



A2.3.6 GENERAL CONSERVATION STATE ANALYSIS REPORT

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1. CHANGE RECORDS

Version	Date	Author	Changes
Version 01	25 th Aug 2020	RSS - CSBC	-

2. GENERAL INFORMATION

Name of Building: Guests House\ AL-Karak Municipality

Location: AL-Karak governorate – South Jordan

Floor area: 240 m²

Volume: 2025.12 m³

Original use – present or future use: The building was constructed since more than 100 years and used as a municipal building. Around med of the 19th century a new larger building was constructed to be used as the main municipal building, while the old one (the case study) has been used for hosting the guests of the municipality and also used for organizing the main events & different activities.

Year: 1893 – 2020

Picture 1: Front Elevation\ Southern Elevation of the mentioned building, June 2020



3. INTRODUCTION

The scope of this report is the identification of the general conservation state by careful visual inspection during several site visits, which was conducted in the extended period from 29 June to 7 July 2020 by specialized team from Construction and Sustainable Buildings Centre at the Royal Scientific Society. The focus was on the exterior stone layers in the building facades in terms of investigating its thickness and general condition, in addition to investigating the general condition of the apparent structural materials through visual inspection.

3.1. Description of existing sources of information

No evidence or records of past conservation state analysis has been found. The only source was to obtain information about the building's renovation phases and general information about the aforementioned building that were obtained by AL-Karak municipality.

3.2. Type of analysis adopted

The main method used to carry out analysis on the building is by visual investigation and preparing drawings represent the reality of the situation as much as possible, besides taking several photographs that assist in determining the general conservation status of the building. The main following steps are:

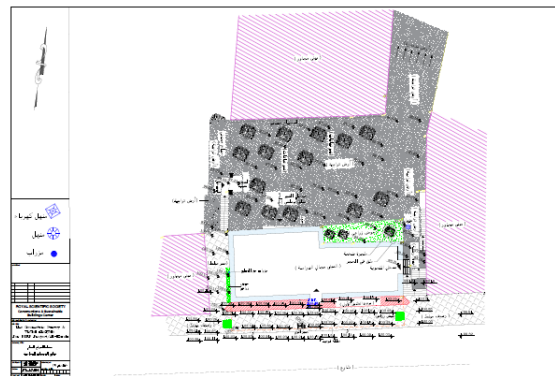
1. material analysis: survey and mapping of structural and finishing materials and thematic mapping of existing finishes (including windows and external doors, surfaces, stone or wooden artefacts);
2. decay and deterioration pattern and crack pattern analysis;
3. Identification of the building elements construction phases.

4. SITE CONDITIONS

The building was constructed in 1893 at Al-Karak city that lies about 140 km to the south of Amman on the ancient king's highway. Moreover, located in AL-Karak Governorate, specifically opposite the ancient Karak Castle, on an area of about (240) square meters (Pic.2 + drawing No.1).



Picture 2



Drawing 1

The building was constructed on two stages as the follow:

1- Stage No. 1 in 1893 (Othman Era):

The basement floor was constructed from true arches and vault made of limestone.

2- Stage No. 2 (from 1913-1926):

The ground and first floors was constructed from true arches and vault made of limestone with steel/ I-Beams embedded in the slab supported by stone columns in the first floor.

The whole building was renovated several times, the first was in 1950, and the last time was in 2003.

The facades of the building are clad in old stone and new stone [Pic.s (1 , 3, & 4)], the building is surrounded by a pavement from the front side (street side) containing some plant tubs, in addition to the presence of dirt portion from the back of the building [Pic. (4)]. in the eastern side of the building, there is a stair which leads into the basement [Pic.5], the roof floor is isolated by asphalt rolls [Pic.s (1, 3, & 4)/ Drawing No.6].

The building is located in AL-Karak Governorate, in the area opposite to AL-Karak Castle. there is a public street from the front façade of the building with a tiled pavement for pedestrian [Pic.2], while there is a nearby building on both sides (western and eastern sides) of the building, and a dirt portion from the back side of the mentioned building, with a staircase leads to the basement in the eastern corridor of the building.

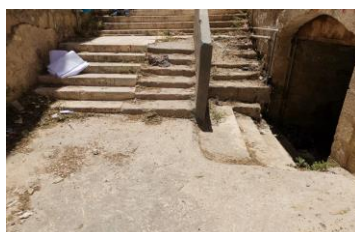
There is a raised plant tub connected to the building from the backside contains a big tree [Pic.4].



