



Organization for Coordination of Humanitarian Relief-OCHR

REQUEST FOR QUOTATION

Construction of five small Business center for Sustainable Livelihoods in four

District of lagman province

Ref#: CFSCSL /OCHR/05/2024

Issue Date: 04 Feb 2024

Close in date: 11 February 2024 03:00 pm

CONTACT DETAILS

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Table of Contents

CONTACT DETAILS	1
1. About OCHR:	4
2. Description:	4
3. Scope of Work:	4
.4 Location:	4
5. Project Duration and Penalty for Late Work:	4
6. Cost of Providing Offers:	5
7. Closing date:	5
8. Cancellation for convenience:	5
9. Offer Documents:	5
9.1. Clarification of Solicitation Documents:	5
10. Amendments of Request for Quotation:	5
11. Preparation of Offers:	5
11.1. Language of the Offer:	5
11.2. Offer Currencies/Offer Prices:	5
11.3. Period of Validity of Offers:	5
12. Opening and Evaluation Criteria:	5
12.1. Bid Security:	5
12.2. Cost-Effectiveness (75 points):	6
12.3. Relevant Experience (10 points):	6
12.4. Bank Statement (15 point):	6
12.5. Work plan and Project Manager: (05 point):	6
13. Preliminary Examination:	6
14. Evaluation of Offer:	6
15. Evaluation and Basis for Award:	7
16. Negotiations:	7
17. Certifications and Compliance:	7
18. Pertinent Information:	7
.19 Offer Documents:	8
20. Performance Security:	8
21. Payment Terms:	9
22. Offer Submission Guidelines: (Open Bidding not held):	9
23. Returnable Bid Forms:	10

17.	Bidder information:	11
24.	Purpose of this “tendering document:	12
25.	Description of the activities:	12
26.	Work follow-up:	12
27.	Responsibility of the contractor:	12
28.	Safety:	13
29.	Pre-amble to the specification:	14
30.	Minimum standards for workmanship and materials Materials & technical specification:	14
30.1.	Quality of Materials	14
30.2.	Quality of Workmanship	14
30.3.	Sand	14
30.4.	Aggregate:	14
30.5.	Cement:	14
30.6.	Water	15
30.7.	Clay:	15
30.8.	Brick masonry in in Mortar:	15
30.9.	Stone Masonry:	15
30.10.	Mortar:	15
30.11.	Plaster and Pointing:	15
30.12.	Out site and inside mud plastering for Brick masonry wall:	15
30.13.	Concrete:	15
30.14.	Concrete design mix:	15
30.15.	Reinforcement:	16
30.16.	Framework:	16
30.17.	Concrete Finishing:	16
30.18.	Curing Concrete:	17
31.	Plumbing work:	17
32.	Drainage System:	17
33.	Site Clearing and Demobilization:	17
34.	Handover of the project:	17

1. About OCHR:

Organization for Coordination of Humanitarian Relief (OCHR) is a national non-governmental organization established in Afghanistan in 2015 to play a vital role in humanitarian and development settings, and to contribute towards the peace building in the country where the people can live in amity and harmony.

In humanitarian situations emerging as result of conflict or natural disasters, natural, the response encompasses the provision of tools and resources i.e., to reduces the suffering and increase self-sufficiency.

Our approach includes sustainable development, focusing on ultra-poor communities of Afghanistan. The endeavours focus on social and economic development of the people dwelling in remotes parts of the country.

Through peacebuilding efforts, we envision Afghanistan a socially inclusive society where peace and prosperity remains a fate for every individual living in this territory. Promote the social cohesion, curtailing extremism in all forms, inclusiveness of peace processes where children, women and marginalized groups have a voice.

2. Description:

OCHR through this RFQ is requesting eligible bidders' Construction companies for, Construction of five **small Business center** for Sustainable Livelihoods in four District of lagman province.

3. Scope of Work:

For Scope of work refer to attached BoQ and Drawings see the **Annex..**

bidders are required to sign and stamped the overall RFQ **Annex-I, Annex II BoQ and** drawing and submit it along this RFQ document.

1. Construction of five small Business center for Sustainable Livelihoods in four District of lagman province.

All the project activities must be completed within 30 calendar days after award of contract.

4. Location:

in four Districts Aligan (Chinchar Talib Abad), Alishang (Qala-e-Khan) Qarghayee, (Qala-e-Sarfaraz Khan) Mehtralam (Baba Kamp 4 Gozar and Baba Kamp, 5 Gozar) of Laghman Province.

