

PRE-QUALIFICATIONS AND PRE-REQUISITES OF VENDORS

For Carrying out the repair and painting work of exterior and common areas



“Gaur Valerio Owners Welfare Association”

A BRIEF SYNOPSIS OF THE SCHEME- REPAIR AND PAINTING

The exterior and the common areas of the entire complex at “Gaur Valerio” are proposed to be refurbished by doing the necessary repairs and subsequently getting it painted. To get the real cost and be able to do the necessary cost comparisons, we have started getting the areas measured physically. All activities shall be identified and suitable treatment as required shall be applied. We need a qualified contractor with proven track record to do this job.

We have made a comprehensive tender document and also a pre qualification document for all bidders who wish to participate in bidding for these works. **We shall be uploading all specifications, parameters and the financial document on the website within next 20 days.** The most important clause of all bidders is to provide a minimum guarantee cover of 5 years for materials and workmanship.

We have laid a special emphasis on the security and thus the entire work of repair of balconies shall be done exclusively with scaffoldings. All statutory national norms pertaining to the social security and safety like CAR policy, 3rd party cover covers, PF, ESI have been made an integral part of the contract.

The tenders shall be floated and the bidders shall place their bids in the locked tender box proposed to be kept in the maintenance office. The key of the box shall be kept with the elders who shall open the box in the presence of all residents whomsoever choose to be present. The bids are in two parts e.g. the technical part and the commercial part. The ones who qualify the technical part shall be considered for the commercial part, the ones failing the technical part shall stand disqualified.

Adequate amount of money is being withheld from the contractor while paying him for the invoices raised by him. We shall towards the end of the contract have a retention amount of 10% which shall be released only against his successful completion of works to the satisfaction of the RWA and the concerned committee.

Schedules of alternative parking shall be displayed time to time when repair/paint is happening at a scheduled spot which demands vehicles to be moved. All efforts are being made to put the residents to least amount of inconvenience, cleaning of debris on a daily basis post completion or work shall be the responsibility of the vendor.

Once the contract is awarded, we shall be displaying the schedules of each week for each month till the completion of the project. This shall help you avoid passing through workable areas, which shall have the hessian netting tucked around it to eliminate the possibility of a potential accident on account of the debris falling from higher floors.

The contractual age of the contract is envisaged to be around 9 months, and the estimated date of start of works at our society is Nov 15th 2019.

The intent of “Repair and Painting” Works

ABSTRACT

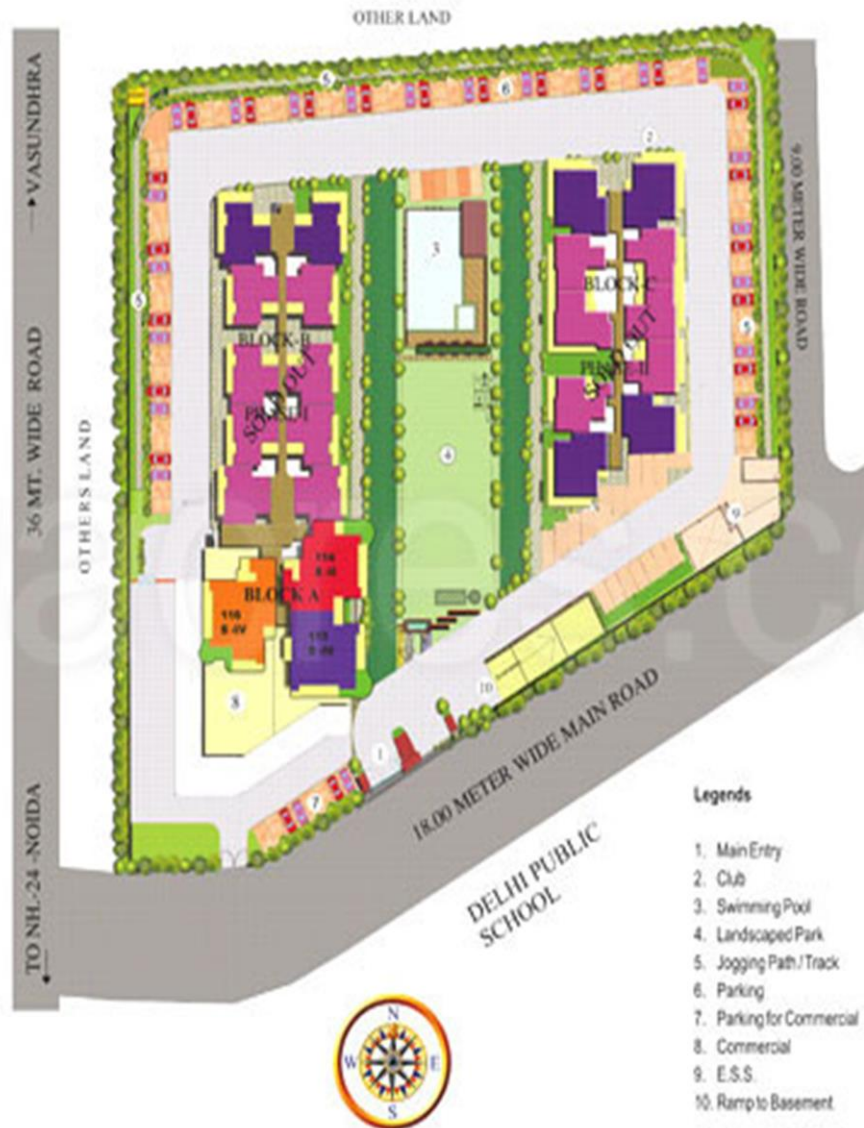
This repair and painting works are intended to be carried out at “**Gaur Valerio Owners Welfare Association**” in order to ensure that the building is in good condition and presentable visually. This property which houses 2 blocks 13 floors each, further bifurcated into three blocks namely A, B and C has been built during the period 2008-2010. The building was not made with good quality of materials and the workmanship was equally pathetic. As a result the property has eroded drastically and immediate repairs of common areas are inevitable.

The main objective of the proposed job is to ensure the building in good condition, creates conducive ambience to occupants and visitors, and to ensure the functional requirements to meet the above, by doing plastering works, waterproofing and painting subsequently.

There are many strategies that need be implemented in order to ensure the efficiency ranging from minimizing inconvenience and to ensure safety among the occupants. The elaborate terms and specifications are attached herewith. Besides the repair and painting the RWA intends laying a special emphasis on the routine maintenance.

Tender Document for Repair & Painting

SITE PLAN



Tender Document

FAQ's

Tender Document for Repair & Painting Works RWA-GVOWA

Why do buildings show cracks after a few years?

Buildings show cracks because of two main reasons and hence there are two types of cracks.

First, multi storied buildings are more of dynamic structures rather than static. They go through the normal phenomenon of settlement, deflections, vibrations and movement because of the movements of loads and wind. With time, this dynamism causes some stresses, which show up in the form of cracks in the walls ceiling etc. This type of cracks is only plaster deep. These cracks are treated by, chasing them out into 'V' shaped groves and filling them up with good quality crack filler.

Second, in the reinforced concrete, water/moisture reaches the steel by leakage or because of the porosity of concrete. This water in the presence of carbon dioxide oxidises the steel and causes rusting or corrosion. The volume of corroded steel is many times more than that of the original steel. This expanded steel puts lot of pressure on the neighboring concrete and the concrete develops cracks. The cracks due to corrosion appear on the columns and beams. These cracks are larger and generally associated with brown colour stains.

Are cracks dangerous and how to treat them?

Surface cracks in the plaster, and those, at the junction of the soffit of the beam and the top of brick work in a wall or those, at the junction of column and the brick work, are only plaster cracks and can be treated by the use of crack fillers.

Cracks due to corrosion which are seen on the column and beams, need to be inspected by taking out the concrete to expose the reinforcement. If the reinforcing steel is corroded more than 50% of its original volume, then it will have to be treated by replacing the lost steel and corrosion inhibition treatment done to entire steel. Then re-concreting is done, by jacketing method, using Super Fluid Micro Concretes, after removing the old concrete. If the damage to steel is less than 50% of its original volume then the lost steel is substituted with new steel to make up the lost volume of steel, corrosion inhibition treatment is done and the broken concrete is made good by polymer modified mortar.

How to identify that the building has a structural problem?

Cracks in the columns and beams, cracks associated brown stains and large chunks of concrete falling off from the RCC members and cracks being very big are all signs of corrosion to indicate that the building has structural problems. Physical examination of the steel by a competent structural repair consultant, after removal of the cover concrete establishes the degree of the problem.

How do we know whether reinforcement is corroded?

Brown marks associated with the cracks indicate corrosion. Bigger cracks on the beams and columns also indicate corrosion. A physical inspection after removing the cover concrete will show the corrosion if it is there. Corroded reinforcements can be separated, by picking with the fingers, as they are very weak.

What causes corrosion of reinforcement?

Corrosion is caused by the oxidation of steel. Reinforcing steel when comes in contact with atmospheric carbon dioxide in the presence of moisture the corrosion process starts and spreads fast like a cancer. Ground water containing chlorides sulphates etc, rising in the capillaries of the concrete when comes in contact with the reinforcing steel the reaction between the two oxidizes the steel and the corrosion process starts.

Do leakages cause corrosion?

Yes leakages are the main cause of corrosion of steel. Hence, a good waterproofing treatment always ensures a protective atmosphere around the steel for a long time and contributes to the longevity of the structure. Leakages in and around main plumbing networks, fire ring mains, swimming pool, backflow of discharge waste are very common however need to be looked at very seriously since they can corrode and weaken the structure which could be a catastrophe in waiting.

Is it safe to stay in buildings that have corrosion problems?

Since the process of corrosion progresses very fast and could cause the collapse of the structure it is advisable that the repairs are carried out faster. If the sound steel is reduced to less half its original volume, then it is not safe to stay in such buildings. It could be a great risk to life and valuables stored in such buildings.

When to take up repairs?

Repairs need to be taken up immediately after the first signs of the corrosion to steel are detected so that the minimum damage can be repaired economically. Any season is suitable for repairs except the rainy season.

During the rainy season difficulty will be faced by the workers on the scaffoldings to reach the area of repair and hence inefficiency. Rains cause delays and non-continuity of works with the possibility of the repairs being washed away or becoming weak with the contamination with rain water.

How do I go about repairing such buildings, should it have structural problems?

You need to contact a Structural Repair Consultant to assess your building, conduct preliminary surveys and give you an initial report for which he may not charge anything. If the problem is serious the consultant highlights it in his preliminary report and suggests detailed investigation and repair or else if it is simple he will suggest ordinary means to solve it economically and may suggest economical applicators for the job. This part is generally done free of cost by the consultants.

CONDITIONS

OF

CONTRACT

CONDITIONS OF CONTRACT.

Definitions

In this Contract, except where context otherwise requires, the following terms shall be interpreted as indicated;

- a. **"Employer"** means Gaur Valerio Owners Welfare Association, Ahimsa Khand-II, Indirapuram
- b. **"Vendor"** means the Entity who is executing the work
- c. **"3rd Party"** means the independent agency who shall monitor the quality and workmanship of the Vendor for execution of the contract.
- d. **"Bill of Quantities"** means the priced and completed Bill of Quantities forming part of the tender.
- e. **"The Virtual Completion Date"** means the date of completion of the Works as certified by the Project Manager, in accordance with the relevant clause as per the work order which is scheduled to be.....
- f. **"The Contract"** means the agreement entered into between the employer, and the vendor as recorded in the Agreement Form and signed by the parties including all attachments and appendices thereto and all documents incorporated by reference therein to execute, complete, and maintain the Works,
- g. **"The Vendor"** refers to the person or corporate body including Successors, Heirs and Assignee of the firm whose tender to carry out the Works has been accepted.
- h. **"The Contract Price"** is the price stated in the Work Order and thereafter as adjusted in accordance with the provisions of the Contract.
- i. **"Days"** are calendar days, **"Weeks"** are of seven days, **"Months"** are calendar months.
- j. **"A Defect"** is any part of the Works not completed in accordance with the Contract.
- k. **"The Defects Liability Period"** is the period named in the Appendix to Contract and calculated from the certified Completion Date.
- l. **"Drawings"** include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
- m. **"The Completion Date"** is the date on which it is stipulated that the Vendor shall complete the Works.

n. **"Materials"** are all supplies, including consumables, used by the Vendor for incorporation in the Works.

o. **"Project Manager/ Engineer in charge"** is the person named in work order (or any other competent person appointed by the Employer and notified to the Vendor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract

p. **"Site"** is the area defined as such in the Appendix to Condition of Contract.

q. **"Specifications"** means the Specifications of the Works included in the Contract and any modification or addition made or approved by the Project Manager.

r. **"Start Date"** is the latest date when the Vendor shall commence execution of the Works. It does not necessarily coincide with the Site possession date(s).

s. **"A Sub vendor"** is a person or corporate body who has a Contract with the Vendor to carry out a part of the Work in the Contract, which includes Work on the Site.

t. **"Temporary works"** are works designed, constructed, installed, and removed by the Vendor which are needed for construction or installation of the Works. u. **"A Variation"** is an instruction given by the Project Manager which varies the Works.

v. **"The Works"** are what the Contract requires the Vendor to construct, install, and turnover to the employer.

Interpretation

7.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning in English Language unless specifically defined. The Project Manager will provide instructions clarifying queries about these Conditions of Contract. The following documents shall constitute the Contract documents.

a. Agreement

b. Work Order

7.2 Vendor's Tender, including priced Bill of Quantities, conditions of Contract (CC), Appendix to CC, Special Conditions, Specifications, Drawings and all correspondence from opening of Tender till Issue of Work Order and any other document listed in the tender and in case of any ambiguity or contradiction between the different parts, shall be interpreted in the following order of precedence;

1. Articles of Agreement

2. Work Order

3. Special Conditions

4. Conditions of Contract

5. Bill of Quantities

6. Specifications

7. Detailed Drawings 8. Other drawings

8. Language

8.1 Language of the Contract shall be English.

9. The Project Manager will decide contractual matters

9.2 Delegation: The Project Manager may delegate any of his duties and responsibilities to others after notifying the Vendor.

