

## RFP/HCR/SYR/24/297 Terms of Reference (ToR)

### A. GENERAL REQUIREMENTS

The main requirement of this ToR is to support UNHCR Syria in the provision of quality engineering services, as part of their current shelter, housing, and infrastructure projects. This document is describing the modalities to implement a frame agreement with one or many engineering firms to support shelter and infrastructure programs in assessment, designing, market analysis, supervision/monitoring, and handover of planned projects.

This service will be established after UNHCR request to the awarded company through official purchase order(s), and the time frame will be determined as per the timeline, scope of work, and target.

UNHCR has presence of the country office in Damascus and in other areas of Syria with three Sub-Offices in Aleppo, Homs, and Qamishli, three Field Offices in Damascus, Tartous, As-Sweida, and one Field Unit in Deir-Ezzor opened in 2021.

The United Nation High Commissioner for Refugees shall sign Frame Agreements with the selected engineering consulting firms to execute UNHCR-funded shelter and infrastructural works projects in the following provinces of the country:

UNHCR office	Location / area	Covered governorates
Field office Damascus	#1-Damascus	Damascus and Rural Damascus
Field office Sweida	#2-As- Sweida	Quenitra, AS Sweida and Daraa
Sub-office Homs	#3-Homs	Hama, Homs, Idleb
Field office Tartous	#4-Tartous	Lattakia, Tartous
Sub-office Qamishly	#5-Qamishly	Al-Hassakeh, Al Raqqa, Deir Ezzor
Sub-office Aleppo	#6-Aleppo	Aleppo

Through its Shelter, Education, Protection, livelihoods, and Health programs, UNHCR undertakes the construction/renovation of homes, schools, WASH, health facilities, bakeries, and other kinds of structures through third-party construction firms.

The UNHCR program includes the following objectives relevant to the Scope of Works

- Construction and rehabilitation of damaged structures/buildings affected either by the conflict or natural disasters which may include but are not limited to damaged houses repair, damaged buildings repair, debris removal and repair access road, Public Schools, Public Health Centers, Civil Registry Centers, Cadastral Buildings...etc.
- Site infrastructure construction and rehabilitation (infrastructure including but not limited to drainage, water and sanitation networks, rehabilitation of water supply systems (boreholes, pumping stations and high concrete water towers, rehabilitation of sewer water treatment plant).
- Electrical and energy study including transformers, cables, solar systems, repair electrical network, calculate the consumption as required.
- Designing and experimenting a new shelter typology, using eco-friendly material,
- Camp planning, and designing including topographic survey, soil testing etc.

- Rehabilitation/renovation and construction of UNHCR offices' premises all around Syria.
- Although the TOR mentions compliance with the Sphere standards and local laws, there is no explicit reference to environmental sustainability in construction practices, which is recommended.
- All studies should follow the Syrian construction codes, Sphere standards, Shelter sector guidelines, environmental sustainability in construction practices,
- The bidder will be responsible for having all the necessary equipment, software's to . UNHCR will not be handing out tape measurers, AutoCAD software licenses etc
- Coordinate with municipality and authorities to ensure house and land property (HLP) right is following to law and norms including local/national development plans (e.g. Post-War National Development Plans).