5. Project Duration and Penalty for Late Work:

The contract duration is for 1 months (30 calendar days) after award of contract, the procurement penalty/delay time is (0.005) % of total contract value per each calendar day.

The (procurement penalty /delay time) will be applied per each delayed calendar day after completion project duration. (30 calendar days), if the contractor not able to complete the project on time. The maximum penalty is 5% over all the project value. The amount will be deducted from the Contractor invoices due to delay time or late work then the contract will be terminated and the supplier will not be entitled for his performance security or guaranty as well. In special cases, where the contractor is found not fully complying with the project work plan and/or consistent low-quality work is reported by the project team, the contract shall be terminated on immediate bases, along with the rest of the above-mentioned penalties applicable.

6. Cost of Providing Offers:

The bidder shall bear all costs associated with the preparation and submission of bid in response to this solicitation/RFQ.

7. Closing date:

Quotation must be received by the Contracting Authority as specified in the RFQ not later than the closing date, any quotations received after that will not be considered / or not allowed to put it in the bid box.

8. Cancellation for convenience:

The Contracting Authority may for its own convenience and without charge or liability cancel the RFQ at any stage.

9. Offer Documents:

9.1. Clarification of Solicitation Documents:

The bidder requiring any clarification on the Request for Quotation may notify OCHR in a written form. The response will be made in writing to any request for clarification of the RFQ that received by the cited deadline for questions. Clarification may be sought in writing through authorized representative email: procurement@ochr.org.af for clarifications only no later than 2 days before close in date, no bids are to be submitted through this or any other emails. For submittal of bids please see the instructions set forth.

10. Amendments of Request for Quotation:

Prior to the Deadline for Submission of Offers, OCHR may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, may amend this Request for Quotation. In order to afford prospective bidder reasonable time in which to take the amendments into account in preparing their offers, OCHR may, at its discretion, extend the Deadline for the Submission of Offers. Any amendments will be published in the same manner as the present RFQ for which the bidders are required to keep an eye on the advertised RFQ till its deadline, for any amendment made there.

11. Preparation of Offers:

11.1. Language of the Offer:

The Offer prepared by the bidder and all correspondence and documents relating to the Offer exchanged by the company and OCHR shall be in English Language only.

11.2. Offer Currencies/Offer Prices:

Prices shall be Offered in USD and OCHR's preferred payment term is through bank form in a minimum of 45 days' net. The bidder shall receive the amount through a specified bank account and will be transferred in minimum of 45 days after the service delivery. Bidders may request a different payment term, though it remains an evaluation factor.

11.3. Period of Validity of Offers:

The Offer shall remain valid for 30 days after the closing date prescribed by OCHR. An Offer valid for a shorter period may be rejected as non-responsive.

12. Opening and Evaluation Criteria:

To assist in the examination, evaluation, and comparison of Offers, OCHR may at its discretion ask the bidder for clarification of their Offers. The following criteria will be applied for the evaluation and scoring of bids.

12.1. Bid Security:

As per the organization's procedures, the bidder is required to submit a bid security of **\$1000** (one Thousand USD, or equal in AFN) to OCHR along with the offer. The bid security can be submitted

through bank form from the bidder's specified account with a clear indication of the **Construction of five small Business center for Sustainable Livelihoods in four District of lagman province**
Ref#: CFSCSL /OCHR/05/2024 and subject to OCHR name on it. (No specific marking, as bid security comprises an essential part of the offer, contractor **supplier's offers lacking the bid security will essentially be counted as non-responsive and offer will be considered rejected by the procurement committee.**

12.2. Cost-Effectiveness (75 points):

- Considering the principle of value for money, the supplier shall provide the lowest possible price. However, the price must be technically acceptable which means the quoted price should be realistic and should be based on current market price analysis.
- OCHR reserves the right to reject any and all bids at its sole discretion for any reason. The quantity requested in this RFQ does not create liability for OCHR and that OCHR may determine to reduce or increase the quantity cited in this RFQ at the contract awarding stage.
- lowest price in no means is the main factor for contract award, the bids should meet at least the identified standards for items as per technical specification. Within the contractual period any changes of the price will not be allowed and any approaches from the supplier requesting for a price increase or expertise unavailability will be considered as non-performance and thus the contract will be void, with 10% of the total contract penalty applied.

12.3. Relevant Experience (10 points):

According to organization policy, bidders should have the capacity and experience of at least two contracts implemented in past 5 years. Copies of the contracts should be part of the offer and will receive score.

