NOMINATION OF

ERBIL CITADEL
(KURDISTAN REGION, IRAQ)
FOR INSCRIPTION ON THE UNESCO
WORLD HERITAGE LIST

VOL. 1
NOMINATION OF
ERBIL CITADEL
(KURDISTAN REGION, IRAQ)

FOR INSCRIPTION
ON THE UNESCO
WORLD HERITAGE LIST

VOL. I

December 2012
NOMINATION OF
ERBIL CITADEL
(KURDISTAN REGION, IRAQ)

FOR INSCRIPTION
ON THE UNESCO
WORLD HERITAGE LIST

VOL. I
FOREWORD

Iraq is noted as the ‘Cradle of Civilisation’ and has an archaeology which is difficult to parallel. However, this is not reflected in the UNESCO World Heritage List, which at present includes only three Iraqi sites. After the inscription of Hatra in 1985, there was a long gap with no new inscriptions, until Ashur was inscribed in 2003 and Samarra in 2007. The nomination of Erbil Citadel to the List continues the process of presenting further Iraqi sites, so that the cultural and natural heritage of Iraq can receive appropriate recognition as the common heritage of humanity.

National recognition of the site goes back three quarters of a century, to 1937, when the Citadel was included in the first group of sites inscribed as archaeological heritage of Iraq, following the enacting of the first protection law in 1936.

Erbil Citadel is an outstanding site because of the size of the archaeological mound, its recorded history over thousands of years, its links to key historical events and its architectural heritage. As a city whose origins go back in time to the earliest phases of Mesopotamian history, Erbil also represents an example of the development of the concept of living in urban settlements, a key contribution of Iraq to world civilisation.
I feel privileged to have the opportunity to present Erbil Citadel, the ancient jewel of our city, for nomination to the UNESCO World Heritage List. I am convinced that such a unique and precious site, able to stir up deep emotions and to recall old memories, deserves to be recognised as the common heritage of the whole of humanity.

Erbil has a long and fascinating history, stretching back at least six millennia, which has been marked by events of global importance, among which –to mention but one– the battle that took place near the city at Gaugamela (but usually remembered as the battle of Arbela, the Greek name for Erbil) when in 331 BC Darius III was defeated by Alexander the Great.

Erbil Citadel has been the focus of great efforts over recent years designed to reactivate the site as the historical cultural hub of the modern city, involving the accurate conservation and rehabilitation of its built heritage, while at the same time fostering its integration in the wider city. This will be achieved by revitalising and regenerating cultural activities, through the creation of new community linkages between the Citadel and the lower city and through the beneficial reuse of Citadel buildings and open spaces for contemporary functions.

A strategic partnership with UNESCO has been in place for five years and has produced outstanding results. Valuable collaboration with national and regional authorities, as well as with other international organisations, institutions and experts from various countries, has resulted in great depth of understanding of the Citadel and its history as well as the preparation of strategic plans for its future, for follow-up by future generations to ensure its long-term safeguarding as a masterpiece of human achievement.

I would like to express my thanks to the High Commission for Erbil Citadel Revitalization (HCECR) and to the local and international institutions, organisations and individuals who have contributed their expertise to the compilation of this nomination file. I also wish to congratulate them for the enthusiastic way in which they worked together as a multidisciplinary team.

It is my pleasure and honour, on behalf of Erbil Governorate, to give my full and heartfelt support to the nomination of Erbil Citadel for inscription on the UNESCO World Heritage List.

Nawzad Hadi Mawlood
Governor of Erbil
INTRODUCTION

This nomination of Erbil Citadel for inscription on the World Heritage List is a natural output of several years of intensive activity to conserve and revitalize this outstanding site, as well as to increase understanding of and raise awareness on its significance. In our view and based on years of in-depth interdisciplinary research, this significance fully meets the requirements to be considered universal.

Erbil Citadel is a distinctive urban settlement on the top of an archaeological mound, which is the result of a continuous process of accumulation and evolution of layers and layers of diverse civilizations. Unlike other similar tells of such a large size and impressive profile, the traces of such process in the Citadel have been handed down until our times and are still in place, a unique testimony to a cultural process that has not survived elsewhere.

Throughout the centuries, the Citadel was a notable landmark on the ancient ‘Royal Road’ and survived all the sieges and wars to which it has been exposed. Erbil Citadel was registered as an archaeological site in 1937. Since that time it has been affected by momentous political events, but also by various efforts to renovate and rehabilitate the site. This iconic landmark, in the centre of Erbil, has been conveyed to national citizens, who look at their Citadel as the ‘crown of Erbil’ and the cultural core of the contemporary urban landscape of their city.

The High Commission for Erbil Citadel Revitalization (HCECR), a special site management body, was established in 2007. After several years of continuous studies and conservation activity, including the completion of statutory documents such as the Erbil Citadel Management Plan, Urban Design Guidelines for the Buffer Zone of Erbil Citadel and the Conservation and Rehabilitation Master Plan, effective and sustainable mechanisms for conservation and monitoring the site are in place, to ensure its safeguarding for the future, in accordance with international standards and the requirements of the World Heritage Convention.

This nomination is the last step of a process of increased awareness, which has developed in the past few years. During this period, local and international experts have emphasised the potential universal values of the Citadel, leading to the inscription on the Tentative List in 2010. We consider the accomplishment of the subsequent nomination process as a result and a success in itself. I believe that Erbil Citadel is ready to be considered for inscription on the World Heritage List. I am grateful to all those institutions and individuals who have shared this idea and who have contributed to produce this nomination file.

Dara Al-Yaqoobi
Head of the High Commission for Erbil Citadel Revitalization
ACKNOWLEDGEMENTS

The present nomination file was prepared by the HCECR with the support of a consultant team consisting of Gaetano Palumbo, Silvia Cravero and Alessandra Peruzzetto. The HCECR team consisted of Dara Al-Yaqoobi (Head), Ranan Khasraw Tawfiq (Site Manager) and David Michelmore (Advisor), with the advice of Jukka Jokilehto and Gouhar Shemdin. Andrea Atalla has assisted with graphic design. HCECR staff provided materials and graphics for the nomination file. The HCECR has received the full support of its Board during the process of preparing the nomination, as well as that of Nawzad Hadi Mawlood, the Governor of Erbil.

Among the institutions and individuals who have provided valued help we would like to acknowledge the assistance of individual experts who have made research available in advance of publication, in particular the Ministry of Culture and Youth of the KRG, John MacGinnis (University of Cambridge), Karel Nováček (University of West Bohemia) and Jason Ur (Harvard University). The Ministry of Municipalities of the KRG, Jason Ur and Golden Eagle Global have provided aerial photographs and satellite imagery. References are provided where these sources have been utilized. The sources of photographs and other illustrations are individually acknowledged where they appear in the nomination dossier.

Amira Eidan al-Dhahab, Iraq Museum Director, and Dalal Najimaldin Nomanoglu, Deputy Permanent Delegate of Iraq to UNESCO, have assisted with planning and following the submission of the nomination file. We are also grateful for the advice and collaboration of the UNESCO World Heritage Centre and the UNESCO Iraq Office.

To these and all other official bodies, scholars and stakeholders we would like to express our sincere thanks for their support in proposing this outstanding site for nomination to the UNESCO World Heritage List.

Dara Al-Yaqoobi  
Head of the High Commission for Erbil Citadel Revitalization
DESCRIPTION AND HISTORICAL BACKGROUND

Erbil Citadel is located at the centre of the city of Erbil, in northern Iraq, in the Kurdistan Region, at coordinates 36° 11' 23" North – 44° 00' 35" East. Erbil Citadel town is a large (nearly 11 hectares) urban complex built on top of an archaeological mound resulting from the accumulation of historical layers throughout at least six millennia of occupation. Although placed on a human-made mound, its physical configuration may be associated to a hilltop town, laid on the relatively flat surface on top of the tell.

Its urban pattern features an ovoid-shaped plan with an internal labyrinthine system of narrow roads, which generate from a main gate and ramify through the built fabric. Major alleyways fan in all directions starting from the southern Grand Gate and are interconnected by an organic network of smaller pathways which give access also to more secluded houses. The nature of the winding alleys and irregular shapes of the plots is the result of incremental development and the resulting urban fabric is typical of an organically evolved settlement.

Most of the Citadel is now occupied by houses and a few public and religious buildings, although there is documentary reference to the previous existence of other administration and religious buildings and military structures as well. These included in particular fortification walls which have now disappeared: the perimeter of the Citadel is characterized today by house façades which were built on top or in front of earlier fortifications. These façades are contiguous to each other, so that the impression, looking towards the Citadel, is still that of a mighty fortress. This configuration is in contrast with other fortified citadels that have maintained their ancient form, featuring a massive enclosure wall.

The majority of historic buildings on the Citadel date to between the middle of the 19th and the first half of the 20th century, but some are older, dating back to the middle of the 18th century onwards. Many houses contain fragments of older buildings and none are of a single construction date. The historic building stock in the Citadel comprises mainly houses, but also includes several mosques, a hammam, and other buildings of religious or social nature, such as takīyas (buildings dedicated to the gathering of sufi religious societies) and diwakhanas (houses used by important families for receiving guests or conduct community meetings). The masonry of all these historic buildings is in fired bricks, mostly laid in mud mortar. These were generally built over the existing structures and foundations, in a continuous and typical regeneration process of an archaeological tell.

The houses are arranged in blocks, mostly with shared walls. All houses have courtyards, which in a few cases are enclosed by buildings on all sides, but more frequently are defined by rooms on two sides and walls belonging to another house or limiting the side along the alleyway. The typical house plan in the Citadel is two rooms side-by-side, entered through separate doorways. The earliest houses are characterized by elaborately decorated brickwork. In later houses, the façade can be protected from the sun by a colonnade or tarmā, some of which have timber columns with decorated capitals and in the case of some large houses appears as an arcade with columns and arches in alabaster.
According to historical research, the Citadel was surrounded by a substantial lower city at the times of Erbil’s greatest prosperity, such as in the Neo-Assyrian period and, almost certainly between 1190 and 1235, when the town expanded around the bazaar, located at the foot of the Grand Gate, at the south. The presence of a large number of historic buildings and the street layout in three districts (Arab, Taajeel and Khanaqa) around the bazaar as well as historic maps are a witness to the overall urban form of Erbil at the end of the Ottoman period.

In modern times the city has dramatically expanded around the Citadel and lower historic districts, based on a model of road network composed by a series of concentric ring-roads surrounding the Citadel and cut by radial roads. In this configuration, the Citadel marks physically and symbolically the centre of Erbil.

Although no major excavations have yet been undertaken, archaeological research confirms the great antiquity of the location, with remains near the Citadel dating back to the Palaeolithic and Neolithic periods. The presence of Ubaid period (c. 4500 – 3800 BC) finds witnesses the presence of this early period in the lower layers of the Citadel tell.

In antiquity Erbil was an important provincial capital during several phases in its history. During the Middle Assyrian period there is the first mention of a temple of Ištar, which became very important during the Neo-Assyrian period, when king Ashurbanipal (669 – 627 BC) made Erbil possibly the second capital. Later, it became the capital of a satrapy during the Achaemenid period (539 – 330 BC) and in its vicinity the famous battle of Gaugamela (also known as Arbela) was fought, where Alexander the Great defeated Darius III in 331 BC, spelling the end of the Achaemenid Empire.

The city maintained an important administrative role during the Seleucid, Parthian, and Sassanian periods. From the 1st century AD, the city became an important centre of Judaism and Christianity. It was conquered by the Muslim armies in 642 AD. Its importance grew under the later Abbasids (the battle of the Zab which ended the Umayyad caliphate in 750 AD was fought in its vicinity), eventually becoming the capital of an emirate under the Begteginids, whose most notable leader was Muzaffar al-Din Kokburi (1190 – 1232), brother-in-law of Salah ad-Din.

Erbil had intermittent contact with the Mongols during the second quarter of the 13th century before its firm incorporation into the Ilkhanate in 1259. In the following two centuries the city was ruled by various local and ephemeral Turcoman dynasties and by the Persian Safavids until 1535 when the entire region became incorporated into the Ottoman Empire until 1918. With the fall of the Ottoman Empire the entire region was controlled by a British mandate until 1932.

In 1921 the Kingdom of Iraq was proclaimed. In the following years, the Country was not spared by other turmoil until the Second Gulf War in 2003. In 2005, the new Iraqi Constitution, which recognizes the Kurdistan Regional Government, was ratified.
THE CITADEL IN RECENT PERIODS

During the 1930s the wealthier families, followed by much of the rest of the population, started to leave the Citadel, partly due to its difficult sanitary conditions. In the second half of the 20th century, several waves of immigration affected the city. Their settlement in the Citadel was accompanied by the abandonment by the local population and by phenomena of squatting into empty homes, or by building shacks made out of locally available materials.

Some infrastructures improvement, funded by UN agencies, included the upgradation of the water supply system and the installation of an electricity network. These works, undertaken at the beginning of the 1990s, have caused physical and visual disturbance, including the waterlogging of the tell: in the absence of correspondingly efficient drainage system, increased volumes of water seeped into the ground, undermining house foundations, especially around the perimeter of the Citadel.

Squatter occupation was accompanied by difficult social and health conditions which led the Kurdish Regional Government to the decision to evacuate the site at the end of 2006, also decreeing the establishment of the High Commission for Erbil Citadel Revitalization (HCECR), in charge of ensuring that this millenarian historic heritage of the Citadel is scientifically and systematically explored, conserved, enhanced, repopulated, and revitalized.

The HCECR and UNESCO signed a Memorandum of Understanding (in two phases) with the aim of revitalizing the Citadel through programmes of conservation and planning. Emergency conservation and restoration projects have been conducted, together with a thorough documentation of the Citadel’s characteristics and features, as well as the compilation of three major documents: a Conservation and Rehabilitation Master Plan, an Erbil Citadel Management Plan, and a set of Urban Design Guidelines for the Buffer Zone of Erbil Citadel.

These documents are supported by in-depth studies and analyses on various aspects of the Citadel (from its history and intangible values, including oral histories, to the detailed analysis of its architectural and urban characteristics) and its buffer zone, as well as by the preparation of guidelines and implementation of capacity building and training programmes for the professional staff of HCECR and other concerned institutions/authorities.

The final objective is to revitalize the Citadel mixing cultural, commercial, and residential uses, according to the indications and recommendations of the Erbil Citadel Management Plan.

JUSTIFICATION FOR INSCRIPTION

The Citadel of Erbil is a rare surviving example of an urban ancient settlement which developed on an archaeological tell, following, layer by layer and time after time, a spontaneous, non-planned growth that was influenced by a combination of previous urban layouts and successive architectural and
urban elements, in a continuous process of addition and transformation extending back at least six thousand years, to the earliest phase of urbanism. It is also a rare site where the process of tell formation has continued up to the present.

Erbil Citadel is an imposing archaeological tell in which the artificial topography is a determinant of the urban form of the settlement still standing on its top. The structure of the Ottoman-period urban fabric is clearly legible, being characterized by a maze of alleys and cul-de-sacs radiating from the main Grand Gate. The Citadel town handed down throughout history is the result of an organic evolution and of a process of decay and reconstruction which is at the very core of the development of the Citadel hill. The original fortifications were in time replaced by houses which were built on top or in front of the ancient city walls, but the imposing character of the uninterrupted line of brick walls makes this site one of the most dramatic urban landscapes in the Middle East.

Defined by Erbil’s inhabitants the ‘crown of Erbil’, the Citadel is today both physically and symbolically at the centre of the modern city, which has expanded in concentric rings at the foot of this iconic site. The Citadel stands still powerful in the image of a mighty fortress, and strong in the memory of its previous inhabitants and of the citizens of Erbil. In fact, the significance of Erbil Citadel is given not only by its archaeology, the historical events it has witnessed, and the historical figures that have lived in, reigned over, or conquered the city, but also by the stories, feelings, and relationships that the inhabitants of Erbil still have with their Citadel. Erbil Citadel is mentioned, with a remarkable continuity of its name (Irbilum, Urbilum, Urbel, Arball, Arbira, Arbelah, Erbil / Arbil) since pre-Sumerian times, in many historical sources providing evidence for the reconstruction of the events that shaped its form.

The criteria selected to justify the nomination of Erbil Citadel for inscription on the World Heritage List are (iii), (iv), and (v). According to these criteria:

(iii) Erbil Citadel bears an exceptional testimony to cultural traditions and to civilizations which have disappeared, as it contains the layers of thousands of years of human occupation and diverse civilizations, while also being a rare witness to an organically evolved tell settlement, continuously remodelled on the traces of previous layouts.

(iv) Erbil Citadel is an outstanding example of multilayer archaeological mound still physically emerging from the surrounding landscape. The physical structure of the Citadel town is characterized by the permanence of the urban form on top of the mound. Its shape with definite boundaries has in part dictated the transformations of the urban fabric while, at the same time, has allowed the adaptation to changing needs throughout the millennia.

(v) Erbil Citadel is an outstanding example of a traditional human settlement, which has not survived elsewhere in this form due to irreversible changes brought by modernization. Its most distinguished feature is its urban form on top of an artificial mound, circumscribed by a circle of perimeter houses
(with façades looking towards the lower city and the surrounding fields) and characterized by a network of alleys radiating from a main gate and by a dense agglomeration of buildings.

The comparative analysis of this site shows that, although archaeological tells are a very common occurrence in the cultural landscape of the region, Erbil Citadel stands out for the peculiarity of its continuity of settlement and the remarkable authenticity of its urban form. No other archaeological tells in the region match the occupational history and the substantial continuity of settlement of the Erbil tell, making it one of the very few sites where the process of tell formation can still be observed and documented. Parallels with sites such as the nearby Kirkuk, or with Aleppo, confirm a substantial difference between Erbil and these sites as it concerns continuity of use, function, or structure.

The authenticity of the site is ensured by the preservation of its urban layout, which was not substantially modified by the 20th century interventions, and that maintains all its characteristics of an organically evolved settlement enclosed within definite boundaries created by the human-made topography of the tell and the circle of perimeter house façades. Its integrity was somewhat affected by the abandonments and some deliberate destructions that occurred in the past thirty years, but this does not impact the urban form and the legibility of the urban fabric and is being addressed by a comprehensive programme of conservation and rehabilitation spearheaded by the HCECR with UNESCO’s assistance.

**STATE OF CONSERVATION AND FACTORS AFFECTING THE PROPERTY**

At the time the site management agency (HCECR) was established in 2007, the Citadel was affected by deterioration phenomena due to the consequences of changes of population’s composition, which brought about an increased lack of maintenance. To this, one must add some deliberate demolitions which had occurred under the previous regime, although not to the extent suffered by nearby Kirkuk Citadel. Another cause of deterioration was the waterlogging of the tell due to poorly built water pipes and sewerage. This has caused walls to crack, also due to a structural weakness connected with masonry materials and construction techniques. These consist of two external leaves built of regular fired bricks, with a core made of rubble masonry set in dry mud mortar. The conditions of the slope are also a factor in the deterioration of the houses on the edge of the tell, which seem to have been built in front of the ancient fortifications, too close to the edge of a steep slope.

After over five years of studies, plans and concrete undertakings initiated and managed by the HCECR, the situation has highly improved. The causes of degradation with the higher risk have been or are being removed, a maintenance and preventive conservation programme is now functioning and critical structural issues are being addressed. A project aimed at stabilizing the slopes and ensuring the stability of the perimeter houses is almost ready for implementation. Emergency stabilization of all the critical issues on the Citadel is completed, and several buildings are now being conserved
and rehabilitated with a view of their adaptive reuse for various purposes. Although rapid development is taking place in the city at the foot of the tell, the setting of the Citadel is protected by the definition of a Buffer Zone divided into two sub-zones and with the compilation of specific guidelines for their management. Further recommendations contained in the Erbil Citadel Management Plan are intended to control the transformation of the areas surrounding the Citadel and make them compatible with the historic character of the neighbourhood.

PROTECTION AND MANAGEMENT OF THE PROPERTY

The Citadel is a protected site under the legislation of Iraq and of the Kurdistan region. The activities of conservation and protection of Erbil Citadel are coordinated by the HCECR, working in a strategic partnership with UNESCO. The past five years have seen a flurry of activities aimed at stopping decay and providing the opportunity for a comprehensive programme of conservation, restoration, adaptive reuse, and resettlement of the Citadel area. The formula of an adaptive reuse along the lines of a mixed-use approach based on cultural activities, tourism-related businesses, and residential areas was adopted, following the completion of two major studies, a Conservation and Rehabilitation Master Plan, completed in 2011, and an Erbil Citadel Management Plan, completed in early 2012.

The Conservation and Rehabilitation Master Plan documented in detail every structure on the Citadel, including conditions, and providing options for their repair and reuse. The Erbil Citadel Management Plan defined policies, strategies, and actions for the implementation of a five to ten years programme aimed at achieving, in phases, the reuse of the Citadel as a residential, tourist, and cultural centre for Erbil.

Besides these two plans, other plans, projects and activities conducted by HCECR and its partners are presented, in order to provide a complete overview and understanding of the philosophy and approach that is guiding the conservation and regeneration of this unique site.

These efforts to revitalize the Citadel and the strong relationship that the people of Erbil have with it, will be determining factors in returning the Citadel to the role and position it has always held in its history, as a place central to the life of Kurdistan and the northern regions of Iraq, and an urban landscape of importance for all humanity.
# TABLE OF CONTENTS

**FOREWORD** ......................................................................................................................... I

**PREFACE** ............................................................................................................................... III

**INTRODUCTION** ....................................................................................................................... V

**ACKNOWLEDGEMENTS** .......................................................................................................... VII

**EXECUTIVE SUMMARY** ....................................................................................................... IX

**CHAPTER 1**

**IDENTIFICATION OF THE PROPERTY** .................................................................................. 3

1.a Country..................................................................................................................................... 5
1.b **State, Province or Region** ...................................................................................................... 5
1.c Name of property ..................................................................................................................... 5
1.d Geographical coordinates to the nearest second ...................................................................... 5
1.e Maps and plans, showing the boundaries of the nominated property and proposed buffer zone .................................................................................................................................................................................. 5
1.f Area of nominated property and proposed buffer zone.............................................................. 5

**CHAPTER 2**

**DESCRIPTION** ........................................................................................................................... 11

2.a Description of property ............................................................................................................ 13
   Summary description of the property .......................................................................................... 13
   Geographic and environmental context .................................................................................... 14
   Historic urban development context ......................................................................................... 17
   The tell / archaeological mound ............................................................................................... 24
   Urban form and fabric of the Citadel ......................................................................................... 31
   Architectural heritage on the Citadel ......................................................................................... 37

2.b **History and Development** .................................................................................................. 62
   Historical overview ................................................................................................................... 62
   Some intangible aspects of Erbil’s history and urban life:
   religious rites and festivals ......................................................................................................... 72
   Oral history programme .......................................................................................................... 73
TABLE OF CONTENTS

CHAPTER 3
JUSTIFICATION FOR INSCRIPTION

3.1.a Brief synthesis

3.1.b Criteria under which inscription is proposed
   (and justification for inscription under these criteria)

3.1.c Statement of integrity

3.1.d Statement of authenticity

3.1.e Protection and management requirements

3.2 Comparative analysis

3.3 Proposed Statement of Outstanding Universal Value

CHAPTER 4
STATE OF CONSERVATION AND FACTORS AFFECTING THE PROPERTY

4.a Present state of conservation
   Introduction
   Condition of the slope
   Condition of the buildings
   Condition of architectural elements and surfaces
   Condition of the Citadel's urban landscape
   Condition of the Citadel setting

4.b Factors affecting the property
   (i) Development pressures
   (ii) Environmental pressures
   (iii) Natural disasters and risk preparedness
   (iv) Responsible visitation at World Heritage sites
       Tourism in the Citadel
       Policies and programmes for tourism management
   (v) Number of inhabitants within the property and the buffer zone

CHAPTER 5
PROTECTION AND MANAGEMENT OF THE PROPERTY

5.a Ownership

5.b Protective designation

5.c Means of implementing protective measures

5.d Existing plans related to municipality and region in which the proposed property is located
TABLE OF CONTENTS

Erbil City Master Plan ................................................................. 153
Erbil City Centre Master Plan .................................................. 154
Urban Design Guidelines for the Buffer Zone of Erbil Citadel .......... 155
Other Plans ........................................................................ 162
5.e Property management plan or other management system .......... 163
Erbil Citadel Management Plan .................................................. 163
Conservation and Rehabilitation Master Plan ................................. 166
5.f Sources and levels of finance ................................................. 170
5.g Sources of expertise and training in conservation
and management techniques .................................................. 170
5.h Visitor facilities and infrastructure ......................................... 175
5.i Policies and programmes related to the presentation and promotion of the property ................................................. 176
Ongoing promotional activities .................................................. 176
Policies and Programmes ......................................................... 178
5.j Staffing levels and expertise ................................................... 181

CHAPTER 6
MONITORING ........................................................................ 183
6.a Key indicators for measuring state of conservation ................. 185
6.b Administrative arrangements for monitoring property ............. 187
6.c Results of previous reporting exercises ................................. 188
Studies and reports until 2007 .................................................. 188
Studies and reports 2008 to present:
Erbil Citadel Revitalization Project ........................................... 191
Other studies and reports since 2007 ........................................ 201
Other activities .................................................................. 202

CHAPTER 7
DOCUMENTATION .................................................................. 205
7.a Photographs and audiovisual image inventory
and authorization form .......................................................... 207
7.b Texts relating to protective designation,
copies of property management plans or documented
management systems and extracts of other plans relevant
to the property ................................................................ 211
7.c Form and date of most recent records or inventory of property ...... 211
TABLE OF CONTENTS

7.d Address where inventory, records and archives are held .................. 211
7.e Bibliography .................................................................................. 213

CHAPTER 8
CONTACT INFORMATION OF RESPONSIBLE AUTHORITIES ..................... 223
8.a Preparer ...................................................................................... 225
8.b Official local institution/agency ...................................................... 225
8.c Other local institutions .................................................................. 225
8.d Official web address ...................................................................... 225

CHAPTER 9
SIGNATURE ON BEHALF OF THE STATE PARTY ..................................... 227
## IDENTIFICATION OF THE PROPERTY