10. Communications

10.1 Communication between parties shall be effective only when in writing. A notice shall be effective only when it is delivered.

11. Subcontracting

11.1 Subcontracting or subletting of the work is strictly prohibited. However wherever the contract specifies certain works to be carried out by specialized agencies, the Vendor may subcontract with the approval of the Project Manager, but may not assign the Contract. Subcontracting shall not alter the Vendor's obligations.

12. Other Vendors

12.1 The Vendor shall cooperate and share the Site with other vendors, public authorities, utilities etc. and also with the Client.

13. Schedule of works

13.1 The Vendor shall construct and install the Works in accordance with the Specifications and Drawings. The Works may commence on the Start Date and shall be carried out in accordance with the Program submitted by the Vendor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.

14. Safety and Temporary Works

14.1 The Vendor shall be responsible for the design of temporary works. However before erecting the same, he shall submit his designs including specifications and drawings to the Project Manager and to any other relevant third parties for their approval. No erection of temporary works shall be done until such approvals are obtained.

14.2 The Project Manager's approval shall not alter the Vendor's responsibility for design of the Temporary works and all drawings prepared by the Vendor for the execution of the temporary or permanent Works, shall be subject to prior approval by the Project Manager before they can be used.

14.3 The Vendor shall be responsible for the safety of all activities on the Site.

15. Work Program

15.1 The vendor shall submit the BAR CHART & MATERIAL PROCUREMENT CHART within 5 days of the date of work order. The program should show the general methods, arrangements, order, and timing for all the activities in the Works including supply of materials. The vendor shall coordinate with the RWA – GVOWA for alternate parking of vehicles in demarcated areas of work in accordance with the schedule and bar charts submitted

15.2 The Vendor shall submit to the Project Manager **Weekly Progress Report** as per the prescribed format.

15.3 Virtual Completion of Work;

The work will be considered as virtually completed only when the Vendor completes the entire work in accordance with the drawings and specifications and after joint inspection of work by the Project Manager and vendor. The Project Manager after satisfying himself shall thereupon approve the virtual completion

16. Access to Site

16.1 The Vendor shall allow the Project Manager and any other person authorized by the Project Manager, access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

17. Instructions

17.1 The Vendor shall carry out all instructions of the Project Manager which are in accordance with the Contract.

17.2 The vendor has to **maintain a site order book** for instructions from the inspecting officer.

18. Extension or Acceleration of Completion Date

18.1 At every stage Vendor shall make all attempts to achieve the desired progress and complete the work on time. Whenever the progress is lagging he will prepare a catch up plan to accelerate the progress. Notwithstanding the above, when events occur which are beyond the control of the vendor and the Client is convinced that the delay in execution of the work is beyond the control of the vendor, extension of time to the extent justified may be granted for completion of the works based on the request of the vendor. In such case liquidated damages will be levied for the balance period, if any as provided

19. Quality

19.1 The vendor should carry out the work strictly as per the specification and as directed by the Project Manager.

19.2 All the materials and workmanship shall be of the kind described in the schedule of quantities / specifications and in accordance with **relevant BIS codes** and as per directions of the Project Manager.

19.3 The materials required for the work should be **purchased only from the manufacturers directly or from the approved dealers**. Confirmation for the same will be required to be submitted to the Project Manager on demand.

19.4 The vendor shall submit **original vouchers / challans etc. alongwith photocopies for verification of actual purchases of all important material at site / head office**. The original will be returned to the vendor after due verification.

19.5 **The vendor must submit manufacturers test certificate of important materials, and if so desired by the Engineer- in – charge shall have to carry out testing of any materials brought on site at their own cost in accredited laboratory / site of works. No extra claim will be entertained for such testing of materials.**

19.6 The vendor should protect the work till its completion and handing over against any possible damage, theft, etc.

19.7 The vendor has to make **arrangements for cleaning the work site every day** and on completion of the work from the work area at his cost.

19.8 The vendor should provide **samples of the materials** for approval and the samples will be kept in the custody of the Project Manager.

19.9 The Project Manager shall inspect the **Vendor's work from time to time and notify the Vendor of any defects that are found**. Such inspection shall not affect the Vendor's

responsibilities. The Project Manager may instruct the Vendor to uncover and test any Work that the Project Manager considers may have a defect. Should the defect be found, the cost of uncovering and making good shall be borne by the Vendor, However, if there is no defect found, the cost of uncovering and making good shall be borne by the Client.

19.10 The Project Manager shall give notice to the Vendor of any defects before the end of the **Defects Liability Period, which begins at Completion, and is defined in the Appendix to Conditions of Contract. The Defects Liability Period shall be extended for as long as defects remain to be corrected.**

19.11 Every time notice of a defect is given, the Vendor shall correct the notified defect within the length of time specified by the Project Manager's notice. If the Vendor has not corrected a defect within the time specified in the Project Manager's notice, **the Employer reserves the right to get the rectifications carried out by other agency and recover the cost of such rectification from the vendor** from any money lying to his credit with EMPLOYER under the present or any other contract.

19.12 The vendor should arrange a **qualified technical supervisor** at site during the course of the entire work. The vendor should not change the supervisor till completion of the work. The supervisor should be available at site when the work is in progress.

19.13 The workmanship should be of high quality / standard and the decision of the Project Manager / Specialist shall be final in this regard.

20. Working conditions:

20.1 The vendor should abide by the rules and regulations for the premises especially on the working hours, entry to the workers to the premises, interpersonal relation with the staff members and other agencies engaged at the site.

20.2 The vendor shall not at any time do, cause or permit any nuisance on the site/ do anything which shall cause unnecessary disturbances or inconvenience to the occupants / visitors at site or near the site of work.

20.3 The vendor's workers will not be allowed to stay at the work site.

20.4 The vendor or his workers can use the common facilities such as drinking water, toilet etc., if made available at the premises. However, it should be ensured that the same should be kept in clean and hygienic condition.

20.5 Water and Electricity as per the availability at site can be made use of by the vendor. The charges for actual consumption electricity are to be paid by the Vendor. If not available, the vendor has to arrange it on his own.

20.6 The dismantled material / debris should be removed from the site daily and be transported out to the place as designated by the Municipal Corporation at vendor's own cost.

20.7 The vendor should make his own arrangement for storage of materials. Employer may provide some space subject to availability (uncovered) within the premises for storage purpose. Materials only as per requirement are to be stored at site. Neither EMPLOYER nor client will take any responsibility for the safety and / or security of any material lying at site.

20.8 Vendor needs to protect all furniture and other assets belonging to Client / User.

20.9 The vendor should not engage any person prohibited by law for execution of the job.

20.10 The vendor should make necessary arrangement for covering of all the furniture, records, and other assets of the client with fabric/plastic sheets during the course of work, for areas which could be effected with painting / repairing

21. General

21.1 In case of any damage to the existing structure, the vendor should make good the same at his cost to the satisfaction of the Project manager.

21.2 Client will have the liberty to modify the design to a reasonable limit. No extra charges will be paid for execution after such modification.

21.3 The quantities indicated in the bill of quantities are approximate and the quantities may vary as per the site conditions / requirements. The rate quoted should be firm for the total quantities of work executed to complete the work.

22. Payments :

22.1 No advance will be paid.

22.2 The billing is to be done in the name of the employer as specified on cover page of the tender.

22.3 The Vendor has to submit the bill strictly as per the nomenclature mentioned in the bill of quantities in the tender document along with detailed rate analysis of extra / deviated items, if any, executed after due approval of EMPLOYER, failing which the bill will be returned.

22.4 The running account bills may be submitted on monthly basis for the completed items of work and for the partly completed items based on the percentage of the work executed. The payment will be released on proper submission of the bill together with the measurements of the work carried out. The Security Deposit, other statutory deductions and any other amounts as may be deductible / recoverable as per the terms and conditions of contract will be deducted from the running bills.

22.5 The payment towards the settlement of running bills will be treated as the advance towards settlement of final bill.

22.6 5% of the value of each running bill will be deducted as Retention Money / Security Deposit till the amount so accumulated equals the total security deposit mentioned in the work order.

22.7 The final bill will be released on satisfactory completion of the entire work and on completion of all the terms and conditions / obligations spelt out and on proper submission of the bill together with the measurements. The Vendor has to submit Insurance policy against fire of value of final bill Valid till DLP from IRDA approved Insurance company .

22.8 50% of the Security Deposit will be refunded with the final bill. The remaining 50% will be returned to the tenderer after the satisfactory completion of defect liability period/extended DLP.

22.09 The vendor should approach the concerned employer's officials one month before the completion of the 'Defect liability Period' and attend to any rectifications / replacements and obtain certificate in the prescribed format for release of Security Deposit.

22.10 Income Tax, Sales Tax on Work Contract, VAT, Cess and / or any other Statutory deductions as per the prevailing rules at the time of execution will be deducted from the payable amount for which certificate will be issued in favour of the vendor.

22.11 Service tax along with cess as per rules is applicable to this contract. The quantum of Service tax including cess as admissible under the rules to this contract will be reimbursed to the vendor on demand supported by verifiable proof of payment. No request for reimbursement will be accepted after submission of final bill.

22.12 No interest is payable to the vendor on any amount due to him on any account.

22.13 The vendor shall be paid **on the basis of the actual quantity of completed work** as per the provisions of the contract and as per the specifications.

23. DEVIATION, VARIATION, EXTRA / DEVIATED ITEMS AND PRICING :

The rates of altered, additional or substituted works shall be determined in accordance with the following :

23.1 The net rates or prices in the original tender shall determine the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced therein.

23.2 If the rate for any altered, additional, or substituted item of work is not specified in the schedule of quantities, the rate for that item shall be derived from the rate for the nearest similar item specified therein.

23.3 If the rate for altered, additional or substituted item of work cannot be determined in the manner specified above, then such items of work shall be priced on the basis of rates for labour and materials as per the market rate prevailing at the time of execution.

23.4 While fixing rates of extra items 15% (Fifteen percent only) shall be allowed on the cost of material and labour to cover all supervision, overheads, statutory Taxes and Levies and profits except service tax.

23.5 For all extra items of work, the vendor should submit to the concerned Project Manager the necessary particulars along with his analysis and the employer proposes to claim for consideration immediately or latest within a period of 4 (four) weeks from the time of cropping up of any authorized extra / deviated item. He shall also ensure that all the authorized claims are included in the final bill. If the vendor fails to submit his claim within the stipulated period or the period duly extended by the Project Manager, then the EMPLOYER shall proceed to fix the rate for the item(s) and the same shall be final and binding on the vendor.

23.6 The Vendor shall note that Extra/Deviated items claim and/or any other claim whatsoever if submitted after submission of his Final Bill, will not be entertained and considered. The Vendor shall not be allowed to make any Additions/ Alterations/ Revisions / Changes/ Modifications/ Variations in the final bill, after the final bill is submitted by him.

23.7 The Tax invoice and the abstract of the bill should be submitted strictly as per the approved format of EMPLOYER.

23.8 The bill should be attached with all measurement sheets, sketches as applicable.

24. Escalation :

24.1 No escalation shall be paid for the works carried out during the contractual period.

24.2 No claim on account of fluctuation of rates of material and labour during the course of work will be entertained (from the date of acceptance of the Tender till issue of completion certificate).

25. Defect Liability Period :

25.1 Defect Liability Period is 12 months from the date of virtual completion of the work unless otherwise specified in Appendix to conditions of Contract.

25.2 During the course of Defect Liability Period the tenderer has to rectify all the defects noticed free of charge.

25.3 In case the vendor fails to attend the rectification work within 7 days of reporting the same in writing, Employer will have the liberty to carry out the said work through any other means at the cost & risk of the vendor. Such expenditure, shall be recovered from the Security Deposit or any other amount due to the Vendor in this or any other contract.

The Defects Liability Period shall be extended for as long as defects remain to be corrected.

25.4 While carrying out the rectification work, vendor should ensure that the surroundings should be protected against any possible damage. In case of any damage, the same should be made good by the vendor at his cost.

26. Statutory obligations to be followed :

26.1 The vendor should ensure adherence of all statutory requirements under the State and Central Rules in force and other local bodies for smooth and timely completion. All such costs are deemed to be included in the quoted rates.

26.2 Before taking up the job, The vendor shall comply with the provisions of all the rules and regulation in respect of labour engaged at site such as Contract Labour {Regulation & Abolition} Act, 1970, Minimum Wages Act, Apprentice Act and all other labour laws as may be enforced from time to time by the Government Authorities for execution of work, procurement of material for completion of the entire project and shall indemnify the Client/ EMPLOYER against any penalties/claims arising from any default on their part . EMPLOYER shall not be held responsible for any penalty on failure of any of the labour regulations or on failure of any compliance of any rule in force.

26.3 The vendor shall strictly comply with the provision of GST (both State & Central), Excise Duty, etc. All the duties / taxes with respect to the work should be borne and paid by the vendor. EMPLOYER shall not be responsible for any payment/ penalty on this account at any stage.

26.4 The goods if manufactured at the vendor office / site, the vendor has to pay Central Excise and he has to produce Excise Invoice Copy for removal of goods from the manufacturing site. In case the goods are manufactured or produced at the site then Excise Invoice showing that the Central Excise has been paid should be submitted to EMPLOYER.

26.5 The vendor should submit a statement confirming that all duties / taxes of every nature covered under the contract have been paid and the vendor shall indemnify the EMPLOYER against all claims in that behalf.

26.6 The vendor should ensure adherence of all the national norms /requirements under the State and Central Rules in force, be it safety, labor and or mandatory national obligations.

26.7 The vendor should submit an affidavit / Declaration on payment of Central Excise.

26.8 The vendor should also submit when required, a copy of the declaration filed with the Central Excise for the previous financial year.