## B. DETAILED REQUIREMENTS

### 1. Emergency response

Type of Activity	Scope of work	Deliverables required during assessment /designing	Deliverables required during supervision and monitoring
1.1 Collective shelter rehabilitation	1. This intervention aims to enhance living conditions in public or unfinished buildings after disasters or emergencies. Work will be carried out to meet particular criteria as well as the minimal requirements outlined in the UNHCR emergency handbook, guidelines for the shelter sector, and sphere standards, environmental sustainability in construction practices,	<ul style="list-style-type: none"> <li>• Assessment report including available space, number of accommodation families,</li> <li>• Safety structure report,</li> <li>• Existing water and sanitation system</li> <li>• Safety and security features such as fences, metal bars, roads, etc.</li> <li>• Designing a scope of work to enhance privacy, infrastructure, living space, and social spaces according to standards.</li> <li>• Participate in contractor site visits with UNHCR’s team, and officially answer their queries, and record any change.</li> <li>• Layouts, specifications, and BoQ</li> <li>• Typical cross-section to main material</li> <li>• Timeline</li> <li>• Recommendations and workplan</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate the samples provided by the construction company.</li> <li>• Conduct site visits during implementation to check the work is according to the designed scope of work, technical specifications, and approved layout.</li> <li>• When it requires approval contractor requests to start critical work, or reject noncompliance work,</li> <li>• Provide UNHCR with a progress report and evaluate the implementation.</li> <li>• Quantities and quality assurance</li> <li>• Evaluate variation order if requested.</li> <li>• Provide timely technical solutions for any unforeseen work and reflect it in the contract documents.</li> </ul>
1.2 Camp construction and or expansion	This intervention aims to assist refugees and internally displaced people who are living in tented situations by designing, establishing, or operating existing camps in accordance with UNHCR's site planning parameters, cost-effective solutions, and risk prevention.	<ul style="list-style-type: none"> <li>• Conduct site surveys (topographical, geotechnical, and engineering); verify the land legal status and construction laws.</li> <li>• Assessment report including available space, number of accommodation families,</li> <li>• Soil report, Slops, potential hazard</li> </ul>	<ul style="list-style-type: none"> <li>• Track the approved timeline.</li> <li>• Participate in handing over committee.</li> <li>• Approve as-built drawing and actual qualities provided by the contractor</li> </ul>

		<ul style="list-style-type: none"> <li>Existing water and sanitation, energy systems</li> <li>Safety and security features such as fences, metal bars, roads, etc.</li> <li>Designing a scope of work to enhance privacy, cut/fill, infrastructure, living space, and social spaces according to standards.</li> <li>Participate in contractor site visits with UNHCR's team, and officially answer their queries, and record any change.</li> <li>Layouts, specifications, and BoQ</li> <li>Typical cross-section to main material</li> <li>Timeline Recommendations</li> </ul>	
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## 2. Long-term Housing program

Type of Activity	Scope of work	Deliverables required during assessment /designing	Deliverables required during supervision and monitoring
2.1. Safety structure assessment	<ul style="list-style-type: none"> <li>This activity might be requested by UNHCR to evaluate damaged buildings to take informative decisions for any potential intervention,</li> </ul>	<ul style="list-style-type: none"> <li>Verify structural integrity and functionality of existing construction/infrastructure, quality of finishes, accuracy of the as-built design drawings, and if not available, prepare architectural drawings of existing buildings, water, and wastewater distribution networks, and pumping and treatment stations.</li> </ul>	<ul style="list-style-type: none"> <li>Detailed report approved by UNHCR with site layout, collected data, as-built drawings, building(s) and site analysis and recommendations.</li> </ul>
2.2. Damaged house repair	<ul style="list-style-type: none"> <li>This intervention aims to help Owners or tenants from families returning voluntarily, IDPs living in rented</li> </ul>	<ul style="list-style-type: none"> <li>Assessment report for each housing unit including existing water, sanitation, energy system, Safety, and security features such as</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate the samples provided by the construction company.</li> <li>Conduct site visits during implementation to check the work is according to the</li> </ul>