<table>
<thead>
<tr>
<th>1.a</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.b</td>
<td>STATE, PROVINCE OR REGION</td>
</tr>
<tr>
<td>1.c</td>
<td>NAME OF PROPERTY</td>
</tr>
<tr>
<td>1.d</td>
<td>GEOGRAPHICAL COORDINATES TO THE NEAREST SECOND</td>
</tr>
<tr>
<td>1.e</td>
<td>MAPS AND PLANS, SHOWING THE BOUNDARIES OF THE NOMINATED PROPERTY AND BUFFER ZONE</td>
</tr>
<tr>
<td>1.f</td>
<td>AREA OF NOMINATED PROPERTY AND PROPOSED BUFFER ZONE</td>
</tr>
</tbody>
</table>
Identification of the Property

1.a • COUNTRY

Republic of Iraq

1.b • STATE, PROVINCE OR REGION

Kurdistan Region, Erbil Governorate

1.c • NAME OF PROPERTY

Erbil Citadel

1.d • GEOGRAPHICAL COORDINATES TO THE NEAREST SECOND

N 36° 11' 28" – E 44° 00' 33"
(center of Citadel, near main mosque)

1.e • MAPS AND PLANS, SHOWING THE BOUNDARIES OF THE NOMINATED PROPERTY AND BUFFER ZONE

1. Plan of Iraq with location of Erbil
2. Satellite image of Erbil city, with boundaries of Citadel and Buffer Zone
3. Plan of the Citadel and Buffer Zone
4. Plan of Citadel with boundaries of nominated property

1.f • AREA OF NOMINATED PROPERTY AND PROPOSED BUFFER ZONE

Area of nominated property: 15.60 ha
Buffer zone: 268.34 ha
Total: 283.94 ha

<table>
<thead>
<tr>
<th>Properties</th>
<th>Areas in ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citadel (surface of the tell inside the built perimeter)</td>
<td>10.85</td>
</tr>
<tr>
<td>Slope (surface of the tell outside the built perimeter)</td>
<td>4.75</td>
</tr>
<tr>
<td><strong>Total Nominated Property</strong></td>
<td><strong>15.60</strong></td>
</tr>
<tr>
<td>Buffer Zone A</td>
<td>76.05</td>
</tr>
<tr>
<td>Buffer Zone B</td>
<td>192.29</td>
</tr>
<tr>
<td><strong>Total Buffer Zone</strong></td>
<td><strong>268.34</strong></td>
</tr>
<tr>
<td><strong>Total Nominated Property and Buffer Zone</strong></td>
<td><strong>283.94</strong></td>
</tr>
</tbody>
</table>
Nomination of Erbil Citadel to the World Heritage List
Nomination of Erbil Citadel to the World Heritage List

2010 satellite image of nominated property

Boundaries
- Nominated Property
- Buffer Zone of Nominated Property

MAP 3 NOMINATED PROPERTY AND BUFFER ZONES

OCTOBER 2012
Identification of the Property

NOMINATION OF ERBIL CITADEL (KURDISTAN, IRAQ) FOR INSCRIPTION ON THE UNESCO'S WORLD HERITAGE LIST

2010 satellite image of nominated property

GEOGRAPHICAL COORDINATES

1: N 36° 11' 30" – E 44° 00' 33"
2: N 36° 11' 28" – E 44° 00' 42"
3: N 36° 11' 22" – E 44° 00' 33"
4: N 36° 11' 28" – E 44° 00' 22"
5: N 36° 11' 28" – E 44° 00' 33"

OVERALL AREAS

Tell (base): 155,930 sq m, 15.59 ha
Citadel (top): 108,575 sq m, 10.65 ha

MAP 4 NOMINATED PROPERTY

OCTOBER 2012

HIGH COMMISSION FOR ERBIL CITADEL REVITALIZATION
2
DESCRIPTION

2.a DESCRIPTION OF PROPERTY

2.b HISTORY AND DEVELOPMENT
2.a • DESCRIPTION OF PROPERTY

SUMMARY DESCRIPTION OF THE PROPERTY

Erbil Citadel is a large urban complex located in the centre of Erbil and built on top of a tell (archaeological mound) resulting from the accumulation of historical layers throughout the millennia, and has retained the same name (Irbilum, Urbilum, Urbel, Arbaîl, Arbíra, Arbeîa, and Erbil / Arbil) during its recorded history, which starts c. 2300 BC. Both the size of the tell and the permanence of its name provide an indication of possible continuity of occupation from its foundation to the present.

The Citadel town has an ovoid-shaped plan with a definite boundary and is largely composed of traditional courtyard houses set within a labyrinth of narrow roads. Major alleyways, starting at south from the main gateway (the Grand Gate) fan out in all directions from northwest to northeast and are connected by an organic network of other pathways which give access also to more secluded houses through narrow dead-end or cul-de-sac lanes. The winding alleys and irregular shapes of the plots are the inevitable output of...
incremental and haphazard growth and the resulting urban fabric is typical of a settlement which has evolved organically, over an extended period of time. At least during recent periods, the urban fabric of the Citadel was divided into three districts: Saray, Topkhana, and Takiya.

The enclosure form of the Citadel town is perhaps its most important feature, being constituted by contiguous houses built gradually on the perimeter in replacement of the previous fortification wall, around the middle of the 18th century. This configuration makes Erbil Citadel look like other fortified citadels that have maintained their original medieval form. In Erbil Citadel, instead, the effect is quite extraordinary and unique: in place of a continuous massive and inward-looking wall giving a sense of defence to the community, here the perimeter consists of a series of house façades with windows from which the inhabitants could look out beyond the lower city. During some periods of its long history the Citadel town was part of a larger city that extended outwards from the foot of the mound, below its main gate. Remnants of this larger city still exist.

Most standing historic buildings on the Citadel are dated between the middle of the 19th and the first half of the 20th centuries, although some date back to the mid 18th century; all underwent different construction phases and many incorporate the remains of older buildings. While fortification walls are known to have once surrounded the site, the perimeter of the Citadel is characterised today by house façades which were built on top of these defensive walls or in front of them, a process that probably started after the siege by Nadir Shah in 1743. Historic buildings are mainly houses with a few public and religious structures. There are other public and religious buildings: the Great Mosque (Mullah Afandi Mosque) in the centre of the Citadel is still in use today and is attended by many worshippers, especially for Friday prayers; a traditional hammam (public bath), rebuilt in 1775 and located in the middle of the Citadel town, provided hot baths for the local population, survives today, and functioned up to the 1960s; there are also takiyas and tombs.

Historic buildings in the Citadel are all constructed of fired bricks over previous structures and foundations, in a continuous and typical regeneration process of a tell. They are arranged in blocks and (re)built on shared walls. All houses have courtyards, which in a few cases are enclosed by buildings on all sides. The earliest houses are characterised by elaborately decorated brickwork. In later houses, the façade can be protected from the sun by a colonnade or tarna, some of which have timber columns with decorative capitals, while some large houses have arcades with columns and arches of Mosul alabaster.

**GEOGRAPHIC AND ENVIRONMENTAL CONTEXT**

Erbil (Hawler/Hewlêr in Kurdish), also spelled Arbil or Irbil, is one of the largest cities of the Republic of Iraq, together with Baghdad, Basra, and Mosul. Located in northern Iraq, approximately halfway between Mosul (81 km WNW) and Kirkuk (87 km SSE), the city has a population of about 1.5 million. It is the capital of the autonomous Kurdistan Region as well as of the homonymous Erbil Governorate, one of the three regional governorates together with Duhok and Sulaymaniyah.
Erbil area is characterised by a semiarid continental climate: very hot and dry in summer, mild to relatively cold and slightly rainy in winter. In spring the mean high temperature ranges from 13-18 °C in March to 27-32 °C in May. July and August are the hottest months, when temperatures are 39-43 °C and can reach around 50 °C. Autumn is dry and mild, average temperatures are 24-29 °C in October, cooling slightly in November. Mean winter high temperatures are 7-13 °C and mean lows are 2-7 °C, although temperatures may fall below freezing in mid-winter. Dust storms may occur all year round. Geologically, in the area there are Quaternary deposits, made by residual soil and alluvial plygenetic deposits of lenticular sedimentation.
The city is situated in a fertile plain (noted in the Middle Ages for growing cotton) at about 420 meters a.s.l. (at the base of the tell), between the rivers Great Zab (at northwest) and the Little Zab (at southeast), with a backdrop of the Zagros mountain range at north and northeast. Located close to the Turkish and Iranian borders, Erbil lies at the crossing of important historic routes from Iran to the Mediterranean, and from southern Iraq and the Gulf to Anatolia and Central Asia. It is this strategic location which has assured its continuing importance throughout the centuries, coupled with the abundance of its agricultural hinterland.\(^3\)

Due to the increased prosperity of the region after 2003 war, Erbil has undergone a rapid economic development, which has attracted both domestic and foreign investors. The city is experiencing an unprecedented building boom with the construction of new quarters. This results in the renovation of existing districts, the creation of new infrastructures (among which the planned Kurdistan Museum, to be built just outside the Citadel’s northern gate) and in a considerable urban growth. Since 2006, the city has approximately quadrupled its overall area and is still growing.\(^4\)

Nowadays, Erbil Citadel (Qalat in Kurdish, Qala’at in Arabic) is situated at the very centre of Erbil city. Historic aerial photos and plans, such as one of c. 1920 (published in 1944) and a sketch map by Ernst Herzfeld, dating to the late Ottoman period, show that such physical centrality is fairly modern. Until at least mid-1960s the lower city still mainly consisted of the old districts occupying an arc from the southwest to the southeast of the tell, surrounded by agricultural land especially toward north. In the above mentioned c. 1920s plan, the whole city covered about 30 hectares, a quarter of which was occupied by the Citadel (see next section).

Therefore, we may say that the relationship of the Citadel with the lower city and landscape has changed status from centrality of power and image to physical centrality, while retaining its role of Erbil’s outstanding feature. From far distance, the site was a notable landmark for merchants and other travellers, coming from the east on the former Royal Road of the Achaemenid Empire, or northwards from Basra along the ancient trade
route which linked Anatolia and Central Asia with the Persian Gulf. Today, because of its imposing height, golden-brown colour, and the peculiar perimeter wall, the Citadel tell is perhaps one of the most dramatic urban landscapes in the Middle East.

**HISTORIC URBAN DEVELOPMENT CONTEXT**

In the contemporary urban landscape and from a bird’s eye view, the Citadel and the lower city appear as two well-distinguished and contrasting entities. The Citadel is well defined in both profile (thanks to its truncated cone-shaped structure and regular skyline) and dimensions, enclosed within the circle of perimeter houses on top of the slope. Inside, it is characterised by homogeneity of built heritage in terms of materials and techniques as well as architectural typology and style.

By contrast, the lower city, today, has no limits to its boundaries and it features a heterogeneous skyline, streetscape and architectural components, like most cities which have undergone a fast growth in the past decades. It comprises a mixed ensemble of residential urban fabric and some of the most vibrant commercial areas of Erbil. A strong characteristic (readable especially on the city plans) marking the lower city and linking it to the upper town is the urban expansion model, based on a radial-concentric road network, of which the Citadel is the core. Nevertheless, the lower city to the south of the Citadel (at the foot of the Grand Gate) –now included in the buffer zone– incorporates many historic buildings and a street pattern which are a witness to the urban form of the late Ottoman period.
Nomination of Erbil Citadel to the World Heritage List

2.11 Vertical aerial photograph of Erbil city, 1951 (Pitt-Rivers Museum, Bradford Collection, 1998.296)

2.12 View of the Citadel from southwest in the 1940s (HCECR Archive)

2.13 Reconstruction of the layout of the historic city and its fortifications (from: Novček, forthcoming)
In the lower city lies the bazaar area, the foundation of which is ascribed to Sultan Muzaffar al-Din Kokburi (reigned 1190 – 1232), who is accredited the renaissance of the city. The bazaar, which includes two vaulted covered markets or qaysariyas, is flanked by remains of three historic districts: Arab, Taajeel and Khanaqa. The traditional street pattern and the historic built fabric of these quarters of the lower city are similar to those on the Citadel. They are characterised by narrow irregular streets and the prevalent buildings typology is the historic courtyard house of one or two storeys in brick.

According to historical research, at times the Citadel was surrounded by a substantial lower city, such as in the Neo-Assyrian period and in the period of greatest medieval prosperity between 1190 and 1235, when the town expanded around the bazaar. The three above-mentioned historic districts were likely developed on the traces of previous medieval and maybe even older urban settlements, whose existence is extensively
referred to by documentary sources and travellers’ accounts. Earlier excavations and more recent discoveries confirm the great archaeological potentials of the plain around the Citadel.

Another testimony to the existence of a large lower city in the Middle Ages is the vestiges of the only medieval above-ground architecture preserved in Erbil, the so-called minaret of al-Muzaffar. Situated some 900 metres southwest from the Citadel’s main gate, beyond the border of the Arab historic district, it is commonly known as the Choli Minaret and was most probably part of a large congregational mosque. If the urban expansion in some flourishing historical periods is well documented, in later periods of decline the city shrank back around the Citadel.

To the north and northwest of the Citadel lies a curve-shaped area which nowadays comprises the administrative centre of Erbil, in the Mustawfi district. It encompasses several large detached buildings which host government offices and public services such as military, health and education facilities, the Governorate office, the Court and a post office. These areas were still mainly occupied by the silted Citadel ditch and agricultural land until a few decades ago, when the main access to the Citadel was from the southern Grand Gate, with a secondary entrance from east through a little gate. The expansion towards north started in the 1920s, when a new gate (Ahmadi Gate) was opened at the north by piercing an entrance passageway through an existing house, to facilitate access to a new administration building constructed under the British administration to the north-west outside the Citadel. An access ramp was also created at that time (and later widened, to allow vehicular circulation following the driving through of the central road in 1958).

From the 1930s–’40s, the city started to grow, also due to the abandonment of the Citadel by its inhabitants and their relocation in the lower city. The concentric road scheme (based on a road network composed by a series of concentric ring-roads cut by radial roads) was established in the 1940s–’50s, when the second and third ring-roads around the Citadel were created to accommodate urban extension. In the following decades the same planning approach was augment-
ed with additional ring-roads and was recently confirmed by the Erbil City Master Plan of 2008, thus marking the physical centrality of the Citadel. These modern routes concentrate key-tertiary activities, small to medium retail and commercial uses, professional services, restaurants and hotels, etc.

The c. 1920 plan, published in 1944 (which presents the situation just after the end of the Ottoman period, before the opening of the northern gate), shows that the relationship between the upper and the lower parts of the historic city was clearly legible and the tripartite but integrated nature of the historic city was well defined: citadel, lower city, and external areas. The physical hinge between upper and lower town was—and basically still is—the area around the southern (and main) gate of the Citadel, which has kept the function of market area. The urban form was still delimited by the Citadel and the agricultural fields to the north and by the two wadis (Sayx Qazi and Said Hawa Dere).

With this model of urban growth, the urban form of the old districts in the lower town has been diluted in the greater city, filling all empty areas and spreading in all directions. The traditional street layout of these districts is still legible (even if broken by the opening of new larger roads) incorporating many historic buildings. From a bird’s eye view, in the contemporary urban form of Erbil, the Citadel stands as a unique witness to an ancient larger city and thus its significance as the historic core of the city is emphasised.

The development of the urban form of the lower city throughout history must be still explored in depth. Erbil was overlooked until recent times by scholars of Mesopotamian archaeology and historiography, partly due to the growth of the city, which has made field research more complex to undertake. Important steps have been taken recently by various teams of local and international researchers. Among others, an ongoing study compares information from travellers’ descriptions with ancient and medieval documentary sources as well as with the results of archaeological topography and remote sensing, using satellite imagery and aerial photos taken in the first half of the 20th century (mainly between 1930s and 1950s).
2.19 View of the lower city from the Citadel in the 1940s (Constantin A. Doxiadis Archive)

2.20 View from the Citadel looking northwest (HCECR, 2010)
OVERVIEW OF TRAVELLERS’ DESCRIPTIONS OF ERBIL

The accounts of geographers and other travellers who visited Erbil since the Middle Ages provide descriptions of how the city may have looked like in different historical periods and hence how it may have developed throughout the centuries. Local historians also provide topographical information in their accounts of historical events. Generally speaking, and considering that these accounts must still be double-checked with comprehensive historical and archaeological research, the city is portrayed as being composed by two parts: the lower and the upper, each surrounded by its own walls but in mutual relationships with each other.

According to these the Citadel had, in its most flourishing period (12th and 13th centuries) all the signs of a complex, independently fortified city quarter surrounded by a ditch (some portions of which survived until the first half of the 20th century, when the first ring-road was created) and with the residential component prevailing. Nevertheless, in this period the lower city was described as being much larger and containing a wider range of religious and public buildings.

After the medieval renaissance (under the rule of Muzaffar al-Din Kokburi, between 1190 and 1232) and in particular from the Ottoman period, Erbil was no longer the seat of a ruler and became a provincial centre of the eastern border of the empire, although it still lay on important communication routes. This is reflected by travellers’ descriptions, which focuses on a few elements and look at the Citadel mostly from the outside.

Medieval sources of the 13th and 14th centuries AD contain descriptions of the Citadel and the lower town and name various public and communal buildings. Although some travellers visited Erbil from the north, others instead floated down the Tigris on a kelek, but this was only possible downstream and the return journey had to be by land, often passing through Erbil. The descriptions of travellers mostly focus on the appearance of the Citadel from the outside, as relatively few entered through its gate. The descriptions reflect the change from a fortress with formal fortifications to its present distinct and unusual appearance, where the perimeter is formed from the walls of the outer ring of houses.

Travellers, geographers and historians who recorded their impressions of Erbil before the end of Ottoman rule in 1918 include:

- Mēšīḥā-Zěḵā (6th century)
- Muhammad Abu’l-Qasim Ibn Hawqal (10th century)
- Abu al-Barakat Ibn al-Mustawfi (13th century)
- Yaqt ibn’-Abdullah al-Rumi al-Hamawi (13th century)
- Gregory Bar Hebraeus (13th century)
- Abu-l’Abbas Ibn Khalilkan (13th century)
- Rabban Bar Sauma (13th century)
- Abul-Fida’ al-Hamawi (14th century)
- Leonhardt Rauwolf (1574–5)
- Jean-Baptiste Tavernier (1643)
- Eviya ÇeLelebi (1656)
- Carsten Niebuhr (1766)
- Domenico Sestini (1781)
- Guillaume Antoine Olivier (1795)
- Adrien Dupré (1807)
- Giuseppe Campanile (between 1802 and 1815)
- James Silk Buckingham (1816)
- William Heude (1817)
- Claudius James Rich (1820)
- J. Shiel (1836)
- William Frangis Ainsworth (1837)
- Horatio Southgate (1837)
- James Phillips Fletcher (1843)
- Israel Joseph Benjamin (between 1846 and 1851)
- Dwight Whitney Marsh (1851)
- William Hayes Ward (1884)
- Hormuzd Rassam (1878)
- William Haynes Ward (1884)
- Tincio Martinus Lycklama à Nijeholt (1867)
- Joseph Černik (1873)
- George Smith (1873)
- Hindi Rassam (1878)
- Ely Banister Soane (before 1912)
- Ernst Herzfeld (1916)
THE TELL / ARCHAEOLOGICAL MOUND

The build-up of an archaeological tell is a natural process caused by the cyclical building, demolition and rebuilding of houses, most commonly of mud brick, on the levelled remains of the houses which preceded them.12 The existing Citadel town, atop an ovoid-shape artificial mound with the pointed end to the west, is the last layer, built in fired bricks, of such an accumulation process over the millennia. The profile of the large flat-topped artificial hill was—and still is—a remarkable landmark visible from far distance, as suggested by travellers and clearly illustrated by early photographs.

The process of build-up has continued in the Citadel until recent times: cleaning conducted for conservation projects have revealed that there was an increase of ground level of up to 2 metres (including debris and rubbish) during the period of squatter occupation between 1986 and 2006 and that the original floor levels of many earlier-Ottoman-period houses are often c. 1.0 to 1.5 metres lower than the later houses. The Citadel therefore presents a unique example of tell formation which has continued up to the present.

With the exception of the tell on which Kirkuk Citadel stands, which is larger in area but lower in height, Erbil Citadel mound is bigger by far than other tells of the region, reaching nearly 11 hectares (the area is approximately 108,575 square metres) on top, and over 15 hectares (approximately 155,930 square metres) at the base of the slope. The longest west-east distance at the foot of the slope is approximately 500 metres, while the north-south one measures about 420 metres. On top of the mound, only considering the built area of the Citadel, these lengths measure about 430 and 350 metres respectively.

The present base of the mound has an elevation of 420 m a.s.l. Its height is between 20 and 32 metres, generally lower in the central parts (440 m a.s.l.) and higher towards the edges, with the highest parts lying in the south west (447 m a.s.l.) and north east (450 m a.s.l.) sectors of the tell. The top of the tell has the
2.24 Contours of the summit of the tell (from: Conservation and Rehabilitation Master Plan, 2011)

2.25 Tell section (from: Studies for the Conservation and Restoration of Eight Building Groups at the Erbil Citadel, 2011)
Nomination of Erbil Citadel to the World Heritage List

2.26 Terracing for an afforestation scheme, 1958 (Constantin. A. Doxiadis Archive)

2.27 Citadel slope (from: Studies for the Stabilization of the Erbil Citadel slope and the Perimeter Façades Project, report/photo 2011)
form of a shallow bowl, draining out through the southern Grand Gate, indicating that the gate is likely to have been in the same approximate position for a considerable period of time, possibly millennia. The high points towards the edge of the mound may indicate the remains of former fortifications, major structures or possibly important archaeological features.

Along the periphery, the mound features a slope of 33.5° average angle, varying from a minimum of 21.4° on the east, to a maximum of 43.6° on the north. Currently, most of the slope of the tell presents a stepped profile caused by soil creep and also by the terraces cut at intervals into the side of the slope for a planting (afforestation) scheme carried out in the 1950s. The slope of the mound comprises three accesses to reach the Citadel gates: two vehicular ramp roads to the north and south, and steps to the east.

Geotechnical investigations and boreholes recently undertaken have demonstrated that the Citadel is built on an archaeological tell discernible from the lowest layers upwards. Its structure consists of clayey silt, sand and pebbles, which are the remains of ancient earth structures and occupation levels, as well as pottery fragments. The mound therefore contains no natural geology. The large area covered by the mound represents a major settlement, while the depth of stratigraphy corresponds to a protracted occupation. Surface finds of pottery shows that it was occupied from at least the Ubaid period (c. 5000 – 4000 BC), during the first great expansion of urbanisation in human society. An earlier occupation during the Neolithic period (to c. 6000 BC) is still uncertain.

In addition to the Citadel there are other lower archaeological tells surrounding the Citadel, representing the remains of an ancient settlement pattern, of which eight have been identified. One of these, which includes a Neo-Assyrian tomb, is currently being excavated. None of these immediately adjoin the Citadel tell, and on the northern side the distance from these tells to the Citadel mound reflects the depression which represents the remains of the encircling ditch and which survived as irrigated fields until well into the 20th century.

The tell of Erbil Citadel is thought to have been continuously occupied by human communities for thousands of years, although it will require the archaeological excavation programme currently planned by the High Commission for Erbil Citadel Revitalization (HCECR), the site management body, to confirm this assumption. The archaeological investigations which have already taken place, including the collection of surface pottery in 2006, confirm occupation of the Citadel from the Chalcolithic period (c. 4500 – 4200 BC), while occupation from the Neolithic period is suspected. Occupation of this period is certainly present in other nearby sites, such as the site at Mazar Maryam identified in 2010, while at Tell Qalij Agha, substantial Ubaid and Uruk period occupation layers confirm the presence of these periods in the area. The Erbil Plain Archaeological Survey, commenced in 2012 by the Department of Antiquities in partnership with Harvard University, is also confirming the rich archaeological heritage of the Erbil plain, with the Citadel at its heart.
For most of its history, the Citadel must have been surrounded by conventional fortifications consisting of walls and towers, as witnessed by the remains of a single tower under the balcony of a perimeter house (house 6/3) on the eastern side. A description of Erbil in 1574–5 by Leonhard Rauwolf as “surrounded with walls” corroborates their presence in the 16th century. A mandate by the Ottoman Sultan Mahmud I in 1745 records that Erbil and Kirkuk citadels (probably referring to their walls) are “seriously decayed in some parts” and orders a survey prior to their repair. There is no evidence of such works having been done, although it seems likely that the Grand Gate was reconstructed at this time.

This suggests that the present state, where the fortifications consist of the outer walls of the perimeter houses, is a relatively recent development, dating no earlier than the middle of the 18th century (probably due to replacement of the walls by houses following the siege by Nadir Shah in 1743). Some of the perimeter houses may have been built on top of the fortifications, others in front of them. This situation appears to have already existed by 1766, as described by Carsten Niebuhr and as shown in the engraving in the posthumous publication Narrative of a Residence in Koordistan, by Claudius James Rich, likely based on a sketch made in 1820, which shows the perimeter surrounded by houses, as it is now, rather than by city walls.

Parallel and contemporary encroachments occurred on the city walls of other cities, including Istanbul (the imperial capital) and Damascus, which severely compromised if not negated their military effectiveness. The process can be paralleled in the case of Kirkuk Citadel, where limited sections of the city wall survive, although heavily restored. Kirkuk Citadel also has houses constructed on the lip of the archaeological tell which are very similar in design to those in Erbil, but most of the houses in the site were demolished in different phases in 1980s and 1990s. In contrast to Kirkuk, Erbil Citadel’s houses are constructed of brick.

The Citadel was encircled by a wide ditch, the existence of which is witnessed by historical descriptions and many historical photographs, for example a photograph of 1932 of the eastern side of the Citadel, showing the ditch, partially filled, utilised as irrigated fields growing vegetables. The filling-in of the ditch on the southeast was probably linked to the construction of the ring of encircling shops, and on the north to the extension of the city on areas that were previously occupied by irrigated fields in the second half of the 20th century. According to the description of the Arab geographer Yaqut al-Hamawi (who died in 1229), the ditch was also deep.

