

Greater Beirut Water Supply Project Additional Finance

Addendum to the Resettlement Action Plan

I. Introduction

The Addendum to the Resettlement Action Plan (RAP) was prepared in the context of the preparation of the Additional Financing for the Greater Beirut Water Supply Project (GBWSP AF). The Greater Beirut Water Supply Project (GBWSP; Project ID: P103063) was approved on December 16, 2010 and was effective on December 4, 2012. The current closing date is June 30, 2019. There are two implementation agencies – Beirut Mount Lebanon Water Establishment (BMLWE) and Council for Development and Reconstruction (CDR). The total project amount is US\$370 million, of which the IBRD credit amount is US\$200 million and the co-financing from BMLWE and the Government of Lebanon is US\$ 140 million and US\$ 30 million, respectively. 51.19 percent of the IBRD credit is already disbursed.

Project Description

GWSP's Project Development Objective (PDO) is to 'increase the provision of potable water to the residents in the project area within the Greater Beirut region, including those in the low-income neighborhoods of Southern Beirut, and to strengthen the capacity of the BMLWE in utility operations'.

The GBWSP has three components:

1. Bulk Water Supply Infrastructure (total cost: \$236 million; IBRD contribution \$187.55 million). This component comprises (a) *the construction and construction supervision of bulk water supply infrastructure consisting of (i) two water tunnel conveyors of 3 km and 21 km respectively; (ii) two transmission twin pipelines of 7.6 km and 2.7 km respectively; (iii) three storage reservoirs of 35,000 cubic meters (cum), 50,000 cum, and 20,000 cum; (b) design, construction and construction supervision of a water treatment plant (WTP) of 250,000 cum a day capacity; (c) all related equipment, including pumps and valves; and (d) support to CDR for project management related to the above.*
2. Supply Reservoirs, Distribution Network and Metering (total cost: \$61 million; IBRD contribution \$2.55 million). This component comprises: (a) *Design, construction and construction supervision of 16 supply reservoirs of storage capacities varying between 500 and 1,000 cum each; (b) design, construction and construction supervision of water supply distribution network of about 187 km of pipelines; (c) installation of 200,000 household meters in selected areas; and (d) installation of about 30 bulk water meters at reservoirs and distribution chambers.*
3. Project Management, Utility Strengthening and Studies (total cost: \$15 million and IBRD contribution \$9.9 million). *This component focuses on capacity strengthening for the utility and Ministry of Energy and Water.*

The project includes acquisition of public and private land covering a total area of 426,563 m² mainly relating to two main project components: (i) establishing a **Bulk Water Supply Infrastructure**: Tunnels, Water Treatment plant, Transmission & Bulk Storage (including the Awali-Beirut Water Conveyor); and, (ii) **Supply Reservoirs, Distribution Network and**

Metering (Improvement and rehabilitation of the water distribution network in Beirut and its suburbs). A RAP was prepared for the parent project, approved by the Bank on August 6, 2010 and disclosed at the Bank InfoShop on August 6, 2010 in Washington D.C, United States of America.

The RAP identified people affected by the project, described the nature and scale of the impacts, identified the mitigation measures to be taken and specified the legal and institutional framework responsibilities to ensure that all losses incurred by the taking of land or imposition of other restrictions are fully compensated and no one faces any kind of diminution of livelihoods or assets due to the project interventions.

It is to be noted that a pilot project area was implemented under the direction of the BMLWE. This pilot project area is situated in Ashrafieh District (see map in Annex 1, Figure 3) which has been operational for a period of 1 year and which will continue for a period of another 2 years. It includes 4 phases as follows:

- 1) phase 1: supply and installation of 1,000 water meters;
- 2) phase 2: supply and installation of 9,000 water meters; and
- 3) phases 3 and 4: framework agreement for the next subsequent 2 years: annual supply and installation of 10,000 water meters.

It is to be noted that phases 3 and 4 have not yet commenced. The main objective of this pilot project is to reduce water losses and supply and install water meters in already established District Metered Areas (DMAs) in Ashrafieh District.

II. Project Activities to be Financed under the Additional Financing Project

a. Council for Development and Reconstruction (CDR)

GBWSP's financing will not be able to cover the storage of water from the conveyor. The lack of storage will result in a very complex and inefficient use of the water provided through the tunnel. Moreover, technically and practically, no connection could be provided directly between the conveyor and distribution systems, without bulk storage reservoirs. The Hadath and Hazmieh reservoirs, with their designed capacities, are mandatory needed to ensure a proper functioning of the system around normal cycle of 24 hours / day for conveying – treating – distributing, as per the best practice and design requirements. Even though the access to water will improve and the project objective can be achieved, the efficiency, operation and sustainability of the system would be affected. Hence, regional reservoirs are critical to improve the water supply systems and utility operations. Based on this assessment, CDR has requested and additional financing to cover the scale-up for three regional reservoirs.