26.9 The vendors are required to take Vendor's All risk Insurance Policy (CAR Policy) and Workmen Compensation Policy with respect to the work and the workmen within 5 days from the receipt of work order with an IRDA approved Insurance Company other than United India Insurance co. Ltd. the joint name of the employer and the Vendor from the date of commencement of work till the certification of virtual completion. The value of the work to be insured would be 125% of the contract value for CAR Policy.

26.10 The CAR policy should have additional coverage under 3rd party liabilities. The liabilities should be one lakh rupees per accident. The Original of the premium receipt and the policies should be submitted to EMPLOYER. The vendor shall fully indemnify the Client/ EMPLOYER against all claims which may be made against the Client/ EMPLOYER by any member of the public or other third party in respect of anything which may arise in respect of the works or in consequence thereof. The vendor shall also fully indemnify the client/ EMPLOYER against all claims which may be made upon the client/EMPLOYER, whether under the WORKMENS' COMPENSATION ACT or any STATUTE in force during the currency of this contract or at common law in respect of any employee of the vendor or any sub- vendor. The vendor shall be responsible for anything which may be excluded from the insurance policies above referred to.

26.11 The vendor shall also fully indemnify the client/EMPLOYER in respect of any costs , charges or expenses arising out of any claim or proceedings at law and

26.12 Also in respect of any award of compensation of damages arising there from.

26.13 The client/ EMPLOYER shall be at liberty and is hereby empowered to deduct fully the amount of any damages, compensation costs, charges and expenses arising or accruing any such claim or damage from any sum or sums due or to become due to the vendor.

26.14 The vendor shall take Fire Policy for the completion cost of work to cover the defect liability period from an IRDA insurance company and submit along with final bill.

26.15 EMPLOYER will have the right to protect its interest either by taking insurance directly or by any action that it may deem fit on account of the vendor and recover the same from the vendor in case the vendor fails to do so.

27. Liquidated Damages

27.1 The Vendor shall pay liquidated damages to the employer at the rate stated in the Appendix to Conditions of Contract for each day that the actual Completion Date is later than the specified Completion Date. The employer may deduct liquidated damages from payments due to the Vendor in this contract or from any other contract. Payment of liquidated damages shall not alter the Vendor's liabilities.

27.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Vendor by adjusting the next payment certificate.

28. Termination, Determination

28.1 If the vendor commits default in commencing the work, as required by the work order and found that the date stipulated cannot be adhered to, Employer shall be entitled without prejudice to any other rights or remedies available to terminate / rescind the contract

28.2 The contract shall be terminated if the Vendor is declared bankrupt or goes into liquidation

28.3 In case the vendor fails to show adequate progress in execution of work and Employer feels the work cannot be completed within the stipulated time, Employer will have the right to terminate the contract by giving three days notice to the vendor, at Employer's full discretion and the decision of the Employer shall be final and binding. It will be the full discretion of Employer to carry out the balance work through any agency at any rate as per the specification. The additional amount that may be spent for completion of the balance work will be recovered from the vendor. In case of termination of the contract, the payment if any, due to the vendor will be released only on completion of the entire project and finalization of accounts and liabilities.

28.4 If at any time after the acceptance of the tender, the EMPLOYER shall for any reasons whatsoever not require the whole or any part of the works to be carried out, the Project Manager shall give notice in writing to the Vendor who shall have no claim to any payment of compensation or otherwise whatsoever on account of any profit or advantage which he might have derived from the Execution of the whole of the works.

28.5 The Vendor shall be paid at contract rates for the full amount of work executed and All surplus materials collected for incorporation in the work, which the Vendor has procured will be taken back by the vendor.

28.6 If the Contract is terminated, the Vendor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible. The Project Manager shall immediately thereafter arrange for a meeting for the purpose of taking record of the Works executed and materials, goods, equipment and temporary works on Site

29. Vendor's other responsibilities

29.1 The vendor should co-ordinate with all the other agencies for smooth and timely execution of the project.

29.2 The vendor should set out the layout at site before commencement of work and obtain approval to the same from EMPLOYER.

29.3 The vendor should make arrangement for extension of temporary electrical work to provide sufficient light and power as required for the work at his cost.

29.4 The vendor should clear the site within 7 days of completion of work of all surplus material.

29.5 The vendor should take adequate precaution against fire hazard at site. The vendor should ensure that all fire safety measures are taken during execution and that the work carried out is as per the fire safety norms of the local Fire office.

29.6 The vendor should arrange scaffoldings for proper execution of work, also to ensure safety of the workers as per the relevant provisions of the law.

29.7 The vendor should prepare mock-up of the items for the approval of the Project Manager and shall modify the mock-up till it meets with the approval of the Project manager.

The expenditure that may be incurred for making the mock-up samples should be included in the respective items of work.

29.8 In case of any change in the constitution of the firm during the contract period, this shall be intimated to EMPLOYER without delay.

29.9 The vendor should submit shop drawings for the relevant items for the approval of Project Manager before execution of work.

29.10 The vendor has to ensure safety of the premises and the work till handing over of the same to user.

29.11 The vendor should submit the As-built drawings of the entire work together with the Final bill. The vendor should also take photographs & video of the entire completed work and submit 4 copies (4 sets of album & 4 CDs) along with the final bill.

30. Resolution of Disputes

30.1 Except where otherwise specifically stated, the Project Manager will decide contractual matters between the Client and the Vendor in the role representing the Client

30.2 Should the Vendor be not satisfied by the decision or interpretation conveyed by the Project Manager, he may then submit his appeal with full facts for review to the EMPLOYER. The employer may review the appeal himself or appoint a committee to review the appeal. After the review the employer will convey his decision to the vendor and such decision will be final and binding on the vendor and without further appeal

30.3 No such appeal for review which is submitted after the submission of final bill by the vendor is tenable and will not be entertained

31. No arbitration or legal claim will stand against EMPLOYER. The claim if any with respect to the work payment or any other matter including release of Security Deposit etc., will be limited to the client as mentioned and not against EMPLOYER.

SPECIFICATIONS
FOR
CIVIL WORKS

Tender Document for Repair & Painting Works RWA-GVOWA

COARSE AGGREGATE

The coarse aggregate shall be crushed stone or broken stone. Coarse aggregate obtained from crushed or broken stone shall be angular, hard, strong, dense, durable clean and free from soft, friable, thin, flat, elongated flaky pieces. The coarse aggregate should be from the approved source/quarry. Coarse aggregate River shingle or pit gravel shall be rounded, sound hard, clean, non porous, suitably graded in size with or without broken fragments and free from flat particle of shale, clay, silt, loam and other impurities.

Except where it can be shown to the satisfaction of the Consultant that a supply of properly graded aggregate of uniform quality can be maintained over the period of the obtaining the coarse aggregate in different sizes & blending them in correct proportions as and when required.

The maximum size of coarse aggregate shall be such that the concrete can be placed without difficulty so as to surround all reinforcement thoroughly and fill the corners of form work.

WATER

Water used in the works shall be potable water and free from deleterious materials. Water used for mixing and curing concrete as well as for cooling and/or washing aggregate shall be fresh and clean, free from injurious amounts of oil, salts, acids, alkali, other chemicals and organic matter.

Water shall be from the source approved by the Consultant / Project-in-charge and shall be in accordance with Clause 4.3 of IS: 456.

Before starting any concreting work and whenever the source of water changes, the water shall be tested for its chemical and other impurities to ascertain its suitability for use in concrete for approval of the Consultant. No water shall be used until tested and found satisfactory. Cost of all such tests shall be borne by the contractor.

CEMENT

Cement shall be stored on a raised floor in dry weather **proof & dust free but well** ventilated shed.

Cement bags shall be stacked close together away from external walls and in stacks of not more than ten bags to avoid lumping under pressure.

Cement stored during monsoons or cement expected to be in store for more than eight weeks shall be completely enclosed in 700 micron polyethylene sheet so arranged that the flap closes on the top stack. The contractor shall ensure that protective polyethylene sheet is not damaged at any time during use.

Consignments of cement shall be used in order of delivery. A record shall be kept of the batch numbers of cement deliveries in such a form that the part of the works in which the cement is used can be readily identified. If during delivery or by test, the cement is found to be defective, the same shall be returned back forthwith.

The contractor shall be responsible for the storage of cement at the site and no claim will be entertained in the event of any damage occurring to cement due to faulty storage by the contractors or on account of his negligence.

Cement stored on site for a period longer than eight weeks shall be tested to the satisfaction of the Consultant/Project-in-charge before it is used in the works. Cement that has failed the tests conducted shall not be used in the works and shall be removed from the site immediately without fail.

STORING OF AGGREGATE

Aggregates shall be stored on a suitable well drained raft of concrete, timber, metal or other approved material. The storage of aggregates on the ground will not be permitted.

Each size of aggregate shall be stored separately in such a manner as to prevent spillage and mixing of one aggregate with an adjacent aggregate. The dividing walls of any bin shall be of sufficient height and the aggregate shall be so deposited that a distance of 100 mm shall be left between the top of the division wall and any part of the aggregate stack.

When stack piling, the aggregate shall not form pyramids resulting in segregation of different size particles.

The stacks shall be regular and of a height not exceeding two meters.

GRADES OF CONCRETE

The grades of concrete shall be in accordance with the following table. The grade of concrete to be used in each section of work will be shown in the drawings or in the Bill of Materials:

CHARACTERSTIC STRENGTH

| Grade of Concrete | Grade of Concrete Characteristic strength i.e. compressive strength of 15 cm. Cubes at 28 days (N/mm ²) | Nominal maximum aggregate size (mm) |
|-------------------|---|-------------------------------------|
| 10 | 10 | 25 |
| 15 | 15 | 25 |
| 20 | 20 | 20 |
| 25 | 25 | 20 |
| 30 | 30 | 20 |
| 35 | 35 | 20 |

Unless otherwise specified in the drawings, the maximum nominal size of coarse aggregates for different grades of concrete shall be as under:

- | | | |
|----|--|-------|
| a) | For concreting in very narrow space or in very small thickness | 12 mm |
| b) | For all reinforced concrete work except in massive foundations | 20 mm |
| c) | For all ordinary plain concrete and massive reinforced foundations | 10 mm |

All mix design grades viz., M10, M15, M20, M25, M30 etc., shall be designed and have minimum cement content as follows:

| Grade | Qty (in kg) |
|-------|-------------|
| M-10 | 200 |
| M-15 | 300 |
| M-20 | 400 |
| M-25 | 600 |
| M-30 | 800 |

Minimum content of cement remaining unchanged, as specified above for each type of concrete mix, the proportion and quantities of local sand and aggregate are to be worked out and determined in the field/laboratory as per Road Research Note No.4, Department of Scientific and Industrial Research, United Kingdom for design of concrete mixes or as per ACI 613 with the approval of the Engineer. Any change in the source of aggregates will require the re-designing of the concrete mix for the Engineer's approval.

Mix Design

At the commencement of the contract, the Contractor shall make preliminary tests to determine the proportions by weight of cement, fine aggregates, coarse aggregates and water necessary to produce required grades of concrete. The mix proportions shall be selected to ensure that workability of the fresh concrete is suitable for the conditions of handling and placing and when concrete hardens, it shall have the required strength, durability and surface finish. The Contractor shall get approval of the Engineer to such proportions before start of concreting. However, such approval shall not relieve the Contractor of his responsibility to produce concrete having compressive strengths as laid down in the foregoing table.

No departure from the approved proportions will be permitted during the works unless and until the Engineer gives written authorization for any change in proportion. The Engineer shall have authority at any time to check whether the mixing of concrete is being carried out according to the approved proportions.

For the major and important RC works and for all special works, the design of mixes shall be made by the Contractor at his own cost, for each grade of concrete as well as for various workability.

The design of mixes shall be made according to relevant I.S. codes or to approved standard methods. The concrete made by designing the mix is termed hereinafter as "Design Mix Concrete".

Water/Cement Ratio

Where a particular water/cement ratio is stipulated in the design or drawing along with the characteristic grade of concrete, the design of mix shall be carried out by adjusting the other variable factors to obtain characteristic strength of concrete with stipulated water/cement ratio.

In the structures where the impermeability and shrinkage of concrete have an important bearing on the durability and serviceability of the structures, such as water retaining structures, basements, underground premises, tunnels, pump houses, exposed structures near sea side or deserts, pre-stressed structure, thin precast members etc., the water/cement ratio shall be kept low and preferably not exceeding 0.45.

The water cement ratio as achieved in the mix design or as specified in the drawings shall be adhered to strictly and shall not be varied without the permission of the Engineer.

Workability

The workability of fresh concrete shall be such that the concrete is just suitable for the conditions of handling and placing so that after compaction, it becomes completely consistent and homogeneously surrounds all the reinforcement and completely fills the formwork.

MATERIALS

Before bringing to the site, all materials for cement concrete shall be approved by the Consultant / Project-in-charge. All approved samples shall be deposited in the office of the Consultant / Engineer-in-charge before placing orders for the materials with suppliers. The materials brought on to the work shall conform in every respect to their approved samples.

Fresh samples shall be deposited with the Consultant / Project-in-charge whenever type or source of any material changes. The contractor shall check each fresh consignment of materials as it is brought on to the works to ensure that they conform to the specification and / or approved samples.

The Consultant / Project-in-charge shall have the option to have any of the materials tested to find whether they are in accordance with specifications at the contractor's expense. All bills, vouchers and test certificates which in the opinion of the Consultant / Project-in-charge are necessary to convince him as to the quality of materials or their suitability shall be produced for his inspection when required.

Any materials which have not been found to the specification and not approved by the Consultant / Project-in-charge shall be rejected forthwith and shall be removed from the site by the Contractor at his own cost within the time stipulated by the Consultant / Project-in-charge. The Consultant / Project-in-charge shall have the powers to cause the contractors to purchase and use materials from any particular source, as may in their opinion be necessary for the proper execution of work.