12.4. Bank Statement (15 point):

According to organization's procedure, bidders should have the financial capacity to conduct the work without hindrance. The required closing balance at the bank or FSP/MSP (Sarafu) account in the supplier's name is **USD 25,000 (twenty-five thousand USD)** or equivalent in AFN update during RFQ announcement. If bank statement is attached to offer there is no need to disclose the balances i.e., the evaluation committee may infer capacity of the firm/company from the list of transactions the firm/company ensured in the past.

12.5. Work plan and Project Manager: (05 point):

Comprehensive Construction Work plan and Project Manager Civil Eng. with 3-5 Year work Experience is to be attached with offer.

13. Preliminary Examination:

Arithmetical errors will be rectified on the following basis: If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Supplier/Vendor does not accept the correction of errors, its Offer will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.

An offer determined as not substantially responsive will be rejected by OCHR and may not subsequently be made responsive by the bidder by correction of the non-conformity.

14. Evaluation of Offer:

Determination of compliance with the RFQ is based on the content of the Offer itself without recourse to extrinsic evidence. The offer will be evaluated based on the documents/information requested, any missing documents from the offer due to administrative purposes will not be requested and the bidder is required to take care the completeness of the offer.

15. Evaluation and Basis for Award:

A Contract will be executed with the Bidder whose quotation is determined to be responsive to this RFQ document, meets the eligibility criteria stated in this RFQ, meets the technical, management/personnel, and corporate capability requirements, and is determined to represent the best value to the organization.

That means that each quotation will be evaluated and scored against the evaluation criteria and evaluation sub-criteria, which are stated below.

- Cost-Effectiveness
- Relevant Experience
- Bank Statement
- Work plan and Project Manager

OCHR reserves the right to reject any and all bids at its sole discretion for any reason whatsoever. The quantity requested in this RFQ does not create liability for OCHR and that OCHR may determine to reduce or increase the quantity cited in this RFQ at the order stage.

16. Negotiations:

It is anticipated that a 'Contract' will be awarded solely on the basis of the original offers received. However, OCHR reserves the right to negotiate the price and the terms and conditions offered by the bidder by requesting clarifications prior to award or proposing adjustments to the quotation. Furthermore, OCHR reserves the right to conduct a competitive range and to limit the number of Bidders in the competitive range to permit an efficient evaluation environment among the most highly rated quotations. At the sole discretion of OCHR bidders may be requested to conduct oral presentation

17. Certifications and Compliance:

Bidders shall be expected to comply with the following policies and regulations. The bidder must be registered as per the local law and hold a valid license. As per the Afghanistan government tax law, OCHR withholds 4% tax from the total value contract where the supplier is registered with the government of Afghanistan, OCHR releases the tax to the account of MoF and provides confirmation to the respective bidder. This tax is a sole responsibility of OCHR and therefore, it should be included in the final price that will be Offered to OCHR in response to this solicitation.

18. Pertinent Information:

- The OCHR shall have the right to reject the offer if it does not conform to the requirements of the RFQ.
- The OCHR reserves the right to waive any specification or condition stated in this request for quotation in the interest of operational needs or to ensure best value and suitability to organization.
- Considering administrative restrictions bids will be received in bid box at specified bid box at OCHR HQ. A designated technical committee ensuring OCHR procurement policy and procedures will evaluate the offer documents
- Please be informed that the actual required work may differ (increase or decrease) depending on operational needs and hence the OCHR should not be held responsible for any such changes.
- Lowest price in not a base for award of contract the price should be realistic meeting the very current market price analysis, lowest price in no means is the main factor for contract award, the bids should meet at least the identified standards for items as per technical specification.
- Failure to comply with the OCHR requirement will justify the rejection of your offer.

- Within the contractual period any changes of the price will not be allowed and any approaches from the supplier requesting for a price increase or expertise unavailability will be considered as non-performance and thus the contract will be void.
- If not clear in any specification, please communicate and confirm before submitting the offer.

19. Offer Documents:

Your offer package should include the following essential documents.

- Signed and stamped copy of this RFQ document.
- Returnable Bid Forms include BoQs and drawings and other required documents.
- Bid Security as specified in Section xx evaluation criteria above.
- Work plan, CV and certificates of Project Manager
- Legal business registration/certificates.
- Copy of Update bank statement the bank statement where the name of the firm/company and the bank account is legible. (Certifying the bank account and owner of the bank account). No need to disclose balances.
- Past performance evidence (copy of contract contracts, name and contact details of clients.
- Firm/Company Profile.

In addition, your offer should be submitted with information as following.

