

Terms of Reference for 'Project Management Consultancy for Marine Interpretation Center to be developed at Mandvi- Kachchh, '

Background

1. **Integrated Coastal Zone Management (ICZM) Project:**

The World Bank is assisting Gol in building national capacity for implementation of the new integrated management approach for India's coastal zones, and piloting the integrated coastal zone management approach in states of Gujarat, Orissa and West Bengal. Development of economic infrastructure in the coastal zone, along with protection of ecological and cultural landscapes and traditional rights is crucial to India's growth and development. Balanced, sustainable and rapid economic growth is also the fulcrum for poverty reduction. The project, and the reforms it supports, will play a vital role in reducing the vulnerability of coastal populations to current variability and disasters, both of which are expected to increase due to climate change effects.

At the state level in the state of Gujarat, the project is supporting capacity building and pilot investments which are designed to demonstrate integrated management of ecological, economic and social concerns in the Gulf of Kutch. One of the pilot investments, all located in the Gulf of Kutch, to complement the ICZM plan and capacity building sub-components, includes investments for conservation and protection of coastal resources and establishment of a marine Interpretation Centre (MIC) at Mandvi envisaged **to be developed for education, information , purposes.**

2. **State Government Agencies:**

Gujarat Ecology Commission (GEC) is the state government agency established for the purpose of enhancing environmental safeguards in the state and facilitating development of sustainable technologies and has been designated as the State Project Management Unit (SPMU) for implementation of the ICZM project in the state of Gujarat..

Kachchh Forest Circle (KFC): KFC is the Project Executive agency working for conservation and management of coastal resources such as Mangrove, Sea Turtle etc. KFC is also given mandate to develop the Marine Interpretation center at Mandvi under the project to meet with the objective of the education, awareness and information sharing about marine wealth of the State. .

Objectives of the assignment

1. To support the Kachchh Forest Circle in conceptualizing the concept of Marine Interpretation center for the disseminating the information of marine resources of Gujarat State.
2. To support Kachchh Forest Circle in execution and monitoring of MIC The overall comprehensive project includes a development of New Interpretation Building construction works at Mandvi, Dist Kachchh.
3. To achieve the stipulated standards of quality Correctness and completeness High-grade Workmanship, Conformity to Codal provisions, Standards, Specifications and systems towards error free production in construction process and allied activities including completion on time as schedule in project programme.

Proposed Marine Interpretation Center:

The Proposed MIC is thought to be having state of art design with main emphasis on disseminating the information pertaining to marine resources of the State to the various stakeholders, especially with the general public. The MIC shall be having combination of electronic and multimedia with various types of sculpture, diorama and other innovative displays on marine resources. It is presumed that the display material shall have state of art mechanism so that viewers can easily view the and understand the life system of these marine resources and shall carry the conservation value after visiting interpretation center.

Location: It has been decided to set up this interpretation center at Mandvi, Kachchh near the Forest guest house. The adequate land of about 2 ha is available within campus. The details of the land will be making available to selected consultant.

Scope of the assignment

1. The consultancy service under this contract includes: Location planning, Architectural planning, Structural Design and Drawing of layout of water supply, sewage and drainage system , waste disposal, other misc. appurtenant works, Lighting, power supply system, Roads walkways etc. including soil survey, soil bearing capacity.
2. The consultant shall carry out primary survey of the area and collect all the relevant data as deemed fit for the development of conceptual and structural design.
3. All design & Drawings in accordance with Code of practices prevailing in the construction Work. Provision and procedure under latest & relevant versions of Indian Standards with due focus on Earthquake Resistant design of structures safety, Stability, Durability & serviceability shall be prepared by the consultant. The consultant will

assist in receiving formal Building construction Permission as per local body Byelaws.

- 4 The consultant shall prepare the three versions of conceptual design and submit to client out of which client will finalised one design with changes if any desired by the client. All design, drawings, detailing in architectural and structural designs & drawings are as per Indian standard code considering earthquake zone.
- 5 The consultant shall have to prepare detailed plan/estimate using prevailing SOR/market rates along with rate analysis of each item along with detailed specification of each item. The consultant shall have to assist KFC for obtaining relevant technical sanction from competent authority.
- 6 The Consultant shall need to prepare an innovative and state of art design for the interpretation material to be hosted in the proposed MIC. It is the duty of the consultant that they shall give the complete structural design/drawing along with specification for each of the **display interpretation material** with interior designing. The consultant shall take care that interpretation material design shall in accordance with construction design.
- 7 The Bill of Quantity must include construction of MIC and its interior to the satisfaction of the client. The detailed design drawing and specification of interior display interpretation materials shall be got approved from the client.
- 8
- 9 The consultant shall prepare the bidding document as per the World Bank guidelines. The consultant will assist SPMU and Kachchh Forest circle for tendering procedures for award of construction contract to a construction contracting agency .The scope also include bid evaluation and final award of formal contract to competent contracting agency.
- 10 The Consultant shall provide his expertise as and when inquired by SPMU or KFC for the subject assignment with respect to procurement of contractor.
- 11 For the Project execution, Management, Supervision and Monitoring of the MIC building construction work and establishment and interior design work of interpretation material. The consultant shall provide adequate Key personnel such as civil engineer who has adequate knowledge of building construction.
- 12 The consultant shall make sure that regular and effective (day to day) design and drawing progress surveillance is carried out ensuring that construction progress is not hampered and the works are executed strictly as per the drawings and work specifications. Any dispute related to drawing and work specification must be in the notice of authorised designated representative by CCF KFC.
- 13 Hidden Items- During execution of hidden items senior level expert visit is mandatory .He must also ensure that measurement for hidden items must be 100% checked by him.