CEMENT

Cement shall be provided by the Contractor. On the following types of cement as specified shall be used

a. Ordinary Portland Cement 43 grade confirming to BIS 8112-1987

b. Ordinary Portland Cement 53 grade confirming to BIS 12269-1987

Cement at site shall be stored in dry weather proof go-downs (or shed) built by the Contractor at his own costs in stacks which are not higher than 10 bags. The cement go-down shall be constructed as per CPWD specifications. The contractor shall conduct all necessary tests as specified in the IS, at his own cost to ascertain himself on quality of the material.

AGGREGATES

- a) Aggregates from natural sources shall be in accordance with IS:383. The contractor shall submit to the Consultant / Project-in-charge certificates of grading and compliance from the suppliers for all consignments of aggregate. In addition at site from time to time, the contractor shall test the aggregates in accordance with IS: 2386 parts I, II, III and IV.
- b) The contractor shall allow for and provide all necessary apparatus for carrying out each test and for supplying test records to the Consultant.
- c) For fair faced concrete, the contractor shall ensure that aggregates are free from iron pyrites and impurities which may cause discoloration.
- d) The fine aggregates shall be river sand, stone dust or other approved sand. It shall be free from clay, loam, earth or vegetables matter and from salt or other harmful chemical impurities. It shall be clean sharp, strong angular and composed of hard siliceous material.

1.1 DESCRIPTION

This section covers the requirements for finishing of cement concrete, proportioning, batching, mixing, testing, placing, compacting, finishing, jointing, curing and all other work as required for cast in place reinforced concrete. The contractor shall provide all the materials including cement, steel, labour, equipment, 'form work', scaffolding etc., required for completion of all reinforced concrete works as per drawings and documents. Cement concrete shall be composed of cement, fine aggregate, coarse aggregate, water, with or without admixture as approved, proportioned and mixed as specified herein.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- a) Steel reinforcement
- b) Form work

1.3 APPLICABLE CODES AND STANDARDS

The codes and standards generally applicable to the work of this section are listed hereinafter.

IS 383 Coarse and fine aggregates from natural sources for concrete

IS 456 Code of practice for plain and reinforced concrete

IS 516 Methods of testing for strength of concrete

IS 1199 Methods of sampling and analysis of concrete

IS 1838 Performed fillers for expansion joints in concrete non-extruding and resilient type IS 1946 Code of practice for use of fixing devices in walls, ceiling and floors of solid

Construction

IS 2389 Methods of testing of aggregate for concrete's

IS 2505 Concrete vibrators, immersion type

IS 2645 Integral cement water proofing compounds

IS 3414 Code of practice for design and installation of joints in buildings

IS 3558 Code of practice for use for immersion vibrators for consolidating concrete IS 4082 Recommendation on stacking and storage of construction materials at IS 7861 Code of practice for extreme weather concretizing

IS 7861 Recommended practice for hot weather (part I) concretizing IS 8112 Ordinary Portland Cement grade 43

IS 12269 Ordinary Portland Cement grade 53

PART— I

The following clauses are intended to amplify the requirements of the reference document listed above and the contractor shall comply with these clauses

2 WATER-PROOFING FOR ROOF

The waterproofing shall be integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc. consisting of following operations:

- a) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with proprietary water proofing compound conforming to IS : 2645 over the RCC slab including cleaning the surface before treatment.
- b) Laying cement concrete using broken bricks/brick bats 25mm to 100mm size with 50% of cement mortar 1:5 (1 cement: 5 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 over 20mm thick layer of cement mortar of mix 1:5 (1 cement: 5 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 to required slope and treating similarly the adjoining walls upto 300mm height including rounding of junctions of walls and slabs.

- c) After two days of proper curing applying a second coat of cement slurry admixed with proprietary water proofing compound conforming to IS: 2645.
- d) Finishing the surface with 20mm thick jointless cement mortar of mix 1:4 (1 cement: 4 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 and finally finishing the surface with trowel with neat cement slurry and making of 300 x 300mm square.
- e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Project-in-charge. With average thickness of 120mm & minimum thickness at khurra as 65mm.

3. GUARANTEE

The treatment shall carry a guarantee for 10 years against leakage of water, dampness, seating and other defects. The treated roof shall be tested by allowing water to stand on the areas to a depth of 150 mm for at least 72 hours. All guarantee shall be furnished in the format approved by the Consultant/Project-in-charge duly signed by the contractor and sub contractor.

4. SPECIFICATIONS FOR CURING

The finished surface shall be cured for at least 7 days

5. KHURRAS

The Khurras shall be constructed before the brick masonry work in parapet wall is taken up, and it shall be 5 cm x 45 cm and shall be formed of cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) unless otherwise specified in the drawings.

6. LAYING

A PVC sheet 1M X 1M X 400 micron shall be laid under the khurras and then cement concrete shall be laid over it to a minimum thickness of 3 cm with its top surface lower than the level of adjoining roof surface as approved.

7 FINISHING

The khurras and sides of the outlet shall then be rendered with cement plaster of mix and thickness stipulated in the drawings. This shall be done when the concrete is still green and shall be finished with a floating coat of neat cement The sides of the khurras and sizes of finished outlet opening shall be as directed by the Consultant.

11 SPECIFICATION FOR PLASTERING WORK

11.1 SCOPE

The Contractor shall furnish all labour, materials scaffolding, equipment, tools, plants and incidentals necessary and required for the completion of all plaster work.

11.2 GENERAL

Plaster as herein specified shall be applied to all internal surface where called for. All plaster work shall be executed by skilled workmen in a workman like manner and shall be of the best workmanship and in strict accordance with the dimensions on drawings subject to the approval of the Consultant/Engineer - incharge. The primary requirement of plaster work shall be to provide dense, smooth and hard enclosure and devoid of any cracks of the interior and/or exterior.

11.3 SCAFFOLDING.

Double scaffolding having two seats of vertical supports shall be provided. The supports shall be sound and strong, tied together with horizontal pieces over which scaffolding planks shall be fixed. The contractor shall get the scaffolding approved from the Consultant well in advance.

11.4 CHASING AND BREAKAGE

It shall be allowed only after having the protective green fabric in place which shall work as a curtain to eliminate the possibility of rubble and dust flying across or landing in the flat / balcony of any resident.

11.5 PREPARATION

Masonry and concrete surfaces which call for application of plaster shall be clean, free from dust and loose mortar. Efflorescence if any shall be removed by brushing and scrapping. For masonry surfaces the joints shall be raked out properly, while the concrete surfaces shall be roughed by wire brushing and hacking to provide the key, thereby ensuring proper bond to the satisfaction of the Consultant. The surface shall then be thoroughly washed with water, cleaned and kept wet before plastering is commenced.

11.6 CHICKEN WIRE MESH

Galvanized chicken mesh (22 gauge, 12 mm size) shall be provided at junctions of brick masonry and concrete members, to be plastered and other locations as called for, properly stretched and nailed with galvanized wire nails, ensuring equal thickness of plaster on both

sides of the mesh. The width of the mesh shall be as approved by the Consultant / Project-in-charge. The chicken mesh wherever. Specified, shall be fixed in place before plastering.

- 11.7** Samples of each type of plaster shall be prepared well in advance of undertaking the work for the approval of the Consultant/Project-in-charge

11.8.1 MORTAR

The mortar of the specified mix shall be used. Mortar shall be prepared as specified under "Brick Work". It shall be made in small quantities, as required, and applied within 15 minutes of adding water to the plaster mix

11.8.2 CEMENT:

Cement shall be as per specifications under "BIS Cement reference"

11.8.3 SAND

For plaster work normally clean fine river sand shall be used. However, if specified in the drawing or schedule of finishes, coarse sand conforming to the specifications under Concrete work" shall be mixed with fine river sand in proportion specified or directed by the Consultant.

11.8.4 WATER PROOFING COMPOUND

FOSROC, ROFFE Chemicals or approved equivalent as approved by Consultant / Project-in-charge wherever specified.

11.9. CEILING PLASTER

6mm thick Ceiling plaster shall be completed before commencement of wall plaster.

Plastering shall be started from the top and worked down towards the floor. To ensure even thickness and true surface, plaster about 15 x 15 cm shall be first applied, horizontally and vertically, at not more than 2 meters intervals over the entire surface to the plaster to serve as gauges. The surface of these gauged areas shall be truly in place of the finished plaster surface. The mortar shall be laid between the gauges with a trowel ensuring thorough filling of joints. The mortar shall be applied in a uniform surface slightly more than the specified thickness and then brought to a true surface, by working a wooden straight edge reaching across the gauge, with small upward and side movements at a time. Finally the surface shall be finished off true with trowel or wooden float according as a smooth or a sandy granular texture is required. Excessive trawling or over working the float shall be avoided.

All corners, arises angles and junctions shall be truly vertical or horizontal as the case may be and shall be carefully finished. Rounding or chamfering corners, arises, junctions etc. Where required shall be done without any extra payment. Such rounding shall be carried out with proper templates to the sizes required. No portion of the surface shall be left out

initially to be patched up late on. Grooves shall be provided at the junction of ceiling and wall plaster without any extra cost.

In suspending work at the end of the day, plaster shall be left, cut clean to line both horizontally and vertically. When recommencing the plastering, the edge of the old work shall be scraped, cleaned and wetted with cement slurry before plaster is applied to the adjacent areas, to enable the two to be properly joined together. Plastering work shall be closed at the end of a day on the body of the surface and not nearer than 15 cm to any corners or arises. It shall not be closed on the body of the features such as pilasters, bands and cornices. Horizontal joints in plaster work shall not also occur on parapet tops and copings, as these invariably lead to leakages.

11.9.1 GROOVES

Wherever directed all joints between concrete and brick masonry besides other locations as called for shall be expressed by a groove cut in plaster at no extra cost

11.9.2 FINISH

The plaster shall be finished to a true and plumb surface and to the proper degree of smoothness as required. The work shall be tested frequently as the work proceeds with a true straight edge not less than 2.5 m long and with plumb bobs. All horizontal lines and surfaces shall be tested with a level and all jambs and corners with a plumb bob as the work proceeds.

11.9.3 CURING

Curing shall be started as soon as the plaster has hardened sufficiently not to be damaged when watered. The plaster shall be kept wet for a period of at least 7 days. During this period, it shall be suitably protected from all damages.

11.9.4 PRECAUTION

Any cracks which appear in the surface and all portions, which sound hollow when tapped or are found to be soft or otherwise defective shall be cut out in rectangular shape and redone as directed by the Consultant.

11.9.5 FLOATING COAT OF NEAT CEMENT

Where finishing with a floating coat of neat cement is specified in the drawings or directed by the Consultant, specification, for this item of work shall be same described above except for the additional floating coat which shall be carried out as below. When the plaster has been brought to a true surface with the wooden straight edge, it shall be uniformly treated over its entire area with a paste of neat cement and rubbed smooth, so that the whole surface is covered with neat cement coating. The quantity of cement applied for floating coat shall 1 kg. per sq. mt. smooth finishing shall be completed with trowel immediately and in no case later than half an hour of adding water to the plaster mix.

11.10 BEARING PLASTER

This shall be consist of cement plaster 1:3(1 cement : 3 coarse sand) 20 mm thick finished with a coat neat cement laid on top of walls as bearing for RCC lintels, beams and slabs. When dry, a thick coat of lime wash shall be given.

Tender Document for Repair & Painting Works RWA-GVOWA

SPECIFICATIONS FOR PAINTING WORKS

Tender Document for Repair & Painting Works RWA-GVOWA

SPECIFICATION FOR PAINTING WORK

OIL BOUND DISTEMPER / EXTERNAL SURFACES ETC.

MATERIALS

Oil emulsion (Oil Bound) washable distemper (IS : 428) of approved brand and manufacture shall be used. The primer shall be of the same manufacture as distemper shall be diluted with water or any other prescribed thinner in a manner recommended by the manufacturer. Only sufficient quantity of distemper required for day's work shall be prepared.

The distemper and primer shall be brought by the contractor in sealed tins in sufficient quantities at a time to suffice for a fortnight's work, and the same shall be kept in the joint custody of the contractor and the Project - in-charge. The empty tins shall not be removed from the site of work, till this item of work has been completed and passed by the Consultant / Project-in-charge.

PREPARATION OF SURFACE

The surface shall be thoroughly cleaned of dust. Any unevenness shall be made good by applying putty, made of plaster of Paris mixed with water on the entire surface including filling up the undulations and then sand papering the same after it is dry.

Pitting in plaster shall be made good with plaster of Paris mixed with the colour to be used. The surface shall then be rubbed down again with a fine grade sand paper and made smooth. A coat of the distemper shall be applied over the patches. The patched surface shall be allowed to dry thoroughly before the regular coat of distemper is applied.

APPLICATION

15 cm double bristled distemper brushes shall be used. After each day's work, brushes shall be thoroughly washed in hot water with soap solution and hung down to dry. Old brushes which are dirty and caked with distemper shall not be used on the work.

SCAFFOLDING

The specifications in respect of scaffolding, protective measures shall be as described under white washing.

WATER PROOF CEMENT PAINT

MATERIAL

Cement paint of required colour and of approved brand and manufacture conforming to IS : 5410 shall be used. Before application of the cement paint the shade shall be got approved from the Consultant. Cement paint shall be mixed with water in two stages.

The first stage shall comprise of 2 parts of cement paint and one part of water stirred thoroughly and allowed to stand for 5 minutes. Care shall comprise of adding further one part of water to mix and stirring thoroughly to obtain a liquid of workable and uniform consistency. In all cases the manufacturer's instructions shall be followed meticulously.

Cement paint shall be mixed in such quantities as can be used up within a hour of its mixing as otherwise the mixture will set and thicken, affecting flow and finish.

The lids of cement paint shall be kept tightly closed when not in use, as by exposure to atmosphere the cement paint rapidly become air set due to its hygroscopic qualities.

PREPARATION OF SURFACE

For new work, the surface shall thoroughly be cleaned of all mortar dropping, dirt, dust, algae, grease and other foreign matter by brushing and washing. The surface shall be thoroughly wetted with clean water before the cement paint is applied.