- Your offer should be submitted in Sealed Envelope and submitted in the bids box before closing date of offer on at the OCHR Head Office Reception; Offers submitted in other places will not be considered.
- Mark the envelope RFQ the **Construction of five small Business center for Sustainable Livelihoods in four District of lagman province Ref#: CFSCSL /OCHR/05/2024**
- offers not addressed and sent as such will not be considered. Do not send your offer by fax and/or email.
- When submitting the offer, the bidder should sign the bids submission logbook sheet.
- The envelope should be properly marked with the bidder's company name, date, and time of submission, and RFQ reference number
- Your offer should be clear and legible, (in the English language preferable)
- Your offer should state the offer issuing date.
- Your offer should be numbered.
- Your offer should be specific on the offer validity date.
- Price should be Offered in USD; however, the organization may consider currency change to AFN as per the procurement regulations.
- Your offer should be duly signed and stamped.
- Complete bank details, as all payments will be made only through bank transfer only.
- The bidder firm is responsible for all costs/expertise involved in preparing the offer, and OCHR bears no responsibilities to reimburse the costs spent on preparation of the offer either the firm is qualified or disqualified.

20. Performance Security:

As per the organization's procedures awarded firm/Contractor required to submit a performance of (5) % total contrate to OCHR after award of contract. The performance security can be submitted through bank form the contractor specified account with a clear indication of the **Construction of five small Business center for Sustainable Livelihoods in four District of lagman province Ref#: CFSCSL /OCHR/05/2024**and subject to OCHR name on it.

21. Payment Terms:

OCHR's preferred payment term is through bank form in a minimum of 45 days net. They bidder shall receive the amount through a specified bank account which will be processed within a minimum of 45 days as per project circumstance. The contractor may request a different payment term, though it remains an evaluation factor.

Payment will be made two installment or as per project circumstance and request of project manager After improvement of physical percentage and verified by OCHR provincial assigned team and related stakeholders.

Payment will be made in two installments, or as per project circumstance

1. Frist installment **80%** after **90%** physical completion of the project and verified by OHCR Provincial team.
2. final installment **100%** payment after the completion and official handover of the project to the relevant stakeholders or Sector.

Payment will be made to the contractor within 45 days once the invoice is received, and work is attested by the organization provincial staff, considering the banking regulations i.e., no liabilities will be incurred to the organization if the banking system restricts the payments due to unforeseen circumstances including delay in payment by the donor and the 45 days period exceeds. The payment is subjected to tax as per Afghan Tax Law, which will be deducted from the payment to the Contractor.

Note: the payment procced only through AIB bank, if the contractor/Supplier/Service provider don't; have an active account in AIB bank, the bank transfer charges will be deducted from contractor/Supplier/Service invoices

22. Offer Submission Guidelines: (Open Bidding not held):

With reference to the information provided in the 'Offer Documents' section above, sealed enveloped are expected to be delivered at the address on closing date. Your offer should be submitted in Sealed Envelope and submitted in the bids box the OCHR Head Office Reception; Offers submitted in other places will not be considered. Bids received later than mentioned date and time will not be accepted.

OCHR Head Office: House#37, Street#3, District 5, adjacent to Dawat University, Khushal Area, Kabul Afghanistan.

23. Returnable Bid Forms:

This BoQ contains statements required in the Offer documents and shall be signed by a duly authorized person. Any addition to, deletion or alteration in the BoQ may result in rejection of the Offer.

Please prior to quoting your prices conduct a site survey. The quantities mentioned in the BoQ may vary with actual work on site. OCHR will carry out a re-estimation of the actual work done against the work mentioned in the BoQ. For any extra work OCHR shall be contacted on prior basis and approval shall be sought for extra work. Any extra work done without the approval/permission of OCHR shall be considered void and no payment will be disbursed for the work done.

Project Name: Construction of five small Business center for Sustainable Livelihoods in four District of lagman province Ref#: CFSCSL /OCHR/05/2024

Project location: Lagman Provinces

District: in four Districts Aligan (Chinchar Talib Abad), Alishang (Qala-e-Khan) Qarghayee,(Qala-e-Sarfaraz Khan) Mehtralam (Baba Kamp 4 Gozar and Baba Kamp, 5 Gozar) of Laghman Province.

