

### **Water Network- UNDP Contribution:**

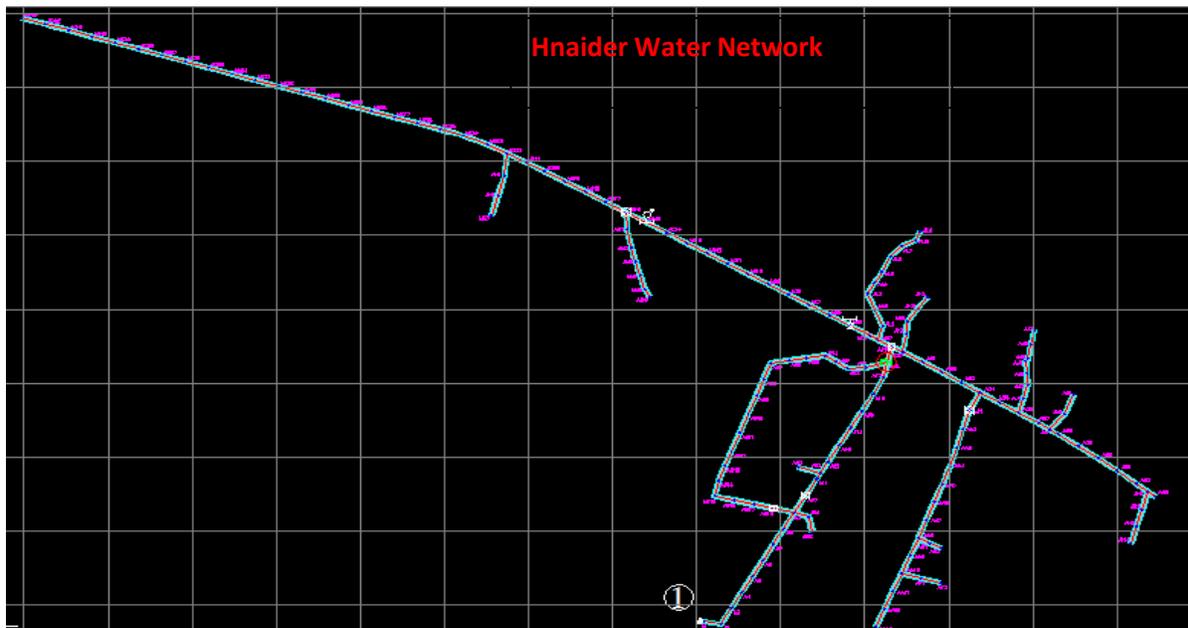
As a result of the conflict in Syria, more than 1.2 million registered refugees are being hosted in communities in Lebanon. A large portion of these refugees are being hosted in the North of Lebanon, already one of the poorest areas in the country. These communities already suffer from poor water services due to lack of adequate infrastructure and have limited means to expand local infrastructure.

The Swiss Development Corporation (SDC) has provided the Lebanon Country Office with resources for the support of water infrastructure in North Lebanon. As such, under the umbrella of the Lebanese Center for Water Management and Conservation (LCWMC) at the Ministry of Energy and Water, the project has improved the water supply services in the area of Wadi Khalid and in Hnaider village in particular.

The project was managed and implemented by the United Nations Development Programme (UNDP), the Energy and Environment Programme. Its main objective is to increase the supply of water in host communities and relieve the associated economic, environmental, health and social stresses.

The project consists on implementing the main distribution water network in Hnaider as well as the house connections for the existing households as per the topographic surveys done during the design phase.

The total length for the implemented network is around 4,000 m (HDPE Pipes) including more than 200 house connections and other related accessories.