APPLICATION

For new work, the treatment shall consist of a priming coat of cement paint following by the application of two or more coats of cement paint till the surface shows an even colour. For each coat, the entire surface shall be coated with the mixture, uniformly, with proper cement paint brushes in horizontal strokes followed immediately by vertical ones which together shall constitute one coat.

The subsequent coats shall be applied only after the previous coat has dried. The finished surface shall be even and uniform and shall show no brush marks.

Enough cement paint shall be mixed to finish one room at a time. The application of a coat in each room shall be finished in one operation and no work shall be started in any room, which cannot be completed the same day. After each day's work, the brushes shall be washed in hot water and hung down to dry. Old brushes which are dirty or caked with painting shall not be used.

SCAFFOLDING

The specifications in respect to 12.1.1 scaffolding protective measures shall be as described above under white washing.

SPECIFICATIONS FOR ACRYLIC EMULSION PAINTING:

Workmanship:

Scaffolding:

Wherever scaffolding is necessary, it shall be erected on double supports tied together by horizontal pieces, over which scaffolding planks will be fixed. No ballies, bamboos or planks

shall rest on or touch the surface which is being white washed Where ladders are used, pieces of old gunny bags shall be tied on their tops to avoid damage or scratches to walls.

Preparation of surface:

Preparation of surface shall in general be in accordance with, except that any unevenness shall be made good by applying putty (white cement based) mixed with water including up the undulation and then sand papering the same after it is dry.

Preparation of paint

The paint mix, shall be continuously stirred while applying for maintaining uniform consistency. Number of coats shall be as per item description. The painting shall be laid evenly and smoothly by means of crossing and laying off. The crossing and laying off consists of covering the area with paint, brushing the surface and at first, then brushing alternatively in opposite direction 2/3 times and then finally brushing lightly in a direction at right angles to the same. In this process, no brush marks, no hair marks no clogging of paint puddles shall be permitted. The full process of crossing and laying off with constitute one coat. The paint shall be applied by means of brush or roller.

Before starting painting with plastic emulsion paint, the prepared surface shall be reacted with two coats of primer consisting of cement primer whitening and plastic emulsion paint shall start only after the preceding coat has become sufficiently hard to resist brush marking. Subsequent coats of plastic emulsion paint shall also be started after the preceding coat is dried by evaporation of water content.

The surface of finishing shall present a flat, velvets smooth finish, even and uniform shade without patches, marks, paint drops etc.

Precautions:

Brushes shall be quickly washed in water immediately after use and kept immersed in water during break periods to prevent the paint from hardening on the brush. Old brushes, if used shall be completely dried of turpentine / oil paints by washing in warm soap water.

No oil base puttied shall be used in filling cracks / holes.

Washing of painted surface shall not be done within 3-4 weeks of application.

Protective measures

Surface of distempering over existing distempered surface, the existing distempering shall be scrapped by steel scrapers leaving a clean surface.

All nails shall be removed. Pitting in plaster shall be made good with plaster of paris mixed with dry distemper of colour to be used. The surface then shall be rubbed down again with a fine grade sand paper and made smooth. A coat of distemper shall be applied over the patches. The surface shall be allowed to drythoroughly before the regular coat of distemper is allowed.

The surface affected by moss, fungus, algae efflorescence shall be treated in accordance with IS 2395.

ACRYLIC COPOLYMER AGGREGATE FINISH

Material

It shall be an acrylic based textured wall coating consisting of quartz and silica aggregate, inorganic pigments and other additives to form a crack free, flexible, tough, water proof coating.

Preparation of Surface

The surface to be coated shall be cleaned and all dirt, dust, grease and loose particles shall be removed. Any old textures surface shall be removed with removing agent as per manufacturer's instructions.

Application

Bonding agent and water shall be mixed first. Then the flakes / granules shall be added and mixed thoroughly and kneaded till no lumps are found. The dough shall be left for 20-30 minutes before starting application. The bonding agent, flakes / granules and water shall be mixed in different ratios for different finishes as per manufacturer's specifications.

The first application shall be by steel trowel. It shall be smoothened, if the specified finish required, by a plastic trowel.

VARNISHING

Varnishing of wood and wood based material shall be in accordance with IS 2338 (Part – II). Surface to be Varnished shall be prepared to produce a smooth, dry and matt surface and all dust and dirt shall be removed from the surface.

The varnish shall be applied liberally with a bush and spread evenly over a portion of the surface with short light strokes to avoid fronting. It shall be allowed to flow out while the next section is being laid in. Excess, varnish shall be scraped out of the brush and then the first section be crossed, re crossed and laid off lightly. The varnish, once it has begun to set, shall not be retouched. In case of any mistake, the Varnish shall be removed and the work shall be started afresh.

Where two coats of varnish are applied, the first coat shall be hard drying under coating or flattening varnish which shall be allowed to dry hard and then be flattened down before applying the finishing coat. Sufficient time shall be allowed in between two coats.

When flat varnishing is used for finishing, a preparatory coat of hard drying under coating or flattening varnish shall first be applied and shall be allowed to harden thoroughly. It shall then be lightly rubbed down before the flat varnish is applied.

On larger areas, the flat varnish shall be applied rapidly, and the edges of each patch applied shall not be allowed to set, but shall be followed up whilst in free working conditions.

PAINTING OF STEEL AND OTHER METAL SURFACES.

GENERAL

Reference shall be made to the following Indian Standards: IS 2524, IS 1447.

Preparation of surface

The surface, before painting, shall be cleaned of all rust, scale, dirt and other foreign matter with wire brushes, steel wool, scrapers, sand paper etc. The surface shall then be wiped finally with mineral turpentine which shall then be removed of grease etc. The surface then shall be allowed to dry. In case of GI surface so prepared shall be treated with Mordant solution (5 liters for about 100 sq.m) by rubbing the solution generously with brush. After about half an hour, the surface if required shall be retouched and washed down thoroughly with clean cold water & allowed to dry.

Application of priming and paints

Approved quality primer and paint in specified no. of coats shall be applied as per manufacturer's recommendations either by brushing or spraying. Each subsequent coat shall be applied only after the preceding coat is dried.

SYNTHETIC ENAMEL PAINT TO WOOD WORK

Synthetic enamel paint of approved brand and manufacture and of the required colour shall be used for the top coat and an under coat of shade to match the top coat as recommended by the manufacture shall be used.

One coat of specified paint of shade suited to the shade of the top coat shall be applied after rubbing with the finest grade of wet abrasive paper to ensure a smooth and even surface, free from brush marks and all loose particles dust off.

Top coats of specified paint of required shade shall be applied after the first coat is thoroughly dry. Additional finishing coats shall be applied if found necessary to ensure properly uniform glossy surface.

Tender Document for Repair & Painting Works RWA-GVOWA

The following guidelines are to be noted with regard to use of materials in the work.

1. The CONTRACTOR shall be required to use material of the make given in the list of approved make or specifically mentioned in the Bill of Quantities. EMPLOYER is free to demand the CONTRACTOR to use any particular make from the approved list of items.

However in case of non availability of any item as per the list of approved make CONTRACTOR shall use alternative item of ISI make with prior written permission from the CONSULTANT/Project-in-charge.

2. Wherever, material bearing Standard Mark (ISI) are used in the work, the Contractor should furnish necessary documents and proof of payments made for the procurement of materials bearing Standard Mark (ISI).
3. In case it is established that Standard material (bearing ISI mark) as well as the materials indicated in the list (as mentioned in the above para) are not available in the market, then approved equivalent materials may be used in the work subject to approval from the consultant and Project-in-charge.
4. For materials bearing "Standard Mark (ISI)" ordinarily no testing is to be done. However, in case of doubt or with a view to check the quality of materials, Project-in-charge may send samples for random testing.
5. For use of materials other than materials bearing "Standard Mark (ISI)" Mandatory tests shall be conducted at the frequency specified in the contract. In case frequency of testing is not stipulated in the contract then standard specification (CPWD, ISI etc.) may be considered for frequency at which materials are to be tested.
6. Before bulk purchase of quantities of materials, it is the responsibility of the Contractor to get the samples of materials approved from consultant and Project-in-charge.

1.1 REFERENCES

- .1 Environmental Protection Agency (EPA)
 - .1 *EPA Test Method for Measuring Total Volatile Organic Compound Content of Consumer Products, Method 24 (for Surface Coatings).*
- .2 Master Painters Institute (MPI)
 - .1 *MPI Architectural Painting Specifications Manual*
- .3 Society for Protective Coatings (SSPC).
 - .1 *SSPC Painting Manual, Systems and Specifications Manual.*
- .4 National Research Council (NRC).
 - .1 *National Fire Code of Canada*

1.2 QUALITY ASSURANCE

- .1 Contractor shall have a minimum of five years proven satisfactory experience. When requested, provide a list of last three comparable jobs including job name and location, specifying authority, and project manager.
- .2 Qualified journeyman shall be engaged in painting work. Apprentices may be employed provided they work under the direct supervision of a qualified journeyman in accordance with trade regulations.
- .3 Conform to latest MPI requirements for exterior painting work including preparation and priming.
- .4 Materials (primers, paints, coatings, varnishes, stains, lacquers, fillers, thinners, solvents, etc.) shall be in accordance with MPI Painting Specification Manual "Approved Products" listing and shall be from a single manufacturer for each system used.
- .5 Other paint materials such as linseed oil, shellac, turpentine, etc. shall be the highest quality product of an approved manufacturer listed in MPI Painting Specification Manual and shall be compatible with other coating materials as required.
- .6 Retain purchase orders, invoices and other documents to prove conformance with noted MPI requirements when requested by Owner's Representative.
- .7 Standard of Acceptance:
 - .1 *Walls: No defects visible from a distance of 1000 mm at 90° to surface.*
 - .2 *Ceilings: No defects visible from floor at 45° to surface when viewed using final lighting source.*

.3 *Final coat to exhibit uniformity of colour and uniformity of sheen across full surface area.*

.8 Mock-Ups:

.1 *When requested by Owner's Representative or Paint Inspection Agency, prepare and paint designated surface, area, room or item to requirements specified herein, with specified paint or coating showing selected colours, number of coats, gloss/sheen, textures and quality of work to MPI Painting Specification Manual standards for review and approval.*

.2 *Construct mock-ups in accordance with Section 01 45 00 - Quality Control.*

.3 *Mock-up will be used to judge quality of work, substrate preparation, operation of equipment and material application and skill to MPI Architectural Painting Specification Manual standards.*

.4 *Locate as directed by Owner's Representative.*

.5 *Allow two (2) working days for inspection of mock-up before proceeding with Work.*

.6 *When accepted, mock-up will demonstrate minimum standard of quality required for this work. Approved mock-up may remain as part of finished work.*

1.3 ENVIRONMENTAL PERFORMANCE REQUIREMENTS

.1 Provide paint products meeting MPI "Environmentally Friendly" E2 or E3 ratings based on VOC (EPA Method 24) content levels.

1.4 SCHEDULING OF WORK

.1 Submit work schedule for various stages of painting to Owner's Representative for approval. Submit schedule minimum of two (2) working days in advance of proposed operations.

.2 Obtain written authorization from Owner's Representative for changes in work schedule.

.3 Schedule painting operations to prevent disruption of occupants in and about the building.

1.5 SUBMITTALS

.1 Submit product data and manufacturer's installation/application instructions for paints and coating products to be used.

.2 Submit WHMIS - MSDS - Material Safety Data Sheets.

.3 Upon completion, submit records of products used, records to be included in Operation and Maintenance Manuals. List products in relation to finish system and include the following:

.1 *Product name, type and use.*

.2 *Manufacturer's product number.*

.3 *Colour numbers.*

.4 *Manufacturer's Material Safety Data Sheets (MSDS).*

.5 *MPI Environmentally Friendly classification system rating.*

.4 Submit manufacturer's application instructions for each product specified.

.5 Submit duplicate 200 x 300 mm sample panels of each paint, stain, clear coating, with specified paint or coating in colours, gloss/sheen and textures required to MPI Painting Specification Manual standards submitted on the following substrate materials:

.1 *3 mm plate steel for finishes over metal surfaces.*

.2 *13 mm birch plywood for finishes over wood surfaces.*

.3 *50 mm concrete block for finishes over concrete or concrete masonry surfaces.*

.4 *13 mm gypsum board for finishes over gypsum board and other smooth surfaces.*

.6 When approved, samples shall become acceptable standard of quality for appropriate on-site surface with one of each sample retained on-site.

.7 Submit full range of available colours where colour availability is restricted.

1.6 EXTRA MATERIALS

.1 Submit maintenance materials in accordance with Section 01 78 00 - Closeout Submittals.

.2 Submit 1 - 4 litre can of each type and colour of finish coating. Identify colour and paint type in relation to established colour schedule and finish formula.

.3 Deliver to Owner's Representative and store where directed.

1.7 DELIVERY, HANDLING AND STORAGE

.1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.

.2 Deliver and store materials in original containers, sealed, with labels intact.

.3 Labels shall clearly indicate:

.1 *Manufacturer's name and address.*

.2 *Type of paint or coating.*

.3 *Compliance with applicable standard.*

.4 *Colour number in accordance with established colour schedule.*

- .4 Remove damaged, opened and rejected materials from site.
- .5 Provide and maintain dry, temperature controlled, secure storage.
- .6 Observe manufacturer's recommendations for storage and handling.
- .7 Store materials and supplies away from heat generating devices.
- .8 Store materials and equipment in a well ventilated area with temperature range 7°C to 30°C.
- .9 Store temperature sensitive products above minimum temperature as recommended by manufacturer.
- .10 Keep areas used for storage, cleaning and preparation, clean and orderly to approval of Consultant. After completion of operations, return areas to clean condition to approval of Consultant.
- .11 Remove paint materials from storage only in quantities required for same day use.
- .12 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling storage, and disposal of hazardous materials.
- .13 Fire Safety Requirements:
 - .1 *Provide one 9 kg Type ABC dry chemical fire extinguisher adjacent to storage area.*
 - .2 *Store oily rags, waste products, empty containers and materials subject to spontaneous combustion in ULC approved, sealed containers and remove from site on a daily basis.*
 - .3 *Handle, store, use and dispose of flammable and combustible materials in accordance with the National Fire Code of Canada.*
- .14 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials.