Summary sheet for Construction of five small support center for Sustainable Livelihoods in four District of lagman province Ref#: CFSCSL /OCHR/05/2024

Cod#	Description	Unit واحد	Quantity مقدار	Unit in include 4 % Tax in USD في واحد به دالر قيمت في	Total Cost (USD.) قيمت مجموعي	Remarks ملاحظات
A	Total Estimation Cost for Construction of five small Business center for Sustainable Livelihoods in four Districts Aligan (Chinchar Talib Abad), Alishang (Qala-e-Khan) Qarghayee,(Qala-e-Sarfaraz Khan) Mehtralam (Baba Kamp 4 Gozar and Baba Kamp, 5 Gozar) of Laghman Province.	Each	5	-	-	
Total Estimation cost for Construction of five small Business center for Sustainable Livelihoods in Laghman province					-	

Essential Note for BoQs

1	Building materials/Construction material and Works may be subject to tests at any time at the request of OCHR technical team/Engineer. These tests shall be carried out as directed by the Engineer or Authorized Repetitive at the place of Manufacture or fabrication or on site or in testing institute. The Contractor shall provide such assistance materials, plant, instruments and labor as required for such test. The cost of carrying out such tests shall be borne by the contractor.
2	The works actually executed shall be measured and is subject to deduction, Contractor shall visit the site of the works and obtain all information that may be necessary for completing their Offer as under the provision of this contract no claim for additional work is accepted once contract is signed.
3	If, in the Contractor opinion, The BoQ contains ambiguities or BoQ does not comply with the drawings which might influence the calculations, the contractor shall indicate this to OCHR through a letter or email before submitting the Offer.
4	Mobilization, Demobilization and other temporary works required for the execution of the items listed above, plus site restoration will be the responsibility of the contractor. Hence all the unit prices are assumed to cover all activities associated with the works, and are not limited to those activities mentioned above, and that the total contract cost quoted is all inclusive to complete the total works.

17. Bidder information:

Persons authorized to sign bids, offers and contracts

Name	Title	Email	Telephone

Banking Information:

Payment shall be made through bidder’s specified bank account, please provide your banking information as requested below. Considering the banking restrictions, provide your AIB account in the supplier/contractor’s name is the OCHR able to make payment to the supplier/contractor. This in good faith the supplier is required to comply with, however, ***if currently holding no account at AIB the bidder may commit to open the account in case of contract award.***

Bank Name: _____ (AIB)_____

Account Name: _____

Account Number: _____ SWIFT Code: _____

Sign and Stamp of the Bidder Firm

Annex-I

Technical specification for Construction of five small Business center for Sustainable Livelihoods in four District of lagman province Ref#: CFSCSL /OCHR/05/2024

24. Purpose of this “tendering document:

This tendering document concerns the project Organization for Coordination of Humanitarian Relief (OCHR) is planning to implement through the funding and collaboration of xx for **Construction of five small Business center for Sustainable Livelihoods in four District of lagman province** as per BoQ drawing and technical specification the details are provided below Refer to the attached drawings.

25. Description of the activities:

This is a succinct description of the activities to do as per BoQ and drawing.

2. Construction of five small Business center for Sustainable Livelihoods in four District of lagman province.

All the project activities must be completed within 30 calendar days after award of contract.

26. Work follow-up:

To allow an adequate work follow-up, the Contractor will maintain a construction log book at all sites in which all information related to the work will be reported. This book will allow the OCHR Engineer to know precisely the progress report of work as of his arrival on the construction site. The remarks and reserves of the Contractor and/or the person in charge of the program will be notified in the book of the building site. A copy of this field notebook will have to be given to OCHR at the end of the project. It might be used as an intermediate or final report to the donor. Information to be recorded in the construction site log book shall include but not limited to:

- Name of the building site (number of latrines with the location description).
- Generally, all technical details, incidental, clean breakdowns, difficulties with the course of work, with an indication of the time when they occurred.

27. Responsibility of the contractor:

The contractor will have to start his activities, deploy his machinery, tools, material, staff and equipment as per the agreed implementation plan and are aware of the accessibility constraints.

- The purchase of all the materials would be submitted to a work contract (approvals), under authority of OCHR and project stakeholders.
- The type of contract will be paid in real expenses and the quotation amount has to be presented in AFN.
- The Contractor should be ready to start the works as agreed with OCHR after the notification of call for negotiated procedure results.
- It is up to the Contractor to arrange at his own expenses the necessary for mobilization of required staff and stock of materials installation on site for the defined work.
- The contractor will manage with his own means the supply of adequate and necessary materials, equipment and labor to the working site.
- The Contractor will have to strictly follow the National guidelines of MRRD in term of Water Supply Technology/Technical options as well as the technical requests and recommendations of OCHR mentioned