The presence of a ditch is mentioned by various travellers who visited Erbil (among these Sestini in 1782 and Olivier in 1795 and in particular in the Year Book (Salnama) for Mosul of 1908 (1325 in the Ottoman civil calendar) as “... a sheltered fortress and it was a big city in old times. ... Its mound is large and it look likes Halep Citadel, but Erbil Citadel is bigger and higher than Halep Citadel. Erbil Citadel is surrounded by a deep ditch ...” (Yearbook (Salnama) for Mosul of 1908, Ottoman Archives, Istanbul). Other visitors refers to the ditch but in some cases it is not clear whether they mean around the tell or the lower city.
Information from written sources, surface survey, remote sensing analysis and limited excavation, all confirm that the archaeological potential of the site is enormous and that there is an opportunity today to conduct major excavations in order to answer a number of research questions such as the date of the earlier occupation and to confirm the existence of major temples (linked to the cult of Ištar) and royal palaces (such as the one built by Assurbanipal). Below is an approximate list of major features that are mentioned in the ancient and medieval sources, and which may have left traces in the archaeological record.

A major archaeological programme for Erbil Citadel was initiated and approved in 2012 by the HCECR and the Department of Antiquities. The archaeological excavation plan includes soundings and excavations at several locations in the Citadel, including the area at the centre of the tell, and in at least three other areas, including the edge of the mound, in order to carry out for the first time proper archaeological investigations on site. The project will be carried out, under HCECR supervision, by a consortium of local academic institutions, with the participation of national and foreign experts, starting soon with a comprehensive survey of the Citadel slopes.
MAJOR ANCIENT STRUCTURES ON THE CITADEL MENTIONED IN HISTORIC SOURCES

- A major temple dedicated to Ištar and its associated ziggurat (based on written sources as well as on a representation of the temple in Arbail [Erbil] depicted on a bas-relief from the time of Assyrian king Assurbanipal (representing the king in the act of pouring a libation in front of the temple, over a severed human head, almost certainly belonging to Teuman, king of Elam), preserved in the Louvre (AO19914).25

- A Neo-Assyrian astronomical observatory (this is also described in written sources, and may have been associated with the ziggurat26).

- A Neo-Assyrian royal palace (written sources indicate that King Assurbanipal lived in Erbil for approximately five years between 653 and 648 BC27).

- The Median/Sagartian royal palace (Erbil was one of the main cities of the Median Empire and the capital of the Sagartian Kingdom, thus the existence of an administrative centre and royal palace is certain, although of course it is difficult to predict how much of it can be identified and excavated).

- The royal palace of the Hedyab Kings (it is known that during the Parthian period Erbil became the administrative centre of the Hedyab Kingdom, thus the presence of an administrative complex is probable. In this case as well, as previously mentioned, it is impossible to predict the location of the complex or its state of conservation).

- A Zoroastrian fire temple (the presence of a fire temple is mentioned in sources of the Sassanian period).

- Synagogues, early churches and Nestorian monasteries (Erbil was a main centre of Christianity in early periods, and a large Christian community thrived in Erbil until the early 14th century).

- Mosques, madrasas and palaces (written records mention Erbil as an important city during the Islamic period and record the existence of religious and administrative buildings).

- Fortifications from various periods of occupation (the slopes of the tell may have been consolidated in the form of a paved glacis).

- Foundations of Ottoman houses (cleaning works and test soundings have revealed that the foundations of earlier buildings are well preserved).
URBAN FORM AND FABRIC OF THE CITADEL

Erbil Citadel represents a distinct urban entity, largely composed of traditional courtyard houses defined by a maze of narrow alleyways branching around them like the twigs of a tree. Its physical configuration may be associated to a hilltop town, laid on top of the human-made mound. Contrary to hilltop towns built on natural hills, in this case there is a mutual relationship between artificial topography and urban layout.

Its southern Grand Gate, which was the main entrance (two smaller gates exist, one in the east which is described in an account of 1843 and one in the north which was opened in the early 20th century), acted as hinge between the upper town and the bazaar in the lower city, as still is nowadays. Major alleyways fanned in all directions from the gate towards the interior of the Citadel, to reach all parts of the residential quarters. Smaller lanes that branched off major ones were much shorter in length. The narrow section of these alleyways was such that they were mostly shaded during sunny days, thereby providing a comfortable and cool passage to pedestrians during the hot summer time.

The tortuous network of winding alleys and the irregular shape of the plots are the inevitable result of incremental and spontaneous growth, typical of a settlement that evolved
Nomination of Erbil Citadel to the World Heritage List

2.33 Branch alleyway (from: Conservation and Rehabilitation Master Plan, 2011, photo 2010)

2.34 Junction of two alleyways in the 1950s (Constantin A. Doxiadis Archive, files 23942; also in the report: R-QBP 198 QGHP8 Bédic, history of Iraq: mediaeval monuments of Erbil, 6.11.1957, IRAQ REPORTS vol.69, Oct.-Dec. 1957, photo 29)

2.35 Comparison of the built fabric with a cadastral map of 1920 (from: Conservation and Rehabilitation Master Plan, 2011)
organically, in the absence of a predetermined design. This layout is the final step of the continuous process of adaptation of paths and lanes to the transformation of previous buildings that were built and rebuilt, probably depending on various factors related to use, ownership and financial issues, amalgamation and division of plots, etc.

The iconic outer wall of the Citadel town is among its most important features, formed by contiguous houses built on the perimeter forming a solid wall, very similar to fortified citadels of medieval times. It is not known to what extent the present urban fabric, inherited from the Ottoman period, reflects the layout of previous settlements of more ancient times. Further research and future archaeological excavation will certainly shed light on this matter. Undoubtedly, the legibility of the Ottoman-period town has remained intact, as a comparison of the modern layout with a cadastral plan of 1920 confirms.

In the late-Ottoman period the town was divided into three districts: Saray (meaning ‘palace’ in Turkish) occupied the eastern section, Topkhana (meaning ‘cannon house’) the western section, while Takiya (named from the dervish lodges which distinguished it) occupied a triangle between the other two. The district boundaries did always not follow street lines, but plot boundaries. Government buildings were concentrated in the area of the Grand Gate.

The presence of relatively few buildings for community use: hammam, mosques and takiyas, may be interpreted as the indicator of a restricted ‘institutional’ presence and of a social life organised around a few public elements. The traditional town management was probably based principally on the private property of the plots, which may have guided the creation and remodelling of the street fabric, as in many other similar historic districts of the Islamic world. However, the use of some Citadel houses as diwakhanas to receive guests after the afternoon (asr) prayers, is a witness to a more complex societal organisation, reflected in the mixed and diffuse private/public use of the urban space.

The small eastern gate was probably formed in the late-Ottoman period and the northern Ahmadi Gate c. 1925. The major transformation that impacted the historic urban fabric dates to 1958, when the axial road connecting the Ahmadi Gate with the older Grand Gate at south was created. At the same time, the process of accumulation of layers of debris continued (the level increased of over 1.5 metres in the second half of 20th century), which may have changed the profile of the buildings but, at the same time, has preserved them under the debris. Moreover, the Citadel was not subject to other destructive modifications, such as the construction of concrete or out-of-scale buildings.

In Ottoman times, water in the Citadel was supplied only from the well located in the vicinity of the hammam, from where it was distributed to individual households by water carriers (named saqqa) who transported the leather containers (gerba) on donkeys. A modern water-supply network was introduced in 1924 by the British administration, who installed the first water tank (later replaced by the present one) from which pipes laid on the
2.36 Vaulted entrance to a private courtyard (S. Cravero, 2011)

2.37 Alleyway with Early-Ottoman period brick façade (from: Conservation and Rehabilitation Master Plan, 2011, photo 2009)

2.38 Drain from a private courtyard (G. Pakumbo, 2011)
surface of the alleyways supplied water to houses. This system was renewed in the 1990s but recently removed (except for the water tank) as it was a cause of water seepage endangering the stability of the houses.

Surface water was traditionally drained through channels down in the middle of the alleyways and then through a box drain passing through the Grand Gate and down the slope eastward. After the opening of the north-south axis (1958) an underground sewerage and storm water drainage was laid and repaired in the following decades. Similarly, an electricity network was installed. Leakages from the poor-quality drainage and sewerage networks affected the structural stability of the mound and its built heritage. Meanwhile, plans for all new service networks (including a new water tank) have been specifically designed to replace the previous ones, which have been almost completely removed, and are ready for installation.

The overall urban form of the Citadel –as an organically evolved settlement situated on a tell and enclosed within boundaries defined by a circle of houses rather than by fortification walls– is fully preserved, although the urban fabric and street layout have been subject to some modifications. The compactness of the built fabric has been affected. The opening of the north-south axis has divided the site in two halves, with the centre marked by the flagpole in the middle. However, accurate and clever intervention can easily retrieve the original urban compactness and fabric, thanks to the existence of extensive documentation.
2.41 Inventoried buildings (from: Map 6 in Annex)

2.42 Construction periods (from: Map 7 in Annex)
INTRODUCTION TO THE CITADEL’S BUILT HERITAGE

The Citadel buildings, their material and structural typologies are characterised by a relative homogeneity, reflected also by the golden-brown colour of the brick surfaces. In contrast, the architectural composition in terms of volumes, detailing and decorative features shows greater creativity of the ancient builders to respond to functional and aesthetic needs, reflecting continuous and developing local traditions. The architectural vocabulary used is very rich and extends from the external brickwork exposed in the alleyways to the diversified components enriching the interior of the courtyards and houses, as described in detail below.

A comprehensive inventory and documentation campaign was commenced in 2008 in collaboration with UNESCO, to serve as a fundamental tool for site management and conservation activity planning. A total of 588 building and/or plot units have been identified, numbered, examined and classified (using site-specific inventory forms), according to the architectural/urban significance, under three groups. This inventory is continuously updated and is subject to change according to

<table>
<thead>
<tr>
<th>Classification of Buildings / Architectural and Urban Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block No.</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Classification criteria</td>
</tr>
<tr>
<td>1. Location</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>2. Architectural value</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>3. Architectural details</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>4. Authenticity of construction</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>5. Historical and cultural importance</td>
</tr>
<tr>
<td>6. Age</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>
2.45 Grades of buildings (from: Map 8 in Annex)

2.46 Brick architecture, 1958 (Constantin A. Doxiadis Archive, files 23942; also in the report: R-QBP 198 Q GHP 8 Ekistic history of Iraq: mediaeval monuments of Erbil, 6.11.1957, IRAQ REPORTS vol.69, Oct-Dec. 1957, photo 30)
new information and research following the progress of works conducted on the houses, including detailed surveys of building components, such as doors and windows, railings, brickwork patterns, etc.:

- **Grade 1**: Very important, grand mansions, buildings of particular historical or architectural significance (11 buildings);
- **Grade 2**: Important, i.e. buildings with a substantial amount of original fabric preserved, with important architectural features, with significant urban value (82 buildings);
- **Grade 3**: Less important buildings, i.e. with less original fabric, with no significant features, but still retaining visible parts of authentic structure (227 buildings);
- **No Grade**: ‘Shacks’: random structures, poorly constructed of reused bricks or mud-bricks, sometimes with concrete blocks, no authentic parts visible (252 structures and empty areas);
- **Public structures** (gates, mosques, takiyas, graves, hammam): 16 structures.

Based on such classification and inventory, there are a total of 320 graded houses, 252 ‘shacks’ and 16 public structures.

**HOUSES**

The great majority of the buildings on the Citadel are houses, as the site had a predominantly residential use. Almost all houses have courtyards, some of which contain trees. This system of diffused, private open spaces—as fundamental element of the development of the urban fabric—has survived.

**House chronology and typology**

Historic houses in Erbil Citadel constitute the most important group of traditional buildings in the Kurdistan Region of Iraq. Some of their outstanding features include brick construction, which can be highly decorative, curved corners, richly decorated plasterwork, use of alabaster for detailing and internal wall paintings. Much of the visible fabric dates between the middle of the 19th and the first half of the 20th centuries, but no house is of a single construction phase and the recent conservation works now being carried out by the HCECR confirm the large number of instances in which houses contain earlier fabric, even though it may be concealed behind later plaster. Most have shared walls, on either side of which the houses have been reconstructed over successive ages. So far, few houses are dated by inscriptions (2/2 and 31/8, both dating to the late-Ottoman period). The earliest houses may date to the middle of the 18th century, when the Citadel probably required extensive reconstruction following the siege by Nader Shah of 1743.

In the 1920s, new houses were still built and many old ones were modernised. The situation changed after the 1930s, when the Citadel came to be seen as an uncomfortable and unfashionable place to live and the wealthy families began to move to the lower city. The 1940s to 1960s were a period of
Nomination of Erbil Citadel to the World Heritage List

2.47 Rashid Agha Diwakhana built 1903-5 (G. Palumbo, 2011)

2.48 Late-Ottoman period courtyard (S. Cravero, 2011)
The early 1980s witnessed significant efforts in the Citadel, with the repair or reconstruction of a number of houses in the Saray quarter. From 1986 to 2006, shacks were built by Internally Displaced Persons (IDPs) and squatters, mostly reusing old bricks as well as empty areas.

The HCECR is planning scientific research to establish firmer dates for the Citadel’s houses, which at present must be based on architectural typology (see box below). The studies which have been made on the Citadel comprise detailed ‘block studies’, which have included the phasing of every wall in every historic building.\textsuperscript{33} Research is continuously pursued and experience built through conservation works, to improve the dating methodology with the combination of a range of diversified methods and sources of information: historical research on written and iconographic sources, oral information, analysis of building materials and techniques, archaeological excavation, dendrochronological sampling, and other scientific methods.

The most common plan, for houses of whatever date, features a main wing with two or three rooms entered by separate doors. The larger houses of early date can have two rooms on either side of a central \textit{iwan} (a room without a front wall). Mansions of the late-Ottoman period can have a main range of two (45/3) or three (e.g. 2/5, 24/2) rooms with flanking wings to either side of the courtyard. Some houses have upper storeys and some are raised over \textit{sirdabs}.

Early houses, which had small ventilation openings but lacked windows for light, did not need the façade to be protected from the sun. In late-Ottoman-period houses, which have large windows, a \textit{tarma} or portico to protect the façade became essential. \textit{Tarmas} of this period are supported on timber columns with decorative capitals (e.g. 42/2) or by arcades of Mosul alabaster (e.g. 45/3). In the post-medieval period, \textit{tarmas} are often supported on iron columns.

\textit{Sirdabs} (basements) are most common in perimeter houses, where they were easy to construct as such houses are built on a slope (e.g. 20/1). In the interior of the Citadel, \textit{sirdabs} are only present in late-Ottoman (e.g. 45/3) and post-Ottoman houses (e.g. 10/9). In some cases they only extend under the \textit{tarma} rather than the whole of the ground floor.
Relative dating is based on the following architectural typology. Of course the different typological styles are not mutually exclusive and there are houses intermediate between the types, particularly in the case of late-Ottoman-period houses which also display earlier-Ottoman period features (e.g. 39/4, 56/6). It is also common to find examples of houses being modernised, for example by niches being given arched heads and a vertical profile.

**Early-Ottoman period (c. 1750 - c. 1880)**
Diagnostic dating features include small vertical-profile ventilation windows closed with wooden grilles, so that the rooms were originally dark, leaving large areas of exterior façades and parapets for the display of decorative brickwork; exterior doorways set within rectangular recesses with door heads which are often ornamented with impressed plaster decoration; limited use of alabaster for door heads with highly stylised ornament; plank doors; end-wall niches with gabled heads; niches in the lateral walls with a square or rectangular profile arranged in two tiers; opposed curtain-fastening niches in the lateral walls; corner niches on one or both sides of the entrance doors; gypsum shelves supported on brackets – the shelves can be double; hooded wall fireplaces. Most early windowless houses were modernised in the post-Ottoman period, when living in dark rooms went out of fashion. Supplying light to rooms was most commonly achieved by the reconstruction of the courtyard façade to incorporate windows set within the line of the original plan (e.g. 12/5), or by punching windows through the back of the corner niches (e.g. 37/2).

**Late-Ottoman period (c. 1880 - 1918)**
Diagnostic features include: parapets with an alternating recessed and projecting profile, covered in lime plaster; porticoes (tarmas) supported on timber columns or alabaster arcades; external windows with semi-circular or tangential arched heads; small vertical-profile ventilation windows closed with a diagonal lattice; iron window grilles with faceted knobs at the intersections or decorative grilles with S-scrolls; doorcases in alabaster with classical mouldings or carved vegetal ornament; plaster door heads with multiple-cusped arches; panelled or planked doors; niches with arched heads; gypsum shelves supported on brackets or with coved soffits; ornamental gypsum plasterwork, sometimes ornamented with mirror-work; wall paintings, including blue-on-white stencilled ornament; decorative ceilings made of wood.
Post-Ottoman period (1918 - c. 1960)
Diagnostic features include parapets with decorative panels of diagonally-set bricks; *tamas* supported on iron columns, sometimes roofed with jack arches; tall glazed windows incorporating grilles set within the wooden frame; ventilation windows with a horizontal profile; street and courtyard doorways set within deep chamfered reveals; niches with segmental-arched heads; painted areas of walls defined by a painted band with a wavy edge; crude wall paintings arranged in panels, most commonly featuring vases of flowers or landscape scenes; decorative ceilings are painted on tin.

Modern period (c. 1960 - 1986)
Very few houses were built in this period. Those that were are all low with diagnostic features which include wide windows and niches which are a vertical rectangle.

Squatter shacks (1986 - 2006)
Modern squatter shacks are mostly built out of old bricks and are characterised by poor construction. Mud-bricks were also used and sometimes concrete blocks and other materials which came to hand, including tin cans and parts of motor vehicles. All herring-bone brickwork dates to this period. In contrast to historic houses, squatter shacks normally lack parapets and seldom have stairs to the roof.
The large majority of historic buildings in the Citadel are built of fired brick masonry with mud mortar, sometimes gauged with lime or gypsum. There are different sizes of bricks, but the sizes cannot be safely used for dating, as bricks walls constructed of mud mortar could be easily dismantled and bricks may have been reused many times. The importance of brick construction in Erbil area is supported by the existence, not far from the city, of a number of traditional clamp kilns in the suburbs of Erbil, manufacturing bricks by traditional methods. The HCECR is supporting the continuation of this tradition.

In addition to the brickwork described above, other types of modern brickwork appear in some constructions introduced in the second half of the 20th century. Apart from a few vaulted structures, roofs and floors are generally supported by timber structures. The main beams are usually made of poplar (Populus euphratica) and the secondary timber are made of oak (Quercus sp). Some timber columns are also present in the porticoes. A few house floors and portico roofs are built with iron columns and small I-profile beams supporting shallow vaults (jack arches) made of bricks set in lime mortar.
MAIN STRUCTURAL COMPONENTS

Most house walls have very shallow foundations extending no more than 0.5 m below ground, consisting of no more than the same wall with slightly larger dimension, but others have much more substantial foundations.

The masonry structure of walls usually consists of two external leaves and an internal rubble core set in mud mortar. The bonding of brickwork is normally irregular; headers are sometimes used, but typically the outer leaf of brickwork is bound to the core by the use of wider tile-like bricks. Lateral walls are built with the same technique but their thickness is less. Timber bands concealed in the walls to improve connections, especially at the corners, and for improved seismic performance, are a normal feature of Ottoman-period buildings.

Vaults in the Citadel are a feature of the more important houses and are especially prevalent in basement rooms. Some houses have vaulted rooms on the main floor, while vaulted rooms in upper storeys are comparatively rare. Barrel vaults and pavilion vaults occur, as well as shallow domes. Vaults are made of fired bricks set in lime mortar.

All roofs in the Citadel are flat and most are supported on timber beams used in the round. High-status houses have the roof layer supported on poplar planks, but more conventionally above the primary beams typically there are unshaped oak coppice poles (laid close to each other), over which there is a layer of compacted mud-and-lime mixture. This layer rests on a thin fabric (i.e. reeds and woven matting) placed on the joists. The compaction is carried out by means of a cylinder stone rolled over the length of the roof after the laying of each layer.

Some houses from the late- and post-Ottoman periods have iron small I-profile beams supporting jack arches made of bricks set in gypsum mortar, and many of those rebuilt or updated during the first half of the 20th century have iron columns supporting roof structure in the portico area, more rarely within rooms to break beams span between walls.
An important structural and visual feature of the Citadel is the external buttresses that prop up some of the perimeter façades giving them a very characteristic appearance. The buttresses are usually three per façade, one at the centre and one each at the edges, of semicircular cross section, with a conical shape extending from the external ground level to the first internal ground level, whether basement or ground floor.

**ARCHITECTURAL FEATURES**

**External features**

A special characteristic of Citadel buildings is the expressed brickwork of the external walls. Generally, original patterned brickwork dates to the earlier-Ottoman period, and is formed by recessed bricks or pierced brickwork, which can include rhombuses, triangles, chevrons, shallow gabled niches and decorative string courses. Decorative parapets are described below. Some post-Ottoman houses have brick façades finished with a hard render forming decorative panels. Rounded brick corners are a feature which continued to be constructed up to the past decades. Rounded corners are often carried back to a right angle at high level, achieved through different forms of chamber stops.

External doorways and gateways with shouldered arches with trefoil and ogee heads, rendered in lime to contrast with the surrounding brickwork, span the earlier-Ottoman and late-Ottoman periods. In contrast, the typical post-Ottoman street entrance consists of a door set within a deep chamfered reveal with a flat arch, with the brickwork above supported on an iron angle.

**Projections and jetties** sometimes break the profile of the façade, with the upper storey projecting further than the wall of the ground floor. The projection can vary from half the thickness of a brick to substantial jetties supported on projecting timber beams.

Either supported on projecting wooden beams or jack arches, balconies seldom occur in the interior of the Citadel, but can distinguish the exterior façades of some perimeter houses and be finished with decorative iron railings.

Parapets are a distinctive feature of the Citadel; earlier-Ottoman houses can have parapets ornamented with blind niches, blind or pierced niches at parapet level. Alternately, projecting and recessed brickwork in parapets plastered in lime was typical of the late-Ottoman period. Post-Ottoman decorative parapets have bricks set diagonally on the bed, arranged in panels, giving a ribbed effect. This pattern was also used in the 1970s-'80s reconstructions of houses and of perimeter façades.
Other features include garderobes, stairheads and a limited number of projecting (oriel) windows.

**Features within courtyards**

In earlier houses, elevations to the courtyard also normally feature exposed brickwork. In later house, there is much greater use of lime plaster as a finish and in the courtyard of post-Ottoman-period houses, façades protected from the rain are normally covered with plaster. Some courtyards display small decorative blind niches in the façades of early-Ottoman-period houses and large niches with circular of scalloped heads in the courtyard walls of later houses. The types of niches typical of house interiors can also extend into courtyards, especially where protected by a *tarma*. Courtyards are often paved with square brick paviours, frequently set diagonally to the layout of the courtyard.

Arcades are typically used to support *tarmas* (porticoes) in the late-Ottoman period mansions. They can be constructed of Mosul alabaster, or be supported on substantial circular columns built of brick. *Tarmas* can also be supported on timber columns which may also be a decorative element with capitals built up of small pieces of wood.

Citadel houses display many examples of arches used for different purposes. The largest arches, to be found in front of iwans and in early houses are often defined by a band of impressed plaster decoration. The architectural quality of doorways to courtyards in the earlier-Ottoman period is often emphasized by being set within a rectangular recess, within which both tangential and pointed-arches are typical. Ornament around doorways in the earlier-Ottoman period is usually executed in plaster, but in the late-Ottoman period alabaster became the preferred material for doorframes in the most prestigious houses, often enriched with carved floral ornament.

**Internal features and decoration**

Niches are a normal feature of Citadel houses of all periods and display various typologies depending on the date of the building. They are a decorative element, they were used for storage and in addition they also reduced the number of bricks required for construction.
2.76 Alabaster arcade (from: Conservation and Rehabilitation Master Plan, 2011, photo 2008)

2.77 Timber capital (from: Conservation and Rehabilitation Master Plan, 2011, photo 2010)

2.78 Iwan arch (S. Cravero, 2011)

2.79 Doorway impressed plaster ornament (S. Cravero, 2011)

2.80 Carved alabaster doorway (from: Conservation and Rehabilitation Master Plan, 2011, photo 2008)

2.81 Inlaid door (Adam Merani Collection, 2010)
There are other distinctive internal ornamental features, including a high shelf around the walls, made of gypsum, supported on a formwork of reeds. Gypsum plaster is also used for raised plaster ornament in the interiors of some of the most important houses, sometimes also displaying wall paintings, either blue-stencilled ornament on a white background or more richly coloured overall painted ornament.

Decorative ceilings are normally confined to major mansions and are made of wood, either planked or with applied or painted ornament. In the post-Ottoman period, painted tin ceilings appear. Decorative ceilings in 1980s restorations are painted on plywood.
Nomination of Erbil Citadel to the World Heritage List

2.87 South elevation of the Citadel and the Grand Gate c. 1925 (Royal Geographical Society Archive, D058/011094)

2.88 Grand Gate after the demolition of the top storey, 1950s (Constantin A. Doxiadis Archive)

2.89 Exterior façade of the modern southern gate (S. Cravero, 2011)

2.90 Interior façade of the modern southern gate (S. Cravero, 2011)
OTHER BUILDING TYPES

Gates

Until the late-Ottoman period, the Citadel had most probably only one gate, the southern Grand Gate, which connected the entrance to the Citadel with the bazaar and the historic districts of the lower city. Its presence and architecture is illustrated in various documentary sources, in particular, a series of historic photographs of the first half of the 20th century.

The Grand Gate stood in the lowest and most vulnerable part of the perimeter, set within an earthen bank which extended either side and brought the perimeter up to the same level as the perimeter houses on either side. The existing modern construction of 1979 was erected two decades after the demolition of the previous Grand Gate (see box below), which commenced in the late 1940s, when the top storey was removed, and was completed in the late 1950s, prior to –and most probably connected with– the construction of the central north-south road in 1958.

THE OLD GRAND GATE

The Citadel was accessible by the Grand Gate located to the south in the lowest point of the mound. Local tradition assigns the construction of the gate to a master from Iran in 1860, but it is clear that it was of more than one period of construction and was constructed before this date. The top storey, which had a balcony over the entrance arch, was an addition. The eastern section (Saray) and the western extension (Mir Ala) were also additions to an original defensive structure which projected forwards from the line of the walls, as can be seen in an engraving published in 1857.

