel injection : Electronic fuel injection | | | | |
| | 4. Maximum speed : 1500 RPM | | | | |
| | 5. Rated power : In BHP (As per manufacturer standard) | | | | |
| | 6. Cooling : Radiator cooled | | | | |
| | 7. Engine : Battery starting. | | | | |
| | 8. Starting : Universal. Auto/Manual position | | | | |
| | B. ALTERNATOR: | | | | |
| | Type : Brushless. | | | | |
| | Actual Power 320 KVA at 40 deg C. | | | | |
| | Rated power : as per standards (at 40 deg C) | | | | |
| | Frequency: 50 Cycles/sec. | | | | |
| | Supply system : 3 phases & neutral | | | | |
| | Connection: Star. | | | | |
| | Rated voltage: 415 Volts. | | | | |

FE-III
for

EE-VI(RII)

EE-V(Elect.)

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| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------|--------|
| | Rated rpm. : 1500 rpm. max. | | | | |
| | Casing : As per IP-23 protection | | | | |
| | Insulation : Class 'IP'. | | | | |
| | Voltage : Automatic voltage regulator : regulator (Motorised) | | | | |
| | Power factor: 0.8. | | | | |
| | Controller : Type PCC 3300/ 3100 or equivalent | | | | |
| | C. ACCESSORIES: | | | | |
| | The Diesel Engine shall be equipped with minimum following/ as indicated in the specifications, devices/ accessories built-in type including all standard fittings. | | | | |
| | Fuel supply pump with manual venting pump. | | | | |
| | HF Cooled | | | | |
| | Turbo charger with air filter (dry/oil bath type) and damper. | | | | |
| | Charge air cooler. | | | | |
| | Suction fuel filter | | | | |
| | Lube oil filter. | | | | |
| | Hour meter and RPM indicator. | | | | |
| | Battery Starting Mechanism. | | | | |
| | Noise level of the set shall not exceed 75 dbA at one meter distance from the enclosure surface. | | | | |
| | Instrument/Indication panel complete with the followings: | | | | |

EE-V(III)
for

EE-V(III)
and

EE-V(III)ect.)

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| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------------|------------|
| | a) Starting Switch with key. | | | | |
| | b) Lub. Oil Temp. gauge. | | | | |
| | c) Lub. Oil pressure gauge. | | | | |
| | d) Water Temp. gauge. | | | | |
| | Control devices for safety and monitoring along with indicators. | | | | |
| | D.OTHER ACCESSORIES/EQUIPMENT | | | | |
| | Common base/foundation frame, AVM PAIDS | | | | |
| | Fly wheel and flexible coupling. | | | | |
| | Digital voltage regulator (DVR). | | | | |
| | Lub oil filter. | | | | |
| | Fuel oil filter. | | | | |
| | Day storage tank for 990 ltr capacity fabricated out of 2mm thick MS sheet, with M.S. fuel pipe line, high & low level indicator and alarm contacts. | | | | |
| | Residential type silencer with 2 nos. Suitable size of SS bellow | | | | |
| | Anti vibration pads | | | | |
| | Necessary batteries (minimum 2 of 160 AH capacity) with leads and mounting frame etc. | | | | |
| | The cost of initial charge of lubricants, coolant etc | | | | |
| 6 | AUTOMATIC MAINS FAILURE PANEL, SUTIBALE FOR 320 KVA DG SET. (Should be provided as a separate | 1 | No. | 3395106.00 | 3395106.00 |

EF-III

EF-VI(PH)

EF-V(lect.)



CHANDIGARH HOUSING BOARD

A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite
work].

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|------------------------------------------------------------------------------------------------------------------------|----------|------|------|--------|
| | compartment/ section comprising of following items and including all control, signal and power wiring etc as required) | | | | |
| | TP MCCB THERMAL MAGNETIC BASED WITH O/C | | | | |
| | S/C RELEASES 500 A 2 Nos. | | | | |
| | MINIATURE CIRCUIT BREAKER, C-CURVE, 10KA, DP | | | | |
| | 20 Amp, 1 No. | | | | |
| | MINIATURE CIRCUIT BREAKER, C-CURVE, 10KA, DP | | | | |
| | 6 Amp, 2 Nos. | | | | |
| | MINIATURE CIRCUIT BREAKER, C-CURVE, 10KA, SP | | | | |
| | 4 A, 9 Nos. | | | | |
| | CURRENT TRANSFORMER, CL-1, 15VA 500/5 A 3Nos. | | | | |
| | FP CONTACTOR, 240V AC, 2NO+2NC 500 A AC1 2 Nos. | | | | |
| | INDICATING LIGHTS, R, Y 240 V 6 Nos. | | | | |
| | INDICATING LIGHTS, B, 240 V AC 3 Nos. | | | | |
| | MUSHROOM HEAD PUSH BUTTON, PRESS TO LOCK | | | | |
| | TURN TO RELEASE 1 No+ 1 NC 1 No. | | | | |
| | DIGITAL MFM - KW/K WH/PI/A/V/F, 415 V AC 1 No. | | | | |
| | DC AMMETER, 96 Sq.mm 0-20A 1 No. | | | | |
| | 4 POINT ALARM ANNUNCIATOR WITH INBUILT | | | | |
| | HOOTER, TEST, ACCEPT & RESET PUSH BUTTON, 24 | | | | |
| | VDC 1 No. | | | | |
| | AMF CONTROLLER 1 No. | | | | |

EE-III
Dr.

EE-V/PHI
Dr.

EE-V/Elect.)

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**CHANDIGARH
HOUSING BOARD**
A CHANDIGARH ADMINISTRATION UNDERTAKING

Renovation of Block 'A' Chandigarh Housing Board
Office Building, Sector-9, Chandigarh [Composite
work].

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|-----------|-----------|
| | AUX. RELAY, COIL, VOLTAGE, 24V DC 4 C/O, 14 PIN 6 Nos. | 1 | No. | 460201.00 | 460201.00 |
| 7 | Supply of 1.1 kv grade XLPE insulated PVC sheathed steel armoured aluminium stranded conductor ISI marked LT Cables in trenches/ ducts/ through RCC pipes under roads/ on cable trays of following sizes, complete all as specified (as per CPWD specifications for External Electrical works), i/c clamping, dressing, earth work digging, sand filling, bricks protection, back filling etc. as required & approved by Engineer in charge. (Tagging to be provided with aluminium strips on both the ends as approved). | | | | |
| | 3½ core X 300 Sq.mm. | 90 | Metre | 3415.00 | 307350.00 |
| 8 | Providing and fixing in position mild steel exhaust pipe complete with fittings, supports (angles & channels), cutting, bending, welding, 75 mm thick 48 kg/ cu.m density, mineral wool or equal insulation covered with 24 SWG. Aluminium sheet cladding etc. complete as required. (route/ design/ layout shall be finalized & got approved from client/ consultant before execution). | | | | |
| | 150 mm dia "5.2mmthick" | 8 | Metre | 2185.00 | 17480.00 |
| 9 | Providing and fixing in position following size of heavy duty stainless steel flanged expansion bellows for DGi exhaust piping complete with GI nut bolt washers etc. as required. | | | | |

FF-III

FF-V (EIT)

FF-V (Elect.)

