



REQUEST FOR PROPOSALS (RFP) FOR CIVIL AND STRUCTURAL ENGINEERING CONSULTANCY SERVICES FOR MEDICAL OXYGEN INFRASTRUCTURE PROJECTS IN SUB-SAHARAN AFRICA

Reference	RFP/CHAI/CIVILENGR/0124
Posting Date	4 June 2024
Closing date	18 June 2024

Civil Engineering Advisory Support.

The Global Essential Medicines Engineering team seeks a skilled and experienced civil or structural engineer to provide short-term project advisory support and industry-based recommendations regarding the construction of medical oxygen equipment foundations, equipment storage enclosures, and other closely related infrastructural requirements. (i.e., road networks, drainage, retaining walls, roofing, plumbing, etc.)

Background

The Clinton Health Access Initiative (CHAI) is a sub-grantee of FHI360 on the Meeting Targets and Maintaining Epidemic Control (EpiC) project, a global eight-year project funded by the U.S. Agency for International Development (USAID). EpiC receives COVID-19 funding to prevent, prepare for, respond to, and bolster health systems to address COVID-19 and reduce cases of re-emergence. Part of EpiC's COVID-19 program is to provide high-quality medical oxygen systems, and FHI360 is the prime implementing partner for EpiC. One key aspect of the project's focus is to bolster overall health systems and strengthen medical oxygen ecosystems, including improving access to liquid oxygen (LOX). The funding presents an opportunity to implement infrastructure and market-shaping interventions that secure the supply of LOX at more affordable prices and foster a more robust and sustainable oxygen market. This includes negotiating favorable supply agreements, increasing supply-side competition by engaging additional oxygen producers, establishing cost-effective transportation arrangements from large air separation units (ASUs), and strengthening ancillary infrastructure, including bulk storage tanks and cylinder filling stations.

Job Summary

The objective of the Liquid Oxygen infrastructure project's scope of work is to provide technical guidance, expert advice, and innovative solutions to CHAI focus countries on various structural and civil engineering-related projects with a specific focus on delivering concrete slab foundations for Vacuum Insulated Cryogenic Equipment, cylinder storage, manifold/plant rooms, cylinder filling ramps, road access, site construction and renovation for Hospital Medical Gas Piping systems. As a trusted civil/structural Engineering advisor, you will work closely with program staff, Ministry of Health officials, design teams, vendors, sub-contractors, and project stakeholders (Architects, Geotechnical and Biomedical Engineers) to deliver cost-effective, sustainable, and high-quality engineering solutions throughout the project duration.



Proposed Scope of Work and Job Responsibilities

1. Review and refine the project's civil construction technical specifications to ascertain compliance with relevant standards and project scope.
2. Support the review of civil design proposals and drawings (submitted by vendors for sign-off before project commencement)
3. Provide context-specific advisory on critical construction quality inspections to ensure the vendor's approach, materials, and final execution meet industry standards and project requirements.
4. Support the creation of process frameworks for project monitoring, tracking, and analyzing vendor performance against contract deliverables.
5. Support the review of project safety protocols and ongoing progress reports and identifying potential risks.
6. Support with providing technical troubleshooting feedback and in-project recommendations (as required)
7. Assist with the review of all 3rd party inspection reports submitted by the vendor after the project (prior to remuneration disbursements)
8. Create technical guidance modules and training briefs that detail essential requirements, processes, and activities for LOX civil constructions.
9. Contribute to developing new system optimizations, approaches, and tools to continuously strengthen CHAI's LOX projects.
10. Participate in field visits to 25% to 30% of the project locations for site supervision, vendor meetings, final documentation of project close out reports.

Duration and Level of effort

- Short term "Technical Bridge Support" July to December 2024
- Maximum of 40-45% of a complete CHAI FTE per week (16-18 Hrs)
- Hybrid work model (75% Remote + 25% Field Visits)

Proposed Geographical Scope

- Eswatini, Mozambique, Democratic Republic of Congo, Tanzania (Core Technical Advisory Support)
- Other CHAI focus countries (Light touch guidance, Knowledge Management, Evaluation and Learning Support)

Experiences and Competency Requirements for this role:

- Civil and structural engineering firm or consultant with the ability to manage multiple projects across several countries and demonstrable evidence of documented quality processes and experience on international projects.
- Structural Engineering Advisory: Proven track record leading projects as a trusted consultant to clients, guiding them with formulating comprehensive, cost-effective, and fit-for-purpose engineering plans to deliver medium to large-scale buildings, foundations, and road network infrastructure projects.
- Expansive Construction-Specific Expertise: Provide expert advice and technical guidance to clients on structural design, site assessment, soil analysis, earthworks, formwork, reinforcement, concrete works, finishing, and site completion inspections.
- Project management: Understands Project Supervision and Coordination (Manage operations, understand the sequencing of tasks to ensure timely and quality delivery of project outcomes) and Stakeholder management. Tracking project performance and analyzing deliverables against requirements.
- Contract management: High familiarity with construction contract and subcontract documents, service level agreements, terms, and conditions.
- Regulatory compliance: Expertise in ensuring compliance with industry construction and building regulatory requirements (international and regional standards for construction) and possessing a strong HSE and Quality focus.