	<p>housing, Palestinian refugee families, or crisis-affected families who have not fled and are considered members of the host community residing in partially damaged housing who can prove legal occupancy to repair and restore their damaged houses in according to the shelter sector guideline, and UNHCR's standards of procedure. UNHCR implementation is in three modalities:</p> <ul style="list-style-type: none"> <li>• Contracting construction company to repair damaged houses.</li> <li>• Provision and Installation of shelter packages,</li> <li>• Cash for repair</li> </ul>	<p>fences, metal bars, roads, etc.</p> <ul style="list-style-type: none"> <li>• Safety structure report,</li> <li>• Designing a scope of work for each house, covering civil, water, sanitation, and energy.</li> <li>• Participate in contractor site visits with UNHCR's team, officially answer their queries, and record any change.</li> <li>• Sketch, specifications, and detailed BoQ for each house, and accumulative BoQ for all the project.</li> <li>• Typical cross-section to main material</li> <li>• Timeline</li> <li>• Recommendations</li> <li>• Coordinate with municipality and authorities to ensure house and land property (HLP) right is following to law and norms including local/national development plans (e.g. Post-War National Development Plans).</li> </ul>	<p>designed scope of work, technical specifications, and approved layout.</p> <ul style="list-style-type: none"> <li>• When it requires approval contractor requests to start critical work, or reject noncompliance work,</li> <li>• Provide UNHCR with a progress report and evaluate the implementation.</li> <li>• quantities and quality</li> <li>• Evaluate variation order if requested.</li> <li>• Provide timely technical solutions for any unforeseen work and reflect it in the contract documents.</li> <li>• Track the approved timeline.</li> <li>• Participate in handing over committee.</li> <li>• Approve as-built drawing and actual qualities provided by the contractor</li> </ul>
<p>2.3. Common area repair</p>	<p>This intervention targets damaged buildings that accommodate returnee families to ensure that access to their homes is safe and has a minimum protection element</p>	<ul style="list-style-type: none"> <li>• Assessment report for each housing unit including existing water, sanitation, energy system, Safety, and security features such as fences, metal bars, roads, etc.</li> <li>• Safety structure report,</li> <li>• Designing a scope of work for each house, covering civil, water, sanitation, and energy.</li> <li>• Participate in contractor site visits with UNHCR's</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate the samples provided by the construction company.</li> <li>• Conduct site visits during implementation to check the work is according to the designed scope of work, technical specifications, and approved layout.</li> <li>• When it requires approval contractor requests to start critical work, or reject noncompliance work,</li> </ul>

		<p>team, officially answer their queries, and record any change.</p> <ul style="list-style-type: none"> <li>• Sketch, specifications, and detailed BoQ for each house, and accumulative BoQ for all the projects.</li> <li>• Typical cross-section to main material</li> <li>• Timeline</li> <li>• Recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• Provide UNHCR with a progress report and evaluate the implementation.</li> <li>• quantities and quality</li> <li>• Evaluate variation order if requested.</li> <li>• Provide timely technical solutions for any unforeseen work and reflect it in the contract documents.</li> <li>• Track the approved timeline.</li> <li>• Participate in handing over committee.</li> <li>• Approve as-built drawing and actual qualities provided by the contractor</li> </ul>
<p>2.4. Retrofitting damaged building</p>	<p>Targeting damaged structures that have been declared as physically unsafe due to conflict or disasters such as earthquakes.</p>	<ul style="list-style-type: none"> <li>• The engineering syndicate and municipality must certify your detailed structural study.</li> <li>• Conduct the required soil, concrete, and reinforcement tests.</li> <li>• Detail scope of work, specification, method of statement, scaffolding design,</li> <li>• Provide detailed drawings and sections to reinforce the damaged structural element.</li> <li>• Detailed safety measures and policy during implementation</li> <li>• Timeline,</li> <li>• Recommendation and feasibility study</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate the samples provided by the construction company.</li> <li>• Conduct site visits during implementation to check the work is according to the designed scope of work, technical specifications, and approved layout.</li> <li>• When it requires approval contractor requests to start critical work, or reject noncompliance work,</li> <li>• Provide UNHCR with a progress report and evaluate the implementation.</li> <li>• quantities and quality</li> <li>• Evaluate variation order if requested.</li> <li>• Provide timely technical solutions for any unforeseen work and reflect it in the contract documents.</li> <li>• Track the approved timeline.</li> </ul>