- 14 The consultant shall justify the extra items if any, during execution and will assist CCF KFC. in finalizing the rates based on detailed rate analysis.
- 15 It is the duty of consultant to take samples of the material before execution for mix design and during execution of work and testing of the same from standard government approved laboratories. The concrete/steel samples shall be got tested before placing. The consultant has to maintain test result records of each and every material used in the construction adhered to the updated Indian Standard specifications.
- 16 The consultant shall supervise/monitor the construction works; verify the quality and quantity to be executed by the contractor. It is the duty of the consultant to prepare running bill and certify the same before making payment by KFC .
- 17 It is the duty of the consultant to verify and brought into notice of the client well in advance in case if any variation in quantity and quality and extra items before its execution.
17. The consultant shall verify and certify the quality and quantity of interpretation material /display material executed by contractor as per tender specification and develop monthly bills for the each of the interpretation material as per the approved design of the tender. It is the responsibility of consultant to prepare re work completion certificate final bill for making payments.
18. The consultant shall ensure that all necessary precautionary measures at site with regard to safety of the people working there or visiting sites are fully observed by the contractor.

Deliverables & time schedule

Sr.No	Deliverables	Time Frame	Payment terms
1.	Inception report, soil survey, testing of soil, vicinity survey . Conceptual plan and its approval. Plan reviews approvals. Estimated costing based on approval.	Within one month from the signing of agreement	10% of the contract amount
2.	Conceptual Design in 3 D format . Statutory approvals, schematic GA Drawings.	Within 45 days from the signing of the agreement	10% of the contract amount

Sr.No	Deliverables	Time Frame	Payment terms
3.	Detailed Estimates, Costs, BOQ, Specifications Material, Interpretation material standards, Tender drawing etc. preparation of tender documents as per world Bank norms.	Within 60 days from the signing of the Contract	10% of the contract amount
4.	Bidding and Analysis and finalization of agency.	Four months from the signing of agreement	10% of the contract amount
5	Submission of all required architectural and structural working drawings and construction up to plinth level	Within Six months	10% of the contract amount
6.	Construction of MIC building up parapet level, plastering .Working drawing of interpretation work ,Models etc.	Within Eight Months from the signing of agreement	10% of the contract amount.
7.	Execution work of flooring, electrical installation work, sanitation work, tiles work, doors and windows, Interior work Interpretation material Display work, Models etc Completion of all items including Final finishing .	Within 11 Months from the signing of agreement	20% of the contract
8.	Final bill Acceptance and work completion report/ certificates.	Within 12 Months from the signing of agreement	10% of the contract amount

Key Staff/Professionals Required

The consultant shall provide constant support to KFC to accomplish the For establishment of MIC building at Mandvi
The Consultant will engage a Team of Key experts listed below.

Proposed Team

	Positions	Qualification and Experience	No	Man/ Month
1	Sr. Team Leader/ Project Manager (Nodal Person)	Master's or higher degree in Planning with Min. 20 years of post-qualification experience in management of multi-disciplinary projects related to MIC work.	1	6

2	Construction Manager/Civil Engineer	Minimum BE civil must have knowledge of Building Constriction .10 years' experience is must.	1	12
3	Quality Control Engineer	BE civil with 5 years' experience of quality monitoring.	1	6
4	Marine Biologist	PhD/Post graduate in Marine Biology with more than 5 years of post-qualification experience in relevant sectors	1	1
5	Structural Engineer.	5 years' Experience,M.E./M.Tech in structures,	1	4
6	Site supervisor	10 years' experience having BE or Diploma certificate courses.	2	12
7.	Electrical Engineer.	10 years' experience. Minimum BE Electrical.	1	1

The consultant shall provide adequate Support staff CAD draftsman work assistant clerks Data entry operator as a backstopping for effective and efficient designing and drawing and implementation of MIC project.

Completion Certificate-

The consultant will supervise all structure resulting in completion of works one by one issue the inspection notes for addition alterations rectifications and getting them executed as per specifications. Subsequently the consultant shall accompany the CCF MNP or authorized representative for finalizing the completion certificate. If the work is not acceptable the same shall be rectified till it is acceptable to CCF MNP. It must be signed by the team leader.

Results to be achieved by the consultant-

1. Completion of civil work in line with architectural and engineering drawing and specifications.
2. Ensuring that the required quality of construction as well as the structural safety standards is achieved.
3. Completion of the Interpretation work, marine models establishment etc within the specified deadlines.
4. Ensuring that the contractor fulfill all the contractual obligations.
5. Ensuring that handing over of well-constructed and fully functional building.