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|---------------------|----------|-------|----------|--------------|
| | 150 mm dia | 1 | No | 14331.00 | 14331.00 |
| | | | Each | | |
| | | | Total | | 42.77.090.00 |

**SCHEDULE OF QUANTITIES FOR THE WORK RENOVATION OF BLOCK 'A' CHANDIGARH HOUSING BOARD OFFICE
BUILDING SECTOR 9 CHANDIGARH (COMPOSITE WORK) PART CI-(C) CCTV SURVEILLANCE SYSTEM**

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|----------|
| 1 | Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. | 350 | Metre | 153.00 | 53550.00 |
| 2 | Supplying & drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/recessed steel/PVC conduit as required. | 792 | Metre | 61.00 | 48312.00 |
| 3 | Supply installation Testing and Commissioning of 5MP Bullet camera - 1/ 2.8 inch or better, CMOS & Progressive Scan and 5MP Bullet Camera. 1 ~ 1/32000 s or better, Automatic / Manual Lens 2.8mm/4mm, H.265+/H.265, H.264, Color: 0.01 lux @ F2.0/1.6, B/W: 0 lux with IR, Signal-to-Noise Ratio (SNR) 52dB or Better, Defog, Day and Night functionality Automatic, Color, Mono, Internal Illuminator visibility of at least 30 meters, 5MP, 2MP (1920x1080) & 720P (1280x720) @ 25/30 FPS, Wide Dynamic Range Required, Configurable video streams (H.265+, H.265, H.264) Min 2 Streams, Perimeter, Crossing line/Tripwire, Motion detection, Tampering/ Masking, Compatible Integration ONVIF profile S, G & T, SDK/API, SD Card:256GB or Better, SRTP/AES/TLS | | | | |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----------|-----------|
| | support. The OEM of Camera should not be Banned/Blacklisted because of security concerns anywhere globally. Built in/External Mic Should be supported and provided. -10°C - 60°C. IP67, IK10 with Built-in Surge Protection (Test reports required for IP67 & IK10). 12 V DC \pm 10%, PoE. Certifications UL, CE, FCC, IP67, IK-10, OEM Cyber Security Certificate, NDAA Compliant & BIS. The camera should be certified for web application penetration testing as per OWASP-WSTG V4.2 standard from any Cert-in empanelment lab before the bid publishing date as per STQC directorate. OEM Should Have ISO 9001, 14001, 27001, 45001. | 9 Nos | Each | 20694.00 | 186246.00 |
| 4 | Supply installation Testing and Commissioning of 5MP Dome camera - 1/ 2.8 inch or better, CMOS & Progressive Scan and 5MP Dome Camera. 1 ~ 1/32000 s or better, Automatic / Manual Lens 2.8mm/4mm. H.265-/H.265. H.264, Color: 0.01 lux @ F2.0/1.6, B/W: 0 lux with IR, Signal-to-Noise Ratio (SNR) 52dB or Better, Defog, Day and Night functionality Automatic, Color, Mono, Internal Illuminator visibility of at least 30 meters, 5MP, 2MP (1920x1080) & 720P (1280x720) @ 25/0 FPS, Wide Dynamic Range Required, Configurable video streams (H.265, H.264) Min 2 Streams, Perimeter, Crossing | 24 Nos | Each | 19149.00 | 459576.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount | |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------|-----------|-----------|
| 5 | <p>line/Tripwire, Motion detection, Tampering/Masking, Compatible Integration ONVIF profile S, G & T. SDK/ API, SD Card:256GB or Better, SRTP/AES/TLS Support. The OEM of Camera should not be Banned/Blacklisted because of security concerns anywhere globally. Built in/External Mic Should be supported and provided. -10°C ~ 60°C. IP67, IK10 with Built-in Surge Protection (Test reports required for IP67 & IK10). 12 V DC $\pm 10\%$, PoE, Certifications UL, CE, FCC, IP67, IK-10, OEM Cyber Security Certificate, NDAA Compliant & BIS. The camera should be certified for web application penetration testing as per OWASP-WSTG V4.2 standard from any Cert-in empanelment lab before the bid publishing date as per STQC Directorate. OEM Should Have ISO 9001.14001.27001.45001.</p> <p>Supply installation Testing and Commissioning of Network Video Recorder of 32Ch with 8 HDDs or more(Raid1/Mirroring Support), H.264/H.265, 1 HDMI & 1 VGA Output, Network interfaces 1 RJ-45, 10/100/1000 Mbps self Adaptive Ethernet Interfaces , 2 USB 2.0 Interface, resolution support 8MP/6MP/5MP/4MP/3MP/ 1080p/ UXGA/ 720p/ VGA, Alarm Interface (4 In/ 1 Out), Audio Interface (1 In/ 1 Out), Security -User Authentication, 802.1x Authentication, AES Video Encryption, User Access Log, operating temperature - 10 to +55 degree, IP address</p> | 2 | Nos | Each | 155297.00 | 310594.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----------|-----------|
| 6 | filtering, Video Analytics :Loitering, Running, Abandoned object (Object Left), Missing object (Object Lost), Parking, Face Detection (Capture), People Counting, Crowd Detection(onboard or through VMS ,If through VMS , all Server and VMS licenses shall be quoted from Day-1) , Incoming Bandwidth Min 160Mbps, ONVIF Profiles S & G, Certifications - UL , CE & FCC complete etc. as required,OEM Cyber/Information Security Certificate, OEM should have ISO 9001,14001,ISO 27001 and 45001 | 2 Nos | Each | 52694.00 | 105388.00 |
| 7 | SITC of 43" 4K UHD resolution LED Display , 350 nits brightness or better, Wifi Type support both 2.4 & 5G Standard, Dolby Audio, Built in Wifi and Chromecast, HDMI CEC, HDMI ARC, Built-inBluetooth,20W built in speakers, HDMI 2.0 X 2, AV X 1, USB X 2, RJ45 X 1,24/7, Make Panasonic/Christie/Sony/Samsung | 12 Nos | Each | 43231.00 | 518772.00 |
| 8 | SITC of Surveillance Hard Disc Drive with the following specification:-Capacity 10TB. | 12 Nos | Each | 37098.00 | 445176.00 |

EE-III
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EE-V(2)
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EE-V(Elect.)