The proposed additional financing will bridge a financing gap of US\$70 million resulting from an increase in the following: (i) construction costs for the three regional reservoirs (two reservoirs in Hadath area, and one reservoir in Hazmeih); (ii) the expropriation cost of two of the reservoirs (Hadath 90 and Hazmeih 90); (iii) half of the optional part of the cost of the tunnel and the twin pipeline contract (1st half of the optional part is already ensured by the CDR local funds), for US\$10 million; and (iv) supervision and contingency costs.

The parent RAP covered the land expropriation involved in the tunnels, including the access roads, water treatment plant, three bulk storage reservoirs, 24 local water supply reservoirs, pumping stations and the distribution network.

The land expropriation has been completed by following the approved RAP for most project activities except two bulk reservoirs which are:

- i) Hadath Reservoir (at level 90 ASL - refer to Hadath 90). The proposed volume is 54,600 cum, compared to the original conceptual design of 50,000 cum
- ii) Hazmeih Reservoir (at level 90 ASL - refer to Hazmieh 90). The proposed volume is 29,400 cum, compared to the original 20,000 cum

These bulk reservoirs will be financed by the AF and this addendum was prepared to provide updated information of land expropriation involved in these two bulk reservoirs.

b. Beirut and Mount Lebanon Water Establishment (BMLWE)

Changes under the proposed additional financing project: Based on the positive outcomes of the pilot project, including significant reductions in water losses, provision of invaluable water consumption pattern data, and continuous water supply (24/7), BMLWE intends to expand this successful experience to the whole city of Beirut via the following changes, under component 3 of the Greater Beirut Water Supply Project:

- (i) Implementation of 40 District Meter Areas (DMA) including chambers equipped with inflow meters, pressure reducing valves, data loggers, etc.
- (ii) Leak detection for around 1,000 km of network, including all the necessary and associated repair works (networks, house connections, reservoirs, etc.)
- (iii) Supply and installation of around 60,000 meters, in addition to the 30,000 currently under construction within the first project;
- (iv) Loss reduction management, and maintaining the achieved level of water reduction for a period of 3 years

In order to reach these objectives for all customers in the project area, the BMLWE is requesting additional financing in the total amount of US\$20 million. As previously applied, the World Bank will finance 66% while the remaining 34% will be financed by the BMLWE (see Annex 1, Figures 1 & 2 for a map showing the additional financing location under BMLWE). **Based on the above-listed components, it is to be noted that the BMLWE proposed additional financing project will not involve any involuntary taking of land.**

Therefore, as the proposed interventions will improve the water supply across the Greater Beirut Area and improve the efficiency of operations, the overall social and economic impacts of the additional financing project are considered positive. The project will not result in involuntary physical relocation of people nor will it cause demolition of any existing buildings.

III. Implementation of the RAP under parent project

The implementing agencies are monitoring the progress of expropriation and have identified all project affected persons. All affected landowners have been well notified either in person or through local newspapers and compensations are being provided. Both implementing agencies have established Grievance Redress Mechanisms and are preparing complaint logs.

Below is a summary of the expropriations and compensations under the responsibility of the 2 implementing agencies.

a. Council for Development and Reconstruction (CDR)

A grievance mechanism (GRM) is implemented for any people being affected by the various impacts of the pipe laying and reservoir and pumping station works of the project. The purpose of the grievance mechanism is for any affected person to give a full account of their complaints, concerns etc. as necessary. The GRM at CDR works by receiving a complaint or concern either by a phone call, by an official letter registered at CDR, or verbally at CDR. Some of these are simple clarifications and are directly responded on (verbally), yet many of them are received in official written formats and are mainly related to expropriation, questioning the area of the plot, the number of trees and requesting to undertake corrections if needed and so forth. These complaints are compiled and sent to the Consultant for further review (including re-survey and further inspection), and recorded accordingly, noting if any case requires remedial correction, and how, or whether such issue is not needed.

Expropriation has been completed for the tunnel. The total number of affected people is 1068. Compensations have been collected by 56 affected landowners. All affected landowners have been notified by expropriation decisions and the corresponding compensation amounts have been deposited in an ESCROW account. PIU is following up with PAPs who have not yet collected their compensations.

