

Section 3a: Scope of Works

Installation of Sanitary Pipeline - Mazboud

1. BACKGROUND

Aiming at addressing the current needs caused by the Syrian refugee influx and based on previous experience, UN-Habitat is currently implementing ***“Enhancing the Role of Unions of Municipalities to Respond to Refugees’ and Host Communities’ Needs”*** Project, funded by UNICEF. The goal of the project is to improve the living conditions of host population and refugees through the enhancement of access to basic services.

In line with the project goal, the Project aims to achieve two main objectives:

- Empower key local stakeholders (Unions, municipalities, and water authorities etc.), enabling them collectively identify, analyze, and solve key problems and issues related to water and sanitation (WASH).
- Increase the provision of basic services, mainly WASH projects, through the active involvement of local authorities and unions of municipalities in identifying, assessing and implementing sustainable and sound infrastructure projects, including water network improvements, increasing water supplies, grey and black water treatment, as well as reducing contamination of water sources.

With the increase in the number of refugees in different areas of Lebanon, the demand on basic services has significantly increased. Local authorities, with limited financial and technical resources, have been encountering great challenges in providing sufficient basic services to citizens, both refugees and host population.

Mazboud is village in Chouf district within Iqlim Kharroub Chemali union of municipalities. The village contains both, Lebanese and Syrian population with about 3000 Lebanese and about 1000 Syrian refugee.

The village already contains sewage network. Some neighborhoods in the village lack sewage network and depend on septic tanks. The targeted inhabitants in this project can't benefit from the existing network due to the topography of the village that can't allow low area to send their sewage to the network. Due to the increase of population both Lebanese and Syrian refugees, and the existence of several commercial units and a hospital, there is a potential risk of increasing contamination especially for underground water. Moreover, part of Dalhoun village will benefit later from the proposed network.

2. OBJECTIVES

The TOR is developed to commission a qualified contracting company to undertake the installation of sanitary pipeline in Mazboud.

3. SCOPE OF WORKS

- Site Mobilization
- Dig, Prepare, and Install UPVC 200mm and 300mm pipe (6.2mm Wall Minimum)

- Cast and prepare site for Reinforced Concrete Manholes, with 20cm base, 15cm walls and ductile iron Cover
- Asphalt part of the excavated line

Activities (refer to annex 1-Specifications):

A- Existing Drainage System

The Engineers from RTO has done all he can to locate the existing sewage system within the project boundary, which are shown on drawings.

However, the Contractor should do his own investigation during the tendering stage to make sure of existing conditions, and should allow in this item for relocating existing sewage system as directed by the Client/Engineer (pipes, culverts, channels, manhole covers, etc..) including appurtenances and for providing all materials required to complete this item.

Obtain exact location, size and invert levels of existing storm/sewer or channels and submit to the Engineer prior to construction. Along with Shop Drawings for Manholes and Pipelines.

Facilitate the passage of all equipment inside private lands

Note: Item B may be extended outside project boundary if directed by the Engineer.

B- Pipe laying Works

This part includes Excavation of the existing material and storing any suitable material that may be used in backfilling. It also includes cutting Asphalt and disposal of them outside the site. It also includes supplying and laying the Pipe, all as specified in Specs. Pipe Bedding are as specified on drawings.

Backfilling Trenches with suitable material from site or from borrow pits. The material shall be of good selected fill as determined by tests and approved by UN Habitat Engineer.

Laying 200mm dia PVC pipes

Laying 300mm dia PVC pipes

C- Manholes

This part includes casting or installing precast Manhole as shown on Drawings or any equivalent manhole to be approved by UN habitat engineer. Also existing manholes has to be connected to new implemented sewer line with all related works.

Manhole to 200 or 300mm dia. Pipes H<1.5m

Manhole to 200 or 300mm dia. Pipes H>1.5m

Connecting to Existing Manhole as necessary to drain water

Manhole cover and frame Class A (heavy duty)

D- Finishing the Surface and Pavement

This part includes re-establishing the previous state of the pavement and surface above the pipes and around the manholes. It includes asphalt works and/or concreting above the new backfilled trenches to the satisfaction of the Engineer.

4. DURATION OF WORKS

The contracting company is expected to commence the works immediately after Contract signature. The overall execution timeframe for the whole project is 60 working days, effective from contract signature date. Urgent cases that could justify delays of works are mainly due to security reasons, in case of any conflicts in Mazboud or for extreme bad weather conditions.



5. STANDARD OF PERFORMANCE

The Contractor shall perform the required services and carry out his obligations under this Contract with all due diligence, efficiency and economy, in accordance with generally accepted techniques and practices used in performing such type of activities and with professional engineering and contracting standards recognised. He shall observe sound management, and technical engineering practices, and employ appropriate advanced technologies and safe and effective equipment, machinery, materials and methods. The Contractor shall operate and maintain the equipment and machinery involved in the implementation activities in accordance with the relevant laws, standards, regulations and legislation, as well as the requirements under the Contract, and the manuals and guidelines as provided by the manufacturers and suppliers of the equipment and machinery.

Site Safety:

The Contractor shall be responsible for implementing strict safety measures on site in view of the type of works being implemented; the Contractor shall provide and erect protection items required by site conditions or as requested by the Engineer to protect persons, onsite and offsite property, as required and as supplementary to such items that have been left in place; ascertain legal and other requirements.

The Contractor shall maintain protection in place until work is complete and danger of damage has ceased; at such time as approved by the Engineer, remove protections.

Contractor's Resources:

The Contractor shall utilise all necessary resources, manpower, machinery and equipment etc. in order to perform the required works in a proper, safe and timely manner. The Contractor should employ, to the maximum extent possible, the necessary labourer (skilled and/or unskilled) from within the project area.

6. MANAGEMNT MODALITIES

An engineer will be assigned by UN-Habitat to directly supervise the works of the Contractor. The engineer will be directly reporting to and seeking approval/acceptance of output from the project Manager. The engineer will be reporting on progress of works on a weekly basis.

7. QUALIFICATION OF CONTRACTING COMPANY

Experience:

- Minimum 2 similar projects during the past 5 years.
- Previous related work assignments and references including proofs of similar contracts completed in the past
- Signed Customers' statements for past performance assessment
- Company's Legal Certificates and Business License
- VAT Registration Certificate
- Company's Audit financial statements of the two preceding years
- Evidence of the Contractor's insurance policies and coverage
- A list of proposed resources, manpower, machinery and equipment, etc.

- A list of Subcontractor's to be used under this contract and details of works/tasks accomplished by each subcontractor.

The documentary evidence of technical conformity to the Bidding Documents may be in the form of literature, drawings, and data, and shall consist of detailed descriptions of the proposed:

- (a) Clear and detailed work plan (schedule) and method statement;
- (b) Technical and performance characteristics of the proposed machinery, equipment, materials, and tools;
- (c) Environmental and safety measures especially while working in deep excavations and the like;
- (d) Quality Assurance measures and Technical Data Sheets of all material to be used;
- (e) Local laborers to be employed from the target area;
- (f) Maintenance storage and Repair schedule and methodology;
- (g) Strategy to work in heavy environmental areas and conditions.

Timelines and Safety:

In addition to presenting an offer that shows the previously mentioned qualifications:

- The Contractor shall present a work plan including activities and timelines.
- The contractor shall provide safety equipment to all site basis personnel:
 - Safety Helmets, Shoes, Jackets especially while working in deep excavations.
 - Construction site should be closed and surrounded by warning tapes and clear signals.

8. ANNEXES

- Annex 1 – Technical Specifications
- Annex 2 – Detailed BOQs
- Annex 3 – Technical Drawings and details