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| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount | |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------|----------|-----------|
| 9 | should have Non-blocking wire speed switch fabric, should have Min. 20 Gbps Back plane or more and should have Min. 14 Mpps or more and should have power budget of more than 130 watt., 16K Mac address or more. CE-LVD .FCC.CE.BSMI. RoHS Compliant. Operating temperature 0 DegC to 50 Deg C,IPv6 Support. Should have Cluster Stacking to manage up to 24 switches by single IP address The OEM Brand should be having valid ISO 9001, ISO 14001, ISO 45001.ISO 27001 SITC of 9U RACK ,Protection from dirt, dust, oil, and other non-corrosive material as per DIN 41494 EN 61587-1:2012 . EN 60950-1:2006 standards,IP65, -Fans-90 CFM, 230V AC, 50Hz with Wire & Plug with Filter & Louvers at Front with Lock, 19" 1U PDU-6X5 Amps Indian Round Pin Socket, 6A Rocker Switch, -6A Fuse 230V/50Hz, 0.75 Sqmm*3 Core, 1.5 Mtr Length cable, 5A Plug-Mounting Hardware (Pack of 20)-Cantilever Tray 250-1U-Support telegraph pole mounting-Rain awnings on top. & other accessories etc. complete as required. Rack should be UL/CE certified. Make: Norden/ Valrack/ Netrack/ Rittal SITC of JACK PANEL: Category 6 UTP Patch Panel Punch Down 8 Port, Wiring Standards EIA/TIA 568 A/B, Flammability rating UL 94V-0, Safety Rating UL1863 . Transmission ISO/IEC 11801:2002 ANSI /TIA/EIA- | 6 | Nos | Each | 35447.00 | 212682.00 |
| 10 | | 6 | Nos | Each | 4947.00 | 29682.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|--------|---------------------|
| 11 | 568.B.2-10, Category 6 UTP Keystone Jack Un Shuttered Punch Down 180Deg Blue manufactured with an integral cable strain relief. IEEE 802.af, IEEE 802.3at for PoE applications, I/Os Individually replaceable, Rear Cable Manager, Rack Mountable, ISO/IEC 11281, IEC 60603-7, TIA-968-A, Certification: UL, CE. Supply & laying of 3 core 1.5sqmm Un-Armoured copper Power cable to be laid in pipe/on tray or loose. | 500 Metre | Metre | 207.00 | 103500.00 |
| | Total | | | | 24,73,478.00 |

**SCHEDULE OF QUANTITIES FOR THE WORK RENOVATION OF BLOCK 'A' CHANDIGARH HOUSING BOARD OFFICE
BUILDING SECTOR 9 CHANDIGARH- (COMPOSITE WORK) PART C1-(D) EPABX SYSTEM**

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------|-----------|-----------|
| 1 | Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. 25mm | 294 Metre | Metre | 153.00 | 44982.00 |
| 2 | Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. Telephone socket outlet | 46 Nos | Each | 157.00 | 7222.00 |
| 3 | Supplying and fixing following size/ modules. GI box along with modular base & cover plate for modular switches in recess etc as required 1 or 2 Module(75mmx75mm) | 33 Nos | Each | 316.00 | 10428.00 |
| 4 | Supplying and fixing following modular base & cover plate on existing modular metal box etc. as required. 1 or 2 Modular | 33 Nos | Each | 141.00 | 4653.00 |
| 5 | Supplying & drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/recessed steel/PVC conduit as required. 1 run of cable | 1998 Metre | Metre | 61.00 | 121878.00 |
| 6 | Supply installation Testing and Commissioning of fully digital IP based EPABX system configured for 4 CO lines, 6 digital for key telephone port and 64 extensions expendable up to 100 extensions | 1 No | Each | 213606.00 | 213606.00 |

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| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
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| 7 | ports. Make GRANDSTREAM• Built-in Instant Messaging (IM), Audio Conferencing & Web Meetings platform that supports access from computers, mobile devices, and SIP endpoints• Free Wave App allows easy voice & Instant Messaging (IM) communications using desktops, Web, and Android/ iOS devices• API available for third-party integrations, including CRM and PMS platforms• Advanced security protection with secure boot unique certificate and random default password to protect calls and accounts• Three Gigabit auto-sensing RJ45 network ports with integrated PoE+ and support NAT router• Automated NAT firewall traversal service facilitates secure remote connections• Enhanced reliability with support for Hot Standby High-Availability and local dual deployment | 5 | Nos | 23561.00 | 117805 |
| 8 | Supply installation Testing and Commissioning of key telephone set with 16 lines 6 SIP make Grandstream model GRP-2650 | 1 | No | 4186.00 | 4186.00 |
| 9 | Supply installation. testing & commissioning Charges of Single line telephone with caller ID display set make Beetal | 40 | Nos | 1013.00 | 40520.00 |
| | Total | | | | 5,65,280.00 |

**SCHEDULE OF QUANTITIES FOR THE WORK RENOVATION OF BLOCK 'A' CHANDIGARH HOUSING BOARD OFFICE
BUILDING SECTOR 9 CHANDIGARH (COMPOSITE WORK) PART CI- (E) LAN NETWORK**

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------|---------|-----------|
| 1 | Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. | 294 Metre | Metre | 153.00 | 44982.00 |
| 2 | Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required | 33 Nos. | Each | 316.00 | 10428.00 |
| 3 | Supplying & drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/recessed steel/PVC conduit as required. | 1998 Metre | Metre | 61.00 | 121878.00 |
| 4 | Supply, Installation, Testing and Commissioning of Mount 9U x 550 W x 550 D Front Glass Door (tinted, Toughened) with Lock & Key, 2 pairs of 19" Mounting Rails with U-Marking, Welded Side Walls With Metal Engraved Logo, 1U Cable Manager (1), Hardware Packet (1 Pkt), 6 Socket 5 Amp, Power Distribution Unit (1 No) Roof Mounted Fan Unit / 90 CFM /230V AC (1 No). Rack should be as per DIN41494 Standards. OEM must be ISO 9001, 14001, ISO 45001 certified. | 5 Nos. | Each | 9876.00 | 49380.00 |
| 5 | Supply, Installation, Testing and Commissioning of IO. | 100 Nos. | Each | 677.00 | 67700.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------|-------------|
| 6 | Should be shielded and support minimum frequency of 500 MHz. Material Halogen-Free and Heavy Metal-Free/Zinc Alloy should provide 10 Gbps performance upto 100 meters with 4 connectors. Should have mating cycle of 750 and above. Should have Gold Plated Contact Area and tin-plated insulation displacement contact area. Information Outlet should be tool less. Termination should be without pair cross over. IO should be UL recognized, ETL tested. Should have integrated production date and serial No. Supply, Installation, Testing and Commissioning of 24 Port Loaded Patch Panel. Patch panel ports should have option for visual colour coding. Should be made of chromatinized steel. Tool Less Patch Panel with tool less Shuttered I/O. Jack panel should be UL listed/ETL Tested, Each port / jack on the panel should be individually removable on field from the panel. Should have integrated rear cable management shelf. | 5 Nos. | Each | 13429.00 | 67145.00 |
| 7 | Supply, Installation, Testing and Commissioning of Data outlet, Dual Face Plate. Manufacture should have ISO 9001, ISO 14001 and ISO 45001 | 46 Nos. | Each | 257.00 | 11822.00 |
| | | | Total | | 3,73,335.00 |