As for the WTP, expropriation has been completed for the tunnel entry and exit points. The total number of affected people is 13. Compensations have been collected by 10 affected landowners. All affected landowners have been notified by respective expropriation decisions and the corresponding compensation amounts have been deposited in an ESCROW account. PMU is following up with PAPs who have not yet collected their compensations.

The Hadath 125 reservoir expropriation, is already done (via decree 12874 dated 8/8/1998, with the compensations completed by August 2000). It is to be noted that there are no pending issues like open court claims or absentee landowners. The total number of plots is 3, and each is owned by 3 landowners that are the same for the 3 plots. All affected landowners have been notified and compensation has been deposited in the escrow account. Up to date, 2 landowners have collected their compensation.

b. Beirut and Mount Lebanon Water Establishment (BMLWE)

All expropriation decrees have been finalized for component 2 that is under the responsibility of the BMLWE. The status of compensations for the landowners has not changed since the last

quarterly ESIA report. Expropriation has been completed for a total of 24 local reservoirs. The total number of affected people is 129. Compensations have been collected by 8 affected landowners. It is to be noted that all affected landowners have been notified by expropriation decisions and the corresponding compensation amounts have been deposited in an ESCROW account. PIU is following up on all appealed cases and PAPs who have not yet collected their compensations.

All contractors implemented a GRM in the form of a project sign with details including: (i) project name; (ii) responsible authority; and (iii) PMU and Contractor contact numbers. These were placed at all reservoir/pumping station and pipe-laying project locations in all 4 zones of the project. A complaints log was also distributed to all Contractors in the view to document the nature of any complaints and what actions were taken. Thus far, Zones A, C and D have received complaints which have been documented by the respective Contractors while Zone B has not received any complaints. The nature of these complaints is in general minor for example: concern about duration of time until access would be provided again to local roads; complaint about stockpile materials preventing access to parking in front of residential buildings; damage to telephone cable which was immediately repaired by the relevant authority and so on. Therefore, for all intents and purposes, the GRM is now fully implemented under the BMLWE component and appears to be functioning well where all concerns and comments are appropriately addressed.

IV. Update of Inventory and Impacts of Land Expropriation under Proposed Additional Financing (including size of land, number of plots, location, land use, number of landowners and tenants, land attachment etc.)

a. Council for Development and Reconstruction (CDR)

The required expropriated lands are located in two cadastral areas: Hadath (for Hadath Reservoir 90 reservoir) and Baabda (for Hazmieh Reservoir). The plots for Hadath 125 reservoir were already expropriated/ listed in the RAP with no changes introduced. The overall expropriated plots are thirteen (13) plots, eleven (11) in Hadath and two (2) in Baabda. The 11 plots in Hadath are fully expropriated. The 2 plots in Baabda are partially expropriated. The thirteen plots are owned by six (6) landowners, including one landowner for the Baadba plots. The expropriation did not affect any facilities or trees on these plots, and there are no changes in the land use as of the original RAP. To note, that the Baadba plots are located in a prime location, interms of Real Estate and Property Values, where the estimated compensation rate are hence reasonably higher than the plots of Hadath.

The expropriation costs for two regional reservoirs (Hadath and Hazmeih) will be included in the proposed additional financing.

The expropriation of all the plots has been issued by the Decree No. 8275/2012 dated 11/06/2012 amended by the Decree No. 402/2014 dated 28/8/2014, for both Hadath 90 and Hazmieh 90 reservoirs.

The amended decree, no. 402/2014 dated 28/8/2014, concerns only the 2 plots of Baadba, for the Hazmieh 90 reservoir. At his discretion, the landowner of Baadba plots amended the affected plots numbering at the cadastral authority (merging). The amendment of the Decree was issued, based on a complaint by the landowner, to minimize the impact of expropriation on his land,

namely to what concerns the remaining part (outside expropriation) remaining under his ownership and its usability for further exploitation.

In the RAP, dated 2010, the lands to be expropriated for both Hadath 90 and Hazmeih 90 were indicated. No changes have been anticipated to this, except that the expropriation on plot no. 664 for the Hazmieh 90, was anticipated by the RAP to be fully expropriated. As per expropriation decree for Hazmieh 90 (decree no. 402/2014 dated 28/8/2014), the plot no. 664 (Baabda) was partially expropriated i.e. 5646m sqm out of 7672 sqm. There are no changes in land use and landowners in both locations and the landowners do not rely on these lands for any income or livelihood.