- A good coordination between OCHR and the contractor will have to be done through regular field visit and coordination meeting being arranged by OCHR.
- The work has to be realized in good co-operation with the mention Committees and related department and other stake holder representatives for this targeted site,. The related Committees are hereby authorized to monitor the works of the contractor and report to OCHR staff for any dissatisfaction of works or materials being used at site.
- The contractor will have to respect a strict agreed execution of the planed works.
- Security on the field is under the contractor responsibility; however, the contractor will benefit from OCHR network information. In case insecurity events occurred, a temporary suspension could be considered with prior authorization from OCHR representative.
- It is also under Contractor responsibility to ensure a safety barrier around the site and to prevent any incident with the civilians/ villagers.
- The Contractor will be responsible for the security of his equipment and staff on the site and OCHR will not be at any case responsible of any degradation or stealing of material and equipment or harm to contractor staff. It is up to the Contractor to ensure the security maybe by relying on guards.
- If it appears in the middle of the work, that the Contractor cannot fulfill his obligation in time, he will have to reinforce his means in order to complete the work within the completion period.
- The Contractor will be fully responsible for cleaning and removing all materials/ waste materials and equipment after the completion of the works. A clean place will have to be set up as it belongs to the governmental area.
- A visit of conformity for the materials will be carried out by OCHR staff at the beginning of works, with an aim of notifying:
 - Conformity with the material proposed in the offer,
 - Compatibility between the capacities of this material, technical specification of this document and completion periods.
- The pronounciation of this conformity per official report does not relieve in any case the Assignee of his engagements.
- The Contractor is held to attend all the appointments of working site fixed by OCHR. He will make sure that an agent whom will have all due capacities and power for the building site management will represent him.
- All the material that the contractor will use for the work will be subject to the approval of OCHR responsible staff or its representative.
- All the debris materials will have to be evacuated by the Contractor at his own expenses.
- The contractor is responsible for a regular supply of material to ensure the smooth work of the site in order to fulfill his commitments.
- Notwithstanding the approval of OCHR for the quality of materials, the Contractor remains responsible for quality for the used materials.
- It is from his responsibility to carry out and at his own expenses, all the material analyses and all necessary tests to a good execution of the works.
- The Contractor is in charge to follow all the steps, for obtaining all authorizations or agreements and for paying for all the expenses, royalties or allowances resulting from the influence of the installation in targeted sites.
- The importation of materials and supplies will be subjected to the preliminary authorization of OCHR on justification that equivalent materials or supplies cannot be found in Afghanistan. Any change in the origin of materials and supplies imported must be authorized beforehand by OCHR.
- A penalty of % from total amount of contract per day of delay in the completion of the work will be applied.

28. Safety:

The contractor should provide sufficient safety measures for skilled and unskilled labors and other hired workers on the Project site, the contractor should also provide workers and laborers with all required PPEs (personal protection equipment).

29. Pre-amble to the specification:

This specification covers the minimum standards of workmanship and materials required by the Contract. All works shall be carried out with the approval of the OCHR and project stakeholder Engineer. Any civil works or materials that do not meet this specification's requirements shall be repaired or demolished and re-instated at the Contractor's expense. The Contractor shall be liable for any delays to the project caused by construction or demolishing defective work.

Any items of work not described in this specification but forming part of the works shall meet the minimum standards of workmanship and materials. The civil works or materials need to be approved by the OCHR Engineer. Where there is a conflict between local standards and this specification, this specification shall take precedence.

This document forms part of the Contract, and should be read in conjunction with the other Contract Documents:

- Contract Agreement
- Conditions of Contract
- Bid Form
- Contract Drawings
- BoQ
- Work plan and construction tracker.

30. Minimum standards for workmanship and materials Materials & technical specification:

30.1. Quality of Materials

The qualities of all construction materials are to be following the State Standards. The Engineers shall check the quality of all materials delivered to the site and put his finding on the Engineers site NoteBook once a week. Any materials, which do not meet the minimum standards, *shall be rejected*. Such materials shall be removed from the site and replaced at the Contractors expense with materials of the required quality.

30.2. Quality of Workmanship

The quality of workmanship by the Contractor is of an acceptable standard according to this specification. The Engineer will reject any works, which have not been executed to the required standard. The Contractor shall redo any rejected works at his own expense and no time delays to the overall scheme.

30.3. Sand

Sand shall be clean and free from contaminants such as oil, silt, soil, wood, metal, or vegetable. Very fine or smooth Sand shall not be used. Coarse Sand (used for concrete) shall have a maximum size of 5mm. Medium Sand (used for mortar) shall have a maximum size of 2mm. Fine Sand (used for plaster) shall have a maximum size of 1mm.