1.8 SITE REQUIREMENTS

- .1 Heating, Ventilation and Lighting:
 - .1 *Ventilate enclosed spaces.*
 - .2 *Perform no painting work unless adequate and continuous ventilation and sufficient heating facilities are in place to maintain ambient air and substrate temperatures above 10°C for 24 hours before, during and after paint application until paint has cured sufficiently.*
 - .3 *Where required, provide continuous ventilation for seven days after completion of application of paint.*
 - .4 *Provide temporary ventilating and heating equipment where permanent facilities are not available.*

- .5 Perform no painting work unless a minimum lighting level of 323 Lux is provided on surfaces to be painted. Adequate lighting facilities shall be provided by General Contractor.*
- .2 Temperature, Humidity and Substrate Moisture Content Levels:*
- .1 Unless specifically pre-approved by Owner's Representative and, applied product manufacturer, perform no painting work when:*
- .1 ambient air and substrate temperatures are below 10°C.*
- .2 substrate temperature is over 32°C unless paint is specifically formulated for application at high temperatures.*
- .3 substrate and ambient air temperatures are expected to fall outside MPI or paint manufacturer's prescribed limits.*
- .4 the relative humidity is above 85% or when dew point is less than 3°C variance between air/surface temperature.*
- .5 rain or snow are forecast to occur before paint has thoroughly cured or when it is foggy, misty, raining or snowing at site.*
- .2 Perform no painting work when maximum moisture content of substrate exceeds:*
- .1 12% for concrete and masonry (clay and concrete brick/block).*
- .2 15% for wood.*
- .3 12% for plaster and gypsum board.*
- .3 Conduct moisture tests using a properly calibrated electronic Moisture Meter, except test concrete floors for moisture using a simple "cover patch test".*
- .4 Test concrete, masonry and plaster surfaces for alkalinity as required.*
- .3 Surface and Environmental Conditions:*
- .1 Apply paint finish only in areas where dust is no longer being generated by related construction operations or when wind or ventilation conditions are such that airborne particles will not affect quality of finished surface.*
- .2 Apply paint only to adequately prepared surfaces and to surfaces within moisture limits noted herein.*
- .3 Apply paint only when previous coat of paint is dry or adequately cured.*
- .4 Apply paint finishes only when conditions forecast for entire period of application fall within manufacturer's recommendations.*

.5 Do not apply paint when:

- .1 Temperature is expected to drop below 10°C before paint has thoroughly cured.
- .2 Substrate and ambient air temperatures are expected to fall outside MPI or paint manufacturer's limits.
- .3 Surface to be painted is wet, damp or frosted.
- .6 *Provide and maintain cover when paint must be applied in damp or cold weather. Heat substrates and surrounding air to comply with temperature and humidity conditions specified by manufacturer. Protect until paint is dry or until weather conditions are suitable.*
- .7 *Schedule painting operations such that surfaces exposed to direct, intense sunlight are scheduled for completion during early morning.*
- .8 *Remove paint from areas which have been exposed to freezing, excess humidity, rain, snow or condensation. Prepare surface again and repaint.*
- .9 *Paint occupied facilities in accordance with approved schedule only. Schedule operations to approval of the Owner's Representative such that painted surfaces will have dried and cured sufficiently before occupants are affected.*

1.9 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .3 Place materials defined as hazardous or toxic in designated containers.
- .4 Ensure emptied containers are sealed and stored safely.
- .5 Unused paint, coating materials must be disposed of at official hazardous material collections site as approved by Owner's Representative.
- .6 Paint, stain and wood preservative finishes and related materials (thinners, and solvents) are regarded as hazardous products and are subject to regulations for disposal.
- .7 Material which cannot be reused must be treated as hazardous waste and disposed of in an appropriate manner.
- .8 Place materials defined as hazardous or toxic waste, including used sealant and adhesive tubes and containers, in containers or areas designated for hazardous waste.
- .9 To reduce the amount of contaminants entering waterways, sanitary/storm drain systems or into ground follow these procedures:

- .1 *Retain cleaning water for water-based materials to allow sediments to be filtered out.*
 - .2 *Retain cleaners, thinners, solvents and excess paint and place in designated containers and ensure proper disposal.*
 - .3 *Return solvent and oil soaked rags used during painting operations for contaminant recovery, proper disposal, or appropriate cleaning and laundering.*
 - .4 *Dispose of contaminants in approved legal manner in accordance with hazardous waste regulations.*
- .10 Empty paint cans are to be dry prior to disposal or recycling (where available).

Tender Document for Repair & Painting Works RWA-GVOWA

1.10 MATERIALS

- .1 Paint materials listed in the latest edition of the MPI Approved Products List (APL) are acceptable for use on this project.
- .2 Paint materials for each coating formula to be products of a single manufacturer.
- .3 Low odour products: whenever possible, select products exhibiting low odour characteristics. If two products are otherwise equivalent, select the product with the lowest odour. Only qualified products with E2 or E3 "Environmentally Friendly" rating are acceptable for use on this project.
- .4 Paints, coatings, adhesives, solvents, cleaners, lubricants, and other fluids, shall:
 - .1 *be water-based, water soluble, water clean-up.*
 - .2 *be non-flammable*
 - .3 *be manufactured without compounds which contribute to ozone depletion in the upper atmosphere.*
 - .4 *be manufactured without compounds which contribute to smog in the lower atmosphere.*
 - .5 *do not contain methylene chloride, chlorinated hydrocarbons, toxic metal pigments.*
- .5 Water-borne surface coatings must be manufactured and transported in a manner that steps of processes, including disposal of waste products arising therefrom, will meet requirements of applicable governmental acts, by-laws and regulations including, for facilities located in Canada, Fisheries Act and Canadian Environmental Protection Act (CEPA).
- .6 Water-borne surface coatings must not be formulated or manufactured with aromatic solvents, formaldehyde, halogenated solvents, mercury, lead, cadmium, hexavalent chromium or their compounds.
- .7 Water-borne surface coatings must have a flash point of 61.0°C or greater.
- .8 Both water-borne surface coatings and recycled water-borne surface coatings must be made by a process that does not release:
 - .1 *Matter in undiluted production plant effluent generating a 'Biochemical Oxygen Demand' (BOD) in excess of 15 mg/L to a natural watercourse or a sewage treatment facility lacking secondary treatment.*
 - .2 *Total Suspended Solids (TSS) in undiluted production plant effluent in excess of 15 mg/L to a natural watercourse or a sewage treatment facility lacking secondary treatment.*
- .9 Water-borne paints and stains, and water borne varnishes must meet a minimum "Environmentally Friendly" E2 rating.

1.11 COLOURS

- .1 Owner's Representative will provide Colour Schedule after Contract award.
- .2 Selection of colours will be from manufacturer's full range of colours.
- .3 Where specific products are available in a restricted range of colours, selection will be based on the limited range.
- .4 Second coat in a three coat system to be tinted slightly lighter colour than top coat to show visible difference between coats.
- .5 For deep and ultra-deep colours 4 coats may be required.

1.12 MIXING AND TINTING

- .1 Perform colour tinting operations prior to delivery of paint to site. On-site tinting of painting materials is allowed only with Owner's Representative written permission.
- .2 Paste, powder or catalyzed paint mixes shall be mixed in strict accordance with manufacturer's written instructions.
- .3 Where thinner is used, addition shall not exceed paint manufacturer's recommendations. Do not use kerosene or any such organic solvents to thin water-based paints.
- .4 Thin paint for spraying according in strict accordance with paint manufacturer's instructions. If directions are not on container, obtain instructions in writing from manufacturer and provide copy of instructions to Owner's Representative.
- .5 Re-mix paint in containers prior to and during application to ensure break-up of lumps, complete dispersion of settled pigment, and colour and gloss uniformity.

1.13 GLOSS/SHEEN RATINGS

- .1 Paint gloss shall be defined as the sheen rating of applied paint, in accordance with the following values:

| Gloss Level /Category | Units @ 60°/ | Units @ 85° |
|------------------------|--------------|-------------|
| G1 - matte finish | 0 to 5 | max. 10 |
| G2 - velvet finish | 0 to 10 | 10 to 35 |
| G3 - eggshell finish | 10 to 25 | 10 to 35 |
| G4 - satin finish | 20 to 35 | min. 35 |
| G5 - semi-gloss finish | 35 to 70 | |
| G6 – gloss finish | 70 to 85 | |

Gloss Level /Category

Units @ 60°/

Units @ 85°

G7 - high gloss finish

> 85

- .2 Gloss level ratings of painted surfaces shall be as specified herein.

1.14 EXTERIOR PAINTING SYSTEMS

- .1 The following paint formulas requires a three coat finish as indicated in the MPI Architectural Painting Specifications Manual.
- .2 Asphalt Surfaces: zone/traffic marking for drive and parking areas, etc.
- .1 *EXT 2.1B Alkyd zone/traffic marking finish.*
- .3 Concrete Vertical Surfaces: (including horizontal soffits)
- .1 *EXT 3.1A – Latex G4 finish*
- .4 Concrete Horizontal Surfaces: decks
- .1 *EXT 3.2D - Alkyd floor enamel G4 finish.*
- .5 Clay Masonry Units: (pressed and extruded brick)
- .1 *EXT 4.1A - Latex G4 finish.*
- .6 Concrete Masonry Units: smooth and split face block and brick
- .1 *EXT 4.2A - Latex G4 finish.*
- .7 Structural Steel and Metal Fabrications:
- .1 *EXT 5.1J - Pigmented polyurethane finish (over high build epoxy).*
- .8 Galvanized Metal: not chromate passivated
- .1 *EXT 5.3D - Pigmented polyurethane finish for use in high contact/high traffic areas.*
- .9 Dimension Lumber: columns, beams, exposed joists, underside of decking, siding, fencing, etc.
- .1 *EXT 6.2L - Semi-transparent stain finish.*
- .2 *EXT 6.2M - Latex G4 finish (over latex primer).*
- .10 Dressed Lumber: doors, door and window frames, casings, battens, smooth facias, etc.
- .1 *EXT 6.3L - Latex G4 finish (over latex primer)*
- .11 Wood Panelling: plywood siding, fascias, soffits, etc.
- .1 *EXT 6.4K - Latex G4 finish (over latex primer).*

.12 Wood Decks and Stairs/Steps: using spaced lumber

.1 *EXT 6.5A - Latex porch and floor G4 finish (over primer).*

.2 *EXT 6.5F - Deck stain finish.*

Tender Document for Repair & Painting Works RWA-GVOWA

1.15 GENERAL

- .1 Perform preparation and operations for exterior painting in accordance with MPI Painting Specifications Manual except where specified otherwise.
- .2 Apply all paint materials in accordance with paint manufacturer's written application instructions.

1.16 EXISTING CONDITIONS

- .1 Investigate existing substrates for problems related to proper and complete preparation of surfaces to be painted. Report to Owner's Representative damages, defects, unsatisfactory or unfavourable conditions before proceeding with work.
- .2 Conduct moisture testing of surfaces to be painted using a properly calibrated electronic moisture meter, except test concrete floors for moisture using a simple "cover patch test" and report findings to Owner's Representative. Do not proceed with work until conditions fall within acceptable range as recommended by manufacturer.
- .3 Maximum moisture content as follows:
 - .1 Concrete: 12%.
 - .2 Clay and Concrete Block/Brick: 12%.
 - .3 Wood: 15%.

1.17 PROTECTION

- .1 Protect existing building surfaces and adjacent structures from paint spatters, markings and other damage by suitable non-staining covers or masking. If damaged, clean and restore such surfaces as directed by Owner's Representative.
- .2 Cover or mask windows and other ornamental hardware adjacent to areas being painted to prevent damage and to protect from paint drops and splatters. Use non-staining coverings.
- .3 Protect items that are permanently attached such as Fire Labels on doors and frames.
- .4 Protect factory finished products and equipment.
- .5 Protect passing pedestrians, building occupants and general public in and about the building.
- .6 Remove electrical cover plates, light fixtures, surface hardware on doors, and all other surface mounted fittings, equipment and fastenings prior to undertaking any painting operations. Store for re-installation after painting is completed.
- .7 Cover or move exterior furniture and portable equipment around building as necessary to carry out painting operations. Replace as painting operations progress.

- .8 As painting operations progress, place "WET PAINT" signs in areas of work to approval of Owner's Representative.

1.18 CLEANING AND PREPARATION

- .1 Clean and prepare exterior surfaces in accordance with MPI Painting Specification Manual requirements. Refer to the MPI Manual in regard to specific requirements and as follows:
- .1 *Remove dust, dirt, and other surface debris by wiping with dry, clean cloths or compressed air.*
 - .2 *Wash surfaces with a biodegradable detergent and bleach where applicable and clean warm water using a stiff bristle brush to remove dirt, oil and other surface contaminants.*
 - .3 *Rinse scrubbed surfaces with clean water until foreign matter is flushed from surface.*
 - .4 *Allow surfaces to drain completely and allow to dry thoroughly.*
 - .5 *Prepare surfaces for water-based painting, water-based cleaners should be used in place of organic solvents.*
 - .6 *Use trigger operated spray nozzles for water hoses.*
 - .7 *Many water-based paints cannot be removed with water once dried. However, minimize the use of kerosene or any such organic solvents to clean up water-based paints.*
- .2 Prevent contamination of cleaned surfaces before prime coat is applied and between applications of remaining coats. Apply primer, paint, or pretreatment as soon as possible after cleaning and before deterioration occurs.
- .3 Where possible, prime surfaces of new wood surfaces before installation. Use same primers as specified for exposed surfaces.
- .1 *Apply vinyl sealer to MPI #36 over knots, pitch, sap and resinous areas.*
 - .2 *Apply wood filler to nail holes and cracks.*
 - .3 *Tint filler to match stains for stained woodwork.*
- .4 Sand and dust between coats as required to provide adequate adhesion for next coat and to remove defects visible from a distance up to 1000 mm.
- .5 Clean metal surfaces to be painted by removing rust, loose mill scale, welding slag, dirt, oil, grease and other foreign substances in accordance with MPI requirements. Remove traces of blast products from surfaces, pockets and corners to be painted by brushing with clean brushes or blowing with clean dry compressed air.
- .6 Touch up of shop primers with primer as specified in applicable section. Major touch-up including cleaning and painting of field connections, welds, rivets, nuts, washers, bolts, and damaged or defective paint and rusted areas, shall be by supplier of fabricated material.