Furthermore, concerning the unit prices of lands in Hadath and Hazmieh, it is important to note that; (i) the Hazmieh 90 location is a prime location (close to the presidential palace) in terms of real-estate and property values, where the market prices of lands had remarkably increased in the last years, specially between 2007 and now, while comparably (ii) the unit prices of lands for the Hadath 90 reservoir, located in an inferior urbanized/rural area, are stable.

The complete inventory and impacts are provided in Annex 2. All landowners were consulted in the process of inventory updating and the updated inventory has been verified with all the landowners.

b. Greater Beirut Mount Lebanon Water Establishment (GBMLWE)

The additional project financing under component 3 of the Greater Beirut Water Supply Project is **not expected to result in the need for any new expropriations, involuntary physical relocation or demolition of existing buildings.**

V. Compensation Standards of Affected Assets for CDR proposed additional financing

The Compensations of the required expropriated plots are set by the Expropriation Committee (EC) which is an independent Legal Committee composed of a Judge, an Engineer and a Real Estate Pricing Expert sworn at courts. As identified in the Expropriation Law, the EC once notified of the Expropriation Decree undertakes a detailed inspection of the plots and then determines the land prices according to the market price and the recent land transactions in the area. As such, the compensation standard is based on the current market price and transaction cost is included. To be noted, if not satisfied with the EC prices, either the landowners or the CDR can oppose at a higher court i.e. “the Appeal court”.

VI. Total Cost of Expropriation for CDR Proposed Additional Financing

The estimated budget for expropriations related to surface structures is based on a valuation of assets taking into consideration the replacement costs and current market values of lands. For Budgeting for CDR proposed additional financing, refer to the table below. The amount requested as a part of the Additional Financing project is adequate to cover these costs. Total Cost is rounded to 15,000,000 USD. It is important to note that the prices per sqm of lands

differs between Hadath and Hazmieh, taking into consideration the location of each, noting that the location of Hazmieh is relatively higher from a Real Estate or property value perspective.

It is to be noted that there are no expropriations under the BMLWE component of the proposed additional financing.

Table of Budget for Expropriations under CDR Proposed Additional Financing

	Expropriated Area (m ²)	Unit Price (USD/m ²)	Total Amount (USD)
Hadath 90 Reservoir	9,729	500	4,864,500
Hazmieh 90 Reservoir	5,646	1750	9,880,500
Total	15,375	-	14,745,000

VII. M&E and Grievance Redress

It is to be noted that all M&E and GRM will be conducted as per the requirements of the 2010 RAP for both CDR and BMLWE proposed financing.

Annex 1

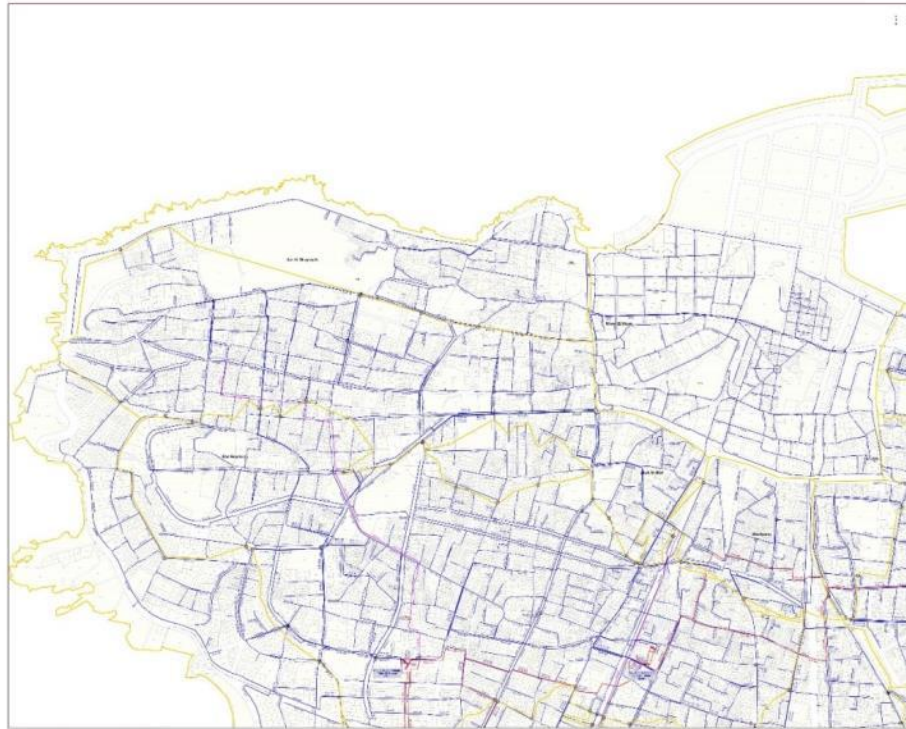


Figure1. Geographic Location of the Project Components for the Additional Financing – BMLWE – West Beirut South