- Fault diagnosis: Proficiency in diagnosing and resolving construction implementation challenges and developing technical recommendations to improve and optimize project outcomes.
- Technical documentation: Experience in reviewing and generating comprehensive technical site assessments and project implementation reports, ability to understand architectural, structural, and MEP drawings, and proficiency in all Google Suite and MS Office functions.
- Teamwork dynamics: Collaborate with multidisciplinary design teams, architects, contractors, and project stakeholders to develop innovative and sustainable structural engineering solutions that meet client country needs and project objectives.
- Capacity building: Provide technical support, guidance, and mentorship to the project implementation team, fostering a culture of learning, collaboration, and continuous improvement.
- Availability and willingness to travel to CHAI project countries in Sub-Saharan Africa for onsite visits to evaluate and assess construction implementation, adhering to travel restrictions, health guidelines, and safety protocols.
- Fluent in English – French or Portuguese is considered an additional advantage.

Qualifications

- Bachelor's degree in civil engineering or related field; Master's degree preferred.
- Professional Engineer (PE) license required; Structural or Civil Engineer (SE/SE) license will be considered advantageous.
- 6 to 8 years of experience in structural or civil engineering consulting, design, and analysis, with a proven track record of delivering successful projects.
- Proficiency in structural or civil engineering software tools, including but not limited to AUTO-CAD, ETABS, SAP2000, RAM Structural
- Strong knowledge of structural building design codes and standards.
- Excellent analytical, problem-solving, and decision-making skills, with the ability to effectively communicate technical concepts and solutions to clients and stakeholders.
- Internationally recognized certifications, affiliations will also be advantageous.
- ****Only applicants who hold these qualifications are eligible to apply.***

Compliance to code of conduct

- The CHAI code of conduct for suppliers is a minimum set of requirements that suppliers must meet to qualify to do business with CHAI and remain in good standing with the organization. Please read the document via this link [Code of Conduct](#) and apply for this solicitation only if you can comply with these requirements. All suppliers and contractors are expected to adhere to the [CHAI EM Code of Conduct](#) for suppliers.

How to apply:

- Interested candidates/firms must submit their resumes/company profile, educational certificates and a detailed proposal explaining the candidate/firm's understanding of the objectives of the solicitation, the technical approach to offering the services, detailed methodology for carrying out the activities and obtaining the expected project output.
- Provide information on at least 3 previous civil engineering consulting projects similar to the scope of work of this solicitation for which your consulting firm/organization were engaged either individually as distinct corporate entities or jointly as members of a consortium of corporate entities.



- Provide a work schedule/workplan, inclusive of proposed activities, deliverables, and timelines.
- Submit a detailed summary of deliverable based costs or daily consultancy rates for the entire project duration. The total costs should be inclusive of taxes, duties, fees, and other impositions paid by the consultant /firm. Indicate the preferred schedule of payment and currency of remuneration.
- For submission of application, please send your completed application via email to gemprocurement@clintonhealthaccess.org
- The deadline for the submission is June 17, 2024, 11:59 pm CAT.

Evaluation Process

We will screen applications on a rolling basis - selected candidates/firms will be invited for our interview process to evaluate:

- Depth of technical expertise and knowledge,
- Previous experience with similar industry-based projects,
- Track record of successful project delivery and client feedback,
- Availability to commit to the project timelines and
- Proposed costs relative to project budget.

Additional Notes:

- Any clarifications required on this RFP should be submitted via the email gemprocurement@clintonhealthaccess.org quoting **RFP/CHAI/CENGR/0124** in the subject line by midnight Central Africa Time (CAT), 10 June 2024. Responses will be shared via all RFP solicitation channels, as well as by email.
- All quotation must be submitted on or before 12 midnight CAT, 17 June 2024 via the email: gemprocurement@clintonhealthaccess.org quoting **RFP/CHAI/CENGR/0124** in the subject line.
- Should your submission exceed 2 MB and cannot be sent by email, please send an email to request an upload link with the subject 'Requesting upload link for **RFP/CHAI/CENGR/0124**' to gemprocurement@clintonhealthaccess.org