**SCHEDULE OF QUANTITIES FOR THE WORK RENOVATION OF BLOCK 'A' CHANDIGARH HOUSING BOARD OFFICE
BUILDING SECTOR 9 CHANDIGARH (COMPOSITE WORK) PART C1-(F) AUDIO/VIDEO SCREEN CONFERENCE ROOM**

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|-------------|-----------|
| 1 | Supply, Installation, Testing & Commissioning of Intelligent Conference Controller. Make & Part No: Bidder need to mention the Make / Model and Part numbers. The controller should have minimum 1 x 10/100Base-T port. The controller should have minimum 4.2 inch high-definition color TFT Type touch screen Interface for easy setup. The controller support camera tracking function for minimum 4 camera. The Controller should support Minimum 128 Conference microphone in a single host. The controller should support extension host for future expansion The controller should comes with at least 1 x RS232 serial port and 1 x RS422 serial port. The controller should have embedded DSP, including low cut, frequency shifter and equalizer. The controller should have minimum 1 x Line In and 1 x Line Out RCA port. The controller should have frequency response between 50Hz-20kHz. The controller should have atleast 1 x Alarm In port. The controller should support timed speech, voting function and data management function. The controller should support minimum 5 conference mode. The controller should support recording function with external device. The controller should support limiting spokesman at a same time. Maximum power consumption: | 1 | Each | 1,37,072.00 | 137072.00 |

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| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
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| 1 | 350W. The controller should be 2U standard chassis, and can be installed in a 19 inch standard cabinet. The controller should have the working voltage as 220V AC. The controller should be provided hardware warranty and ongoing software upgrades for all major and minor release for a period of 1 years. OEM direct contract details (email, Toll free and Web portal cess) and Escalation matrix has to be provided along with Tender document. Also bidder need to ensure TAC support for minimum of one years from the OEM should be added for quoted product. OEM Should have ISO 9001 . ISO 14001 .ISO 27032 and ISO 45001. All the quoted PA and its Components(Controller, Mics, speakers etc) should be from single OEM. | 1 | No | 33,093.00 | 33093.00 |
| 2 | Supply, Installation, Testing & Commissioning of Chairman Microphone Unit, Make & Part No : Bidder need to mention the Make / Model and Part numbers. The Chairman microphone should have On/off button and Chairman Priority button to mute other microphones. The microphone should have 3.5mm headphone Output with volume control. The microphone should condenser type. The microphone should have 8 Pin Din socket. The microphone should be removable microphone goose -neck rod , for easy maintain and store. The microphone should have a Frequency Response : 45Hz-18KHz (-3dB). The microphone should | | | | |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount | |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------|-----------|-----------|
| 3 | have a sensitivity of -45dBV/pa. The microphone should have built in speaker of Minimum 1.5W. The Microphone should have indication light for easy monitoring. The microphone should have Input Impedance : 2k Ω . Signal to Noise Ratio (SNR) should be greater than 78dB. The Microphone should be provided hardware warranty for a period of 1 years. OEM direct contract details (email, Toll free and Web portal cess) and Escalation matrix has to be provided along with Tender document. Also bidder need to ensure TAC support for minimum of one years from the OEM should be added for quoted product. OEM Should have ISO 9001 , ISO 14001 ,ISO 27032 and ISO 45001. All the quoted PA and its Components(Controller, Mics, speakers etc) should be from single OEM. Supply, Installation, Testing & Commissioning of Delegate | 18 | Nos. | Each | 30.283.00 | 545094.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount | |
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| 4 | <p>-45dBV/pa. The microphone should have built in speaker of Minimum 1.5W. The Microphone should have indication light for easy monitoring. The microphone should have Input Impedance : 2kΩ. Signal to Noise Ratio (SNR) should be greater than 78dB. The Microphone should be provided hardware warranty for a period of 1 years. OEM direct contract details (email, Toll free and Web portal cess) and Escalation matrix has to be provided along with Tender document. Also bidder need to ensure TAC support for minimum of one years from the OEM should be added for quoted product.</p> <p>Supply, Installation, Testing & Commissioning of Feedback Suppressor Make & Part No : Bidder need to mention the Make / Model and Part numbers. The feedback suppressor should be atleast 24-bit A/D and D/A conversion. It should have minimum 2 x input channels and 2 x output channels (XLR, 1/4TRS). It should have input impedance of 10kΩ (Unbalanced) and 20kΩ (balances). It should have the output impedance of 150Ω. Feedback suppressor should have automatic search for 12 frequency feedback and the user should have the option to set all parameters of 2x12 filters in manual mode. Its should have a maximum input/output level of 10.5dBu. Signal to noise ratio : 100dB. It should have Frequency Response : 20Hz -20KHz .</p> | 1 | No | Each | 37,308.00 | 37308.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
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| 5 | <p>Suppression Time should be 0.3s@1kHz. Feedback suppressor should automatically analyze and lock the feedback frequency by using its advanced DSP algorithm. Audio Gain : 9dB. Minimum Two parallel processing modules. the left and right channel may be adjusted independently or in parallel. It should have the working voltage as 220V AC. Feedback suppressor should be provided hardware warranty for a period of 1 years. OEM direct contract details (email, Toll free and Web portal cess) and Escalation matrix has to be provided along with Tender document. Also bidder need to ensure TAC support for minimum of one year from the OEM should be added for quoted product.</p> <p>Supply, Installation, Testing & Commissioning of 10 Input Mixer Amplifier Make & Part No : Bidder need to mention the Make / Model and Part numbers, The Mixer amplifier should have minimum 6 No's of Mic Input with 24V Phantom Power Supply and 4 No's Unbalanced Audio Input, 1 No's unbalanced Output. The mixer should have microphone frequency shifter function. The mixer should have 7 band equalizer. The mixer should have outer rated power of 120W. The mixer should have rated voltage of 100V/70V. The mixer should have rated resistance outputs of 4-16Ω. The mixer should have Individual Volume control</p> | 1 | Each | 56,978.00 | 56,978.00 |