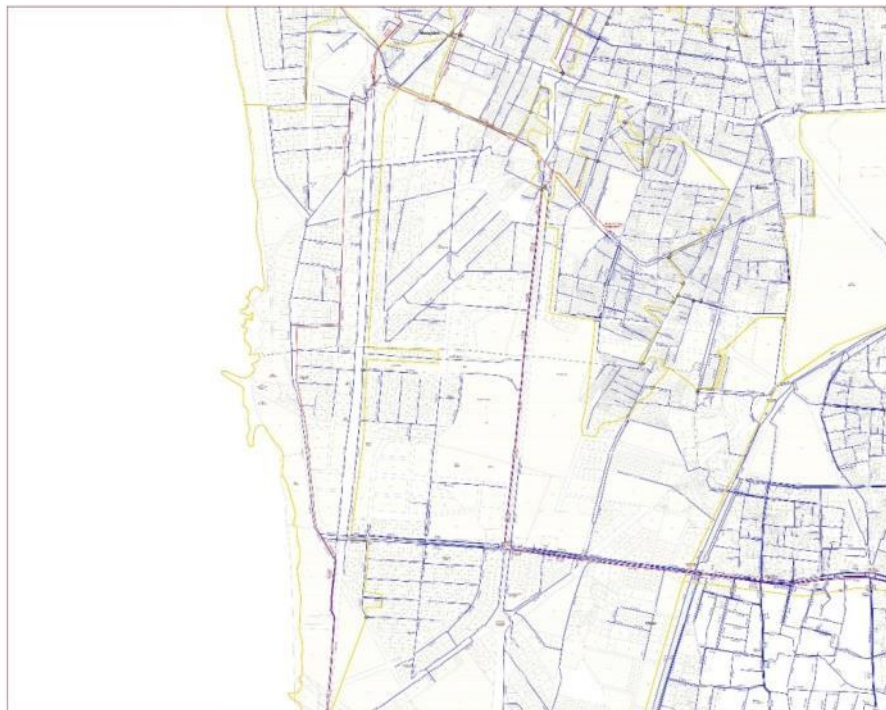


Figure 2. Geographic Location of the Project Components for the Additional Financing – BMLWE – West Beirut North