Indeed the structure of the passageway, defined by very large structural niches on either side, is best explained as supporting a large enough area of roof to act as a fighting platform. The construction of this large defensive structure was probably commenced after 1745, when Sultan Mahmud ordered that the defences of the Citadel should be surveyed and repaired.

The fragments of city walls which can be seen flanking the gate are built of mud-brick, but it is not yet clear if these were the walls which protected the Citadel when it was besieged by Nadir Shah in 1743. By the middle of the 20th century, the niches on either side of the passageway were being used as shops and storage and the timber leaves of the gate itself had been removed. The added top storey was demolished in the 1940s and the gate was completely demolished in the late 1950s.
The present modern entrance has a concrete core faced in brick, featuring a modern abstract monumental style. Its architecture is composed of a series of disconnected sections of wall, interrupted by vertical breaches, with small narrow arched windows mainly opened in the upper parts of the side walls. The main wall, which accommodates the tall arched gateway, is slightly taller.

If viewed from far distance (i.e. from the long square to the south of the gate) materials and colours of the new gate may appear matching those of the surrounding architectural context, nevertheless the contrast with the Citadel house façades is evident. The abstract approach in its design is in contradiction with the spirit of the place. Its architecture gives an impression of easy ‘permeability’ of the access to the Citadel, against the sense of protection that the site inspired in the past.

Given the high symbolic value of the old Grand Gate and its role for the whole Citadel town (which is said to be kind of ‘headless’ without its previous gate), stakeholders and civil society have demanded its reconstruction after demolition of the present construction. In-depth research has been undertaken by the HCECR to improve knowledge and gather documentation on its structure.

Another small gate was opened later in the eastern side of the Citadel, probably in the earlier-Ottoman period. It was reached by flights of steps; the steps leading southwards towards the bazaar culminating in a barbican structure. It lost its importance after the opening of the main street in 1958. The present gate dates to the 1980s.

The Ahmadi Gate, at the north of the Citadel, was pierced through an existing house by Ahmad Afandi, the first Governor of Erbil, c. 1925, to allow access from the Citadel down towards the new administrative building constructed under British administration, in which his office was located. A ramp from the gate runs to the east, towards the new building. The present gate arch was constructed in the 1990s and now serves as the main vehicular entrance to the Citadel.
Mosques

Historical records show that there were several mosques and takiyas in the Citadel. However, only one mosque remains in use today: the Great Mosque (27/6), where many Erbil’s residents and former inhabitants of the Citadel still come for Friday prayers. It is also known as the Mullah Afandi Mosque after the local scholar and notable (1863-1942) who repaired the building in the early 20th century. The mosque used to house a famous religious school. The mosque may hide the remains of an earlier Friday Mosque and may reflect the location of some of the important religious structures known to have existed on the Citadel in the past.

The mosque underwent major reconstruction works in 1959, which resulted most visibly in the replacement of its twenty-two small domes (not all of which were the same size) with a single large dome. It used to have a portico supported on decorative timber columns facing the courtyard. Irregularities in the current plan suggest that the peripheral walls may still include old fabric.
The minbar, dated 1719, is retained from the old mosque. The minaret is ornamented externally with glazed bricks and a brick panel near the base dates its construction to 1848. The hujra at the northern end of the courtyard is post-Ottoman in date and has an old iron-and-wood chandelier in the middle of the room.

The courtyard of the Mala Ibrahim Dogramachi Mosque (22/1) is still used for prayers, but the mosque itself is not in normal use. The present mosque is converted from the hujra of the previous mosque, which was probably demolished in the 1970s.

The Asaad Afandi Mosque (also known as Abdulwahab Mosque and housed in building 21/4) is not in current use; graves associated with the mosque have recently been uncovered by the HCECR.
<table>
<thead>
<tr>
<th>Building identification number</th>
<th>Mosque’s name and/or name of the person to whom is dedicated</th>
<th>Additional information on the history of the mosque</th>
</tr>
</thead>
</table>
| 21/4                           | Asaad Afandi Mosque                                          | - Its history goes back to 1730 AD.  
                               |                                                              | - Renovated in 1961 by Abdulwahab Agha Al Asaad. |
| 22/1                           | Mala Ibrahim Dogramachi Mosque                               | - Al Haj Mala Ibrahim Dogramachi (1851 - 1938) was born in Erbil Citadel and was taught religious sciences by Mala Omar Afandi bin Mala Abu Bakir the 3rd and Shiekh Abu Bakir Nakishbandi.  
                               |                                                              | - Previously the mosque was called Shiekhani Mosque. |
| 27/6                           | Qala Grand Mosque. Dedicated to a well known religious family, Mala Abu Bakir Afandi family. | - Considered as the oldest and most important mosque and religious school in Erbil.  
                               |                                                              | - Friday prayers continue to be held there.  
                               |                                                              | - Mala Abu Bakir Afandi family is well known family with a long history of teaching religious sciences in the region. They had great religious influence and role in Erbil and the region and provided religious certificates for scholars.  
                               |                                                              | - History:  
                               |                                                              | - It might occupy the location of an earlier church, and perhaps previously the Temple of Ishtar.  
                               |                                                              | - Witnessed prosperity under the reign (1190 - 1232) of Sultan Muzaffar al-Din Kokburi (1128 - 1232).  
                               |                                                              | - Witnessed prosperity under the Ottoman rule  
                               |                                                              | - Renovated in 1719 - 1720 (1132 AH) by Mala Omar bin Mala Abu Bakir the 2nd.  
                               |                                                              | - The minbar dates to 1719 AD (1132 AH).  
                               |                                                              | - Enlarged and renovated in 1845 (1261 AH) by Najib Pasha, Wali of Baghdad, as decided with Mala Abu Bakir the 3rd bin Mala Othman (well known as Kuchuk Mulla) during his visit to Erbil Citadel.  
                               |                                                              | - The minaret is ornamented externally with glazed bricks and a brick panel near the base dates its construction to 1845 (1261 AH).  
                               |                                                              | - Renovated in 1908 (1326 AH) by Mala Abu Bakir Afandi the 4th bin Omar Afandi (well known as Mala Afandi / Kuchuk Mulla).  
                               |                                                              | - Reconstructed in 1959 (1378 AH) by Rashad al Mufti. |
Takiyas

One of the characteristics of Erbil Citadel is the presence of takiyas, which were used for gatherings of Sufi brotherhoods (tariqa) or as hostels for dervishes. In the Citadel they were more typically a house of a religious leader used for religious meetings and prayers. The takiyas provided meeting places for sufi, devout Muslims, and dervishes, to practice the religious recitals (thikir or dhikr) and to hold dervish ceremonies.

Generally, takiya buildings were not specifically designed but any house (or two annexed houses) could be converted for use as a takiya. Today, they are reminiscence and testimony to an important cultural/religious tradition and to the relevant intangible values and social memory. In recent times there were three takiyas in use, but there were almost certainly more in the past, reflecting the fact that one of the three Citadel’s districts is named Takiya due to the presence of a number of this type of buildings.

The oldest takiya in the Citadel (Sheikh Sharif) is considered to be that dedicated to Sheikh Muhammed Sharif al-Siddiqi (1870 - 1957), locally known also by other names. It is located to the northeast in two late-Ottoman-period buildings (6/18 and 6/19), but according to local traditions its memory goes back to the thirteenth century. The takiya of Mala Salih Yajan, located in buildings 43/5 and 43/6, is thought to be around 200 years old. Two takiyas were specifically used by women: the takiya of Khalifa Fatma Naqshbendi (Saray district) and the takiya of Khalifa Meerosh (Topkhana district).

Citadel’s inhabitants have memories of such ceremonies in the takiya of Haj Mala Khidhir al-Talafari (53/1), where the HCECR uncovered Sufi wall paintings in 2012. This takiya contains a grave in the basement. The takiyas on the Citadel have gone out of use, but some are still to be found in the modern city and the tradition continues.

Graves and tombs

Together with mosques and takiyas, graves represent important evidence of the religious, symbolic and social/cultural values of the Citadel. The knowledge of their history as buildings as well as of the history and legends of the people buried in them brings additional elements to the understanding of the site.

Eight graves have been found so far in the Citadel, but this number is likely to increase during site analysis and conservation works, which usually entail the removal of debris and the unearthing of previous layers. Moreover, historical research and the oral history programme are contributing to information and documentation about the history of the personalities buried in or connected with the graves. Some of these graves and tombs are still visited by worshippers.
<table>
<thead>
<tr>
<th>Building identification number</th>
<th>Takiya’s name and/or name of the person to whom it is dedicated</th>
<th>Additional information on the history of the takiyas</th>
</tr>
</thead>
</table>
| 6/18 + 6/19                   | Takiya of Sheikh Sharif. Dedicating to Sheikh Muhammed Sharif al-Siddiqi (1870 - 1957 AD). | - Well known also as:  
1- Takiya of Sheikh Zade,  
2- Takiya of Sheikh Zade al-Bakri al-Siddiqi,  
3- Al Takiya al Qadiriya.  
- Considered as the oldest takiya at the citadel, its history goes back to the Atabeg period, around 1128 - 1232 AD (522 - 630 AH).  
- It is believed that it was established by Sheikh Ibrahim al-Haddad. |
| 43/5 +43/6                    | Takiya of Mala Salih Yajan. | Its history goes back 200 years. Established by Sheikh Ibrahim al-Haddad. |
| Topkhana district              | Takiya of Khalifa Meerosh | For women |
| Saray District                 | Takiya of Khalifa Fatma Naqshbendi | For women |
Three of these tombs are now in freestanding buildings but were originally attached to adjacent houses. These are:

- 7g, the tomb of Jomardeen Qassab was formerly part of a house in Block 35, since demolished. The curve of the northern wall projected into the alleyway, which was very narrow at this point.

- 11g, the tomb of Sayid Ibrahim Gaylani is located in a small but interesting post-Ottoman-period building with curved corners, half sunk into the ground. It is attached to house 11/6. The Gaylani sheikhs belonged to the sufi lineage eventually inherited by Ismail Sufi, who founded the Safavid dynasty of Persia.

- 15g, the tomb of Sheikh Abdulqadir Gaylani was formerly in the angle on the northern side of a curving alleyway; now it is a free-standing modern structure built against an old wall, as the alleyway has migrated to the north. The tomb contains a small library of religious books.

<table>
<thead>
<tr>
<th>Grave’s building identification number</th>
<th>Grave’s name and/or name of the person buried (if known)</th>
<th>Additional information on the history of the grave</th>
</tr>
</thead>
<tbody>
<tr>
<td>7g freestanding</td>
<td>Grave of Jomardeen Qassab</td>
<td>It is still visited up to this date.</td>
</tr>
<tr>
<td>11g freestanding</td>
<td>Grave of Sayid Ibrahim Gaylani</td>
<td>It is still visited up to this date.</td>
</tr>
<tr>
<td>15g freestanding</td>
<td>Grave of Sheikh Abdulqadir Gaylani</td>
<td></td>
</tr>
<tr>
<td>inside the house 4/5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>inside the house 10/3</td>
<td>It is called Qerkhler shrine</td>
<td>- Qerkhler means forty sisters.</td>
</tr>
<tr>
<td>inside the house 39/6</td>
<td>Grave of Habeeb al Najjar</td>
<td>- Fairytale stories are told about the character.</td>
</tr>
<tr>
<td>53/1 inside the basement</td>
<td></td>
<td>Located in the basement of the ta’kya of Haj Mala Khidhir al Talafari.</td>
</tr>
</tbody>
</table>
Diwakhanas

In addition to houses, some prominent figures, such as Yaqoob Agha, civil governor as well as a famous poet, and Ali Pasha Dogramachi, possessed diwakhanas, special houses—very specific to Erbil—used for receiving guests and discussing issues. Diwakhanas functioned as sort of public spaces after the afternoon (asr) prayers, as it was a local tradition to open house doors to receive 20-30 people at time. Some of these diwakhanas were special-purpose large buildings providing an impressive expression of the influence of the elite and notable families responsible for their construction, while others consisted of a dedicated room within the house. The most well-known diwakhanas at the Citadel were: 36

1. Yaqoob Agha Diwakhana (58/3);
2. Rasheed Agha Diwakhana (2/2);
3. Ali Pasha Dogramechi Diwakhana (4/7);
4. Mohammed Agha Asaad Diwakhana (42/1);
5. Sayid Abdullah Pasha al Naqib Diwakhana (31/8).

2.103 Courtyard of the Yaqoob Agha diwakhana in the 1980s (SBAH Archive)
2.104 Rear elevation of the Yaqoob Agha diwakhana in the 1980s (SBAH Archive)

2.105 Plan of the Rashid Agha diwakhana (from: Conservation and Rehabilitation Master Plan, 2011)
2.106 Interior of the Rashid Agha diwakhana (HCECR, 2007)
Hammam

A traditional hammam (public bath, 27/2), was built in 1775 by Qasim Agha Abdulla Agha, civil governor of Erbil, the father of Yaqoob Agha. The hammam is located in the middle of the town, and provided hot baths for the local population. It still survives today.

The building is composed by an outer changing hall (barrani), of about 9 by 9 metres, with pointed arches across the corners to form the octagon on which the dome sits. The entrance door and the octagon are ornamented with carved stonework. Under the centre of the dome there is a modern heptagonal fountain. Towards north is the access to the middle hall (wastani), slightly warmer in temperature, covered with a barrel vault and with masonry benches around the walls. At the northern end is the inner hall (jawani), very hot and steamy. This hall, the plan of which is an octagon within a square measuring some 11 by 11 metres, has six alcoves used for private bathing. It is also surmounted by a large dome with small round-glass openings to provide natural light inside.

The hammam was open at separate times for women and men, thus providing ample opportunities for social contacts and other daily affairs. Water for the hammam was obtained from the ancient well which was more than fifty metres deep. For fuel to heat the hammam, dried twigs and vegetation as well as rubbish thrown away by residents were collected daily and dried under the sun and then burnt to heat the water cistern and the under-floor hypocaust of the inner hall. The hammam of the Citadel ceased to function in the 1960s and was restored in 1978 (the dome and south and west sides of the changing room were rebuilt) without it being brought back into its original use. Currently, it is used to host small exhibitions and other cultural activities but restoration to its original use is planned.

In the courtyard of the hammam is the great well, extending far below the base of the mound, which provided the Citadel with water.

A small number of houses have a private hammam: 2/1, 28/3 and 58/3.
2.108 Plan of the hammam (from: Conservation and Rehabilitation Master Plan, 2011)

2.109 Entrance door of the hammam (G. Palumbo, 2011)

2.110 Interior of the hammam (G. Palumbo, 2011)
2.b  •  HISTORY AND DEVELOPMENT

HISTORICAL OVERVIEW

The history of Erbil is documented through archaeological research, historical sources, and travellers’ narratives. A number of archaeological excavations have taken place within the area of the wider city of Erbil. Important new work has recently started, combining the use of remote sensing and field survey in order to better understand the historic landscape and its development, with the Citadel at its core. Finally, all available cuneiform texts, extending back to c. 2300 BC, have recently been collected and the topographical evidence provided by documentary sources has been reassessed.

In relation to the Citadel itself, the size of the tell of Erbil Citadel is a witness to the great antiquity of the site. Its archaeology has so far mainly been investigated through surface surveys. Surveys to date have confirmed occupation at least as far back as the Ubaid period, which saw the emergence of urban civilisation of which the Citadel itself is a cogent witness.

Situated at the cross-road of east-west (such as, in a certain period, the Royal Road of ancient Persia) and north-south routes (from the Gulf to Anatolia, the Caucasus and Central Asia), the strategic position of Erbil ensured its importance through history and facilitated its relation with both neighbouring and far distant sites. Erbil stands in the Transtigris region at the slopes of the Zagros Mountains and in front of the fertile Mesopotamian plain, in the eastern section of the Fertile Crescent that permitted the development of dry-farming agriculture. The highly diverse nature of this landscape allows room for various lifestyles and niches of subsistence, such as settled farmers, nomadic, and semi-nomadic groups.

During its long and continuous history, Erbil rose to particular prominence during several periods:

- The Middle- and Neo-Assyrian periods (1363 – 612 BC) saw the development of the Temple of Ištar in the Citadel as a major cult centre with influence far beyond the borders of modern Iraq. Erbil was one of the main cities of the Assyrian Empire in particular during the reign of Ashurbanipal (669 – 627 BC);
- Under its own royal dynasty, the kingdom of Adiabene (Hadyab), with its capital at Erbil, played an important role in Mesopotamian history, particularly between the 1st and 3rd century AD;
- Founded in 1167, the Begteginid emirate reached its apogee during the rule of Muzaffar al-Din (1190 – 1232), when Erbil witnessed a flowering of arts and culture, as well as both Islamic and Christian learning;
- The new Iraqi Constitution of 2005 defines the Kurdistan Region as an autonomous entity, with Erbil as its capital. The Citadel, at the centre of the modern city, will again become its living heart as a result of the rehabilitation and revitalization process which has already started.
A rapid survey of the archaeological, historic and epigraphic evidence available, presented below, confirms the importance of the site during successive millennia of its history.

**Prehistory**
Finds of the Mousterian stone industry (Middle Palaeolithic, ca. 110000 – 40000 BP) were sporadically collected in the vicinity of the Citadel, while pottery sherds found on the Citadel mound itself seem to support the hypothesis of a continuity of occupation starting at least in the Ubaid period (5500 – 4000 BC). Erbil was not standing alone in the area during the Ubaid period as the discovery of Tell Qalinj Agha in the 1960s proves.39

**Akkadian Period**
The first possible mention of Erbil is found in two texts from Ebla:40 long lists of metal disbursements including silver provisions for the messenger Tilani who went to Ir-bi-i-lum on the years 8 and 10 of Ibibi-zikir, the vizier under king Ishar-damu. This reference would date these diplomatic missions at around 2300-2280 BC.41

**Gutian period**
Erbil is again mentioned as Urbilum in one of the Akkadian inscriptions of the Gutian king Erridu-Pizir (c. 2200 BC) where it is recorded that he captured its governor at a battle in a mountain pass nearby. The Gutians were most probably organized in a semi-tribal society originally located in the middle of the III millennium– on the mountains of the Transtigris region between the Lower
Zab and Elam, or in Luristan. They infiltrated (and/or invaded) the lands of Akkad and Sumer and they might have played a role in the collapse of the Akkadian Empire (22nd century BC). After this, the political situation in the north is not very clear, but it is supposed now by scholars that the land enjoyed a period of independence before the Gutians expansion which ended with the establishment of the Ur III Empire (2120 – 2004 BC). It is also of interest that the name of the governor of Urbilum mentioned in the text (Nirishuha) is considered Hurrian, suggesting that Urbilum was inhabited—at least partially—by Hurrians.

**Ur III period**
The Hurrians were mentioned for the first time in a year-name of Naram-Sin (2254 – 2218 BC) and by the Ur III period, onomastic evidence from the archives shows that they were distributed (even if probably not everywhere as a majority) from the Transtigris region to the Khabur and Euphrates to the west and were rather organised in small states. Sulu (2094 – 2047 BC), the deified king of Ur, guided various campaigns against the Hurrians, reported in Sumerian texts. There is no information if Urbilum regained independence after the Gutian conquest, but it is known that Sulu “devastated” the city in year 45 of his reign and his son Amar-Sin did the same again in his second year. However, Erbil was probably not destroyed, as a later votive inscription of the reign of Sū-Sin (2037 – 2029 BC) mentioned a certain Ir-Nanna (a Sumerian name) as being the governor of Erbil and other cities. It is most probable that the city remained under the control of Ur almost until the end of the empire and was integrated into its state administration, as various administrative texts seem to prove.

**Old-Assyrian period (North Mesopotamian Kingdom)**
After the fall of the Ur III Empire, this northern Mesopotamian region retreats into obscurity for the two following centuries. The area is mentioned again in royal archives such as those of Sheshshara and Mari. Through the texts, it seems clear that the area, before being unified by Šamš-Adad I (end of 19th-beginning of 18th century BC) of Assyria, was ruled by small kingdoms, princes or tribal federations, not all dominated by the Hurrians, Gutians and Lullubians but also by the Amorites. One of those, in the Transtigris, was that of the city of Qabrā which gave the name to the state in which Urbēl (the new form of the name for Erbil) was located. Two separate royal stelae record that c. 1716 BC “all the fortified cities of the land of Urbēl” were attacked and conquered by a coalition formed by Šamš-Adad (king of Assyria) and Daduša (king of Ešnunna) and that the king of the land of Urbēl, Būnu-Ištar, was executed. The Semitic name of the king is the first reference connecting Erbil to Ištar (one of the supreme deities of Assyria), which might mean that she was already the tutelary goddess of Erbil and/or its region.
**Middle-Assyrian period**

At the end of the reign of Šamšī-Adad I, the region was convulsed by a series of revolts by the Turukkeans, sedentary Hurrian tribes organised in kingdoms and princedoms. They took over the control of the area until the formation of the Mitanni Empire, probably in the late 15th century BC. There is a lack of information about Erbil during these centuries until the Middle-Assyrian period (14th – 11th centuries BC) when Erbil (now Arbail) became a major city of the Assyrian Empire that extended, at its apogee, from the Euphrates to the Upper Tigris and to Babylonia. The city was named in a number of royal and votive inscriptions and in administrative texts. In one of these, there is the first actual mention of the temple of Ištar with its ziggurat which were built (or re-built) by Shalmaneser I (1273 – 1244 BC). Through the administrative texts, we also learn that the city had a mayor and a palace with an overseer.

**Neo-Assyrian period**

From the Neo-Assyrian period (end of the 10th century – 612 BC) there is a large amount of information about Erbil thanks to royal, religious and votive inscriptions, letters and administrative texts. These, all written in Akkadian, cover a variety of subjects: from war and military issues to provincial and city administration –such as the construction of an underground canal by Sennacherib (704 – 681 BC) to supply water to the city from the Bastora Valley (where its entrance can still be seen)– and from legislative to royal and religious matters as, for example, the functioning of the Temple of Ištar (the Egašankalamma) in the city and her countryside shrine (akitu) at Milkia (the Egašankalamma), where she was worshipped under the name of Šatru.

Arbail, the seat of a governor, was one of the provincial capitals of the empire: strategic for its position between the Zagros Mountains—the passage to Iran—and the fertile Mesopotamian plain, an important military base for the departure to northeast campaigns, and a regional centre for the administration of justice. It was particularly important for Ashurbanipal (669 – 627 BC) when the city served possibly as a second capital and where he regularly lived especially during the middle of his reign. Ashurbanipal was a devotee of Ištar of Erbil (the Lady of Arbail) whose cult statue represented her armed with sword and bow standing on a lion. A number of depictions of the statue exist, for example on a stele found in Til Barsip (now at the Louvre), on a bronze amulet and on a cylinder seal (both now at the British Museum).

Erbil is represented as a walled city on a relief of the North Palace in Nineveh (Room I) carved in c. 645 BC as part of a series celebrating the campaign of Ashurbanipal against Teumman king of Elam. Although it is a conventionalised representation of a city of the Assyrian period—a fortified citadel with a temple...
2.117 Neo-Assyrian Arbail, as represented on this relief from the North Palace in Niniveh. (Louvre, Paris - AO 19914)

2.118 Mosaic from the “House of the Faun” at Pompeii, now thought to represent the Battle of Gaugamela. (National Archaeological Museum, Naples - 10020)
and a lower city encircled by walls and towers—recent remote sensing studies (based on the analysis of aerial and satellite images) shed new lights on its urbanism. A first fortification system, possibly dated to the Assyrian period but incorporating and formalizing older elements, was identified in the lower city of Erbil. The rampart, 20 m thick with a glacis and a moat and enclosing an irregular circular city of around 3 km², was still visible in the 1960s but nowadays, due to modern urban development, only low reliefs can be discerned in some lanes. In this system, the tell with the Citadel appeared to be on a side position of the rampart, suggesting that the urban plan of Erbil in the Neo-Assyrian period was similar to that of the other Assyrian imperial capitals.

Other low reliefs and hollow ways in the landscape have been identified through remote sensing in the plain surrounding the Citadel. Some of them have disappeared in recent years but others are still visible and when studied will produce new data that will permit to better understand the larger landscape dynamics of the settlement in the various historical periods. In one of these low tells, recently investigated following its accidental discovery, a vaulted Assyrian burial chamber with three terracotta sarcophagi with up to five individuals accompanied by grave goods was discovered beneath a contemporary house. Further analysis of the area identified other tombs forming part of a cemetery occupied for few centuries after the Neo-Assyrian period.

From the Neo-Babylonian to the Achaemenid period
Following the collapse and partition of the Neo-Assyrian Empire, power shifted to Babylon in central Mesopotamia (612 – 539 BC). Lack of references to Erbil in the Babylonian cuneiform texts suggests that in 612 BC Erbil fell under the control of the Medes. A little more information is available for the Achaemenid period (539 – 330 BC) which testifies to the importance of Erbil as a provincial centre of the Empire and the capital of a satrapy. The city is also mentioned in Darius’ inscription in Behistun, where it is said that Darius captured and impaled the Sargatian rebel Shitrantakhma in Erbil in 521 BC.

From the Hellenistic to the Sassanian period
In late 331 BC, Darius III camped in the vicinity of Arbela (the Greek name for Erbil), as Diodorus Siculus reported in his Bibliotheca Historica, before facing Alexander the Great in the battle of Gaugamela (1st October 331 BC) which resulted in the final defeat of the Achaemenid Empire. The city of Erbil from now on would be part of the various succeeding empires (Seleucid, Parthian and Sassanian) and even if it maintained a relevant provincial administrative role the information from the sources is limited.
Flavius Josephus in his *Antiquities of the Jews* quotes the story (a novel, for some scholars) of Queen Helena of Adiabene and her son’s conversion to Judaism and of the kingdom’s support of the Jewish war against Rome. Adiabene —limited on three sides by the Tigris, the Great and Little Zāb and extending towards the east as far as Lake Urmia— was a vassal state of Parthia with Arbela as the capital, the satraps of which were usually permitted to call themselves ‘king’. The region and Erbil, as the rest of western Parthia, suffered the incursions and brief domination of the Romans: Trajan in 116, Septimius Severus in 195 and Caracalla in 216. Christianity had also an important role in the history of the region and the *Chronicle of Arbela*, written in the 6th century but whose authenticity is still debated, is a *liber pontificalis* of the city that provides information about the Christian community and the history of Erbil between 132 BC and 540 AD.