| Sr.No. | Description of Item | Quantity | Unit | Rate | Amount |
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| 6 | <p>option for Microphones, The mixer should have Frequency Response : 60Hz -20KHz (± 3dB). The mixer should have mute function. The mixer should have built-in chime generator and should be able to adjust the volume. The mixer should have the working voltage as 220V AC. The mixer should be provided hardware warranty for a period of 1 years. OEM direct contract details (email, Toll free and Web portal cess) and Escalation matrix has to be provided along with Tender document. Also bidder need to ensure TAC support for minimum of one years from the OEM should be added for quoted product.</p> <p>Supply, Installation, Testing & Commissioning of 6.5" Narrow Edge Ceiling Speaker with Aluminium mesh 10W or more Make & Part No : Bidder need to mention the Make / Model and Part numbers. The speaker should have a minimum output power of 10W. The speaker should have Input Voltage/Impedance 70V/100V . The speaker should support Frequency Response between 120Hz - 16KHz. The speaker should have a minimum Sensitivity (1M,1W) - 90dB. The speaker should have Maximum SPL 92dB. The speaker should be provided hardware warranty for a period of 1 years. OEM direct contract details (email, Toll free and Web portal cess) and Escalation matrix has to be provided along with Tender document. Also bidder need to ensure</p> | 8 | Nos. | 1,971.00 | 15768.00 |

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| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
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| 7 | TAC support for minimum of one years from the OEM should be added for quoted product. OEM Should have ISO 9001, ISO 14001, ISO 27032 and ISO 45001. All the quoted PA and its Components (Controller, Mics, speakers etc) should be from single OEM. Supply, Installation, Testing and Commissioning of Accessories like 8 pin cable 10mtr x 2 Units etc along with other connectors required for deployment | 1 | No | 44,791.00 | 44791.00 |
| 8 | Supply, Installation, Testing and Commissioning of Wall Mounting Rack (600 * 600) 6 Socket PDU, Fan, Cable Manager, Mounting Hardware (Pack of 20), 2 pair Mounting Rail. OEM Should have ISO 9001, 45001, 14001 | 1 | No | 8,962.00 | 8962.00 |
| 9 | SITC of 65" 4K UHD resolution LED Display, 350 nits brightness or better. Wifi Type support both 2.4 & 5G Standard, Dolby Audio, Built in Wifi and Chromecast, HDMI CEC, HDMI ARC, Built-in Bluetooth, 20W built in speakers, HDMI 2.0 X 2, AV X 1, USB X 2, RJ45 X 1, 24/7. | 2 | Nos | 77,351.00 | 154702.00 |
| 10 | SUPPLY & INSTALLATION OF BIOMETRIC LOCK WITH FINGER/PASSWARD/RFID CARD to the entire satisfaction of the Engineer in Charge. | 1 | No | 27,473.00 | 27473.00 |
| | Total | | | | 10,61,241.00 |

**SCHEDULE OF QUANTITIES FOR THE WORK RENOVATION OF BLOCK 'A' CHANDIGARH HOUSING BOARD OFFICE
BUILDING SECTOR 9 CHANDIGARH - (COMPOSITE WORK) PART C1-(G) FIRE ALARM SYSTEM (E&M Work)**

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|---------------------|----------|------|------|--------|
|---------|---------------------|----------|------|------|--------|

**FIRE DETECTION AND ALARM SYSTEM
(CONVENTIONAL)**

| | | | | | |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|----------|----------|
| 1 | Supply, Installation, Testing & Commissioning of Smoke detector with built in LED and mounting base complete with all connections etc. as required. | 72 | Nos | 1223.00 | 88056.00 |
| 2 | Supply, Installation, Testing & Commissioning Fire Alarm sounder with facility to make announcement, mounted in MS Box(16 SWG) with hinged cover plate and suitable for operation with amplifier i/c Line matching transformer etc. complete as required. | 6 | Nos | 582.00 | 3492.00 |
| 3 | Supply, Installation, Testing & Commissioning of main control and indicating panel made out of 16 SWG MS sheet to accommodate the following items duly powder coated in approved colour with louvers for ventilation, locking arrangements audio and visual indication for Fire alarm and Public Address System. Monitoring system including connections, inter connections etc. complete as required. 05 Zone panel for fire alarm system. 250W amplifier racks suitable for operation on 230V AC/24 V DC supply conforming to IEC-268-3 complete with all accessories as required - 2 Nos.(one to act as standby). Talk back Master station with LED PTT(press to talk) push | 1 | No | 74659.00 | 74659.00 |

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
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| 4 | <p>button for operation on 230V AC/24 V DC supply confirming to IFC-268-3 for simplex mode of operation/communication suitable for 20 Nos. talk back unit-1 Set.</p> <p>Amplifier change over switch for interchanging amplifier-1 Nos.</p> <p>Monitor panel for loudspeaker complete with output selector, ON/OFF switch, Fuse, Visual indication etc. complete as required-1 No.</p> <p>Gooseneck microphone with stand and ON/OFF switch-1 No.</p> <p>Main ON/OFF switch, Fuse indication lamp, Dc and Ac voltmeters and ammeters, terminal block etc. complete as required-1 Set.</p> <p>Battery charger trickle cum boost to take complete load of Fire Alarm and PA System complete with all accessories including providing and fixing of 2 Nos. 12Volts, 60AH each Sealed Maintenance free batteries-1 Set.</p> <p>Supplying and laying of 2x1.5 sqmm fire survival cable, 600/1000V rated with annealed copper conductor having glass mica fire barrier tape covered by an extruded layer of Cross Linkable Ethylene Propylene Rubber (EPR) insulation and 1.5/11 inner bedding, steel wire armouring & 1.5/11 outer sheath complete as required.</p> | 441 | Metre | 381.00 | 168021.00 |

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| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|---------------------|----------|------|-------|-------------|
| | | | | Total | 3,34,228.00 |

**SCHEDULE OF QUANTITIES FOR THE WORK RENOVATION OF BLOCK 'A' CHANDIGARH HOUSING BOARD OFFICE
BUILDING SECTOR 9 CHANDIGARH (COMPOSITE WORK) PART C1-(H) UPS 2x20KVA**

| Sr. No. | Description of Item | Quantity | Unit | Rate | Amount |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------|--------|
| 1 | Supply, unloading, shifting, installation, testing & commissioning of micro processor controlled 2 Nos of 20 KVA UPS operating in parallel Conf. mode for 100% load, IGBT based double conversion PWM based online UPS rectifier to achieve input THDI < 3% and input power factor of greater than 0.99 at 100% loading. Normal True Online Double Conversion (VF1 as per IEC 62040-3) with > 96 % efficiency from 40% to 100 % loading condition In Double Conversion Online 3 Phase input and 3 phase 415 V output UPS system; and comprising of the following complete as required and as per specification: Fully rated Rectifier cum charger unit and 100% rated Inverter unit Integrated in UPS module. Fully rated Inbuilt static switch at the inverter output and 100% rated Inbuilt static switch at the static bypass line integrated in UPS module. Web-enabled Monitoring and Management through SNMP protocols for multi-OS environments with below features. Automated unattended shutdown of computers. Local notification through audible alarm. RS-485 port with BUS/MODBUS card, communication protocol to integrate the UPS with building management | | | | |
| a | | | | | |
| b | | | | | |
| c | | | | | |
| d | | | | | |
| e | | | | | |
| f | | | | | |