**Figure 1:** Hnaider Water Network Design- Plan View

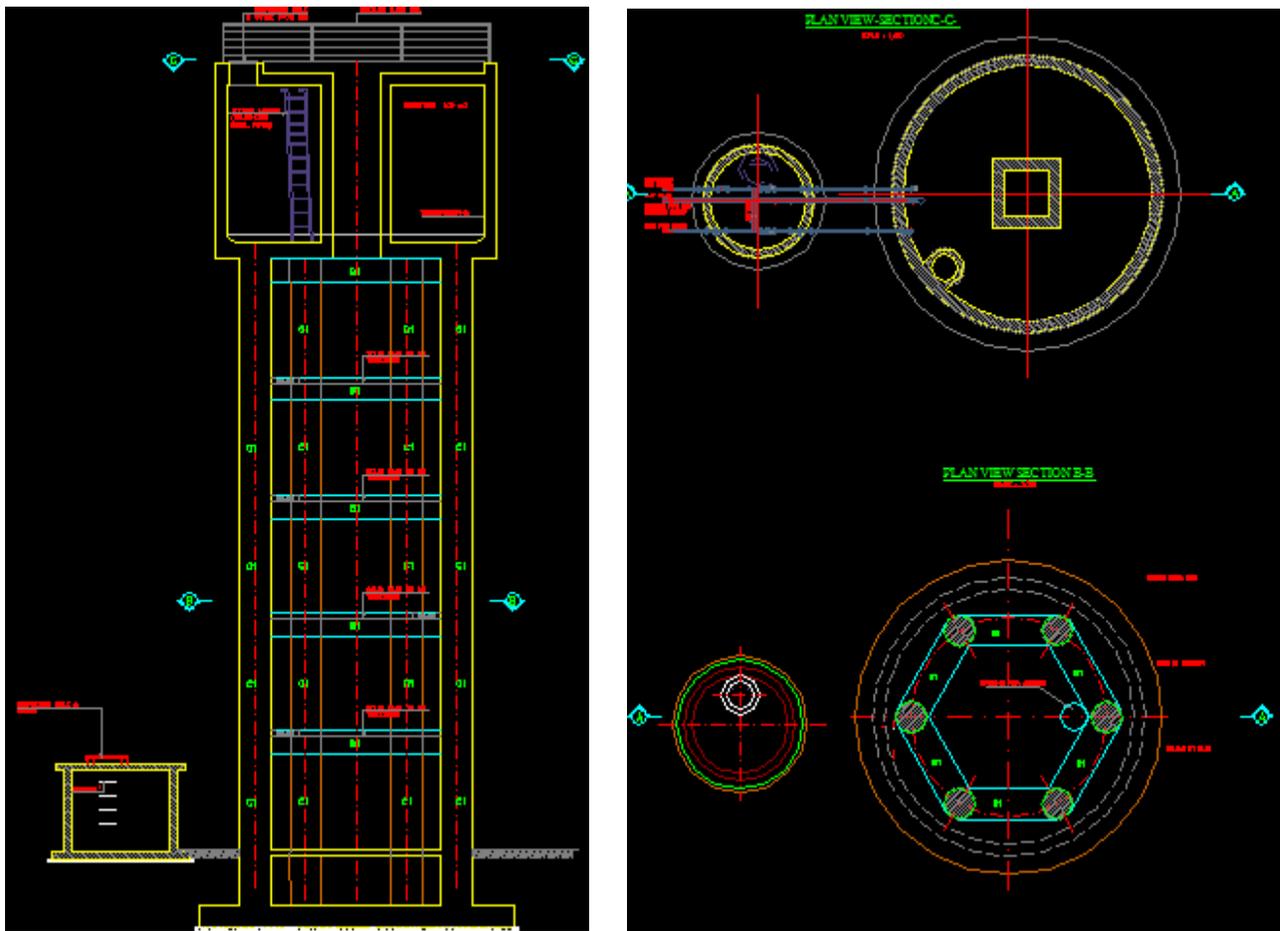


**Figure 2: Testing of Water Network & Installation of House Connections**

### Construction of Hnaider Reservoir:

The project goal is to build an elevated water reservoir with a height of 20 m and a capacity of 100 m<sup>3</sup>. The reservoir should be capable to secure all the required volume of the domestic water for Hnaider inhabitants. The work started during the first week of April and it is estimated to finish the whole construction of the reservoir during the first week of August.

At this stage, several elevated solid slabs are constructed, as well as the related columns and beams. Therefore, more than 80% of the work is completed and in line with the technical specifications and design drawings as set by UNDP team.



**Figure 3:** Design Drawings- Elevated Water Reservoir



**Figure 4:** Beam Structure



**Figure 5:** Work Progress for Hnaider Reservoir