In the Sassanian period (224 – 638 AD) the province was renamed Nōdh-Ardashārakan and the administration continued to be based in Erbil. The Sassanians maintained a suspicious gaze over Adiabene because of its Christianity and the possible influence of Byzantium—especially when Constantine declared Christianity the state religion of the Roman Empire—and this attitude changed only in the 7th century when Arbela became the seat of a Nestorian Metropolitan.

**From the Islamic conquest to the Ottoman period**

Adiabene (now Hadyab) was conquered by the Muslim armies in 642 AD and the provincial power shifted from Erbil to Mosul where also the Metropolitan of Arbela moved in the 9th century. Texts mentioning Erbil in the Early Islamic periods are rare. Some Umayyad and Abbasid archaeological material found during excavations near the still-standing Choli Minaret made some scholars think that a *misr* was established at the limit of the earlier city. In 750 AD the battle that marked the end of the Umayyad caliphate and the beginning of the Abbasid Empire was fought in the vicinity of Erbil. During the Abbasid Empire, from the end of the 9th century, the control of the region was in the hands of the Hamdanids of Mosul who maintained fairly good relations with the Kurdish tribes of the Hadhbanis, who wintered in and controlled the area between the Zab Rivers.

In 1167, Erbil became the capital of an emirate established by the Begteginids, whose most notable leader was Muzaffar al-Din Kokburi (1190 – 1232), brother in law of Salah ad-Din. A cultivated man, he had as vizier Ibn al-Mustawfi (1169 – 1239), a remarkable scholar who wrote a history of Erbil. This period testifies to the renaissance of Erbil and the expansion of a fortified lower city over the surrounding plain. The remote sensing studies cited above identified a second wall system, probably reinforced by buttresses or turrets and by an outer ditch and reusing in some parts the previous Assyrian system. A comparison of the measures derived from this analysis and the references in the sources suggest a lower city of c. 300 ha.

Arab and Syriac sources of the 12th and 13th century also illustrated this new flowering of the city and refer to a large number of private and official buildings both in the Citadel and in the lower town. On the Citadel, which was accessible by only a single gate and a bridge, there was, as Yaqut reported,
a dar al-imara (the palace of the Atabeg) together with other administrative buildings, a congregational mosque (reported by al-Mustawfi), a madrasa and a zawiya. Churches are also mentioned in other texts.

As in the Assyrian period, the Citadel did not have a central position in relation to the perimeter of the lower town. During the period of Muzaffar al-Din Kokburi, the texts mention five gates in the lower fortifications –of which one or two were in relation to the public area in front of the gate of the Citadel– a hippodrome, a house of a sufi, a Shi’a shrine (called Masjid al-Kaf), a madrasa, various suqs, cemeteries and qanat (or kahrīz) which supplied the city with water. Many of the buildings and structures were built under the patronage of the Atabeg Muzaffar or, more rarely, of high officials. Of these medieval buildings, the Choli Minaret is still visible and still standing. The minaret itself is not mentioned in the sources but it is associated by Herzfeld with the madrasa al-Muzaffariya built between 1190 and 1211. The remains of a structure, possibly a mosque, also associated with the minaret and identified during archaeological excavations, are most likely more recent.

Erbil had intermittent contacts with the Mongols during the second quarter of the 13th century before its firm incorporation into the Ilkhanate in 1259. The first contact was in 1221-2 when the Abbasid Caliph al-Nasir II-Din Allah held a military review in Erbil to impress a Mongol envoy. Later, in 1231-2, Mongol forces came to Erbil searching for the last Khwarazmshah, Jelal ed-Din, but left on the approach of Atabeg Muzaffar al-Din. Muzaffar al-Din died in 1232 and bequeathed his Erbil principality to Caliph al-Mustansir bi-Allah, who besieged and took Erbil by force on 27th July 1233. The Mongols unsuccessfully tried to conquer the city in 1237, when it was besieged for forty-five days and only left on payment of a ransom. The Citadel became a firm part of the Mongols domains after a six-month siege in 1258-9, after the fall of Baghdad, when it was purchased from the Mongol ruler by Badr al-Din Lu’lu’, Atabeg of Mosul.

With the destruction of Baghdad by the Mongols in 1258, the see of the Nestorian patriarchate moved to Erbil and the Christian community, already living in the Citadel and in the lower town, was enlarged by the newcomers. This community faced two attacks in 1295 and 1310 during which various churches and Christian houses, mainly in the lower town, were damaged or destroyed.

In 1339-40, coins were minted in Erbil with the name of the Ilkhan Jehan Timur. In 1393 the threat of destruction presented by Timur was successfully averted: in November Timur left Baghdad to march northwards and besiege Tikrit. Ali Oirat, emir of Erbil, appreciated the potential threat of Timur’s northern march
and came to Tikrit, where he made his submission. Timur duly arrived at Erbil on 20th December, where he was magnificently entertained, and left the following day to camp on the banks of the Great Zab.58

**Ottoman period**

After the Mongol Ilkhanate the city was ruled by various local and ephemeral Turcoman dynasties and by the Persian Safavids from 1508 to 1535, when the entire region became part of the Ottoman Empire domains, in which it remained until 1918.

In this period, Erbil maintained its position as a main outpost between the Ottoman and Persian territories and between the Anatolian plateau and Baghdad. It was alternately a dependency of Mosul or Baghdad, or enjoyed some independence under local Kurdish princes.

Mirza Mahdi Khan Astarabadi, the Grand Vizier of Nadir Shah of Persia, describes the Citadel in 1743 as “one of the strongest fortresses” in the region,59 when Nadir Shah, the Persian ruler, besieged and captured it after a siege of sixty days. In that year, he invaded Iraq with an army of 375,000 men, accompanied by nearly 350 cannons and siege mortars.60 However, Nader Shah’s occupation was short, as he retreated southwards after his failure to occupy Mosul. It can be expected that the two-month siege caused considerable damage to the defences of the Citadel, as in 1745 Sultan Mahmud I (1730 – 1754) ordered the Governor of Diyarbakir to repair the walls of Erbil and Kirkuk Citadels, to provide ammunition and an arm of Janissaries to act as a garrison. The Janissaries are referred to by European visitors, but it is not clear if the order to repair the fortifications was ever executed. It seems likely that only the Grand Gate was reconstructed and the remainder of the walls were replaced by houses.

From the 16th century various western travellers passed by Erbil. One of the first, the German Leonhard Rauwolf, in 1574-5 describes the city walls as poor, but it is not clear if he was indicating the Citadel or the lower town or
if he considered only the construction material (mud-brick?) as not strong enough to face a modern attack. There are around thirty travelogues distributed mainly between the 16th and the 20th century, with a higher percentage in the 19th century. Some of the accounts are brief, inaccurate, unreliable and sometimes contradictory. Only few authors spent long words to present the city and analyze its architecture (such as Rich and Herzfeld). Almost all were impressed by the view of the Citadel which they often did not visit, but only admired from a distance. The inside of the Citadel is described as quiet, poor and thinly inhabited in contrast to the lower city, which was more active because of the presence of the bazaar. This is at least the scenario until the middle of the 19th century, when the Citadel appears to become busier, confirming a supposed urban transformation. For example, the Mosul Year Book of 1908 describes the Citadel as containing a bazaar, houses and a mosque.

Of the walls of the Citadel, only a semi-circular brick tower, now supporting a balcony, is still visible in house 6/3. In other areas, the façades of the perimeter houses were built beyond the line of the former walls, a process already complete at the time of the visit by Carsten Niebuhr in 1766. A ditch at the bottom of the Citadel is often mentioned, sometimes described as partially filled, sometimes as still in use. The lower town, if not ignored, appears busy with merchants. Caravanserais, hammam, mosques and houses are listed in the lower town together with scattered ruins of old buildings and archaeological tells, providing visible signs that in the Ottoman period the city had shrunk.

Modern period
After the fall of the Ottoman Empire, Iraq was initially administered as part of India and then became a British mandate until 1932. In 1921 the Kingdom of Iraq was proclaimed and lasted until 1958. In the following years, the Country was not spared by other turmoil until the Second Gulf War in 2003. In 2005, the new Iraqi Constitution, which recognizes the Kurdistan Regional Government, was ratified.

From the 1930s, wealthy families increasingly abandoned the Citadel for new houses and a more modern lifestyle, thus leaving the Citadel to their poorer fellow-citizens. At the same time, several immigration phases affected the city: the first comers, in the 1960s and 1970s, represented the typical phenomenon of urbanisation, with people coming from the countryside looking for work and better living conditions in the city. A larger wave of immigration, from 1986 onwards, involved IDPS (Internally Displaced Persons) fleeing the destruction of their villages by the previous regime. Their settlement in the Citadel was accompanied by its abandonment by the local population and by the phenomenon of squatting in empty homes, or by building shacks made out of locally available materials.

Some infrastructures improvement, funded by UN agencies, including UNDP and UNICEF, included the upgrading of the water supply system built by the British administration in 1924 and the installation of an electricity network. These works, undertaken at the beginning of the 1990s, not only caused physical and visual disturbance, but also resulted in the more serious con-
sequence of the waterlogging of the tell, resulting in subsidence and other structural problems. In the absence of correspondingly efficient drainage system, increased volumes of water seeped into the ground and contributed to the instability of the perimeter houses, where water has probably been trapped behind the modern concrete retaining walls, while on the slope of the mound the escaping water caused serious erosion channels.

In addition to the serious problems caused by inadequate services, squatter occupation was also accompanied by difficult social and health conditions. In consequence, the Kurdish Regional Government took the decision to evacuate the site in November 2006 and established the High Commission for Erbil Citadel Revitalization (HCECR), in charge of ensuring that the millenarian historic heritage of the Citadel is scientifically and systematically explored, and that the site itself is conserved, enhanced, repopulated, and revitalized.

**SOME INTANGIBLE ASPECTS OF ERBIL’S HISTORY AND URBAN LIFE: RELIGIOUS RITES AND FESTIVALS**

Erbil has played an important role in the origin of al-Mawlid, or Prophet’s birthday, a celebration that has spread from here to the whole Muslim world. This celebration emerged as a festival in Fatimid’s Egypt in the 11th century and is known to have taken place under Nur al-Din in Syria and Umar al-Malla’ in Mosul. But it was under Erbil’s ruler Muzaffar al-Din Kokburi at the beginning of the 13th century that the festival started to be celebrated in a grandiose way. The Erbil-born historian Ibn Khalikan (b. 1211) describes a mawlid celebration in Erbil, during which people came from many other cities, including Mosul and Baghdad. Muzaffar al-Din would take care of the accommodation of prominent guests. The festival itself would consist of mystical concerts (sama’at) in the presence of the ruler, followed by a procession of the participants to a takiya, carrying candles. After a celebration inside the takiya, a banquet would take place outside the takiya for the poor, and inside for Muzaffar al-Din’s guests. The festival would then continue all night with more sama’at. Kaptein, in his comprehensive review of this celebration, argues that Muzaffar al-Din’s guests may have contributed to spreading this celebration to other regions of the Muslim world, in the bid to reproduce the ceremonies to which they took part in Erbil.

Another intangible element strictly linked to Erbil Citadel is the already mentioned presence of takiyas. We do not have information on the Sufi brotherhoods that met in the takiyas, or specifics on the thikir rites that took place there. The abundant presence of takiyas in the Citadel, the fact that at least two of them were particularly used by women, and the persisting as-
sociation of these structures with important people in the community, confirm the importance of Sufism in the social and religious environment of the Citadel.

That Erbil Citadel was a strong community is also confirmed by the presence of diwakhanas, houses used by important families to hold meetings, generally after the afternoon (asr) prayer. These meetings did not have a religious character, but was an occasion for the community leaders to meet and discuss local affairs and resolve disputes. Although these meetings do not take place on the Citadel any longer, the tradition persists in the lower city, where some diwakhanas are still found.

**ORAL HISTORY PROGRAMME**

The HCECR has recognised the utmost importance of accompanying physical maintenance and conservation work of the built heritage with recording the emotions and memories of the inhabitants. Along with the documentation for Erbil Citadel’s physical built fabric, the HCECR has also initiated an oral history programme for documenting the oral history and the collective memory of the Citadel’s community.

The oral history programme started in 2010: around forty people have already been interviewed until now, mainly elderly former inhabitants with different backgrounds varying from high-ranking officials, retired officials, teachers, shop owners, craftsmen, workers, merchants, housewives, etc.

The methodology adopted for gathering information starts from arranging meetings and visits to the Citadel for people participating in the programme, touring the site, filling standard questionnaire forms and recording the oral information in writing and by audio/video. Afterwards, the information gathered from different sources is analyzed and compared with other interviews to find matches and discrepancies.

The information gathered is either for a specific topic as needed, or for information related to the Citadel in general such as the names of the original owners of the houses, special events that used to take place in the Citadel, information related to the mosques, the takiyas, the hammam, the gates, lifestyles, customs and traditions.
### TIMELINE OF SELECTED SIGNIFICANT EVENTS

<table>
<thead>
<tr>
<th>Event Date</th>
<th>Important Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>c. 5500 - 4000 BC</td>
<td>Ceramic evidence of occupation of the Citadel mound at a period known for the development of early urban centres in the Fertile Crescent.</td>
</tr>
<tr>
<td>c. 2300 - 2280 BC</td>
<td>The earliest historical reference of Erbil (Ir-bi-ì-lum) is provided by records of two journeys to Erbil by a diplomatic messenger from Ebla.</td>
</tr>
<tr>
<td>c. 2200 BC</td>
<td>Nirišhuha, governor of Erbil (Urbilum), is captured by Erridu-Pizir, king of Gutium.</td>
</tr>
<tr>
<td>c. 2100 BC, Ur III period</td>
<td>Erbil was “devastated” by Šulgi, king of Ur, and five years later by his son and successor Amar-Sin, but the city was not destroyed.</td>
</tr>
<tr>
<td>c. 1716 BC</td>
<td>The kingdom of Erbil (Urbel) is conquered and becomes part of the first Assyrian empire.</td>
</tr>
<tr>
<td>1273 - 1244 BC</td>
<td>Erbil (Arbail) is part of the Middle-Assyrian empire. The Egašankalamma (the Temple of Ištar) and its ziggurat are built or reconstructed under the reign of Shalmaneser I.</td>
</tr>
<tr>
<td>856 BC</td>
<td>Shalmaneser III celebrates in the Temple of Ištar in the Citadel and at her shrine in Milkia following his campaign against Urartu.</td>
</tr>
<tr>
<td>704 - 681 BC, reign of Sennacherib</td>
<td>Sennacherib constructs an underground canal to bring water 22 km from the Bastora valley to the centre of Erbil.</td>
</tr>
<tr>
<td>668 - 627 BC, reign of Ashurbanipal</td>
<td>Ashurbanipal carries out major works on the Temple of Ištar, completes its outer wall and sets standards up at its gates. In 657 BC he celebrates victory against Elam.</td>
</tr>
<tr>
<td>331 BC</td>
<td>Darius III makes Erbil his base before confronting Alexander the Great and suffering defeat at the Battle of Arbela (Gaugamela). Alexander’s half-brother Amphiama-chus becomes governor of Erbil in 321 BC.</td>
</tr>
<tr>
<td>c. 310 BC</td>
<td>Erbil becomes part of the Seleucid empire.</td>
</tr>
<tr>
<td>88 BC</td>
<td>Tigran the Great, king of Armenia, adds Erbil to his short-lived empire.</td>
</tr>
<tr>
<td>1st century AD</td>
<td>Adiabene is a client kingdom of Parthia with its own royal dynasty. Erbil (Arbela), its capital, becomes an important centre of both Judaism and Christianity.</td>
</tr>
<tr>
<td>116</td>
<td>The Roman emperor Trajan makes Erbil the capital of the new Roman province of Assyria but Roman control lasts only two years.</td>
</tr>
<tr>
<td>216</td>
<td>The Roman emperor Caracalla invades and destroys the royal tombs at Erbil, but he is forced to withdraw by Artabanus IV, the last Parthian king.</td>
</tr>
<tr>
<td>406 - 430</td>
<td>Daniel, bishop of Arbela, is raised to the rank of Metropolitan.</td>
</tr>
<tr>
<td>638 or 642</td>
<td>Erbil is conquered by the Muslim army of Utba ibn Farqad.</td>
</tr>
<tr>
<td>750</td>
<td>Marwan II is defeated at the nearby battle of the Zab, spelling the end of the Umayyad Caliphate.</td>
</tr>
<tr>
<td>1167</td>
<td>Zayn al-Din Ali Kučuk ibn Begtegin founds an emirate with Erbil as its capital. In AD 1190 the accession of Muzaffar al-Din Kokburi heralds the start of a 42-year golden age.</td>
</tr>
<tr>
<td>1232</td>
<td>Caliph al-Mustansir bi-Allah besieges the Citadel to assert his authority after the death of Muzzafar al-Din.</td>
</tr>
<tr>
<td>1236</td>
<td>The lower city is burnt and the Citadel is besieged for 45 days by the Mongols, who leave after being paid a substantial ransom.</td>
</tr>
<tr>
<td>1258-9</td>
<td>A long siege of the Citadel ends when it is purchased from the Mongols by Badr al-Din Lu’lu’, the ruler of Mosul.</td>
</tr>
<tr>
<td>1297 - 1310</td>
<td>The Christians are besieged in the Citadel; it is agreed that within Erbil the Citadel should be a Christian enclave. In 1310 the Christians are again besieged in the Citadel and eventually surrender.</td>
</tr>
<tr>
<td>1508</td>
<td>Erbil becomes part of the Safavid Empire.</td>
</tr>
<tr>
<td>1534</td>
<td>Erbil becomes part of the Ottoman Empire.</td>
</tr>
<tr>
<td>1743</td>
<td>The Citadel falls after a 60-day siege by Nader Shah.</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>1835</td>
<td>Troops of Mir Kor, ruler of Soran, are besieged in the Citadel by Ottoman forces but surrender after a mine is exploded in the slope of the mound.</td>
</tr>
<tr>
<td>1918</td>
<td>The Ottoman garrison withdraws and is replaced by a British administration.</td>
</tr>
<tr>
<td>1937</td>
<td>The Citadel is declared a nationally protected site.</td>
</tr>
<tr>
<td>1990</td>
<td>The previous regime is persuaded to halt the demolitions in the Citadel which it had started.</td>
</tr>
<tr>
<td>2005</td>
<td>Based on the new constitution of Iraq, Erbil becomes capital of the Kurdistan Region.</td>
</tr>
<tr>
<td>2007</td>
<td>The HCECR is formed as the body to conserve and manage the Citadel. In-depth studies commence in 2008 as part of a strategic partnership with UNESCO, and the HCECR commences an extensive programme of conservation interventions in 2010.</td>
</tr>
</tbody>
</table>

1. Erbil Governorate Profile (Factsheet), 2011
3. HCECR forthcoming
4. Inventory of Heritage Buildings and Urban Analysis, 2010
6. Ismail 1986
8. Hassan 1987
10. Nováček and Amin unp.
11. A raft supported on inflated skins
12. HCECR forthcoming
15. Rich 1836, following p. 14
18. Rauwolf 1582, p. 240
19. Van Es 2010
22. Postgate 1972, p. 147
23. Ur forthcoming
The main reference for this section is the Conservation and Rehabilitation Master Plan 2011 and related preparatory studies.

The inventory began within the framework of the site analysis for the formulation of the Conservation and Rehabilitation Master Plan and has been continued by the HCECR.

A process described in a letter of the Mayor of Erbil of 1958, Constantin A. Doxiadis Archive, Benaki Museum (Athens), 24002.


All these buildings have been surveyed and subject to special studies.

Information for this chapter is derived from MacGinnis 2012; Novâček and Amin, unpublished; (we thank the above authors and the Ministry of Culture and Youth of the KRG for having provided their work and the authorization to use it in this context) and from Erbil Citadel Management Plan (2012); HCECR (forthcoming); Kozad 2012; Report on Studies and Investigations for the Reinstatement of the Grand Gate of Erbil Citadel (2012)

Mühl 2012, p. 79

Al-Soof, 1969

For this and other dates until the Middle-Assyrian period, the middle chronology is used.

Stele of Šamši-Adad I in MacGinnis (forthcoming), p. 52

Ur (forthcoming a), p. 13; Ur (forthcoming b) p. 5

Novâček 2011, p. 11

Mühl 2012; Ur (forthcoming a)


Bibliotheca Historica 17.53

Lissner 2000; Neusner 1964, p. 63

Sellwood, D., 2011, “Adiabene”, Encyclopædia Iranica online

One of these is Ibn Hawqal, traveler and geographer of the 10th century.

Novâček 2011, p. 12

The information presented in this section of the chapter has been extrapolated from the unpublished article of Novâček and Amin.

Novâček 2011, p. 11

Yaqut al-Hamawi (1179–1229); Zakûrîyûd al-Qazwî (1203–1283); Abûl ’Abbâsîn Khallâkân (1211–1282); Abu al-Fida (1273–1331); Gregory Bar Hebraeus (1226-1286); History of Mar Yabalaha and Rabban Sauma (anonymous Syriac author of the 14th century).
The information presented in this section of the chapter has been extrapolated from the unpublished article of Novůček & Amin and the Report on Studies and Investigations for the Reinstatement of the Grand Gate of Erbil Citadel, 2012.

Olivier's account of his travel in 1795

Report on Data Collection, 2008, pp. 7-13

Niebuhr 1778, pp. 342-3

Account of Buckingham's visit in 1816


Ibn Khallikan, translated by De Slane 1843b, p. 385

Kaptein 1993, pp. 39-42
3
JUSTIFICATION FOR INSCRIPTION

3.1. a  BRIEF SYNTHESIS

3.1. b  CRITERIA UNDER WHICH INSCRIPTION IS PROPOSED (AND JUSTIFICATION FOR INSCRIPTION UNDER THESE CRITERIA)

3.1. c  STATEMENT OF INTEGRITY

3.1. d  STATEMENT OF AUTHENTICITY

3.1. e  PROTECTION AND MANAGEMENT REQUIREMENTS

3.2  COMPARATIVE ANALYSIS

3.3  PROPOSED STATEMENT OF OUTSTANDING UNIVERSAL VALUE
3.1.a • BRIEF SYNTHESIS

Erbil Citadel is an outstanding example of a complete, traditional urban settlement located on the top of an archaeological tell. Such a type of settlement was common throughout the Middle East for millennia. The earliest cities in Mesopotamia formed and grew over tells such as this. Few settlements built over the ruins of previous cities survived until recent times.

Cuneiform and other textual sources mention that Erbil was an important provincial capital throughout its history. Its strategic location made the city or its vicinity the theatre of some decisive historical events such as the battle of Gaugamela (also known as the battle of Arbela, fought in 331 BC), during which Alexander the Great defeated Darius III, and the battle of the Zab (in 750 AD), which ended the Umayyad caliphate.

The Citadel today is characterized by a substantially intact urban form, which is the result of the permanence of processes and the testimony of different historical phases and approaches to urban culture. Its main feature is the combination of a fixed and non-extensible urban form—with boundaries defined by the topography of the slope—and the organically evolved urban fabric at its interior, enclosed within the circle of perimeter houses which in the 18th century replaced the previous fortifications. The form as we see it today is the last of a series of towns that have replaced each other on the top of this man-made hill over several millennia. The earliest surviving houses date to the 18th century, while few (excluding temporary shacks and recent restorations) postdate the 1930s.
The substantial homogeneity of Erbil Citadel’s urban fabric is due to the fact that traditional elites left and construction largely ceased before major modern modifications could take place. In fact, the only major changes from the layout of the urban form of the late Ottoman town is the opening of an axial road connecting the north and south gates in 1958, the demolition of the old Grand Gate, and the construction of a new entrance structure in 1979. Other changes due to collapses and accumulation of debris in the alleyways are the consequence of abandonment and decay of the buildings, and in some cases to their replacement with temporary shacks by squatters who used the Citadel as refuge between 1986 and 2006.

In the late-Ottoman period, the Citadel town was divided into three districts: Saray occupied the eastern section, Topkhana the western one, while Takiya was the central and northern portion. The urban fabric, with its network of alleys, courtyard houses, public and sacred buildings, witnesses a societal organization and social values which are testimony to a cultural tradition still partly alive in the historic districts of the lower city.
The centre of the Citadel is still occupied by the Great Mosque with an associated hammam. The Friday prayers are very popular especially among former residents of the Citadel, a fact witnessing the social memory that the site inspires. The architectural details and materials of the built fabric reflect an urban and building tradition now being replaced in the modern towns of northern Iraq by anonymous modern construction. Fortunately this has not taken place on the Citadel.

Strict parallels to Erbil Citadel do not exist, as many tells in the region were occupied for military purposes, losing their urban character. The closest parallels of an ancient tell transformed into a citadel and subsequently into an urban settlement was the Citadel of Kirkuk, which, however was largely destroyed during the previous regime in 1997-8, and with Qal‘at al-Mudiq, in Syria, where the dimensions and structure of the settlement can hardly be defined as urban.

The Citadel still physically emerges from the surrounding landscape in the city of Erbil, thus maintaining its physical and symbolical role of central location in the city. Its inhabitants describe it as the 'crown of Erbil’, thus confirming not only the importance of its physical location in the modern city, but also the social, associative, and identify values that the people of Erbil have for the Citadel which rises from the centre of their city on its archaeological mound.

3.1.b • CRITERIA UNDER WHICH INSCRIPTION IS PROPOSED (AND JUSTIFICATION FOR INSCRIPTION UNDER THESE CRITERIA)

The criteria selected to justify the nomination of Erbil Citadel for inscription on the World Heritage List are:

(iii) bears a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

(iv) is an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

(v) is an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change. (Operational Guidelines 2011, par 77).

According to these criteria:

(iii) Erbil Citadel bears an exceptional testimony to cultural traditions and to civilizations which have disappeared, as it contains the layers of thousands of years of human occupation and diverse civilizations, while also being a rare witness to an organically evolved tell settlement, continuously remodelled on the traces of previous layouts.
3.4 The Erbil tell and perimeter houses (from: Studies for the Stabilization of the Erbil Citadel Slope and the Perimeter Façades, 2011)

3.5 The traditional urban layout of the Citadel (HCECR, 2012)
Erbil Citadel is a mound of impressive height and size resulting from the accumulation of successive layers from different periods, comparable only to the one of the nearby Kirkuk, the urban character of which was almost completely destroyed by the previous regime in 1997-8. Erbil Citadel contains the layers of at least six thousand years of human occupation and diverse civilizations, thus bearing the potential to illustrate, through excavations and scientific studies, the evolution of civilizations and the development of urbanism.