| | | | | | |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----|------|-----------|
| g | system and USB port for field analysis. | | | | |
| h | Phase sequence detection & protection | | | | |
| i | Phase sequence corrector at Input (Inbuilt / External) | | | | |
| j | Backfeed protection at Bypass Input (Inbuilt / External) | | | | |
| k | Rodent Mesh & User replaceable Dust Filters | | | | |
| 2 | Top as well as bottom Cable entry shall be provided with aluminium cable termination. | 1 | No | Each | 781952.00 |
| | Supply, Installation of Battery Banks for 30 minutes backup comprising of 18 Ah SMF 32 Nos. Sealed, lead-acid, Tubular batteries for each 20 kVA UPS, 0.9 Power Factor with following: | 2 | Nos | Each | 128451.00 |

Total : 9,10,403.00

For Simplified maintenance all connections shall be from front of the racks and it shall be possible to connect multiple racks in parallel to configure extended run times, SMPS (Switched Mode Power Supply):
Vendor to provide complete details of make of Batteries, ampere hour ratings, Expected life, Final discharge voltage, Nominal float voltage, Battery recharge time & configuration of back up time, Battery sizing Calculations, Battery shall be accepted of Exide/Amara/Panasonic makes only.



| Mile stone Programmer (Minor Component - PART C1- (E& M) | | | | | |
|----------------------------------------------------------|-----------------------------------------------|---------------------------|-------------------|-------------------------------------------|--------------------------------------------------------------------------|
| (In Physical Terms) | | | | | |
| S. No. | Description of Milestone (Physical) | | | Time allowed in Days (from date of start) | Amount to be withheld in case on non achievement of respective milestone |
| | 1st Quarter. | During the quarter (DUs.) | Cumulative (DUs.) | | |
| A | Building -E.I. Work | 30% | 30% | 37 Days | 0.70% of tendered amount of composite work. |
| B | DG Set 320 KVA (E& M Work) | 0% | 0% | | |
| C | CCTV SURVEILLANCE SYSTEM (E&M work) | 10% | 10% | | |
| D | EPABX SYSTEM (E& M work) | 10% | 10% | | |
| E | LAN NETWORK (E& M works) | 10% | 0% | | |
| F | AUDIO/VIDEO SCREEN CONFERENCE ROOM (E&M work) | 0% | 0% | | |
| G | FIRE ALARM SYSTEM (E&M work) | 10% | 10% | | |
| H | UPS 2x20KVA (E& M works) | 0% | 0% | | |
| | 2nd Quarter. | | | | |
| A | Building -E.I. Work | 30% | 60% | 75 Days | 0.80% of tendered amount of composite work. |
| B | DG Set 320 KVA (E& M Work) | 0% | 0% | | |
| C | CCTV SURVEILLANCE SYSTEM (E&M work) | 10% | 20% | | |
| D | EPABX SYSTEM (E& M work) | 10% | 20% | | |
| E | LAN NETWORK (E& M works) | 10% | 20% | | |
| F | AUDIO/VIDEO SCREEN CONFERENCE ROOM (E&M work) | 0% | 0% | | |
| G | FIRE ALARM SYSTEM (E&M work) | 10% | 20% | | |
| H | UPS 2x20KVA (E& M works) | 0% | 0% | | |
| | 3rd Quarter. | | | | |

| Mile stone Programmer (Minor Component - PART CI- (E& M) | | | | | |
|----------------------------------------------------------|-----------------------------------------------|------|------|----------|--------------------------------------------|
| (In Physical Terms) | | | | | |
| A | Building -E.I. Work | 30% | 90% | 113 Days | 2.0% of tendered amount of composite work. |
| B | DG Set 320 KVA (E& M Work) | 80% | 80% | | |
| C | CCTV SURVELLIANCE SYSTEM (E&M work) | 70% | 90% | | |
| D | EPABX SYSTEM (E& M work) | 70% | 90% | | |
| E | LAN NETWORK (E& M works) | 70% | 90% | | |
| F | AUDIO/VIDEO SCREEN CONFERENCE ROOM (E&M work) | 70% | 70% | | |
| G | FIRE ALARM SYSTEM (E&M work) | 70% | 90% | | |
| H | UPS 2x20KVA (E& M works) | 0% | 0% | | |
| | 4th Quarter. | | | | |
| A | Building -E.I. Work | 10% | 100% | 150 Days | 1.5% of tendered amount of composite work. |
| B | DG Set 320 KVA (E& M Work) | 20% | 100% | | |
| C | CCTV SURVELLIANCE SYSTEM (E&M work) | 10% | 100% | | |
| D | EPABX SYSTEM (E& M work) | 10% | 100% | | |
| E | LAN NETWORK (E& M works) | 10% | 100% | | |
| F | AUDIO/VIDEO SCREEN CONFERENCE ROOM (E&M work) | 30% | 100% | | |
| G | FIRE ALARM SYSTEM (E&M work) | 10% | 100% | | |
| H | UPS 2x20KVA (E& M works) | 100% | 100% | | |

General/Specific Conditions for Electrical (E&M) Component to be read in conjunction with General/Specific conditions of Major components of work as applicable:-

1. If the main contractor does not have authorization/ electrical license for carrying out the electrical work as per Government of India norms then main contractor have to associate or carry out the same from authorized electrical licensed contractor.
2. All the hidden items such as conduits etc. are to be properly tested before covering.
3. Contractor shall have to check the Site Order Book regularly for any instructions of the Engineer-in charge or his authorized representative and sign the site order book. He shall be bound to ensure compliance with the instructions recorded therein.
4. Routine type tests for the various items of equipment shall be performed at the Manufacturer works and tests certificates furnished.
5. All tools, instruments, plants and labour/operating personnel for the site test shall be provided by the contractor at his own cost.
6. **WARRANTIES/GUARANTEE:** All equipments shall be guaranteed for a period of 12 months during the Defects Liability Period to be considered from the date of overall completion of the project against unsatisfactory performance and /or break down due to defective design, workmanship of material. The equipment's of components, or any part thereof, so found defective during guarantee period shall be forth with repaired or replaced free of cost, to the satisfaction of the Engineer-in-charge. In case it is felt by the department that undue delay is being caused by the contractor in doing this, the same will be got done by the department at the risk and cost of the contractor. The decision of the Engineer-in-charge in this regard shall be final.
7. The successful tenderer should furnish well in advance copy each of detailed instructions and manuals of manufactures for all items of equipments regarding installation, adjustments operation and maintenance.
8. All works shall be carried out in accordance with relevant regulation, both statutory and those specified by the Indian Standards related to the works covered by specification.
9. The contractor shall have to produce all the relevant records to ascertain the genuine equipment from the manufactures has been supplied and erected.
10. Contractor shall provide appropriate cover for all Electrical Panels etc. to protect them from rust/damages, during execution of work till the work is actually completed and handed over to the department.
11. All concealed work and earthing shall be done in the presence of the Engineer-In-Charge or his authorized representative.
12. To provide all incidental items not shown or specified in particular but necessary for proper execution of works in accordance with the drawing, specification and schedule of items.
13. The electrical Installation work shall be carried out in accordance with Indian Standard Code of Practice. It shall also be in conformity with the current Indian Electricity rules and regulations and requirements of the Local Electricity Supply

Authority and Fire Insurance regulations, so far as these become applicable to the installation.