			<ul style="list-style-type: none"> <li>• Participate in handing over committee.</li> <li>• Approve as-built drawing and actual qualities provided by the contractor</li> </ul>
2.5. New shelter topology design	<p>The UNHCR may propose the design of a new shelter typology as a medium-term solution to enhance the living conditions of Internally Displaced People (IDPs) residing in inadequate shelters for protected situations. This design should adhere to the</p> <p><a href="#">UNHCR shelter and sustainability overview April 2021.</a>, or alternatively, it could incorporate innovative solutions.</p>	<ul style="list-style-type: none"> <li>• Full design including specification, layout, detail drawings, BoQ, and 3 models.</li> <li>• using accredited software by structural designs by official institution globally</li> <li>• Consultation with institutions, universities, and syndicates, inside and outside syria</li> <li>• Recommendation for proposed material</li> <li>• Data sheets for proposed materials,</li> <li>• Calculation books</li> <li>• Presentation</li> <li>• Analysis and feasibility study</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring the prototype and supporting UNHCR in testing and experimenting with the product</li> <li>• Participate in the advocacy with stakeholders including government, beneficiaries.</li> <li>• Testing the procured material</li> <li>• Monitor the implementation</li> </ul>
2.6. Construction material market survey	<p>UNHCR might request the company to conduct market survey for construction material</p>	<ul style="list-style-type: none"> <li>• Determine the list of materials used in shelter and infrastructure programs based on the work's scope.</li> <li>• Design the specification for the proposed material, create typical cross-sections, create a datasheet, and confirm its availability in the market.</li> <li>• Conduct a quarterly market survey and provide the average price in each governorate.</li> <li>• Update the list in response to UNHCR requests for newly used program items or any unexpected</li> </ul>	NA

		information that exceeds 10%.	
2.7. Soil investigation, and topographic survey	For the new site, conducting a site topographic survey and soil investigation will help UNHCR design, and plan a new intervention based on the nature of the allocated land	<ul style="list-style-type: none"> <li>• Check the site topography for making test boreholes; take samples; and conduct laboratory tests.</li> <li>• Conduct a site survey using GPS, and Total Station,</li> <li>• Provide a detailed contour and survey points, and analysis Slop, distance from services, and flooding risks, etc.</li> <li>• Provide soil report approved and certified by a syndicate</li> </ul>	<ul style="list-style-type: none"> <li>• NA</li> </ul>
2.8. Debris removal	The intervention is to support families to return to houses in clear and safe access route	<ul style="list-style-type: none"> <li>• Coordinate with local authorities to guarantee the official clearance to of the site from any suspected ordnance.</li> <li>• Conduct a site survey to determine the volume of debris.</li> <li>• Mapping the safety routes as per the provided approval</li> <li>• Provide a work schedule, including labor, light and heavy equipment.</li> <li>• Establish a GPS track linking the site to the official dumping pit.</li> <li>• Timeline and recommendation</li> </ul>	<ul style="list-style-type: none"> <li>• Perform on-site visits during the implementation process.</li> <li>• calculate the quantity of debris after site cleaning by comparing pre- and post-cleaning site surveys. using total station and civil 3D software</li> <li>• Ensure that all wasted items are properly deposited in the designated location. • Report any incidents that occur during the implementation phase.</li> </ul>
2.9. Topographic survey for land, contour, analysis, etc..	This activity is to conduct a site survey and analysis for the commencement surface for new land, or project	To provide a master plan, GPS points, site analysis including slop, terrain, flood mitigation and access to the new site, quantities for cut and filling when requested using total station, GPS, and Civil 3D software	NA

### 3. Study for Infrastructure projects:

Type of Activity	Scope of work	Deliverables required during assessment /designing	Deliverables required during supervision and monitoring
3.1. Water and sanitation network repair	To repair or extend the existing water and sanitation network including pipes, manholes, and other accessories	<ul style="list-style-type: none"> <li>Full set of documents required for the tender including master plan, profiles, layouts, cross-section, specification, assessment, BoQ, timeline and recommendations</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate the samples provided by the construction company.</li> <li>Conduct site visits during implementation to check the work is according to the designed scope of work, technical specifications, and approved layout.</li> <li>When it requires approval contractor requests to start critical work, or reject noncompliance work,</li> <li>Provide UNHCR with a progress report and evaluate the implementation.</li> <li>quantities and quality</li> <li>Evaluate variation order if requested.</li> <li>Provide timely technical solutions for any unforeseen work and reflect it in the contract documents.</li> <li>Track the approved timeline.</li> <li>Participate in handing over committee.</li> <li>Approve as-built drawing and actual qualities provided by the contractor.</li> </ul>
3.2. Pump station and borehole	To repair damaged water pumps, or existing boreholes including the control panel, pump, energy source,		
3.3 Solar streetlight	To design solar street light project, for procuring devices according to required illumination, and columns, concrete bases, maps, and locations		
3.4 Electrical network	With coordination with the electricity directorate, this intervention might be conducted to repair damaged networks including cable, transformer, and other requirements.		
3.5 Rehabilitation of Civil Registry Center, Cadastral Building, School, and (Public Health Center), Rehabilitation of Bakery - Civil, Architecture, MEP, Production Line, or any other public building	To repair and/or renovate public Building services design including health, school, civil registry, bakery, and citizen service center.	<ul style="list-style-type: none"> <li>Full set of building service drawings including civil, finishing, plumbing, sanitary, electrical, mechanical, and equipment with technical specifications and calculation analysis. BOQ and cost estimation</li> </ul>	