Historical sources tell us that Erbil was, just to mention a few, a capital of the Neo-Assyrian Empire (King Ashurbanipal had a royal palace built there), capital of the kingdom of Adiabene during the Parthian period, the seat of a Metropolitan bishop from the 5th to the 9th century AD, capital of the Begteginid emirate from 1167 to 1232, and an important staging post on the route between Middle East and China during the Mongol period.

The Citadel is a rare witness to an organically evolved settlement continuously remodelled since the earliest phases of urbanisation in Mesopotamia, on the traces of previous layouts. The Citadel town is not only an outstanding but also the most representative surviving example of the type of urbanism represented by towns on top of archaeological tells, which developed in upper Mesopotamia from the late-Neolithic and Chalcolithic periods, and remained for millennia the typical urban settlement from the Middle East to Central Asia.

The overall urban form resulting from this process of building and rebuilding on the same site has been handed down to modern times and is displayed in its integrity, while the urban fabric of the uppermost layer, dating back to the late Ottoman period, is still easily and fully legible. In this sense, Erbil Citadel is the only well preserved town on a tell witnessing such a process, which has been alive until recently.

Furthermore, the physical evidence can shed light on intangible aspects of life from the end of the 18th century until the most recent times. The street network, the dedicated districts and gates, the location and type of traditional infrastructures (courtyard houses, diwakhanas, takiyas, hammam, well, water drainage, etc.) are a precious document to lifestyles and customs, which are also reflected in the traditional toponymy. The three districts names of Saray, Takiya, and Topkhana as well as the names of houses are a witness to social and functional relationships between different community groups in the Kurdistan region.

In conclusion, the tell and physical heritage of Erbil Citadel are an exceptional testimony to cultural traditions which have disappeared but can still be largely understood through the urban form as well as witness accounts, historical research, and architectural studies, while its archaeology has the potential to illustrate the evolution of the settlement’s form and structure over a very long time span.
(iv) Erbil Citadel is an outstanding example of multilayer archaeological mound still physically emerging from the surrounding landscape. The physical structure of the Citadel town is characterized by the permanence of the urban form on top of the mound. Its shape with definite boundaries has in part dictated the transformations of the urban fabric while, at the same time, has allowed the adaptation to changing needs throughout the millennia.

Erbil Citadel is an outstanding example of multilayer archaeological mound still physically emerging from the surrounding landscape, despite the fact that such landscape has changed its nature and destination from agricultural land to built town development. The name (and potential brand) that the local stakeholders have assigned to the Citadel, as the ‘crown of Erbil’, is the best picture of their perception of the site as a central landmark.

The physical structure of Erbil Citadel, the typology of its urban ensemble, its buildings, and their decorative elements are outstanding examples of urban and building traditions which have survived in this form for the past two hundred years at least, and that have elsewhere been largely replaced by anonymous, imported building forms. In contrast, the Citadel has not been subject to this phenomenon, retains its characteristic form and fabric, and notably does not contain any concrete-framed house.

The different building forms, decorations, and architectural elements, still largely intact, allow to draw a precise picture of these traditions, which have largely disappeared in other locations of northern Iraq and the Kurdistan region, or, if they have survived, are now encroached by modern constructions and have lost their authenticity of setting.

The results of demolitions and neglect which occurred in the Citadel in the past fifty years have not impacted the legibility of the variety of architectural types that characterize historic settlements. In addition to different types of dwellings for diverse community leaders and groups, such as large mansions and smaller courtyard houses, there are diwakhana, mosques, takiyas, tombs, etc. Therefore, the complexity and the form of the urban organization are well preserved.
(v) Erbil Citadel is an outstanding example of a traditional human settlement, which has not survived elsewhere in this form due to irreversible changes brought by modernization. Its most distinguished feature is its urban form on top of an artificial mound, circumscribed by a circle of perimeter houses (with façades looking towards the lower city and the surrounding fields) and characterized by a network of alleys radiating from a main gate and by a dense agglomeration of buildings.

The urban form of Erbil Citadel, characterized by a dense agglomeration of buildings on the top of an artificial mound, enclosed within a circle of perimeter houses and connected by a network of alleys radiating from a main gate, is outstanding. The destruction of Kirkuk Citadel, and the transformation of Aleppo Citadel, only leave the Citadel of Apamea (Qal’at al-Mudiaq) in Syria as the closest example of an archaeological tell which is still inhabited.

Further to this, Erbil Citadel is an outstanding example of a traditional human settlement that was typical of Mesopotamia. It stands as an exceptional representation of a culture of accumulating layers on the same site by continuously reshaping the settlement, in a process of rebuilding structures to accommodate changing needs, and of the continuity of tell formation up to the present. This process has not survived elsewhere, for various reasons, hence adding value to Erbil Citadel’s case.

The special configuration of the Citadel enclosure, consisting of a circle of perimeter houses which, in the second half of the 18th century were built in replacement of previous fortification walls, is also an important witness to the change of relationship between the Citadel and the surrounding landscape. Indeed, the outer-looking façades of the perimeter houses may be a suggestive mark of the loss of defensive needs and the link between upper and lower town, and its agricultural land.
3.1.c • STATEMENT OF INTEGRITY

Erbil Citadel must be considered from various points of view for the purpose of assessing its integrity: as an archaeological mound, as a historic urban landscape, and as built fabric.

As an archaeological tell, the site is completely intact, since no archaeological excavations have ever been made on the site, but it is known from surface pottery collections and from boreholes excavated in the framework of a recent project (Studies for the Stabilization of the Erbil Citadel Slope and the Perimeter Façades) that human occupation of the site goes back at least to the Ubaid period (5th millennium BC), and that the hill is formed entirely by strata resulting from successive occupational layers.

In its contemporary urban context, the site maintains the full integrity of the urban form and, to a large extent, of its built fabric, since no modern construction was built on its slopes or on its top, with the exception of squatter occupation and a few restorations in the 1970s-80s. However, these were built using mainly traditional material and techniques.

The buffer areas of the Citadel have some problems related to encroachment and decay of the historic building stock and low quality of modern construction, but this is now being addressed through the Urban Design Guidelines for the Management of the Buffer Zone of Erbil Citadel (see chapter 5 for a detailed discussion of their aims).

Some interventions may have affected integrity at the scale of Erbil Citadel’s urban layout, but this can be recovered thanks to existing accurate documentation, through sensitive new infill construction, for which guidelines have been developed. In general, however, there is also integrity of form given the substantial wholeness of the urban shape of the Citadel.

Some areas of the Citadel have deteriorated as a result of lack of maintenance, structural failure, and some deliberate demolitions by the previous regime. The activities conducted by the HCECR and UNESCO have the objective of arresting decay and bringing the Citadel back to life, following the indications of the recent Erbil Citadel Management Plan. Conservation activities, with the use of traditional building materials, are aimed at re-establishing the integrity of the site, where this has been compromised as a result of physical decay.

Although abandonment, decay, some demolitions and encroachments have affected in part the integrity of the site, nevertheless the problems have been identified and plans and guidelines are now in place and being implemented in order to arrest decay and return the Citadel to its role as the central place for Erbil and its citizens.
3.9 Continued use of traditional building materials (HCECR, 2012)

3.10 Traditional brick making in Erbil (from: Conservation and Rehabilitation Master Plan, 2011)
3.1.d • STATEMENT OF AUTHENTICITY

The authenticity of Erbil Citadel is “still substantial since there has been a phenomenon of subtraction of the physical heritage, but not one of replacement with modern, incompatible materials and forms”.¹

Town development since the second half of the century has emphasised the important role of the Citadel’s location as the city landmark and as the core of a system of concentric and radial roads, some of which may follow the lines of old trackways and roads that connected Erbil Citadel with other settlements beyond the fields, and along ancient routes to other sites in Mesopotamia and beyond.

At the urban scale, the outstanding character of Erbil Citadel is the substantial uniformity of its urban form throughout the ages. The Citadel still maintains the urban form and the legibility of its urban fabric as well as the sense of place. At the overall Erbil city scale, modernisation and development have changed the relationship between the Citadel and its hinterland, which until the mid-20th century still largely featured agricultural land and the Citadel constituted over a quarter of the built landscape.

At the building scale, the long periods of occupation and the consequences of political events and changes in the population’s structure have caused in some cases phenomena of decay and collapse due to neglect, abandonment and deliberate demolitions. The historic buildings which have survived such phenomena have preserved very well their architectural design, struc-

3.11 Erbil Citadel and its surrounding agricultural landscape (HCECR Archive)
Justification for Inscription

ture, materials and details. Moreover, they constitute the largest and most important group of historic houses in the Kurdistan Region. Authenticity of materials is guaranteed here by two factors: the substantial presence of original materials in the built fabric of the Citadel, and the use of traditional materials (lime mortars, hand-made bricks, gypsum, timber beams, etc.) in ongoing conservation works. It is notable that there are no concrete-framed buildings in the Citadel, and that all the houses have load-bearing masonry walls.

In addition, all types of dwellings and buildings are still present today: these include grand mansions, diwakhanas, smaller houses, mosques, takiyas, tombs, and alleys. Some of them require conservation, and plans addressing this matter are being implemented. In any case there is enough of each type of structure to ensure that the complexity and variety of the elements composing the urban stock of Erbil Citadel is preserved as a result of the comprehensive conservation strategies now in place.

The Grand Gate is the only example of building that was demolished after falling in disrepair and was later replaced by a new modern structure. The authorities and the local community consider the reconstruction of the gate a priority, and remarkable efforts are being devoted to documentation gathering, archaeological excavations, and studies aiming at retrieving the form and aspect of the site before the mid-20th century modifications, through the reconstruction of the old Grand Gate, in compliance with the Riga Charter on Authenticity and Historical Reconstruction in Relationship to Cultural Heritage (in particular article 6 of the charter). The HCECR Board, the Governorate and the City Council have approved the proposal for the reconstruction.

Authenticity of use and function resides in the uninterrupted use of the Citadel as human settlement. This includes also the latest phenomenon of IDPs and squatters who took refuge from persecution in the Citadel before the Government could find better accommodation for them. This may have caused some loss of authenticity of the built fabric, especially through the reuse of material from historic houses to build temporary housing and shacks on the ruins of earlier construction. As argued in the Management Plan “the shacks represent a phase of crisis in the history of the Citadel that certainly has parallels in other
Nomination of Erbil Citadel to the World Heritage List

3.14 A section of the Erbil tell showing its archaeological potential (from: Studies for the Stabilization of the Erbil Citadel Slope and the Perimeter Façades, 2011)

3.15 A traditional brick kiln (from: Conservation and Rehabilitation Master Plan, 2011)

3.16 A Friday prayer at Erbil Citadel (HCECR, 2012)

3.17 School children and their drawings of Erbil Citadel after a drawing competition organized by HCECR (HCECR, 2009)
periods [of occupation of the Citadel], following wars, sieges, invasions or epidemics, during which almost certainly part of the original population left, to be replaced by newcomers and squatters.\textsuperscript{12}

The potential archaeological heritage of the tell, which is expected to be of outstanding importance (see site description and historical background), has fully preserved the authenticity of substance on account of the fact that the mound was subject to limited archaeological excavations and soundings. Erbil Citadel is said to be one of the oldest continuously inhabited cities in the world and is documented in historical sources from c. 2300 BC. If continuity of human occupation over the millennia has not yet been documented by archaeological evidence, it is however safe to say that the site was occupied, according to historic sources, during the past six thousand years and during the most critical phases of the various civilizations that were established in the region. This is also confirmed by the remarkable continuity of use of its name, maintained through the ages in various forms (Irbilum, Urblum, Urbel, Arba'il, Arbera, Arbel, Erbil / Arbil). The comprehensive collection of available historical texts in cuneiform script, dating from c. 2300 BC to 331 BC, sponsored by the Ministry of Culture and Youth (KRG), has provided excellent indications of what can be expected of the underlying archaeology, including major monuments such as the famed Temple of Ištar, which housed oracular priestesses and included an astronomical observatory, a ziggurat, and royal palaces from the Assyrian and later periods. The likely later archaeology can be adduced from further studies carried out by the HCECR, covering the Hellenistic period until the present.

Contrary to other similar sites which were used for military purposes or have been abandoned, Erbil Citadel was inhabited until 2006, when the collapse of the sewerage system, the overall unhealthy environmental conditions, dangers of collapse, the need to safeguard the health of the population still living on site, led to their relocation in order to upgrade the site and its infrastructures while proceeding with the rehabilitation and conservation of the Citadel. Indeed, the site was not subject to sudden abandonment or to a dramatic event that would have affected its authenticity, but to a decision taken within the frame of a programme aiming at building rehabilitation and site revitalization, so as to create the living standards needed in the 21st century while ensuring the conservation of the site. The people evacuated were compensated with a plot of land and money sufficient to build a new house, in an area now popularly known as Qalati Newi (New Qalat). Such a programme is meant to keep continuity of use while, at the same time, introducing a diversification of functions which will contribute to revitalize the Citadel as the cultural as well as the physical hub of Erbil.

If in terms of location the development of the city of Erbil has marked the physical centrality of the Citadel (which did not exist in earlier times) aiming to emphasise its role as the principal city landmark, authenticity of setting was identified as a potential problem, given the growth of the modern city around the Citadel. This is now being addressed both by the Erbil Citadel Management Plan and the Urban Design Guidelines for the Buffer Zone of Erbil Citadel, and by enhancement through the removal of selected incongruous structures.
Traditions and techniques linked to the production of materials for building and conservation activities are being supported and have received new impulse following recent activities on site. The Citadel is fortunate in that handmade brick kilns survive just outside Erbil and traditional lime and gypsum manufacture is also available. Repairs and reconstructions on the Citadel are supporting these traditional manufacturing industries in guaranteeing sales for traditional construction materials and in upgrading traditional products where this is necessary. In addition, traditional craft skills for building conservation are being supported and developed.

Erbil’s citizens have a strong sense of belonging to the Citadel including the many families who used to live or own a house there. Friday prayers still attract large numbers of citizens, who renew their link with the Citadel on a weekly basis. Civil society groups such as the Erbil Citadel’s Friends Association (which is being created), also contribute to keep alive within the community a sense of belonging and interest towards the conservation of the site. For them, the Citadel preserves its authenticity of spirit and feeling.

The continuing programme for the collection and documentation on oral history linked to the Citadel undertaken by the HCECR shows that there are efforts for the preservation of oral traditions and other forms of intangible heritage.

In conclusion, various elements contribute to the definition of authenticity in Erbil Citadel: its overall urban form, which derives from an organic growth influenced by previous layouts; the variety of its building types and decorative elements, representing all characteristics typical of a traditional city of the Ottoman period in the northern regions of Iraq; its setting, which maintains the centrality of the site in a renewed urban form, and all this within a social context that still sees the Citadel as the heart of the city, its ‘crown’, and for which the spirit and feeling of the place remain intact.
3.1.e • PROTECTION AND MANAGEMENT REQUIREMENTS

All requirements regarding site protection and management of Erbil Citadel to ensure that its potential Outstanding Universal Value is maintained over time are met; they are summarized in the box below and described in detail in the following text.

OUTLINE OF THE PROTECTION AND MANAGEMENT FRAMEWORK

- The site has been protected under national legislation since 1937 (Official Gazette n. 1587, 16 August 1937), according to the provisions of the Law on Antiquities of Iraq (Law No. 59/1936 and two amendments No. 120/1974 and No. 164/1975).

- A special site management institution, the High Commission for Erbil Citadel Revitalization (HCECR), comprising a Site Management Office, was established in 2007; it is fully functioning and is being progressively strengthened. A Board of Members was added in 2010.

- The legal framework is being adapted to improve the effectiveness of site protection and management, by means of two documents (2012):
  - Internal Regulations on the Functioning of the High Commission for the Revitalization of Erbil Citadel (Area);

- A detailed Conservation and Rehabilitation Master Plan (2011) was prepared and is now being implemented. It includes analyses, classification, and an inventory of all Citadel’s heritage buildings and other cultural assets and provides a holistic framework for their protection.

- A comprehensive and multi-objective Erbil Citadel Management Plan (2012) was completed and approved, and implementation has commenced.

- For the protection of the Citadel’s settings, Urban Design Guidelines for the Buffer Zone of Erbil Citadel (2011) were developed by the city authorities and are under implementation.

The cultural significance and outstanding value of the site are fully understood by all political leaders and stakeholders, who demonstrate a firm commitment to safeguarding and revitalising Erbil Citadel. The increased number and pace of initiatives and concrete undertakings in the past five years prove that this awareness is being translated into action.

The aim of such actions is threefold: (1) to strengthen the existing heritage management structure; (2) to conserve and enhance the tangible values of the site (by planning urban/architectural conservation and rehabilitation as...
well as archaeological research); and (3) to upgrade the conditions and living standards offered by the built heritage, in order to keep and regenerate the intangible values linked to the continuity of occupation.

The evacuation of the site, at the end of 2006, was an important preparatory step of this process, decided by the regional authorities to facilitate operations for conservation and revitalization and to address serious safety and health issues caused by the collapse of the sewerage and drainage system.

A special High Commission for Erbil Citadel Revitalization (HCECR) was established in May 2007 by the Council of Ministers of the Kurdish Regional Government (KRG). Placed initially under the Council of Ministers and, from December 2009, under Erbil Governorate, the HCECR has initiated and implemented a large programme of activities aiming at conserving and rehabilitating the site.

The signature, in 2007 and 2010, of two Memoranda of Understanding between the HCECR and UNESCO for the development of the Erbil Citadel Revitalization Project marked the start of a strategic partnership with UNESCO to support research, conservation and management planning and implementation on a long-term basis. The major activities have included studies and extensive documentation for the management and conservation of the Citadel, capacity-building programmes and execution of the conservation of a number of vulnerable buildings (for full details see 6.c).
**STRATEGIC PARTNERSHIP WITH UNESCO**

Following the signing of a memorandum of agreement in September 2007, UNESCO has assisted the High Commission for Erbil Citadel Revitalization (HCECR) in the implementation of Phase I, and subsequently Phase II, of the Erbil Citadel Revitalization Project.

The overall goal of the project is to ensure the sustainable revitalization and development of the Citadel of Erbil, by implementing conservation and management measures in accordance with best practices, while also enhancing national capacities in the field of heritage conservation and management, thus contributing to the sustainable development of Erbil city in the long term.

The first phase of the project, which is almost completed, aimed at reinforcing local capacities in the field of conservation and restoration techniques, undertaking studies for urgent remedial works to prevent further damages, and establishing a Conservation and Rehabilitation Master Plan. This Master Plan sets the basis for the future conservation and rehabilitation of the Citadel.

Phase II of the project was planned with a view to enhance capacities of the HCECR, while at the same time carrying out the implementation of projects on the ground within the framework of a memorandum of understanding signed in March 2010. It foresees the following results:

- Conservation and management of Erbil Citadel for its sustainable development, strengthened through institutionalization, capacity building and training activities;
- Conservation of Erbil Citadel’s most vulnerable features carried out according to international best practices;
- Sustainable development and rehabilitation of Erbil Citadel.

The HCECR, established in 2007, is a special governmental institution under Erbil Governorate. The HCECR has a central control, in close consultation with other stakeholders (Erbil Governorate, Erbil Directorate of Antiquities, State Board of Antiquities and Heritage, Salahaddin University, Erbil Municipality, etc.) over all conservation, rehabilitation and management activities on the Citadel.

The HCECR operates actively also with practical intervention for the preventive conservation through a large-scale maintenance and monitoring programme, and through the coordination of all studies (e.g. documentation
research and gathering) and other activities undertaken in partnership with other parties, in addition to UNESCO, as described above.

The HCECR already has substantial resources and is in the process of continuous reinforcement to cope with the needs arising from the increased conservation and management activities. In parallel with the preparation of the *Erbil Citadel Management Plan*, an institutional strengthening programme was prepared, resulting in the draft of two new legal instruments:

- Internal Regulations on the Functioning of the High Commission for the Revitalization of Erbil Citadel (Area);

As of December 2012, the HCECR comprises a total of about 39 permanent staff. A two-phase staff reinforcement programme, to expand and further strengthen this institution, foresees almost tripling the number of personnel and transforming the HCECR into a site management body structured in three divisions, guiding successful implementation of the Management Plan. Meanwhile, additional professional staff are being recruited and involved in the ongoing conservation and rehabilitation projects, through which they receive training. In the period March-September 2012 alone, nine staff were recruited on a long-term basis to cope with increasing workloads due to intensive conservation and rehabilitation activities.

Following the transfer of the HCECR to Erbil Governorate in 2010, the conservation and rehabilitation programme for Erbil gathered
pace, the commitment of regional authorities to pursue its implementation is extraordinary and the Citadel revitalization is considered a priority by all. Administration of Citadel-related issues (i.e. the infrastructure networks) and practical conservation and rehabilitation works proceed at fast pace and the improvements are visible day by day.

The Erbil Citadel Management Plan outlines a holistic five-year programme for conservation and enhancement, by means of a range of activities articulated around eight objectives. It must be noted that this Management Plan is not only a strategic document but also a policy document, providing a specific guiding framework—in line with up-to-date international standards—for each of the eight management objectives, which are:

1. Research and excavation
2. Conservation, documentation and maintenance
3. Rehabilitation, reuse and revitalization
4. Interpretation and tourism development
5. Awareness raising, education and community participation
6. Facilities, services and infrastructures
7. Legal/institutional framework and capacity building
8. Investment, marketing and funding

A phased and budgeted Implementation Plan covering a five-year time span gives a clear picture of the expectation on what the Citadel should look like in the short term. All service networks will have been installed and nearly 1/4 of the buildings, especially those concentrated around the South Gate, will have been restored and rehabilitated, in particular for cultural activities.

The Interpretation Centre, the Grand Gate and some other special buildings in the core area (hammam and Great Mosque) will also be included in the first priority intervention area for short-term realisation, in order to accelerate the revitalization process focusing on community attractors. Incentives for bringing both residents and investors will support the process. Archaeological research in the centre of the mound will have
been commenced, while educational and promotional activities will have been implemented for site awareness and presentation.

In the medium-long term (ten years), it is expected that restoration and rehabilitation of a second priority intervention area, concentrated in particular around the North Gate, will be completed, bringing the number of restored buildings to almost half of the total building stock. This second priority area will be developed to contain a mix of uses: cultural, touristic, and business-related, in harmony with the character of the Citadel.

The Conservation and Rehabilitation Master Plan and the Erbil Citadel Management Plan, provide a holistic framework and a repopulation and revitalization strategy to reconcile conservation and rehabilitation needs of the Citadel, to make it the living and vibrant centre of modern Erbil. They also address the theoretical challenge of the vulnerability of the site to loss of significance due to development pressure and exposure to the risk of trivialisation, which could be caused by imbalances in the repopulation and by a predominant tourism destination and includes measures to address this hypothetical risk.

The conservation and rehabilitation programme requires the reconstruction of portions of the urban fabric and groups of buildings, i.e. on areas of shacks that will be demolished and on parts destroyed by the previous regime. Building on the guiding framework provided by the Master Plan and in accordance with the policies set up by the Management Plan, detailed technical guidelines are being prepared to manage the delicate matter of infill reconstruction in the context of overall site authenticity.

Local authorities are aware of the need to reinforce the regulation system aiming at the integration of the Citadel’s protection and conservation in the more general city planning framework. In particular, the protection and the improvement of the setting were recently addressed through the compilation of the Urban Design Guidelines for the Buffer Zone of Erbil Citadel, completed in May 2011 and approved in June the same year.

These Guidelines, which are the key output of a comprehensive project Management of the Buffer Area of the Erbil Citadel, developed with UNESCO’s support, are now under implementation. They identify two boundaries of buffer zones, to protect the integrity of setting of the proposed World Heritage property.4
3.2 • COMPARATIVE ANALYSIS

Erbil Citadel is an ancient town on an archaeological tell going back to the earliest phases of the development of urbanism. In contrast to almost all other sites, Erbil Citadel has continued as a living settlement to modern times. The Citadel also contains an important corpus of traditional architecture preserved within an organic urban plan. The following paragraphs place these values within the context of analogous sites, which are compared with the Citadel in terms of each of its constituent elements.

The imposing profile of Erbil Citadel—with the tell, the traditional urban complex and the homogeneous façades—stands over the lower city as the main focal point of the surrounding landscape.

“Tells formed over centuries or millennia as individual households built, repaired, tore down, and rebuilt stone and mudbrick structures on the same spot. They are cumulative result of many generations engaging in this simple domestic behaviour.” Tells are typical landmarks both in rural and urban landscapes from Anatolia to South East Asia passing through the Levant, Mesopotamia, the Iranian plateau and Central Asia. Most are unoccupied and survive as archaeological mounds, although many are threatened by modern uncontrolled development and their boundaries can often be defined only after detailed archaeological works and studies of aerial and satellite imagery.

Tells can be found in various locations in the landscape. They can be classified according to their position regarding present land use, as this can be an indication of continuity or shifts in settlement and urban patterns in the region. To show how vast is the territory where tells could be found, this selective and systematic classification takes into consideration a number of sites which are among the most significant in the history of Middle East and Central Asia, to arrive to the most relevant corpus for comparison with Erbil Citadel, where the three criteria proposed for the inscription are often interrelated. Some may share with Erbil a specific historical momentum and/or planning/urban characteristics which evolved differently over time, leaving Erbil as an exceptional example of tell evolution. Few are also World Heritage Sites.