14. Electrical work in general shall be carried out as per CPWD's general specification for Electrical Works Part-I Internal 2013 & Part-II (External) 1994, with up to date correction /amendments, relevant Indian Electricity Rules and as per directions of Engineer-in-charge. For electrical panels, CPWD General Specifications for Electrical Works Part - IV shall be applicable. In case of variation, nothing extra shall be paid on account of these additional specifications & conditions as the same are to be read along with schedule of quantities for the work.
15. All Electrical installation shall comply with the requirements of Indian Electricity rules 1956 and Indian Electricity Act-1910 as amended up to date and bye laws of authority of State Government or any other department.
16. For the items not covered under any of the specifications stated above, the work shall be executed as per Manufacturer's specifications/ General Engineering Practice and / or as per direction of Engineer in Charge.
17. The bidder should note that the specifications furnished in the tender is of general nature only and it is the responsibility of the bidder to design, supply, install and commission the equipment and services required for the satisfactory performance of the installation. All the items of equipment required for the safe and satisfactory operation of the installation shall be supplied and installed by the bidder.
18. The term complete installation shall not only mean major items of the plant and equipments covered by specifications but all incidental sundry components necessary for complete execution and satisfactory performance of installation. However, major equipment not covered in the scope of the work and required subsequently as an additional feature, not covered in the contract specifications, shall be paid extra. The decision of the Engineer-In-Charge in the matter shall be final and binding upon the contractor.

CODES AND STANDARDS

19. In addition to the requirements the design, manufacture, inspection and testing of the piping, fittings, valves and specialties covered under this specification shall conform, in general, to the standards and codes (latest edition) mentioned below:

| | |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| IS : 694 - 1990 | PVC insulated Electric cable for working voltage upto and including 1100 volts. |
| IS : 732 - 1989 | Code of practice for electrical wiring and installation |
| IS : 1258 - 1987 | Bayonet lamp holders(Third revision) |
| IS : 1293 - 1988 | Three pin plugs and sockets outlets rated voltage upto and including 250 volts and rated current upto and including 160 amps. |
| IS : 1554 - 1988 (Part - I) | PVC insulated (Heavy Duty) electric cables for working voltages upto and including 1100 volts. |
| IS : 1646 - 1982 | Electrical installation fire safety of buildings (general) Code of practice. |
| IS : 1885 - 1971 | Glossary of items for electrical cables and conductors |
| IS : 3837 - 1976 | Accessories for rigid steel conduit for electrical wiring. |
| IS : 4615 - 1968 | Switch socket outlets. |



| | |
|---------------------------|-------------------------------------------------------------------------------------------|
| IS : 5133 - 1969(Part -I) | Boxes for the enclosure of electrical accessories. |
| IS : 5216 - 1982(Part-I) | Guide for safety procedures and practices in electrical work. |
| IS : 8828 - 1996 | Miniature Circuit Breakers |
| IS : 9537 - 1981 | Rigid Steel Conduits for electrical wiring (Second Revisions) |
| IS : 10810 - 1988 | Methods of test for cables. |
| IS : 12640 - 1988 | Earth Leakage Circuit Breakers |
| IS : 13947-1989 | Moulded Case Circuit Breakers |
| IS : 13947 - 1993 | General requirement for switchgear and control gear for voltage not exceeding 1000 Volts. |
| IS 1248 - 1968 | Elect. indicating instruments. |
| IS 2705 - 1981 | Current transformers |
| IS 3156 - 1965 | Voltage transformers. |
| IS 3231 - 1965 | Protective relays |

DG SET

20. In general, work of DG set shall be carried out as per CPWD's specifications; Part VII D.G. Sets - 2013 with up to date correction /amendments, relevant IE rules and as per directions of Engineer-in-charge. In case of variation, nothing extra shall be paid on account of these additional specifications & conditions as the same are to be read along with schedule of quantities for the work.
21. The term complete installation shall not only mean major items of the plant and equipments covered by specifications but all incidental sundry components necessary for complete execution and satisfactory performance of installation. However, major equipment not covered in the scope of the work and required subsequently as an additional feature, not covered in the contract specifications, shall be paid extra. The decision of the Engineer-In-Charge in the matter shall be final and binding upon the contractor.
22. The DG sets shall be tested for 8 hours at site for which necessary arrangement i.e. fuel, company engineer shall be made by the agency.
23. The Guarantee /Maintenance Manual of DG sets shall be provided by the agency.
24. The DG sets shall be procured strictly as per the milestones to ensure one years guarantee after testing and commissioning.
 - Manufacturer's technical catalogues of all equipments and accessories.
 - Operation and maintenance manual of all major equipments, detailing all adjustments, operation and maintenance procedure.

CCTV

25. The firm shall supply the detailed specifications of the manufacturer before procurement of all CCTV items.
26. The system shall be tested and commissioned after configuring all the cameras at the specific control room location.
27. The system shall be accepted only after successful working of CCTV cameras as per the requirement at site and to the satisfaction of the Engineer in charge.

UPS

28. The online UPS shall be installed strictly in the presence of manufacturer engineer.
29. The battery bank shall be provided as per manufacturer guidelines.

EPABX

30. The EPABX exchange shall be tested and commissioned with intercoms at specified locations.

Fire Alarm System

31. Automatic Fire Alarm System shall be installed with the existing manual Fire Alarm System.
32. No damage /malfunctioning of existing Fire Alarm System shall be ensured. Any damage to the existing Fire Alarm System shall be borne by the agency.

LAN/ Telecom points

33. The LAN/ telecom points shall be of same make /modal as of other modular accessories.
34. Noting extra shall be payable for LAN /telecommunication points on wall or on modular furniture.
35. All audio video cables shall be concealed and nothing shall be visible.
36. All audio accessories i.e. amplifier, mike & speaker shall be of same make and comp ratable.
37. All LAN points shall be tested with existing server and nothing extra shall be payable on this account.