3.6. Electrical Transformer Study	To design a scope of work related to provision or maintenance of electrical transformer.	Full set of documents required for the tender including master plan, profiles, layouts, cross-section, specification, assessment, BoQ, timeline and recommendations	
3.7. Rehabilitation of High Concrete Water Tank	To design a scope of work related to construction provision or maintenance concrete water tank.	Full set of documents required for the tender including master plan, profiles, layouts, cross-section, specification, assessment, BoQ, timeline and recommendations	<ul style="list-style-type: none"> <li>• Evaluate the samples provided by the construction company.</li> <li>• Conduct site visits during implementation to check the work is according to the designed scope of work, technical specifications, and approved layout.</li> </ul>
3.8. Solar System Design and Studies	Including all related components from the Invertor, Batteries, Cables, Number of Panels and Capacity, Steel Structure, earthing system and lightning protection ...etc. to ultimately have a functional and durable Solar System	Full set of documents required for the tender including load profiling, feasibility studies, solar system design, specification, assessment, BoQ, timeline and recommendations	<ul style="list-style-type: none"> <li>• When it requires approval contractor requests to start critical work, or reject noncompliance work,</li> <li>• Provide UNHCR with a progress report and evaluate the implementation.</li> <li>• quantities and quality</li> <li>• Evaluate variation order if requested.</li> <li>• Provide timely technical solutions for any unforeseen work and reflect it in the contract documents.</li> <li>• Track the approved timeline.</li> <li>• Participate in handing over committee.</li> </ul> <p>Approve as-built drawing and actual qualities provided by the contractor.</p>

#### **4. Engineering Support requirements:**

UNHCR may request for individual engineering support as per the field requirements and this activity will be measured on the basis of daily personnel costs as per the following details:

Site Assessment:

- Project Manager with min 10 years' experience in WASH projects.
- Structural/Civil Engineer with min 5 years relevant experience.
- Topographer with min 5 years relevant experience.
- Draftsman with min 2- years' relevant experience.
- Hydraulics Engineer with min 5 years' experience in WASH projects.
- Mechanical Engineer with min 5 years in WASH projects.
- Electrical Engineer with min 5 years in WASH projects.
- Social & Environmental Expert with min 5 years relevant experience.

Design and Technical Documents:

- Project Manager with min 10 years' experience in WASH projects.
- Architect with min 5 years relevant experience.
- Structural/Civil Engineer with min 5 years relevant experience.
- Electromechanical Engineer with min 5 experience years in WASH projects.
- Sanitary Engineer with min 5 years' experience in WASH projects.
- Mechanical Engineer with min 5 years' experience in WASH projects
- Draftsman with 2-year experience.
- Social & Environmental Expert with min 5 years relevant experience.

Site Supervision during execution of works:

- Project Manager with min 10 years' experience in WASH projects.
- Resident Civil Engineer with min 5 years relevant experience.
- Architect with min 5 years relevant experience.
- Electromechanical Engineer with min 5 experience years in WASH projects.
- Mechanical Engineer with min 5 experience years in WASH projects.
- Sanitary Engineer with min 5 experience years in WASH projects.
- Social & Environmental Expert with min 5 years relevant experience.