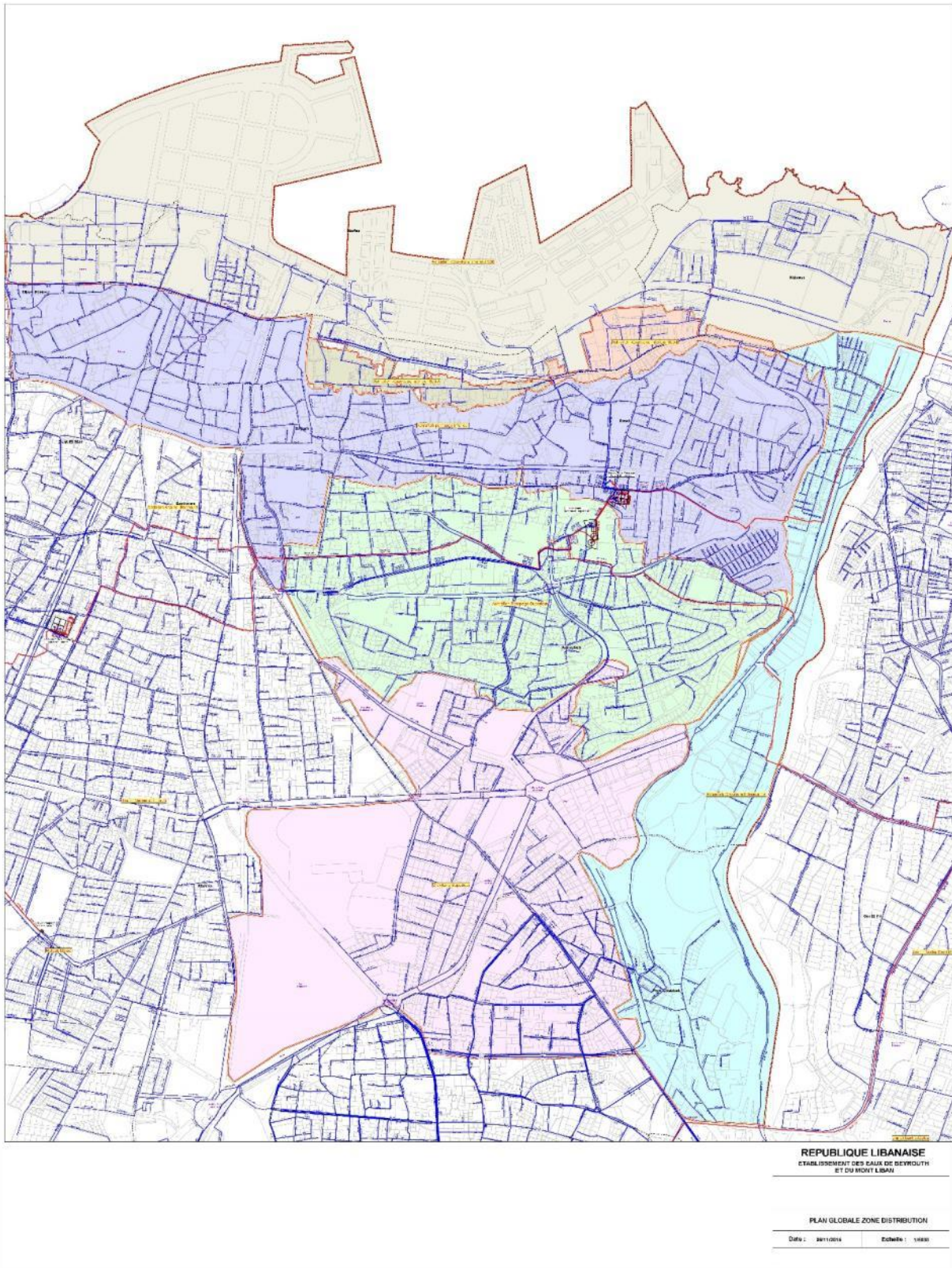


Figure 3. Map showing pilot project location - Ashrafieh

Annex 2

Inventory and Impacts of Land Expropriation - CDR

Expropriation Decree # From the parent project RAP	Date from the parent project RAP	Cadastral Location*	Plot #	Plot Area in (m ²)	Expropriated Area	Remaining Plot Area in (m ²)	Estimated Budget (USD)	Land Owners/occupier /Investors	Shares	Damaged Facilities	Damaged Trees	Status of Expropriations
8275/2012	11/06/2012	Hadath	39 25	809	809	0	404,500	Helmi Ali Kobaissi	2400	None	None	Not yet started
8275/2012	11/06/2012	Hadath	39 26	836	836	0	418,000	Helmi Ali Kobaissi	2400	None	None	Not yet started
8275/2012	11/06/2012	Hadath	39 27	976	976	0	488,000	Helmi Ali Kobaissi	2400	None	None	Not yet started
8275/2012	11/06/2012	Hadath	39 28	1024	1024	0	512,000	Helmi Ali Kobaissi	2400	None	None	Not yet started
8275/2012	11/06/2012	Hadath	39 29	845	845	0	422,500	Khaled Ibrahim Abd El Fattah	2400	None	None	Not yet started
8275/2012	11/06/2012	Hadath	39 30	1074	1074	0	537,000	Ali Amin Hammoud	2400	None	None	Not yet started
8275/2012	11/06/2012	Hadath	39 31	867	867	0	433,500	Eva Mohammad Daoud	2400	None	None	Not yet started
8275/2012	11/06/2012	Hadath	39 32	839	839	0	419,500	Jawdat Ibrahim Hammoud	2400	None	None	Not yet started
8275/2012	11/06/2012	Hadath	39 48	810	810	0	405,000	Eva Mohammad Daoud	2400	None	None	Not yet started
8275/2012	11/06/2012	Hadath	39 49	821	821	0	410,500	Jawdat Ibrahim Hammoud	2400	None	None	Not yet started
8275/2012	11/06/2012	Hadath	39 50	828	828	0	414,000	Eva Mohammad Daoud	2400	None	None	Not yet started
8275/2012 Amended by 402/2014	11/06/2012 Amended by 28/8/2014	Baabda	66 4	7672	5646	2026	9,880,500	Abdallah Remon Rizk	2400	None	None	Not yet started

*The yellow part was updated during the preparation of this addendum in February 2018