.7 Do not apply paint until prepared surfaces have been accepted by Owner's Representative.

Tender Document for Repair & Painting Works RWA-GVOWA

1.19 APPLICATION

- .1 Method of application to be as approved by Owner's Representative. Apply paint by brush roller, air sprayer, airless sprayer. Conform to manufacturer's application instructions unless specified otherwise.
- .2 Brush and Roller Application:
 - .1 *Apply paint in a uniform layer using brush and/or roller of types suitable for application.*
 - .2 *Work paint into cracks, crevices and corners.*
 - .3 *Paint surfaces and corners not accessible to brush using spray, daubers and/or sheepskins. Paint surfaces and corners not accessible to roller using brush, daubers or sheepskins.*
 - .4 *Brush and/or roll out runs and sags, and over-lap marks. Rolled surfaces shall be free of roller tracking and heavy stipple.*
 - .5 *Remove runs, sags and brush marks from finished work and repaint.*
- .3 Spray Application:
 - .1 *Provide and maintain equipment that is suitable for intended purpose, capable of properly atomizing paint to be applied, and equipped with suitable pressure regulators and gauges.*
 - .2 *Keep paint ingredients properly mixed in containers during paint application either by continuous mechanical agitation or by intermittent agitation as frequently as necessary.*
 - .3 *Apply paint in a uniform layer, with overlapping at edges of spray pattern.*
 - .4 *Brush out immediately runs and sags.*
 - .5 *Use brushes to work paint into cracks, crevices and places which are not adequately painted by spray.*
 - .6 *Wood, stucco, concrete, cement masonry units CMU's and brick; if sprayed, must be back rolled.*
- .4 Use dipping, sheepskins or daubers only when no other method is practical in places of difficult access and only when specifically authorized by Owner's Representative.
- .5 Apply coats of paint as a continuous film of uniform thickness. Repaint thin spots or bare areas before next coat of paint is applied.
- .6 Allow surfaces to dry and properly cure after cleaning and between subsequent coats for minimum time period as recommended by manufacturer.
- .7 Sand and dust between coats to remove visible defects.

- .8 Finish surfaces both above and below sight lines as specified for surrounding surfaces, including such surfaces as projecting ledges.
- .9 Finish top, bottom, edges and cutouts of doors after fitting as specified for door surfaces.

1.20 MECHANICAL/ELECTRICAL EQUIPMENT

- .1 Unless otherwise specified, paint exterior exposed conduits, piping, hangers, ductwork and other mechanical and electrical equipment with colour and finish to match adjacent surfaces, except as noted otherwise.
- .2 Touch up scratches and marks on factory painted finishes and equipment with paint as supplied by manufacturer of equipment.
- .3 Paint fire protection piping red.
- .4 Do not paint over nameplates.
- .5 Paint steel electrical light standards. Do not paint outdoor transformers and substation equipment.

1.21 FIELD QUALITY CONTROL

- .1 Field inspection of exterior painting operations to be carried out by Owner's Representative.
- .2 Advise Owner's Representative when each applied coating is ready for inspection. Do not proceed with subsequent coats until previous coat has been approved.
- .3 Co-operate with Owner's Representative and provide access to areas of work.
- .4 Where "special" painting, coating or decorating system applications (i.e. elastomeric coatings) or non-MPI listed products or systems are to be used, paint or coating manufacturer to provide as part of this work, certification of surfaces and conditions for specific paint or coating system application as well as on site supervision, inspection and approval of their paint or coating system application as required at no additional cost.

1.22 RESTORATION

- .1 Clean and re-install all hardware items removed before undertaken painting operations.
- .2 Remove protective coverings and warning signs as soon as practical after operations cease.
- .3 Remove paint splashings on exposed surfaces that were not painted. Remove smears and spatter immediately as operations progress, using compatible solvent.
- .4 Protect surfaces from paint droppings and dust to approval of Owner's Representative. Avoid scuffing newly applied paint.
- .5 Restore areas used for storage, cleaning, mixing and handling of paint to clean condition as approved by Owner's Representative.

SAFETY GUIDELINES AND COMPLAINCES

Tender Document for Repair & Painting Works PWA-GVOWA

Personal Protective Equipment

Application- This rule applies to personal protective equipment and other protective equipment for the eyes, face, head, extremities and torso to include protective clothing, respiratory devices, and protective shields and barriers for also the residents and their respective captive areas, wherever vendors encounter hazardous processes or environments, that are capable of causing injury or impairment in the function of any part of the body.

I. Introduction

Work environments include a variety of jobs, tasks, and activities that present a variety of hazards. Different regulators Environmental Protection Agency (EPA)) require the assessment of hazards in the workplace. This assessment may include physical, chemical, and electrical hazards. Once hazards are identified they must be controlled or minimized in order to ensure the safety of the worker. This is accomplished by: 1) Engineering controls; 2) Substitution; 3) Administration controls; and 4) Personal protective equipment. This plan outlines how to conduct a basic hazard assessment and develop a standard operating procedures from the hazard assessment.

II. Purpose

The purpose of this plan is to identify hazards and corresponding control methods in order to minimize the risk of accident or injury along with compliance with health and safety regulations. Once identified, these control methods can be incorporated into a written standard operating procedure for a given task.

III. Definitions

Administrative controls (or work practice controls): Written safety policies, rules, supervision, schedules, and training used with the goal of reducing the duration, frequency, and severity of injury or illness.

Engineering controls: Elimination or reduction in exposure to a physical hazard through the use or substitution of engineered machinery or equipment. Examples include working at heights without safety harness, helmet, neon vests safety shoes, eye protection glass covers and if required ears covers.

Hazard Assessment: Documented process of identifying the hazards associated with a work environment, project, or tasks prescribing relevant control measures and personal protective equipment to reduce the risk of injury to both the workers and the inhabitants of the society.

Personal Protective Equipment: Devices worn by the worker to protect against hazards in the environment. Personal protective equipment is designed to protect many parts of the body (i.e., eyes, head, face, hands, feet, and ears). Includes specialized clothing or equipment worn by employees for protection against Responsibilities of the vendor with respect to safety

1. Provide support and training as needed to assist personnel in developing hazard assessments and appropriate standard operating procedures.

2. Provide staff the time to prepare and review standard operating procedure plans.
3. Provide support and training as needed to assist personnel conducting hazard assessments and developing appropriate standard operating procedures.
4. Attend safety and health training classes related to the nature of the hazards identified by the hazard assessment.
5. Follow the relevant standard operating procedures for their work utilizing identified control measures (personal protective equipment- PPE).
6. Maintain assigned personal protective equipment by proper cleaning, storage, and replacement as instructed.
7. Install a green fabric cover on the scaffolding (Hessian or equivalent) to prevent rubble falling free on the floors below or to negate the area of any resident being filled with debris and rubble.
8. Use of personal protection equipment for each worker is a must, any worker found working with the above pre requisites is liable to be rested and grounded without any work.

Tender Document for Repair & Painting Works PWA/GVOWA

TENDER DOCUMENTS

FOR

EXTERNAL PAINTING AND REPAIRING WORK OF

VARIOUS BUILDINGS /BLOCKS AT

GAUR VALERIO, AHIMSA KHAND-2

INDIRAPURAM

GHAZIABAD

Tender Document for Repair & Painting Works RWA-GVOWA

NOTICE INVITING TENDER

| | |
|---|--|
| Name of the work | External Painting and repairing work of various buildings at "Gaur Valerio Owners Welfare Association" |
| Estimated Value | 35.00 lakhs |
| Earnest Money | 1 Lakh in the form of DD in favour of "GAUR VALERIO OWNERS WELFARE ASSOCIATION" Payable at par in India. |
| Date of Issue of Tenders | : 20/10/2019 till 4.00 P.M. |
| Last Date and Time of Submission of P.M.Tender | : 26/10/2019 till 6.00 PM |
| Date & Time for opening of Technical bid (Part-A) | : 03/11/2019 at 11.30 pm |
| Date & Time for Opening of Price bid (Part-B). | : 03/11/2019 at 2.00 PM |
| Address for submission of tender | Gaur Valerio, Ahimsa Khand-II, Indirapuram |
| Place of Opening of the Tender | Gaur Valerio, Ahimsa Khand-II, Indirapuram |
| Tender fee | Rs. 1000.00 in DD- in favour of Gaur Valerio Owners Welfare Association. |

Defect Liability Period

1 year from the date of actual completion.

Tender Document for Repair & Painting Works RWA-GVOWA

(1) SCOPE OF WORK

- a. Scope of work consists of External Painting and repairing work of A,B,C,
And Basement, Stair and corridor railing's, all areas defined as
"common areas" * for the interpretation of common areas
Model bye laws 2010 of GDA defines the battery limit.
- b. Repair of RCC beams, Shades, Chajja, water traps inside and outside each flat etc, duly finished with putty and paint of approved **make and shade**.
- c. Enamel Painting of all metallic surfaces and also 3 feet of the corridor.

(2) ELIGIBILITY CRITERIA

- 1, Bidders must be registered / empanelled as appropriate class of contractors. Bidders have to submit the up to date certified copy of the Registration Certificate along with his Tender. The original will have to be produced when demanded for verification.
- 2, Copies of work orders for similar nature of work of at least one contract of value Rs. 40 lakh, or two contracts of similar nature of work of Rs. 50.00 lakh or three contacts of similar natures of works of Rs. 60.00 lakh in last 3 years. Contractors should have executed similar nature of work in prestigious institutional buildings, Universities, hospitals. and produce credentials in support thereof, Certificates of satisfactory completion of works must be provided.
3. Experience of having successfully completed works during the last 3 years ending last day of the month previous to the one in which applications are invited.
4. Average annual financial turn over on said work should be at least 150% of the estimated cost during the immediate last 3 consecutive financial year. Copies of balance sheets for the last three years are to be enclosed, duly attested by the vendor and his chartered accountant.
5. The Bidders must have G.S.T / ITCC & PAN No. and all statutory registrations.

(3) GENERAL TERMS & CONDITIONS

1. **Earnest Money:** An earnest money of **Rs 1,00,000.00**..has to be enclosed along with the Technical bid (Part-A). The EMD shall be only in the form of Bank Draft in favour of "Gaur Valerio Owners Welfare Association". No Cheques /Cash shall be accepted as EMD. The refund of EMD to the technically disqualified shall be made within 10 days from the date of opening of price bid. The EMD of the successful lowest bidder shall be held back and will be released only after completion of the works, site clearance and against deposition of all documents including the comprehensive guarantee cover of 5 years.
2. **Validity of Tender:** Tender shall be valid for our acceptance without any change in rates and NIT

conditions for a period of 90 days from the date of opening of price bid.

3. **Escalation:** No escalation over and above items rates quoted by the bidder shall be paid during the execution of contract.
4. **Completion time:** The time shall be the essence of this contract and entire work as titled above is to be completed in all respects within a period of nine (9) months from the date of issue of the work order. Any delay in completing the work for reasons attributable to the Contractor is liable for liquidated damages as per CPWD norms. Under the force-majeure conditions or delay due to reasons beyond control of the contractor, GVOWA may grant suitable time extension without penalty for which the contractor has to request along with the justification.
The bidder needs to submit reasons well in advance to GVOWA for approval without any prejudice to price escalation. No time extension request shall be considered after the expiry of completion period/contract. The decision of the Managing Committee regarding Time extension will be final and binding on the contractor.
5. The rates shall be inclusive of all taxes (Service Tax, GST etc.) duties and transportation etc. GVOWA welfare fund charges are leviable @ 0.25% of the amount bill claimed.
6. **Deviations:** No deviation from the stipulated terms and conditions will be allowed. Tender is independent of any deviations.
7. **Site Conditions:** Contractor shall acquaint himself fully with the site conditions and the working environment of GVOWA before quoting his rates. No Compensation on account of any site difficulties will be entertained, at a later date, after award of the work.
8. **Correspondence:** All the correspondence in respect of tender/award of work shall be made to The President "Gaur Valerio Owners Welfare association".
9. **Terms of Payment :** The payment shall be made on submission of the bills in proper format by the contractor after due certification by the engineer responsible for supervision of the work. Contractor can submit six interim or running bills and one final bill after completion of work for claiming payment based on actual quantities of items of work executed as per BOQ and Engineer's instructions 5% deductions will be made towards the security deposit from each running bill. The security deposit shall only be refunded after expiry of the defect liability period.

Payment terms :-

Part-1 (Repair Works)

40% on satisfactory completion of repair work of Block-B/C

40% on satisfactory completion of repair work of Block-B/C

20% on satisfactory completion of repair work of Block-A

Part-2 (Painting Works)

70 % against delivery of material at site.

20% against progress at site, on pro rata basis as per progress at site.

10% against handing over of areas as per schedules mutually accepted.

The bills submitted, shall be complete in all respects including manufacturing details, batch details, MTC's and conformity to specifications.

Third party validation of the materials received shall be done by GVOWA at its own cost. The bills submitted shall be processed within 20 days, subject to all supporting papers / documents submitted

Tender Document for Repair & Painting Works RWA-GVOWA

10. Security Deposit

A security deposit equal to 05 % of the value of work will be deducted from Contractor's bills and shall be refunded after the completion of defect liability period of one year after ensuring successful performance of the works executed by the contractor.