Site Inspection during Defects Liability Period:

- Resident Civil Engineer

Quality Assurance and Site Supervision:

- Site visit report for sites (all inclusive), upon UNHCR request company will participate in vendor site visits, and ad hoc visit to the construction site to provide technical judgement, expertise, and progress evaluation,
- Site supervision and Monthly report for sites in the subject governorates/areas per each office (all costs included)

#### **C. Geographical coverage:**

Every governorate in Syria is being covered by UNHCR shelter and infrastructure interventions, which reach all geographic regions within each governorate, including district, subdistrict, and community levels.

Therefore, companies might indicate interest in one, several, or all governorates, according on their expertise, competence, and capacity to mobilize personnel and material resources.

The firms will be asked to submit a proposal based on which governorate it is eligible to work with UNHCR on, showing they can operate and cover all the areas under the scope of the works submitted (at all levels, district, sub-district and community level).

#### D. Frame agreement duration and timeframe:

The frame agreement period will initially last for one year, but it can be extended for an additional year based on the company's performance report during the implementation period, satisfaction in coordination, technical capacity, and official certification to carry out the activities specified in the frame agreement objective.

#### E. Evaluation criteria:

##### Mandatory Evaluation Criteria:

Incorporation, proper registration with the Syrian Engineering Syndicate, and qualification as a consultant office to undertake engineering studies in the following professions: structural, road, water, sanitation, mechanical, electrical, and renewable energy. If a foreign firm's expertise is necessary, it should be registered as a joint venture with PEC in accordance with the specific PEC By-Laws.

##### Weighting Evaluation Criteria:

CRITERIA DESCRIPTION	Score
<b>1. General company profile and qualifications</b>	<b>20</b>
a) Years in business (stability) – company profile proves experience in the engineering studying fields and humanitarian sector	10
b) Client references, final reports, and satisfaction letter for the experiences provided in the company profile including any previous project or contract with UN Agenais or NGOs including any previous project or contract with UN Agenais or NGOs	10
<b>2. Proposed services, approach, and company's capacity</b>	<b>30</b>
a) Capacity to mobilize and cover locations, (timeline to start project in specific location, brief description for the role of every team member in the designed location)	10
b) provide examples for potential project and steps to complete (method of statement) General understanding of the requirement & HSE Plan	10
c) Quality control and assurance procedures, reporting mechanism, templates etc. including prior examples	10
<b>3. Proposed personnel to carry out the works</b>	<b>20</b>
a) Appropriateness of proposed project teams including CVs, Qualifications of the project managers, organigram,	10
b) Ability to utilize the targeted community resources including engineers, assistant engineers surveyors, skilled labor, etc. Propose how who to benefit from engineers from the targeted area	10
<b>Total</b>	<b>70</b>

## F. General information

UNHCR will assess the consulting firms that submitted proposals against the tender document. The company must be officially registered and have a certificate as a consultant office to undertake engineering studies issued by the Syrian Engineering Syndicate.

In addition, the bidder should ensure and provide demonstrated details within the technical response form Annex B related to the following points:

1. Demonstrated expertise in building and infrastructure design working with both private and public sector companies nationwide.
2. Demonstrated experience working with similar project authorities (e.g., United Nations, Donor Agencies, INGOs) and project sizes.
3. The applicant should have experience with geo-technical studies, feasibility studies, design work, detailed BOQs and drawings (architectural, structural, mechanical & electrical), procurement, change orders, construction supervision or management, laboratory testing, material testing, coordination, and more.
4. The consultant's particular contribution and staff strength suggest sufficient capacity to address project needs.
5. Specify the needed skills for the project and request brief CVs from consultants. Expert posts should be limited to a maximum of six. The application should include a list of all professional staff linked to the firm's job.
6. Engineering firm should present declarations of competency with suitable references. The firm's competency may be evaluated based on their expertise with similar projects, overall experience, and the availability of top-line professionals on a consistent basis.
7. The consultancy company must offer the optimal personnel structure and detailed roles in their recommendation.
8. Appoint or nominate a team leader/project manager with diverse experience.
9. Ability to utilize the targeted community resources including engineers, assistant engineers surveyors, skilled labor, etc. propose how who we can benefit from engineers from the targeted area.
10. Company must declare to not be part of any construction project might UNHCR implement directly or through partner during the frame agreement period, Also, Company should disclose any potential relation with construction company in case of any conflict of interest in according to UNHCR Code of conduct.