30.4. Aggregate:

The coarse aggregate used for the concrete mix shall be angular crushed rock varying from 5mm to 20mm. It shall be clean and free from contaminants such as oil, silt, soil, wood, metal, or vegetations.

30.5. Cement:

Cement (*Portland 400 or 500*) shall be delivered to the site sealed bags. It shall be kept clean and dry until usage. Partially used bags of cement shall be stored in a dry place until required

- Standard quality fresh Portland cement shall be used for all concrete work and other cement related activities, bags weight should be 50kgs, rather than any other packaging.
- Recoveries of cement dust will be prohibited.
- Cement use on the site should not be stored over long periods (more than two months); the Engineer on site will check the quality on regular basis, it should meet all storing rules.

- Concrete work shall be carried out from concrete past having strength of M:200.
- Compressive strength of Mortar for pointing work should be M:250.

30.6. Water

Water used for concrete mix, mortar, plaster, and other construction materials shall be potable, clean, and free from organic material. If none is available on site, the Contractor shall transport suitable water to the site.

30.7. Clay:

The clay must be of industrial quality and delivered in small aggregates, if possible. If not available, the clay used to create the plug should come in chunks of small size (less than 5 cm) to avoid them being stuck in a higher position than they are supposed to.

30.8. Brick masonry in in Mortar:

The bricks shall be, regular in shape, size, and color, free from flaws, cracks, lumps, .

30.9. Stone Masonry:

Stone shall be of uniform size and shape and the specified dimensions. Walls shall be straight, perpendicular, and dimensionally correct, constructed as shown on the drawings (if included). The lines of mortar shall be horizontal with no excess mortar staining the faces of the walls. The faces of walls shall be regular and even, with no irregular stones.

30.10. Mortar:

Mortar for stone shall be mixed in the proportion of 1 cement: 4Medium Sand by volume. Sufficient water shall be added to achieve the desired workability. The surfaces of the stones must be smooth and have a medium size; the mortar shall be placed on all horizontal and vertical faces between the Stone, with no gaps. Each Stone shall be placed to the correct line and level and shall be level in all directions. Any gaps shall be filled with additional mortar rammed in with a small wooden rammer. The outside faces of stone walls shall be pointed. No excess mortar shall be allowed to stain the faces of the Stone.

30.11. Plaster and Pointing:

Plaster and pointing for internal walls and external rendering shall be mixed in the proportion of 1 cement: 4 for plaster and 1cement:3 for Pointing Fine Sand by volume. Sufficient water shall be added to achieve the desired workability.

The walls shall be wetted before applying the plaster and pointing. The plaster shall be 10mm to 20mm thick and pointing according to the stone construction state. It shall have a uniform flat finish free of irregularities and blemishes. The finish shall be clean and precise at corners and between walls and ceilings in a straight line. Untidy or poorly finished plaster shall be rejected. When the plaster is still damp, the wall shall be floated to a smooth finish with a wet steel float.

30.12. Out site and inside mud plastering for Brick masonry wall:

Clay plaster should be soft finish and highly flexible, especially compared to cement, which is brittle and prone to cracking. This makes it the perfect companion to soft substrates, including straw bale. It has the ability to flex (to a degree, of course!) with the movement of the wall itself without cracking.

the consists of a relatively high clay content dried mud and a quantity of straw fibers to protect the mud against shrinkage cracks.

30.13. Concrete:

Except otherwise specified, all plain and reinforced concrete works and concrete in general (either handor machine mix at site) will meet the applicable standards & specifications.

30.14. Concrete design mix:

The materials used in concrete shall be proportionate by weight following the standard cement/sand/aggregate mix ratios as follows:

- For reinforced concrete mix - 1:1.5:3 mix ratio only for footing and columns or as per BOQ
- For reinforced concrete mix - 1:1.5:3 mix ratio for beams, slab, and peaks /as per BOQ
- For plain/mass concrete mix - 1:1.5:3 mix ratio/as per BOQ

- For brick masonry mortar mix- 1:6 Mix ratio/as per BOQ
- For plastering mortar mix- 1:3 Mix ratio/as per BOQ
- For stone masonry mortar mix- 1:5 Mix ratio/ as per BoQ

The aggregates mix, cement, and water content ratio shall be selected to obtain the best results for compressive strength, density, water tightness & durability, workability, and finish quality. The concrete mix must be such that the design is compatible with the minimum water content ratio to give each grade adequate concrete workability.