11. Contractor should depute a qualified supervisor dedicated for this work, who will monitor and coordinate work from contractor's side and interact with the GVOWA Engineers, responsible for supervision of work, on regular basis.
12. Contractor will take due permission for entry of all his workmen in GVOWA. No unauthorized person will be allowed to work inside. CAR policy and muster roll at site as per the physical attendance for EPF/ESI shall be the responsibility of the bidder.
13. The contractor will arrange all necessary materials, tools, equipment, access ladders & scaffolding, measuring instruments and working consumables etc. needed for execution of the works. Safe custody of all such material will be contractor's sole responsibility. No extra charges will be paid for the same. Watch and ward of all material till the system is taken over by GVOWA shall be the sole responsibility of the contractor and pilferage etc. shall be entirely to his account. **Use of jhoola is strictly prohibited and you can work only on scaffoldings, mechanical hoists, truck mounted hoists and/or anchor reinforced monorail.** The safety of the workmen and their safety shall be the responsibility of the bidder.
14. During execution of work, Engineer can make minor changes in the scope of work as per site conditions or other reasons. Contractor will have no extra claim in his rates for the same.
15. If during the execution of works, any damage is caused to GVOWA property by contractor's workers, contractor will duly make good the loss. GVOWA has the right to make suitable deduction from contractor's bills along with penalty, if contractor fails to make good the loss.
16. During execution of work, the contractor should follow all standard norms of safety measures/precautions as per relevant IS codes and CPWD specifications to avoid accidents / damages to man, machines and buildings, at his own cost. Contractor will have his own arrangement to escort the labour to the nearest hospital for treatment in case any injury happens to any worker during execution of work.
17. Manpower deployed by the contractor at our site for carrying out contract works is strictly prohibited being associated with any other works within the campus.
18. No material belonging to the contractor whether consumable or non-consumable should be brought inside the GVOWA campus without proper entry at the Main Gate nor any material should be taken out without proper gate pass issued by the authorized representatives of GVOWA.
19. During execution of the work, contractor should dispose off waste material on regular basis and should keep the area of work properly cordoned off and neat and clean as far as possible. After completion of work, contractor should clear the site completely of all unwanted and junk

material before submitting his final bill.

20. GVOWA will provide electricity if needed, the electrical meter will be provided by the contractor and necessary deduction will be made as per the actual consumption of electricity during execution of work. The contractor shall be provided water connection free of cost.
21. Tender once submitted will remain with the GVOWA and will not be returned to the bidders.
22. **Termination of Contract:-** GVOWA reserves the right to terminate the contract on account of poor workmanship, failure to mobilize site within 15 days, non-compliance of specifications for the works, abnormal delay in progress of work, violation of any contract provisions by the contractor. In such case, contractor's EMD and security deposit deducted so far will be forfeited.

The contract can also be terminated on the request of contractor. In such cases the contractor is liable to pay Liquidated damages @ 5% of tendered value besides forfeiture of EMD & security deposit recovered so far.

23. Any dispute arising out of this contract will be subjected to jurisdiction of Ghaziabad.
24. Tenders not complying with any of the provisions stated in this tender document are liable to be rejected. GVOWA also reserves the right to accept or reject any or all the tenders without assigning any reason and does not bind themselves to accept the lowest tender or split the work in two or three parts.
25. That in the event of any difference or dispute arising between the parties to this Agreement for any reasons whatsoever relating to the contract, whether during the substance of this Agreement or their after, it has specifically been agreed that the party will endeavor to amicably resolve the difference, but in case if dispute or differences still remain unresolved, the same shall be referred to the sole Arbitrator appointed by the President GVOWA and the Arbitrator decision shall be final and binding upon the parties concerned.
26. Demonstrational views in 3D MAX views and walk throughs shall be the responsibility of the bidder.

(4) **SUBMISSION OF BIDS**

1. Submission of Tender: Tenders should be submitted in two Parts i.e. "Technical bid" (Part-A) and "Price bid" (Part-B) in two separate sealed envelopes. Both the parts should be further put in a single sealed envelope super-scribing name of work, due date for opening, bidder's name & address. The tender duly filled in may be sent to above mentioned address either by post or hand delivered in the tender box kept in the maintenance office-GVOWA, after ensuring that due entries are made in the tender register kept at the counter. It should not be handed over to any employee of the GVOWA. No tender shall be accepted later than the time schedule specified above.

Any clarifications/amendments/corrigenda etc., to NIT before last date of submission of bid will only be available in our maintenance office.

a. **Technical Bid (Part-A)** : In this bid, the bidder shall submit the following:

- a. Covering letter on Company's Letter head
- b. Bio data of company (Company profile, organizational setup, credentials, list of plant, machinery & tools in his possession).
- c. Earnest Money Deposit.
- d. Copies of GST no., PAN no. etc.
- e. Bankers certificate for credit worthiness.
- f. Company's financial performance documents (Audited balance sheet, and profit and loss statement)
- g. Copies of work orders for similar nature of work of at least one contract of value Rs. 40 lakh, or two contracts of similar nature of work of Rs. 50.00 lakh or three contracts of similar nature of works of Rs. 60.00 lakh in last 3 years. Contractors should have executed similar nature of work in prestigious institutional buildings, Universities, hospitals. and produce credentials in support thereof, Certificates of satisfactory completion of works must also be provided. Paint manufacturers of approved brand as given in the schedule of Quantities with their approved applicator.
- h. All above documents duly signed & stamped by the bidder.

(Note- 1. Completion certificate submitted should be by an authorized representative of that organization.

All documents submitted by the bidder should be self-attested along with stamp and should be valid up to the last date of validity of tender.

b) **Price Bid (Part-B)** : In this bid, the bidder is required to quote his item rates in the BOQ

Attached in accordance with the scope of work, terms & conditions & technical specifications enclosed. The rates/price quoted by contractor should be all inclusive i.e. should include all material cost, labour, services, plant/machinery/tools & tackles, ladders & scaffolding required for work, freight, Insurance, Octroi, Govt. duties & levies, taxes

(GST, Service Tax, Sales Tax etc.), transport/cartage of materials/labour and all other expenses not specifically mentioned but reasonably implied. Nothing over and above these rates shall be payable to contractor. Further nothing extra in rates will be considered for any variations in

tender quantities or due to any site difficulties. It is mandatory for bidder to quote all items rate as asked for in the BOQ/ PRICE schedule. Failure in not filling some item rates will lead to rejection of tender. The bidders should quote unconditional rates, neatly written without any overwriting and all pages should be duly signed & stamped.

Tender Document for Repair & Painting Works RWA-GVOWA

(5) SPECIAL TERMS AND CONDITIONS

1. Makes of various paints to be used by contractor will be according to the list of approved makes given. No other makes will be used by the contractor.
2. Contractor will first submit the shade cards of relevant make of paint to RWA-GVOWA for approval of colour before procuring the paint in bulk.
3. No mixing will be allowed with stainer to achieve a particular colour. Contractor will procure direct colour paint of approved shade and apply directly.
4. Contractor will thoroughly clean all paint marks left here and there due to spilling and splashes of paint at no extra cost.
5. Contractor's job will also include removing of all malba and debris arising in the process of painting including washing of floor to remove stains of paint, at no extra cost.
6. Contractor will arrange proper ladders, scaffolding and monorails / hoists (for painting at higher levels) at his own cost and will take all safety measures like safety belts, extra labour to hold ladders etc. If it is observed that work is proceeding without adequate safety precautions, work may be stopped by GVOWA and in such cases, contractor will be solely responsible for delay and its consequences thereof.
8. Contractor shall provide manufacturer's certificate for the material supplied at site and contractor shall bring 75% of theoretical quantity of required painting material before start of work, as per the schedule of shipments agreed upon between the bidder and GVOWA.

(6) TECHNICAL SPECIFICATIONS

1. Thorough repairs (like repairing broken edges of walls, filling depressions etc.) with POP/wall care putty) will be carried out by contractor before starting painting work, broken balcony civilities, undulations wherever is the responsibility of the bidder.
2. Detailed technical specification for painting work with respect to materials & workmanship and mode of measurements will be as per IS codes and CPWD specifications, unless mentioned otherwise.
3. Thinner if required, may be added (not more than 10 %) in enamel paint with the prior permission of Engineer.
4. There should be proper time gaps (at least 8 hours) between two coats of paint to ensure drying of first coat of paint.
5. The approved quality, make & shade of paint shall be maintained by the Contractor throughout the work. The covering capacity ratio with respect to quantity of paint should be strictly adhered to by the Contractor as per specification. For any lapse / deficiency in this regard, a suitable deduction shall be made from the contractor's bill.
6. All painting material to be used should be of Premium/first quality.

(7) CHECK LIST

TO BE SUBMITTED ALONG WITH BID

The tenderers are requested to ensure the submission of the essential documents to avoid disqualification of the bid. However, the check list is not exhaustive and the tenderer are requested to go through to NIT & related documents carefully and completely for fulfillments of tenderers requirement.

| S. No. | Enclosures | Submitted |
|--------|--|-----------|
| 1. | Cost of tender document | |
| 2. | EMD | |
| 3. | Similar works order with completion certificates | |
| 4. | Annual turnover certificate for the last three years with certification from practicing chartered accountant | |
| 5. | Copy of registration letter (all statutory registrations) | |
| 6. | Signature with stamp in all pages of tender documents. | |
| 7. | Bank account detail | |
| 8. | E-mail address | |
| 9. | Address for communication | |
| 10. | Phone no, Mobile no, Landline no. | |

Signature of the Tenderers

(8) **LIST OF APPROVED MAKES**

(Premium/1st quality paints to be used of the following makes)

| | | |
|-----|------------------------------|---|
| 1. | Portland Cement | L&T, Ultra Tech, ACC, or other brands approved by GVOWA |
| 2. | Steel Reinforcement Bars | TISCO, SAIL, RINL, Rathi udyog Ltd. |
| 3. | Structural Steel Sections | TISCO, SAIL RINL, Supreme.... |
| 4. | Stone Aggregate (Blue/Black) | Sohna, Pali or other Approved |
| 5. | Water proof Shuttering | Century, Green, Duro/Haryana Plywood |
| 6. | Paints | ICI, Asian, Berger, Nerolac, Shalimar, Dulux or equivalent |
| 7. | Exterior Paint | Apex (Asian), weather shield (ICI DULUX) Shalimar or equivalent |
| 8. | White Cement | Birla, JK Cement |
| 9. | Waterproofing | Structural Water proofing Co. Dr. Fixit, Overseas Water Proofing, Tape Crete |
| 10. | Silicon Sealants | Dow Corning.GE |
| 11. | Glass and mirror | Saint Gobain/Guardian/Asahi |
| 12. | The Adhesives | Weber, Lafarge, Keisel, Balendura |
| 13. | Expansion joint covers | CS, Inpro |
| 14. | Glass | Saint Gobain, Guardian, Glaverbel, |
| 15. | Putty | Birla/ Sakarni |

Accepted

(Signature of bidder)

Note:- Entire NIT (except price bid) is to be attached with 'Technical bid (Part-A)' duly signed & stamped by the bidder

B .O.Q- Civil Repairs & Painting

EXTERIOR PAINTING AND REPAIRING OF A,B,C Blocks and all common areas like basement and terrace.

| S. No. | Description of Items | Qty. | Unit | Rates | Amount |
|--------|---|------|------|-------|--------|
| 1. | Removing of Exterior Water Proof Cement Paint, white wash ,color wash, exterior paint and RCC surface etc. by scrapping with sand papering, removing loose particles etc. and making surface smooth for the work including necessary Tools & Plant and scaffolding up to all heights. | | L/S | | |
| 2. | Repair of Balconies, Chhajjas,& columns (all RCC work) etc. with cement concrete of mix 1:11/2:3 (1 Cement: 1 1/2 coarse sand: 3 stone aggregate) and necessary plaster work with 1:3 (1 Cement: 3 coarse sand) etc including necessary epoxy painting on rusted reinforcement including dismantling of required areas if necessary etc. and finishing the same with cement plaster in its original shapes & size including necessary scaffolding centering & shuttering complete job up to all heights of the building (Exterior works & its disposal of dismantled material as per the direction of Engineer In-charge (Steel reinforcement if required will be paid extra)). | | L/S | | |
| 3. | Plaster in patchwork and repair of walls and ceiling etc. after cutting the old plaster in proper shape and repair with cement mortar 1:3 (1 cement: 3 coarse sand) complete. Making good surface including necessary T&P and a Scaffolding up to all required heights of the buildings (exterior work & its disposal of dismantled material as per the direction of Engineer In-charge within the society) | | L/S | | |
| 4. | Filling putty making surface using readymade powder base putty of approved brand, complete on walls surface interior & exterior including sand papering after filling the putty making the surface smooth for applying the finishing painting coat Including necessary Scaffolding up to all height. | | L/S | | |
| 5. | Painting with synthetic enamel paint of approved brand and make of Satin Enamel Paint/Gloss finish giving an even shade to all metallic railing in the staircase and corridors including using of colour stainer (only if required with prior approvals) of approved brand for making of required shades with brushes etc. complete including necessary Tools & Plants and scaffolding up to all height. | | Sqm | | |
| | a) Old work (minimum two or more than coats) | | | | |
| | b) New work (three or more than 3 coats) | | Sqm | | |

| | | | | | |
|----|---|--|-----|--|--|
| 6. | Finishing walls with Premium Acrylic smooth exterior paint with silicone additives, weather shield etc. of approved brand and manufacture. New work (two or more coat) over and including base coat of water based exterior primer of same brand applied including necessary tools & Plants and scaffolding/Jhoola up to all height | | Sqm | | |
| 7. | Repairing of all expansion joint with rockwool and silicone additives finished with aluminum flash | | Sqm | | |

SIGNATURE OF CONTRACTOR

WITH STAMP

Note: Tenderer has to signed and stamp each page of this tender document

Tender Document for Repair & Painting Works RWA-GVOWA

*****End of document*****

08 Oct, 2019

Tender Document for Repair & Painting Works RWA-GVOWA