According to this classification, tells can be:

(1) uninhabited and isolated (sometimes, partially used as a cemetery) in rural or steppe areas. If small tells in rural areas may represent a substantial continuity of land use, as they contain small villages or hamlets dedicated to agricultural activities, the presence of large tells in areas where today settlement is sparse, or where modern urban centres are found in distant locations, is an indication of radical shifts in settlement patterns, where areas that once needed the presence of an urban centre experienced at a certain point in time the abandonment of such centre in favour of another location. In this case the resulting tell was never or rarely re-occupied and survives today as an archaeological site. The first four settlements, located as Erbil in the northern Fertile Crescent, also present a lower town:
Tell Baqrta, located 28 Km south of Erbil, is one of the largest mounds of the area (220 m in diameter and 20 m in height) and used to control a hill pass toward Mesopotamia. Studies on aerial imagery also show an extensive lower city. It was never explored, but from a recent survey, materials from the Chalcolithic to the Parthian and Islamic periods were collected. Scholars are tempted to identify this site with the ancient Baqara, possibly equated with the Old Babylonian Qabra.

Qasr Shemamok (the ancient Kilizu, as identified from an inscription on a brick found by Austen Henry Layard) is located 30 Km southwest of Erbil. The tell, 20 m high and with an extension of 70 ha, is surrounded, most probably from the Neo-Assyrian period, by a lower city. Materials found at the site seem to testify an occupation from the Halaf to the Medieval Islamic period, with a particular importance during the Middle and Neo-Assyrian periods.

Tell Barri is located in Syria, 40 Km from the modern Qamishli, on the left bank of the Jaghjagh. At the bottom of the tell, 32 m high, the ancient ditch and the lower city (extended for 37 ha) are still identifiable. It was occupied, almost without interruption, from the 4th millennium BC to the 13th - 14th century AD. Thanks to an inscription on a pavement tile found during the excavations, it was possible to identify the site with the ancient Kahat and the structure with the palace of the Assyrian king Tikulti-Ninurta II (890 - 884 BC).

Tilbeshar, southeast of Gaziantep in Turkey, was occupied from the Neolithic period (6th millennium) to the Middle Bronze Age (1600 BC) and again in the Medieval period (12th – 13th century). It is located in a fertile plain and it is composed by a citadel (6 ha) and a lower town (56 ha) that started to develop in 2600 BC. The Medieval settlement later occupied the entire ancient site.

In Turkmenistan, Ulug Depe is an exceptional site on the foothills of the Kopet Dagh Mountains. Extended for 30 acres, it was occupied from the Neolithic period to the Iron Age (6200 – 200 BC) and is directly related to the Oxus Civilization from Bactria.

(2) uninhabited at the outskirt of a modern village or surrounded by modern development. This is also a common case: the tell survives as an archaeological site, and does not have a particular function in the structure and typology of the modern settlement. In some cases a modern cemetery is placed on the tell slope. Some examples are:

Tell es-Sultan (ancient Jericho), in the Palestinian Territories, is located in an oasis in the Jordan Valley and is considered one of the oldest sites in the world –occupied from the Epipaleolithic to the Early Islamic and modern period– that developed an urban culture from the Early Bronze Age II. Tentative List since 2012

Hamadan –most probably the ancient Ecbatana (as named in the classical sources), capital of the Median Empire and summer capital of the Achaemenids– is located in Iran, in the central Zagros Mountains. On the ancient tell, occupied from the early 1st millennium BC and located in the centre of the modern city, impressive architectural remains dating to the 5th century BC in mudbricks were excavated. Hegmataneh, Tentative List since 2008
3.22 A view of Tell Baqta (K. Kopanias, 2011)

3.23 A view of Qasr Shemamok (Mission archéologique française à Qasr Shemamok, 2011)

3.24 A view of Tell Bani with the excavation trench (S. Valentini, 2005)

3.25 An image of the imposing Ulug Depe in the Turkmen step (MAFTUR, 2012)

3.26 Tell es-Sultan/ancient Jericho, aerial view from the south; in the foreground MB structures and fortifications in Area A of Palestinian-Italian Excavations (1997-2012) (Rome Sapienza Expedition to Palestine & Jordan)

3.27 The archaeological site of Afrasiab and, at a distance, the Timurid monuments of Samarkand (G. Palumbo, 2007)
Samarqand (ancient Afrasiab) in Uzbekistan was founded in the Achaemenid period, between c. 650 and 550 BC. The ancient qal’a (219 ha) was occupied until the Mongol invasion, while the lower city developed from the 11th - 12th century. In 1371, Timur chose the city as his capital and started a programme of new constructions and embellishment. **Samarqand – Crossroad of Cultures, World Heritage List since 2001**

(3) **in urban context and used to locate a defensive fortress.** This case is not very common, as the location within an urban centre of strategic importance is required. There is no continuity of occupation, as the construction of the fortress is generally conducted after a long period of abandonment of the previous settlement. In this case we can speak of an adaptive reuse of what has become a physical vantage point in the landscape. Among these we can mention:

**Chamchamal,** in Iraqi Kurdistan, an ancient tell never systematically explored that was occupied by an Ottoman fortress and continued to be a military stronghold also under the former Iraqi regime.

**Hama** (the ancient Hamat) is located in Syria on the Orontes River. The ancient tell (about 336 m long, 215 m wide and 46 m high) occupied from the 5th millennium BC to 1400 AD, is now surrounded by the modern city. On the top of the tell, a fortress, overlooking the lower town, was built in the Ayyubid period to face the Crusaders armies and its destruction is attributed to Timur. It is now occupied by a park. **Noréas de Hama, Tentative List since 1999 – only the waterwheels are on the Tentative List, not the tell.**

(4) **still occupied by a village that grew without any organic urban development.** This is also an uncommon occurrence: a village still occupies a tell, but continuity of settlement does not seem to be the primary reason for this occupation, but rather the opportunity provided by the existence of a hill to place buildings in a location higher than the surrounding plains. There is no defensive reason for this, but perhaps only to better control the surrounding fields. Among the examples available, one can mention:

**Hit,** located in Iraq on the Euphrates River to the north of Ramadi, is an ancient settlement mentioned since the 9th century BC as Id. Herodotus called it Is. It was famous for the asphalt and the naphtha that was traded. In the ancient times, the bitumen was collected and used as cementing material for buildings and boats. Apparently, there were walls and two gates, but they are no longer visible even if the line of the tell is clear from the aerial photographs.

**Tell Ashara,** the ancient Terqa, is in Syria along the Euphrates River, 80 km to the south of Deir-ez-Zor. It is 18 m high and has a surface of 12 ha. Terqa was occupied from the 5th - 6th millennium BC, but became an important city from the beginning of the 3rd millennium and the capital of the kingdom of Khana after the destruction of Mari by Hammurabi in the 18th century. Two thirds of the ancient site are now covered by the modern agricultural village of Ashara.
(5) Inhabited tells within an historic urban environment. This typology is extremely rare. Only a handful of sites survived until this century as inhabited settlements over an archaeological tell and as part of an historic urban environment. Erbil belongs in this category, along with the citadels of Kirkuk, Aleppo, Qal’at al-Mudiq (Apamea), and Tel Afar.

This category with its sites, located in Iraq and Syria, constitutes the main corpus for the Comparative Analysis and their characteristics are analyzed in relation to the aspects of Erbil Citadel in order to demonstrate the unique character of the nominated property.

Kirkuk (Iraq):¹⁵ The presence of finds dated to the 5th millennium was attested but these did not come from systematic excavations and research. Archaeological data are still limited, but there is extensive historical information available from a corpus of cuneiform texts, the archive of Wullu,¹⁶ found in clandestine excavations at the edge of the tell of Kirkuk which illuminate the society and economy of this ancient site in the 15th century BC through five generations of family documents.

Since 1926 scholars have identified Kirkuk with the ancient Arraphe, founded by the Hurrians and capital of their kingdom. The 6th century AD Syriac account of the martyrs of Karka de Bet Selok (“fortress of the house of Seleucos”) provides information about the city from the Assyrian period and reports that the city was rebuilt by Seleucos Nicator or Antiochus I; in the Parthian period,
3.31 Aleppo Citadel, the tell (G. Palumbo, 2009)

3.32 Aleppo Citadel, Temple of the Storm God (G. Palumbo, 2010)

3.33 Aleppo Citadel: the imposing gate (G. Palumbo, 2009)

3.34 Aleppo Citadel: the top of the tell with ruins of the Ayyubid, Mamluk and Ottoman periods (G. Palumbo, 2010)
it was part of the kingdom of Adiabene and under the Sassanians it was an important Nestorian centre. In the 12th century, it was located in the territory of the Begteginid Atabeg, based in Erbil. The present name of Kirkuk appeared for the first time in the 15th century Zafarnama, written by Sharaf al-Din Ali al-Yadin. During the Ottoman period, Kirkuk was a garrison centre providing protection against the enemy coming from the East. During the previous regime, the population of the citadel was relocated and many of its buildings were destroyed in 1997-8, leaving its interior an almost empty field.

Even if Kirkuk is sensibly larger, but lower and more recent than Erbil, the two citadels, located in northern Iraq at a distance of nearly 90 Km, present a similar development both in their history and urban form. Both have a lower city and an upper fortified town on a tell, resulting from continuous occupation. The houses of Kirkuk Citadel were constructed of stone, in contrast to the brick architecture of Erbil Citadel. Moreover, the almost complete destruction of the built heritage of Kirkuk Citadel leaves Erbil Citadel as the best surviving corpus of traditional architecture in the region. The relocation of Kirkuk Citadel’s population, which took place in 1997-8, affected and irreversibly damaged the character of the site, weakening the connections between the traditional organization of the urban space and its architecture. In contrast, these connections have been preserved and are still visible in Erbil Citadel.

Aleppo Citadel (Syria) There is no archaeological data of when the shallow natural hill that later became the Citadel of Aleppo started to be occupied, but the site is mentioned in cuneiform texts from Ebla, Mari and Alalakh. Sources from Ebla mentioned for the first time in the middle of the 3rd millennium BC the worship of the Storm God (Hadda) in a centre call Halam69. The references to the Storm God in connection with the city continued to be present in later sources: for example in the 19th – 17th centuries BC when Aleppo was the capital of the kingdom of Yamkhad. Also, studies of the landscape in the modern lower city19 show the presence in the first half of the 2nd millennium BC of a lower town with ramparts. Recent archaeological excavations conducted by the Freie University of Berlin found the temple of the Storm God of the 3rd millennium BC (Early Bronze Age) and its later reuses, including the Middle Bronze and the Late Bronze/Early Iron Age phases. The latter shows a realignment of the axis of the cella, which is reduced in size and is decorated with basalt bas-reliefs showing the Storm God, other deities and semi-human (including a scorpion-man) and animal figures. The focal point of this decorative complex is the figure of the king facing the Storm God. Written sources also confirm its importance during the Neo-Assyrian period when he was one of the seven major storm gods of the empire.

As from the written sources and few archaeological evidences, the citadel continued to be occupied in later periods most probably always as a citadel/acropolis connected to a lower town. In the Hellenistic/Roman periods the lower town was located between the fortified acropolis and the river and was organized following an orthogonal system that still determines the road network of the bazaar area. Evidences of Hellenistic structures were
identified on the citadel/acropolis. In the Byzantine period the lower city was probably in bad condition while the acropolis was still fortified.

The city became again a capital after the conquest of the Hamdanids in 944 and enjoyed a short period of prosperity. But it is during the Crusader period, under the Zangid and Ayyubid dynasties, that the city regained its importance and the citadel became again a strategic stronghold entirely structured to face the Franks’ armies, with barracks and a luxurious residence inside.

Severe damage was inflicted to the town and its citadel by the Mongols in 1260. Occupied by the Mamluks in the same year, the citadel underwent restoration works at the end of the 13th century. Devastated for the second time in 1400 by Timur, it was again rebuilt by the Mamluks. Most of the buildings that are still visible date to this period.

In the Ottoman period its importance decreased because Aleppo was no longer a frontier city, only hosting a garrison of Janissaries and their families. After the devastating earthquake of 1822, only the soldiers remained in the citadel. During the Mandate, French soldiers were stationed inside and there was no access to the public.

Erbil and Aleppo at first sight look very similar: both have a citadel on a tell (which is larger in Erbil than in Aleppo) and have an extended (at least in certain periods) lower city; both have a long occupation tradition; both have their own venerated city gods (respectively, Ištar and Haddad); and both were part of a new urban and social development of Syria and northern Mesopotamia during the Ayyubid period. In Aleppo, however, starting in the Hellenistic period, the citadel became the fortified acropolis of an otherwise important lower city. In its later developments (Crusader period) it continued to be specifically a military stronghold with a palace for the ruler (under the Ayyubids) and, in the Ottoman period, it was probably only partially inhabited and only by a single social group: the soldiers and their families. Nowadays, it is a cultural site and does not have any urban character. Despite the similarity with this World Heritage Site, Erbil Citadel one more time stands alone in terms of its continuity of settlement and urban form.

Ancient City of Aleppo, World Heritage List since 1986

Qal’at al-Mudiq (Syria). If plenty of information is available for the prestigious Seleucid city of Apamea, this is not the case for the related Citadel of Qal’at al-Mudiq.

Archaeological explorations are difficult due to the dense occupation of the village and only recently it was proved through a borehole made from the surface of the hill that the citadel stands on a totally artificial mound. Soundings made during the 1970s at the base of the tell revealed Neolithic, Chalcolithic and Bronze Age layers. During recent archaeological and restoration works carried on in certain sections of the citadel walls, remains of a Bronze Age mud-brick fortification wall were found. For some scholars,
it is possible that the tell conceals the remains of the city of Niya (16th – 14th century BC) mentioned in Hittite texts.

This earlier wall was later replaced by a Hellenistic stone fortification somehow connected to the lower city of Apamea, founded in the 3rd century BC by Seleucos I Nicator. The various phases of the medieval Crusader wall are dated starting from the 12th century AD when Qal’at al-Mudiq became a Frankish stronghold. Unfortunately, other periods of occupation are not well known because in the areas covered by the excavations no intermediate layers were found but for some scholars during the Byzantine period dwellings were spread also around the slopes.

Erbil and Qal’at al-Mudiq share a very similar plan in the fortified character of the tell occupation and in its streets network, but Qal’at al-Mudiq is smaller in size (240 m EW – 260 m NS – 20 m high over the plain) than Erbil Citadel. Also, in the Syrian site, the continuous occupation of the tell has not yet been proven through archaeological features or ancient sources. Besides, if the medieval towers of Qal’at al-Mudiq are generally well preserved, the original curtain walls are often encroached, reduced, cut or replaced by modern constructions. The interior of the citadel, still inhabited, has lost much of its authenticity of form due to modern replacements and additions to the original building stock. In conclusion, although Qal’at al-Mudiq offers some parallels to Erbil Citadel for a remarkable continuity of settlement, its dimensions, closer to that of a village, and changes to its original architectural character make the two sites substantially different.

Apamée (Afamia), Tentative List since 1999. The Citadel, the object of this analysis, is not considered in the Tentative List entry.

Tel Afar (Iraq)²² Austen Henry Layard visited the city and gave this description: “A very considerable eminence, partly artificial, is crowned by a castle, whose walls are flanked by numerous towers of various shapes. The town, containing some well-built houses, lies at the foot of the mound a citadel....”. He also mentioned that “It has been three times besieged, within a few years, by Ali Pasha of Baghdad, Hafiz Pasha, and Injeh Bairakdar Mohammed Pasha.” In the three occasions the inhabitants resisted with courage but at the last assault two third of the population was killed and the houses destroyed and built at the bottom of the tell.
Similarly to Erbil but at a smaller scale, the ancient tell of Tel Afar, of which there are no or only few archaeological information, was continuously occupied. Unfortunately, due to the 19th century destructions, it lost its traditional character. A section of the citadel walls was restored by the former regime and its area is occupied only by modern buildings.

**DISCUSSION**

Erbil Citadel is an exceptional relic of an ancient traditional settlement continuously developed from the earliest phase of the establishment and growth of towns and urban civilisation, as it was never abandoned and continued to be inhabited and built from the origin of its settlement until present times, undergoing developments that were and are determined and influenced by the region’s history and events. In this regard it differs from ancient settlements which have been abandoned and are now isolated archaeological sites (such as Qasr Shemamok, Tell Baqrta, Tell Barri, Tilbeshar and Ulug Depe), tells associated with a modern settlement but which are abandoned or merely used as cemeteries (Hamadan, Samargand and Tell es-Sultan), tells which survive as fortresses in an urban context (Chamchamal and Hama), tells encroached by modern settlements without continuity of urban form (Hit and Tell Ashara), leaving as the only direct comparisons Kirkuk, Aleppo, Qal’at al-Mudiq and Tel Afar. However, the houses within the Citadel of Tel Afar were abandoned following sieges in the 19th century, Qal’ at al-Mudiq is much smaller than Erbil Citadel and does not compare to its urban character, Aleppo is used as a cultural site, while Kirkuk Citadel ceased to provide a close comparison when the houses where almost all demolished in 1997-8.

Erbil Citadel displays a traditional Islamic and Ottoman urban structure, while some scholars have argued that there may be much earlier Mesopotamian influences in the spatial organization of the city. Erbil Citadel began to lose its character of fortified settlement in the mid-18th century, when homes started to be built on and beyond the ancient perimeter of its walls, gradually replacing them. Features of the relation between the upper and the lower town, which are most probably dated both to the Neo-Assyrian and Islamic periods, are contained in the modern development of Erbil and can still be partially read in the modern streets system of the lower city (see Chapter 2). In this regard it differs from sites such as Aleppo and Qal’ at al-Mudiq, where the citadels retain medieval defensive walls. Kirkuk Citadel provided the only close parallel, where parts of the perimeter had been replaced by houses in the same way that occurred in Erbil Citadel, but almost all the perimeter houses at Kirkuk were demolished in 1997-8.

Parallels to the urban form of Erbil Citadel in terms of its narrow alleyways exist elsewhere in the Islamic world, but there are significant differences. The urban plan of the Citadel, with its fan-like arrangement of narrow streets is derived from the location of the fortress city on top of a high archaeological tell where the presence of a single access determined the streets emanation. Even if the street plan now may likely have gradually changed throughout its millennia of history, nevertheless the form of the tell, with its summit in the form of a shallow saucer with the main gate at the lowest point of the perimeter, dictates a plan of the same general form. It is quite different from
the urban form of flat sites, such as the lower city of Aleppo and the Old City of Damascus, where there are multiple gates and the existing street plans are derived from the Hellenistic grid of streets. These two examples, representing urban World Heritage Sites in the region, may display similarities in urban form, but in reality they are very superficial and reflect a different morphology.

Erbil Citadel, as one of the Neo-Assyrian capitals, is the only one still occupied: Ashur (a World Heritage Site since 2003), Nimrud and Khorsabad are vast archaeological sites in a rural landscape while the ancient Citadel of Niniveh (Kuyunjik) is uninhabited at the outskirt of the city of Mosul while Nebi Yunis is occupied by a Muslim holy shrine and the lower city is partially encroached by modern development.

The fortified character and approximately circular plan of the Citadel on a high location might suggest a comparison with the ancient city of Amedy (or Amadiya)\(^\text{24}\) in the Dohuk Governorate (Iraqi Kurdistan). That site, on the Iraqi Tentative List since 2011, has a long history of occupation. The Medieval town was built by Imad ed-Din Zangi in 1142\(^\text{25}\) and later from the early 14th century to 1842 was the capital of the Bahdinan emirate. Despite some similarities, the context is different from Erbil: Amedy is a naturally fortified hilltop town standing on a natural plateau with vertical cliffs in the mountain region of Northern Iraq. Also, the few historic buildings still standing after the destructions of 1842 and the 1960s are built in stone, while Erbil Citadel is built of bricks while stone is used only for architectural decorations.

This use of bricks made Erbil unique in the area of northern Iraq where stone is usually the main construction material, not only in the above mentioned Amedy but also in Mosul,\(^\text{26}\) Kirkuk,\(^\text{27}\) and Tel Afar. Also, another peculiarity of Erbil is the syncretism of elements from the East\(^\text{28}\) (the tarma with the wood-
en columns and the small carved niches of the rooms as well as the almost total absence on the street side façades of the *shanashil*, so typical in other Near-Eastern cities and the West (the architectural decorations –made of Mosul alabaster– of the internal façades), giving at first sight to the visitor the impression to pass from Mesopotamia to Iran and Central Asia while moving from one house to the other.

**CONCLUSIONS**

The comparative analysis has shown that, although archaeological tells are a very common occurrence in the cultural landscape from the Levant to Central Asia, Erbil Citadel stands out for the peculiarity of its continuity of occupation and the remarkable authenticity of its urban form.

No other archaeological tells in the region match the occupational history and the substantial continuity of settlement of the Erbil tell, making it perhaps the only site where the process of tell formation, resulting from the accumulation of debris and the rebuilding of houses on top of collapsed ones, can still be observed and documented up to the present.

Erbil Citadel represents a rare combination of traditional Islamic and Ottoman urban structure and architecture and elements derived from much earlier urban developments. The urban form, with definite boundaries circumscribed by perimeter houses as well as with an organic plan of narrow alleyways fanning out from a single gate, may find parallels also among early examples of urban development. Even if the alleyways may have changed their alignments through the millennia, the overall form of the Citadel still reflects these ancient origins.

This comparative analysis has shown that although there are some parallels with certain other sites which share some of Erbil Citadels’ characteristics (Kirkuk, Aleppo, Qal’at al-Mudiaq, and Tel Afar), substantial differences exist between Erbil and these sites in relations to continuity of use, history, function, and structure. For this reason the specific characters of Erbil Citadel are elements that can be used to justify its potential Outstanding Universal Value.
3.3 • PROPOSED STATEMENT OF OUTSTANDING UNIVERSAL VALUE

BRIEF SYNTHESIS

The Citadel of Erbil is a rare surviving example of an urban ancient settlement which developed on an archaeological tell, following, layer by layer and time after time, a spontaneous, non-planned growth that was influenced by a combination of previous urban layouts and successive architectural and urban elements, in a continuous process of addition and transformation extending back at least six thousand years, to the earliest phase of urbanism. It is also a rare site where the process of tell formation has continued up to the present.

Erbil Citadel is an imposing archaeological tell in which the artificial topography is a determinant of the urban form of the settlement still standing on its top. The structure of the Ottoman-period urban fabric is clearly legible, being characterized by a maze of alleys and cul-de-sacs radiating from the main Grand Gate. The Citadel town handed down throughout history is the result of an organic evolution and of a process of decay and reconstruction which is at the very core of the development of the Citadel hill. The original fortifications were in time replaced by houses which were built on top or in front of the ancient city walls, but the imposing character of the unbroken line of brick walls makes this site one of the most dramatic urban landscapes in the Middle East.

Defined by Erbil’s inhabitants the ‘crown of Erbil’, the Citadel is today both physically and symbolically at the centre of the modern city, which has expanded in concentric rings at the foot of this iconic site. The Citadel stands still powerful in the image of a mighty fortress, and strong in the memory of its previous inhabitants and of the citizens of Erbil. In fact, the significance of Erbil Citadel is given not only by its archaeology, the historical events it has witnessed, and the historical figures that have lived in, reigned over, or conquered the city, but also by the stories, feelings, and relationships that the inhabitants of Erbil still have with their Citadel. Erbil Citadel is mentioned, with a remarkable continuity of its name (Irbilum, Urbilum, Urbel, Arbaib, Arbera, Arabela, Erbil/Arbil) since pre-Sumerian times, in many historical sources providing evidence for the reconstruction of the events that shaped its form.

Erbil Citadel’s proposed nomination criteria are:

(iii) Erbil Citadel bears an exceptional testimony to cultural traditions and to civilizations which have disappeared, as it contains the layers of thousands of years of human occupation and diverse civilizations, while also being a rare witness to an organically evolved tell settlement, continuously remodelled on the traces of previous layouts.

(iv) Erbil Citadel is an outstanding example of multilayer archaeological mound still physically emerging from the surrounding landscape. The physical structure of the Citadel town is characterized by the permanence of the urban form on top of the mound. Its shape with defi-
nite boundaries has in part dictated the transformations of the urban fabric while, at the same time, has allowed the adaptation to changing needs throughout the millennia.

(v) Erbil Citadel is an outstanding example of a traditional human settlement, which has not survived elsewhere in this form due to irreversible changes brought by modernization. Its most distinguished feature is its urban form on top of an artificial mound, circumscribed by a circle of perimeter houses (with façades looking towards the lower city and the surrounding fields) and characterized by a network of alleys radiating from a main gate and by a dense agglomeration of buildings.

INTEGRITY

Erbil Citadel is an intact archaeological tell which still keeps its role of landmark in the landscape of Erbil. It preserves over thirty metres of archaeological deposits going back to the very early beginnings of urbanization in Mesopotamia. The overall urban form of the Citadel town on its top is integral, due to the permanence of a mutual relationship between the build-up of the man-made mound and the town initial plan and successive developments.

The fabric of the urban settlement on the Citadel is largely intact and clearly recognizable in its blocks division and alleyways. Some demolitions made by the previous regime have opened some spaces and the building stock has suffered from natural decay in the past fifty years, but these will be carefully filled following the recommendations of the Erbil Citadel Management Plan, in order to return the Citadel to its role as the central place for Erbil and its citizens.

Its buffer areas have some problems of integrity due to modern constructions encroaching on the street immediately surrounding the tell, but this is being addressed by the implementation of new guidelines regulating uses and form of modern activities in this area.

AUTHENTICITY

The authenticity of Erbil Citadel is substantial within different perspectives. First of all, as an archaeological tell which has not been excavated, the site retains all the archaeological layers. As a settlement with a layout influenced by the artificial topography of the mound, the ancient urban form of the Citadel town on its top is fully authentic while its Ottoman-period built fabric is preserved to a high extent.

Cases of demolition and abandonment were not accompanied by replacements with modern, incompatible materials and forms, leaving substance and design of the historic city remarkably preserved. Moreover, the construction of temporary housing by newcomers who occupied the site for a couple of decades can be considered part of the history of the Citadel, and another element of authenticity of function and use.

The site fully preserves authenticity of spirit and feeling and inspires sense of place, being not only a physical and symbolic landmark of Erbil city landscape but also a popular venue for gatherings of former residents and Friday
prayers. If in terms of location the development scheme of Erbil has marked the central position of the Citadel, authenticity of setting is being improved thanks to specific guidelines.