The grades of concrete for the various works shall be as noted on the drawings and as below all reinforced concrete (foundations, slabs, etc.).

- Characteristics compressive strength at 28days: 250kg/cm or as per BoQ
- Minimum cement content: 280 kg/m
- Max free water content ratio: 0.40
- Max nominal size of aggregates: 25

After placement, the concrete shall be vibrated by mechanical means. The vibration method is to be approved Engineer/works personnel before the operation. The vibrated and consolidated concrete is finished by toweling or floating the surface to a smooth and flat finish.

Following placement, vibration, and finishing work to the concrete and after the initial set has occurred not to damage the concrete surface, appropriate measures, approved by the site Engineer/Works personnel are to be implemented to cure the concrete for a minimum period of 14 days.

Where concrete previously placed as part of the works is to be butted, jointed, or raised with the addition of further concrete, except in the case where the initial concrete is blinding concrete, the first concrete surface must be suitably prepared by the scrubbing, i.e., removing the laitance (fine concrete surfacing) before placement of the other concrete. The method is to be approved by the Site Engineer/Works personnel. After scrubbing, the concrete shall be a thoroughly wetted and thin layer of 1:2 cement: sand mortar applied before pouring the new concrete.

30.15. Reinforcement:

Steel reinforcement shall be 60 grades or as per drawing with the correct diameter, as shown on the drawings. The bars shall be clean and free from rust. And be securely fixed with wire before placing the concrete. The minimum cover to reinforcement shall be 25mm.

30.16. Framework:

The exact dimensions and positions shall be as per the issued execution drawing. All formworks shall be designed and built to maintain rigidity throughout the concrete placement, ramming, vibration, and setting to the required shape, position, level, and specified class of finish. All joints shall be sufficiently tight to prevent leakage of concrete.

Before concreting commences, the formwork shall be thoroughly cleaned and freed from all sawdust, tiewire, shavings, earth, dirt, and other debris. Release agents should be applied and compatible with the finish class; care must be taken not to contaminate the reinforcement.

Striking of formwork shall be done without damage to the concrete, including removal without shock to prevent impact load on the partially hardened concrete. For columns, walls, and other parts not supporting, the weight of the concrete may be removed as soon as the concrete has hardened sufficiently to resist possible damage due to removal operations. For suspended slabs or supporting formworks, 14 days of hardening are required before striking forms.

Formwork for the concrete shall be to the approval Engineer and shall not allow grout loss from the concrete mix.

Prior to the concrete placement, the formwork is to be inspected and all harmful materials removed to the approval.

The Contractor must undertake no mixing or placement of concrete without prior permission by the Engineer.

30.17. Concrete Finishing:

Concrete shall be finished to a smooth uniform surface and finished using a metal or wooden float.

The surface texture shall be flat and smooth with no irregularities or air bubbles. When formwork is removed, the face of the concrete shall be flat and smooth. If there are signs of voids, air bubbles, or

inadequate compaction, the concrete shall be removed, disposed of, and re-laid with a fresh mix.

30.18. Curing Concrete:

Sufficient water is required for concrete to harden through hydration. The concrete must be kept moist or "cured" to ensure it does not dry out. Poorly cured concrete will shrink or crack, and not achieve its full strength. Concrete shall be cured by covering it in plastic sheets.

Spraying with water, covering with wet Sand, or other methods proposed by the Contractor and approved by the Engineer. The Contractor shall ensure that all concrete is adequately cured. Curing shall start as soon as the concrete has been poured and shall continue until curing is complete *after 28 days*.

31. Plumbing work:

The contractor shall ensure that all pipes and fitting comply with the requirements of OCHR design and drawing and except those of a minor nature shall be carried out by a designated person, the service shall not run through individual premises, beside this, plumbing installation shall be arranged to avoid water contamination, water quality deterioration, water leakage and to ensure proper environmental consideration during installation of pipe network materials. The plumbing equipment is required to be certified by the OCHR site engineer.

32. Drainage System:

Used and surface rain runoff water: All water from the Facility must be collected and channeled through the drainage channel into soakaway pits. The water drained from the high risk shall be channeled to the high-risk soakaway pit, while the water drained from the low risk shall be channeled to the low-risk soak away pit.

All water from the Facility, including water from hand washing basins and surface rainwater, must be collected and channeled through man-holes into a soakaway pit as per site need.

33. Site Clearing and Demobilization:

After each completion of the work, the contractor must remove all remaining sand, gravels, and cuttings from the site.

34. Handover of the project:

Handover of the project conduct as per procedure.