Annexure 'A'

(To be executed On Judicial Stamp paper worth Rs.100/- between Contractor,
Manufacturer & Engineer-in-charge of the work)

GUARANTEE BOND

This agreement made this ____ day of ____ between
M/s. ____ & M/s. ____ (hereinafter called the Guarantors which
expression shall include where the context so admits the representative successors or his/its
assignees of the one part) and the Engineer-in-charge on behalf of Chandigarh Housing
Board, Chandigarh constituted under Section -III of the Haryana Housing Board Act, 1971
as extended to the Union Territory, Chandigarh having its principal office at 8 Jan Marg,
Sector 9-D, Chandigarh (hereinafter called the Board which expression shall unless
repugnant to the context or meaning thereof including its successor and assignees of the
other part).

Whereas this agreement is supplementary to the contract (hereinafter called
the Sub Contract) dated----- made between the Guarantors of the one part and Board of
the other part, whereby the contractor & manufacturer, inter alia, undertook to render the
buildings and structures and supply of ____ (Name of item) (As per the
list/items of products/ material appended) conforming to the prescribed specifications.
Wherein, the material in question have been used at ____
(Location) during the period between ____ to ____ at the site of work.

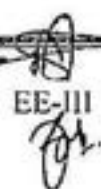
And whereas the Guarantors agreed to give a guarantee to the effect that the
said material will remain defect free for the next five years to be reckoned from the date of
completion of the work under the contract Agreement No. ____ dated ____.

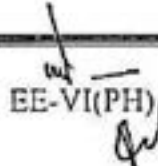
During this period of guarantee, the Guarantors shall make good all
manufacturing defects and for that matter, shall replace at his risk and cost such defective
material(s) as observed to the satisfaction of the Engineer-in-charge, and shall commence
the works of such rectification within seven days from date of issuing notice from the
Engineer-in-charge calling upon him to rectify the defects, failing which the work shall be
got done by the Department by some other Contractor/ manufacturer at the Guarantor's
cost and risk, and in the later case the decision of the Engineer-in-charge as to the cost
recoverable from the Guarantors shall be final and binding.

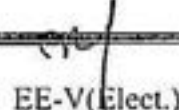
That if the Guarantors fails to replace the defective material(s) or commits
breaches hereunder then the Guarantors will indemnify principal and his successors against
all loss, damage, cost, expense or otherwise which may be incurred by him by reason of
any default on the part of the Guarantor in performance and observance of this
supplemental agreement. As to the amount of loss and/or damage and/or cost incurred by
the Board, the decision of the Engineer-in-charge will be final and binding on the parties.
In case of failure to replace the defective material, in addition to the recovery, stated here,
the Guarantors and the Contractor shall be black listed.

In witness whereof these presents have been executed by the Obligor
____ and by ____ for and on behalf of the Chairman, CHB on the day,
month and year first above written.

Signed, sealed and delivered by OBLIGOR in the presence of

EE-III


EE-VI(PH)


EE-V(Elect.)


1.

2. (Contractor)

2. (Manufacturer)


Signed for and on behalf of The Chairman, CHB by EE _____ in the presence of.

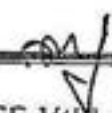
1.

2.

Note:- This Guarantee Bond shall be signed by the manufacturers individually, if the
manufacturer of _____ are different agencies.


EE-III

EE-VI(PH)



EE-V(Elect.)

List of material to be covered under the Guarantee for Civil Component:-

| Sr. No. | Description |
|---------|--------------------------------------------------------------------------------|
| 1. | Vitrified floor tile, Ceramic wall tile, Anti skid floor tile, wooden flooring |
| 2. | Flush Door Shutters |
| 3. | Automatic sensor for door |
| 4. | Bay Compactor ✓ |

List of material to be covered under the Guarantee for PH Component:-

| Sr. No. | Description |
|---------|-----------------------------------------------------|
| | CP Fittings |
| 1. | CP Brass Angle Cock 15 mm i/d |
| 2. | CP Brass Bottle trap 32 mm i/d |
| 3. | CP Brass over head shower 15 mm i/d with shower arm |
| 4. | CP Brass Health faucet |
| 5. | CP Brass Sink Mixer 15 mm i/d |
| 6. | CP Brass Wall Mixture |
| 7. | CP Brass Bib Cock |
| 8. | CP Brass Bib Tap(Two Way) |
| 9. | CP Brass Pillar Sensor Tap |
| 10. | CP Brass Push Bib Cock |

List of material to be covered under the Guarantee for Electrical Component:-

| Sr. No. | Description |
|---------|----------------------------------------|
| 1. | MCB /RCCB/ MCCB/BDB's |
| 2. | Modular Switches, Socket & Accessories |
| 3. | CCTV Camera |
| 4. | DG Set |
| 5. | UPS |
| 6. | EPABX Exchange |
| 7. | Digital telephone |
| 8. | Amplifier, Mikes |
| 9. | Batteries |
| 10. | Fire Detectors |
| 11. | Fire Panel |
| 12. | POE Switches |

EE-III
[Signature]

EE-VI(PH)
[Signature]

EE-V(Elct.)
[Signature]

Financial Bid for the work Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work].

| Part | Description | Amount |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| 1 | Renovation of Block 'A' Chandigarh Housing Board Office Building, Sector-9, Chandigarh [Composite work] (DNIT AMOUNT) | Rs.2,81,53,809.00 |
| <p>I/we will charge % (in figures) i.e.^{(a)*} percent (in words)^{(b)*} (write above or below) on the total Composite cost of Rs.2,81,53,809/- (Rs. Two Crore Eighty One Lakh Fifty Three Thousand Eight Hundred Nine only). The overall amount Rs. (in figures) (Rs.^{(c)*} (in words) with my quoted Rates.</p> | | |
| * Note: | | |
| 1. | For filling up the portion marked (a)* above the agency is to quote the percentage in figure and words. Percentage is to be quoted up to three digits after decimal. | |
| 2. | For filling up the portion marked (b)* above, the agency is to quote either above or below | |
| 3. | For filling up the portion marked (c)* above the agency is to quote the amount in figures and words. | |
| 4. | In case of any ambiguity or difference between the quoted percentage and amount, the amount worked out at '(c)' above will be considered as correct and the percentage will be considered accordingly. | |
| Dated | | Signature of the Bidder (s) |

Superintending Engineer-I
Chandigarh Housing Board
Chandigarh

Superintending Engineer-II
Chandigarh Housing Board
Chandigarh

Executive Engineer-III
Chandigarh Housing Board
Chandigarh

This NIT containing 168 pages as per Index amounting Rs.2,81,53,809/- (Rs. Two Crore Eighty One Lakh Fifty Three Thousand Eight Hundred Nine only) is hereby approved.

Chief Engineer
Chandigarh Housing Board
Chandigarh

25/10/24 25/10/24 25/10/24