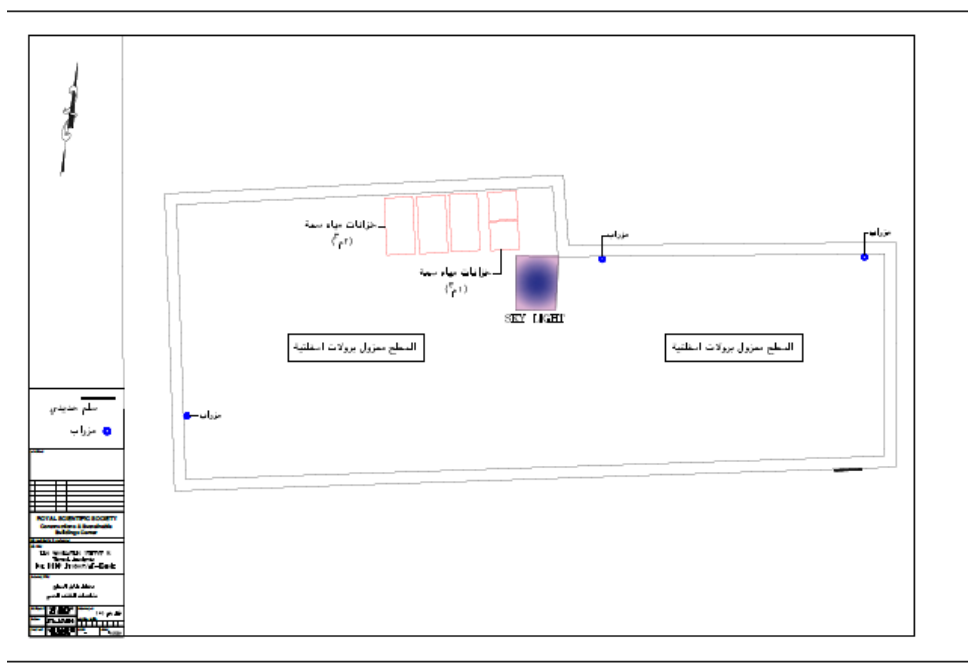
Picture 3



Picture 4



Picture 5



Drawing 2

5. PRE PLANNING ACTIVITIES

According to the correspondence between the National Energy Research Centre (NERC) and Construction and Sustainable Buildings Centre (CSBC) at Royal Scientific Society, The National Energy Research Centre (NERC) assigned a 3rd party “the Construction and Sustainable Buildings Centre (CSBC)” to provide a general conservation state for the building by visual inspection during site visits for visible structural elements by determining the nature of the visual construction materials used.

A specialized team from the Construction and Sustainable Buildings centre (CSBC) made several visits to the mentioned site in the extended period from 29 June to 7 July 2020, as they conducted a careful visual inspection of the building and its surroundings, and they recorded the needed information for that as much as possible. No tender activities have been performed.

6. DATA ACQUISITION

6.1. Description of methodologies used

The method of sensory and visual detection has been adopted on the building for the observed structural elements and determining the nature and thickness of those materials, specifically the external stone of the building's facades, in addition to documenting any cracks observed in the building.

6.2. Description of the performed data acquisition activities

A specialized team from the Construction and Sustainable Buildings centre (CSBC) made several visits to the mentioned site in the extended period from 29 June to 7 July 2020, as they conducted a careful visual inspection of the building and its surroundings, and they recorded the needed information for that as much as possible.

7. POST PROCESSING

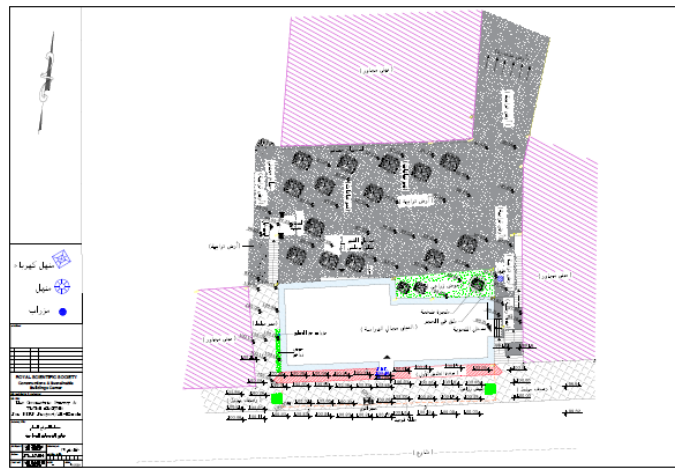
All observations documented through site visits were used in addition to the use of photographs and as-built drawings, which are prepared by CSBC team in order to produce general conservation status.

8. RESULTS

8.1. General conservation state overview

The general structural condition of the building is good, as no cracks were noticed inside or outside the building with the exception of a crack in the rear outer stone facade at the eastern corner of the building.

See drawing No. 3 (Site Plan).



Drawing 3

8.2. Material analysis

The facades of the building are clad in old stone and new stone (limestone), the front façade of building is surfaced limestone and the other facades are from curved/irregular limestone, the outer stone thicknesses were documented according to the following:

- Basement: the thickness of the walls at the entrance to the basement ranges around (1.4 – 1.6) m and mix from old stone (irregular) and limestone.
- Ground floor: the thickness is about (0.75) m for external wall and includes a mixture of old and new stone (limestone).
- First floor: the thickness of the external walls of this floor is about (0.55) m.

The building contains many internal brick partitions with thicknesses ranging from (15-20) cm with plastering and painting layers.

8.3. Decay and deterioration pattern and crack pattern analysis

No major cracks were noticed inside or outside the building with the exception of a crack in the rear outer stone facade at the eastern corner of the building.

9. ANNEXES

9.1. Technical documentation of the building (Traditional Survey)

A 1: Drawings

1. Site Plan
2. Basement Floor
3. Ground Floor
4. First Floor
5. Roof Floor
6. Survey Work (Leveling)

9.2. Photogrammetric documentation

A 2: Pictures (1-30)