PROTECTION AND MANAGEMENT REQUIREMENTS

The Citadel is a protected site under the legislation of Iraq and of the Kurdistan region. The authority in charge of its revitalization efforts, the High Commission for Erbil Citadel Revitalization (HCECR), is working in a strategic partnership with UNESCO and other agencies to conserve and rehabilitate the Citadel through programmes of physical improvements within the framework of detailed studies and plans. Its action has resulted in the publication of the Erbil Citadel Management Plan, the instrument that is now regulating all activities concerning the site’s future development and conservation. This plan was preceded by detailed studies resulting in recommendations for conservation and rehabilitation activities presented in a Conservation and Rehabilitation Master Plan. The buffer areas of the Citadel are not under the responsibility of HCECR, but of Erbil Municipality, which has benefited from UNESCO’s, HCECR’s and international assistance to generate the Urban Design Guidelines for the Buffer Zone of Erbil Citadel, which are under implementation.

The current efforts to revitalize the Citadel and the strong relationship that the people of Erbil have with it, will be determining factors in returning the Citadel to the role and position it has always held in its history, as a place central to the life of the city of Erbil and the northern regions of Iraq, and as an urban landscape of importance for all humanity.

---

1 Erbil Citadel Management Plan, p.86
2 ibid.
3 See also 5.e, the Plan’s Executive Summary in the Annex, as well as the full document in the nomination package
4 Detailed description in 5.d
5 Ur (forthcoming a), p. 2
6 Kopanias et alii (forthcoming)
7 http://www.orient-mediterranee.com/spip.php?article1066 (last visited 22/08/2012); Anastasio et alii 2012
8 http://www.tellbarri.com/ (last visited 22/08/2012)
9 From internal report
10 Nigro 2010
11 “Hamadan” and “Ecbatana”, in Encyclopædia Iranica online
12 Sourdel 1986; Burns 1988, pp. 130-133
13 Streck 1986
Nomination of Erbil Citadel to the World Heritage List

15 Kramers 1986; “Bet Slok” in Encyclopædia Iranica online
16 Grosz 1988
17 Yousif 2009, p. 142
18 Gonella 2008 and Burns 1988
19 Nigro 1999, p. 51
20 Nováček- & Amin, unpublished; Garcin 2001; Nováček (forthcoming)
21 Dangle 2004 and Gelin 2007
22 Layard 1850
23 Frankfort 1950
24 Ammann 2006 and Sissakian & Fouad 2011
25 Campanile 1818, p. 23
26 al-Kubaisy 2010
27 Saatçi 2007
28 Diba et alii 2001
STATE OF CONSERVATION
AND FACTORS AFFECTING
THE PROPERTY

4

4.a PRESENT STATE OF
CONSERVATION

4.b FACTORS AFFECTING
THE PROPERTY
4.a • PRESENT STATE OF CONSERVATION

INTRODUCTION

The state of conservation of the Citadel town and buildings as well as the stability of the mound on which it sits have been the subject of studies since the end of the 1950s and, in a holistic and systematic way, since 2007-8, following the establishment of the High Commission for Erbil Citadel Revitalization (HCECR), as the site management body (see 6.c).

The Conservation and Rehabilitation Master Plan prepared the first comprehensive site analysis and condition assessment, consisting of: elaboration of an updated site plan, identification and classification of historic buildings, identification and analysis of building materials and techniques, geological investigation of the mound, determination and monitoring of deterioration phenomena, grading and mapping of the building structural risk, recommendations for emergency intervention and propping, identification of priority structural interventions, and development of a general conservation strategy.

The result of this work, presented in the technical documentation of the Master Plan and in particular in the Technical Report of the four-volume project package on In-depth Survey and Studies Covering the Structural Condition of the Citadel, is a fundamental reference and framework for any future analysis of structural conditions of both the buildings and the mound, which constitute the key issue on the Citadel.1

4.1 Location of buildings where maintenance, emergency and preventive conservation activities were conducted by HCECR (from: Map 10 in Annex 6)
4.2 Location of buildings where detailed architectural documentation and documentation of building details and decorative features was conducted (from: Map 10 in Annex 8)

4.3 Location of buildings where conservation and rehabilitation projects are being conducted (from: Map 11 in Annex 8)
However, it must be noted that this assessment presents the picture of the situation just after the evacuation of the site (at the end of 2006), when the site was in a very poor state due to the consequences of decades of neglect and sporadic intervention on individual buildings, without any overall conservation and rehabilitation strategy. Moreover, the service networks (water and storm water drainage, sewerage, electricity) which had caused see page and other deterioration, were still in place.

After over five years and various interventions timely conducted by the HCECR with the support of other parties and in particular within the framework of the UNESCO/HCECR Erbil Citadel Revitalization Project (see box in 3.1.e), the situation has improved substantially and it keeps changing radically for the better. Emergency measures have been taken, maintenance and preventive conservation have been conducted systematically on 179 houses (as of December 2012), various buildings have been or are being repaired and rehabilitated, while new studies are prepared for future action on both buildings and mound.

In particular, the stability of the slope and of the perimeter houses has been the subject of a specific study with the determination of remedial measures, which has just been completed and is ready for implementation.

Therefore, the HCECR is aware of the most critical issues and, informed by in-depth scientific and technical studies, acts actively to address their solution. Generally speaking, Erbil Citadel is affected by deterioration phenomena mainly associated with the instability of the terrain forming the tell, the natural process of aging and degradation of constituent materials, the lack of maintenance following the exodus of the long-established inhabitants and their replacement by squatter occupation, and some wrong intervention especially in the second half of the 20th century (i.e. demolition of built fabric to create the north-south axis). Nonetheless, a crucial fact must be highlighted: the Citadel was not subject to replacement of traditional built fabric with modern concrete and/or out-of-context constructions, which is an added value to its overall state of conservation and authenticity.

Below is a brief description of the current conditions and typical deterioration phenomena affecting the slope, the buildings, the whole Citadel urban landscape and its setting.

**CONDITION OF THE SLOPE**

Given the morphology of the site, slope stability is one of the most critical issues. Studies carried out by the Conservation and Rehabilitation Master Plan proved that partial or total collapses of some Citadel’s buildings in the past are largely related to failure of the soil supporting the foundations and particularly the façades overlooking the slopes. The study combined visual inspection and regular monitoring throughout several months in 2008-9, and processed data by using a specialised computer programme (FaMIVE)\(^2\) for modelling the risk of collapse.
In particular, the crack pattern and crack movement were observed and monitored in many of the houses. Cracks on the floor at a distance of 1 to 2 m from the slope façade meeting vertical or diagonal cracks on the side walls clearly indicate that they are caused by soil movement. Similarly, horizontal cracks at the base of internal walls indicate soil movement just underneath them. Furthermore, façades leaning outward may indicate local failure of soil bearing capacity.

Perimeter houses are the most vulnerable to these phenomena, due to fact that, as described in 2.a, they were built not on top of the mound, but actually on the upper part of the slope itself, in front of the line of the former city walls. This happened in a process of encroachment on urban fortifications which can be paralleled in many other cities in the late-Ottoman period (including the imperial capital of Constantinople) and is also clearly evident in the case of Kirkuk Citadel, the closest parallel to Erbil.

In order to define stratigraphy and soil characteristics, a number of soil investigations were undertaken with the assistance of the Salahaddin University, Department of Civil Engineering, with the drilling of four boreholes within the top ridge of the Citadel and eight auguring prospecting along the slopes. The results of the boreholes stratigraphy were used to determine soil profile and cross section at a number of locations corresponding to the position of the monitoring gauges installed. The boreholes identified:

- between 4 and 5 strata, with silty clay underlying alternating clay silt and silty sand; and
- an upper average 2 m of detritus accumulated since the 1970s (due to demolitions and following squatter occupation).

The sides of the mound display erosion gullies, the main causes of which appeared to be (through analysis and monitoring during heavy rains) water leakages from the old water supply, drainage and sewerage systems (which are now removed). The main factors of disturbance that have caused soil slip and erosion on the side of the tell are:

- the construction of vehicle ramps in the mid 20th century;
- the construction of the encircling shops at the base of the mound in the early 20th century and their more recent demolition (which affected the base of the mound); and
- digging concentric trenches round the mound for an afforestation (planting) scheme in the 1950s.

In all cases the slope was found to be unstable, with a slip surface with a small radius between 3 and 4.5 m, located immediately underneath the perimeter façades. These results highlighted two important facts:

1. the instability is localised in the immediate vicinity of the buildings and of the surface of the slope; and
2. the position and shape of the slip surfaces are consistent with the crack patterns seen in the buildings on site.
The seriousness of the problem has been fully understood by the HCECR and other stakeholders and other studies and initiatives were undertaken based on the first results of the analysis, described above:

- A roundtable was organized by the HCECR and UNESCO in July 2010, with the aim of bringing together the different specialists who are familiar with the situation of the current condition of the Citadel, and particularly its slope, to discuss the various possible options to be considered and the way forward to ensure the safeguarding of the site. The conclusions focused on consensus regarding the slope situation, as well as the approach to carrying out testing and studies, and the way forward for investigating possible interventions. It was agreed to focus on possible interventions that would help in increasing the superficial stability of the slope, and to deal with the issue in a holistic manner.

- A UNESCO/HCECR Project on **Studies for the stabilization of the Erbil Citadel slope and the perimeter façades** was launched in 2011, to carry out in-depth geotechnical investigations and analyses to further explore the problems of stability, followed by plans and technical specifications for remedial solutions that will ensure the long-term stability of the slope and the structures above.

The project was organized in three phases and was developed using the most modern diagnosis technologies, resulting in:
4.5 Elevation drawings of the northwest sector of the Citadel derived from laser scanning conducted in the framework of the Studies for the Stabilization of the Erbil Citadel Slope and the Perimeter Façades project (2011)

4.6 Elevation orthophotos of the entire perimeter derived from laser scanning conducted in the framework of the Studies for the Stabilization of the Erbil Citadel Slope and the Perimeter Façades project (2011)
Phase 1: accurate topographic survey using a 3D laser scanner, reproducing graphically the morphology of the slope and of the upper structures with high details and photographic texture quality. This high-quality survey constitutes a fundamental document to record the present condition of the tell.

Phase 2: geognostic investigations, with execution of boreholes and extraction of disturbed and undisturbed soil sample, focusing in particular on areas featuring most serious instability phenomena and erosion; seismic investigation using HVSR and MASH methodology to estimate earthquake effects. These investigations are able to interpret the local dynamic amplification of the site of interest, and provided a site specific design response spectrum, useful for the structural calculation of the design parameters.

Phase 3: analyses of results of soil investigations and expert assessment and previous studies; design of possible remedial alternatives to address the root causes of slope decay, including costs/benefits consideration and practicability of application; cost estimates of the proposed solution.

The project ended in June 2012 and the proposal is currently being reviewed and evaluated, in order to prepare the follow-up for the implementation of remedial measures.

**CONDITION OF THE BUILDINGS**

In the following section the individual causes of building degradation are described. These are being addressed both by the HCECR’s wide-ranging maintenance programme, commenced in March 2010, and in individual conservation projects for undertaking more extensive works.

The major causes of building deterioration (structural damage in the first place, as described in the next section) are a result of two factors:

- the social and economic changes that occurred from the 1930s (but gathered pace in the 1950s), when the attractiveness of the Citadel as a secure, comfortable and prestigious place to live started to diminish; and
- the lack of a policy and strategy (until 2007) to integrate the Citadel within the development of the town and the urban and spatial planning schemes, through a comprehensive rehabilitation and revitalization programme.

The Citadel has been subject in the past to loss of historic fabric, due in particular to four principal causes:

- decay and collapse of houses, because of lack of maintenance from the 1950s onwards;
- opening of north-south axis with demolition of houses and the Grand Gate at the end of the 1950s;
- deliberate demolitions in 1990 by the previous regime; and
- demolitions by squatters and other builders, who used abandoned
old houses and courtyard walls as a quarry for materials to build informal edifices and shacks. These are built of a variety of building materials, including mud bricks, concrete blocks, jerry cans and even parts of motor vehicles, but the overwhelming majority of walls are built of bricks reused from historic houses.

It must be noted that the conditions of the building stock as diagnosed by the Conservation and Rehabilitation Master Plan showed a situation of very poor state of conservation. However, as explained before, the emergency phase is now over, the main problems are being addressed and the overall situation has been substantially transformed, with many buildings already repaired.

Indeed, following this assessment the immediate response was to start a programme of interventions to limit further decay and provide temporary structural support. This has materialised in the propping and shoring of walls and houses, roof maintenance, capping of exposed walls, covering the roofs or collapsed ceilings with plastic sheets to avoid water infiltration. These works have been carried out by the HCECR from March 2010 and include the following types of intervention:

- shoring (racking, flying and dead shores);
- buttressing;
- repairing brick walls;
- re-screeding roofs;
- stitching cracks;
- capping wall tops;
- cleaning roofs and adjusting slopes;
- temporary protection to roofs (plastic sheets);
- removing cement plaster;
- re-pointing of brick joints;
- selective removal of later additions;
- clearing (windows, doors, arches, niches);
- removing debris;
- replacing/installing wooden beams;
- repairing roof cavities;
- dismantling recent roofing layers;
- other interventions.

A map and list detailing the types of intervention executed on each building is presented in the Annex 6.

Moreover, a number of complete conservation and rehabilitation projects aimed at adapting the historic buildings for future use are being carried out by the HCECR, UNESCO, and a few other organisations under the HCECR’s supervision.
4.7 Aerial photo of the Citadel showing temporary protection of roofs by blue tarpaulins (Vossing Ingenieurbüro / Ministry of Municipalities and Tourism, 2011)

4.8a Temporary shoring of a tarma (HCECR, 2011)

4.8b Temporary flying shores to avoid the collapse of walls (HCECR, 2010)

4.9a Brick wall repairs (HCECR, 2012)

4.9b Brick wall repairs (HCECR, 2010)

4.10a Roof repair activities (HCECR, 2012)

4.10b Roof repair activities (HCECR, 2012)

4.11a Stitching cracks intervention (HCECR, 2011)

4.11b Stitching cracks intervention (HCECR, 2011)
4.12 a An example of an intervention on a house courtyard (HCECR, 2011)

4.12 b Completed project: brick wall repairs, stitching cracks and repointed masonry (HCECR, 2012)

4.13 a An example of an intervention on the exterior wall of a house (HCECR, 2011)

4.13 b Completed project: wall was consolidated and delaminated sections were rebuilt (HCECR, 2012)

4.14 a An example of a house in need of structural consolidation (HCECR, 2012)

4.14 b Completed project of structural consolidation (HCECR, 2012)
PHENOMENA AFFECTING STRUCTURAL STABILITY

Water penetration

It has been observed that water penetration is a consequence of lack of maintenance which has affected the buildings on the Citadel until recent years. Water penetrates the walls through cracks in the ceilings, and open or missing windows and other openings, thus affecting the weak mortar joints, which in large part are mud-based and easily dissolve in the presence of water.

The problem is sometimes compounded by the old replacement of traditional lime plasters with cement-based plasters which make impossible the migration of water to the exterior and maintain the humidity inside the walls. The study conducted by the Master Plan’s team demonstrated that both capillary action and infiltration from the top have affected the walls of many buildings on the Citadel.

Remedial measures: Emergency and preventive actions conducted by the HCECR so far have consisted in covering the roofs with plastic sheets and performing repairs to roofs and wall tops where necessary. Other more intensive maintenance activities include roof repair, removal of cement plaster to allow water exchange and transpiration from the core of the walls. The development of the sewerage network (underway) is an indispensable step to ensure that no more water is dispersed in the ground.

Loss of mortar

Loss of mortar is a common occurrence, considering the characteristics of the mud mortar used for joints in Erbil Citadel. The mud mortar, which already is characterised by weak bonding properties and is inherently weak, is further weakened by water action, and it can dissolve quite rapidly, especially on exposed surfaces. Sights of walls with deep joints, showing a lack of mortar between their courses, are not uncommon on the Citadel.

Remedial measures: In rehabilitation works, joint re-pointing with appropriate lime mortar is the most common remedial measure applied by the HCECR to the exposed brick masonry featuring large areas of loss of mortar, with a depth exceeding 10 mm, to avoid that an increase of this phenomenon will eventually reduce structural strength. In some cases there is a need to preliminarily (and carefully) remove the traces of previous re-pointing, especially when this was executed with cement-based mortar.
4.15a Effects of water penetration at the base of walls in a perimeter house (HCECR, 2010)

4.15b Completed project: consolidated walls, elimination of cement plasters and repointed masonry (HCECR, 2012)

4.16a Loss of mortar (HCECR, 2010)

4.16b A completed project showing repointed masonry (G. Palumbo, 2012)
Walls delaminating

This is a consequence of untreated surfaces following water penetration, and mortar loss. Studies have identified this phenomenon in many locations of the Citadel, resulting from the loss of the mortar joints and subsequent fall of bricks, poor connection of the external layer with the internal rubble core of walls, and presence of cement plasters on the surface which increases the internal pressure of the wall. The rubble core of the walls, once it loses the binding capacity of the mud mortar, accumulates at the bottom of the wall, making it bulge. It has been proved that the use of cement plasters accelerate this process, since it captures water in the wall core without allowing it to escape.

Remedial measures:
Wall delaminating and loss or bulging of portions of facing brickwork have been approached in two phases: the first phase included emergency shoring and safety fencing (from 2010) while the second phase (ongoing) consists of detailed investigation to ascertain how extensive the detachment of the external leaf might be and how unstable this is. In some cases the problem is related to the more general structural instability of the building and therefore it is tackled within the frame of an overall consolidation project. Generally speaking, the common remedy adopted is to carefully dismantle and rebuild (brick by brick) the part of the wall under consideration, trying to limit such reconstruction to the minimum necessary.

Walls cracking

The cracks associated to the movement of the façade may be due to the movement of the upper slope and/or the uneven settlement of the foundations, as well as to thrusting horizontal forces, especially if the façade is poorly tied with the party walls. The cracks that are seen on the party walls under the beams may have several causes, such as uneven settlement of the roof, increased loads on beams, etc. Both types of cracks are dangerous, but the cracks visible at the joint between the façade and the party walls may indicate that the foundation is moving in the direction of the slope, thus representing a warning sign of movement and potential for catastrophic collapse.

Remedial measures:
Crack repair is approached depending on the causes as well as on the results of the monitoring. An extensive crack monitoring campaign was undertaken on different cracks of over 100 houses in 2008-9, resulting in their classification according to the type, position in the building, and movement recorded. The crack monitoring has been reactivated during the studies of the slope stability (concluded in June 2012) and tell-tales are being reinstalled. Generally, if the causes of the cracks are not due to overall problems of structural stability and the movements are minor the cracks are stitched by carefully cutting out cracked bricks one by one and replacing them with complete bricks of the same size and type.
4.17 a Wall delamination (G. Palumbo, 2011)  
4.17 b Repair of a delaminated wall (HCECR, 2010)

4.18 a Deep cracks in perimeter house well (UNESCO, 2010)  
4.18 b Completed project: cracks were stitched and the wall was consolidated (UNESCO, 2011)
**Outward leaning**

Normally this phenomenon is observed only when the leaning is already advanced, especially where walls do not have smooth vertical faces and are the result of many phases of construction. The leaning outward of a wall is often associated with the settlement of foundations or slope failure, and must be monitored in order to understand its behaviour and progress. The studies conducted on the Citadel’s houses have included the analysis of each wall given the impact of this structural behaviour on the overall stability of the building.

**Remedial measures:**
The identification of walls featuring serious phenomena of outward leaning, followed by shoring and, if needed, safety fencing has been done. The problem, which may in some cases combined with other issues of structural stability is then approached case by case. The buildings featuring the most dangerous problems of structural stability requiring a comprehensive consolidation project are among those selected for in-depth study and priority intervention, especially within the frame of the UNESCO/HCECR Project.

**Other observed damage**

Some damage from gunfire was observed on perimeter houses, especially around windows. These did not have any structural consequence, except in houses 1/2 and 1/3 that may have received a hit from a tank shell since the damage is more substantial and, in the case of 1/3, may explain the damage in the point of contact between the eastern corner of the façade and a party wall.

4.19 Shoring of outward leaning walls in an alleyway (HCECR, 2012)
SUMMARY OF STRUCTURAL ISSUES

The following summary is derived and updated from various sections of the In-depth Survey and Studies Covering the Structural Condition of the Citadel, Vol. 1: Technical Report, which presents the results of the analysis conducted in 2008-9 within the frame of the Master Plan. Some of the issues resulting from this analysis are indeed being addressed through the maintenance programme developed by the HCECR and further studies and works conducted especially within the frame of the UNESCO/HCECR Project.

- The water table is below the base of the tell.
- Structure of the tell: the Citadel mound has been built up by archaeological stratification resulting from occupation over thousands of years, which consists of silt, sand and pebbles, which will be the remains of ancient earth structures and paving, as well as pottery fragments. The mound is believed to be artificial without natural geology.
- Main hazards affecting the buildings of the Citadel (and that are being addressed) are: 1. soil settlement and slope instability; 2. reduced structural integrity and capacity due to decay and damage of materials and structural elements; and 3. moderate seismic hazard.
- Dynamic actions must have contributed to cause some of the present crack patterns and partial collapses observed on site, rather than just decay of materials and effects of slope settlement. While some of the damage has been explained as produced by shell- ing and blasting, other less localised crack patterns and partial collapses of upper storeys would be best explained by seismic activity.
- The area of Erbil is considered to be in a moderate seismic risk.
- Decay due to water penetration is heightened by the previous lack of maintenance of the roof structures and the loss of integrity of the windows. It was also worsened by the loss or lack of lime plastering and its replacement of cement-based, non-breathable, plasters. Water can penetrate the wall by driving rain, through the unsealed top of the wall or by capillary action form the foundation where proper drainage of the soil around the buildings is not in place. However, the ill-functioning service networks causing water leakage have been removed and the roofs have been sheltered by plastic sheets. Cement plasters are being removed from houses under repair.
- The perimeter houses are particularly vulnerable because many of them are built not on top of the mound, but in a hazardous position into the top of the slope. Such thrust can be further increased by water infiltration in the fill during rainy periods. An intervention for ensuring the slope stability has been designed and is under evaluation for implementation.
Cracks in vaulted structures supporting the floor level and/or the roofs of perimeter houses indicate outward movement. The monitoring carried out during nine months in 2008-9 (which has just been re-activated) also confirmed that such movement, although modest, was present and increasing.

Construction timber species: the principal timbers used in construction are poplar (*Populus euphratica*), which has little natural durability to termite attack, and the secondary timbers are oak (*Quercus sp*), which contain significant amounts of vulnerable sapwood, because of their small section. Insect damage: there has been widespread subterranean termite damage, but no live termites have currently been found and there appears to be no current threat. There has also been some damage by longhorn beetle, for which no treatment is generally required.

Surface water: previous reports have suggested that surface water is the principal cause of decay, but this does not now appear to be the case. The storm water drainage system, although damaged, still functions and serious water logging does not currently occur. Moreover, a new drainage system is being installed and this will not be an issue any longer.

**RISK ASSESSMENT AND MAPPING**

Studies for the assessment of the structural conditions conducted as part of the Conservation and Rehabilitation Master Plan, targeting in particular 110 perimeter buildings, led to the identification of structures at risk using a specialised methodology (FaMIVE). An algorithm was developed in order to categorise the level of risk associated with each building due to the potential of the walls overturning and the associated collapse of floors and roof, caused by the leaning of walls (compounded by the state of decay and damage already present), as well as by the instability of the slope.

This allowed ranking and mapping the buildings in four categories of risk: extreme, high, medium, and low. This risk map is currently being updated in light of the changed and improved situation (see chapter 6.a).

**CONDITION OF ARCHITECTURAL ELEMENTS AND SURFACES**

In general, architectural elements and fittings such as door and window frames in Mosul alabaster, wooden doors and windows and decorated surfaces (i.e. ceilings, paintings on walls, etc.) still present in the Citadel are in relatively good conditions and less exposed to deterioration now that the site is under full control and management. The HCECR is conducting a detailed inventory and survey of these elements, based on which specific guidelines for their conservation and restoration will be developed soon.
CONDITION OF THE CITADEL’S URBAN LANDSCAPE

The changes to which the historic urban landscape of the Citadel has been subject have been explained in 2.a, which highlights the fact that the overall urban form has been maintained intact while some loss have affected the urban fabric, especially due to the demolition of some buildings along the north-south axis to connect the north and south gates.

Apart from this and other losses due to demolitions under the previous regime, the historic fabric of building blocks with built fabric surrounding courtyards and distributed by a network of small alleyways, lanes and cul-de-sac has been preserved. The interiors of the courtyards with tarmas, arcades, surrounding rooms for family and guest, service spaces and trees, which are a key feature of the historic urban fabric, are well preserved and still convey the sense of place and perception of the private and semi-public use.

CONDITION OF THE CITADEL SETTING

As explained in 2.a, the setting of the Citadel mound in the lower city consist of the historic districts of Khanaqa, Taajeel and Arab, located mainly around the southern gate, and the later administration district to the north. These areas currently feature some problems of visual pollution, especially connected with the communication towers and some high building.
The city authorities are fully aware of the need to improve the situation and to enhance the potential Outstanding Universal Value of the Citadel as well as to rearrange its setting, in order to improve interconnectivity between the upper and the lower parts of the historic town and to safeguard also the urban and architectural heritage of the lower city. There are concrete plans to relocate government offices and other public buildings just outside the Citadel’s north gate and to transform the area in a cultural park, whose eastern side will be flanked by the new Kurdistan National Museum (see also the next section).

The Urban Design Guidelines for the Buffer Zone of Erbil Citadel, recently developed and approved by Erbil Governorate (2011) with the participation of the HCECR, demonstrate that local authorities also understand the importance of safeguarding the diffused heritage of the lower city while, at the same time, protecting the character of the Citadel by controlling and guiding the development in the surrounding areas. The inventory of heritage buildings of the lower city has been prepared, to complement the inventory of the historic building on the Citadel. It has resulted in the identification and classification of 161 buildings in the three historic districts at the foot of the Citadel and their inclusion in a geodatabase.

A two-level protective zone has been determined around the Citadel: Buffer Zone A, a special protection area delimited by the second ring-road and which incorporates the historic districts at south; and Buffer Zone B, delimited by the third ring-road and including the Choli Minaret to the southwest. These two buffer zones are also meant to enhance the integration and connectivity between the Citadel and the surrounding districts, while enhancing the view toward the tell from the lower city and vice versa. The Urban Design Guidelines provide regulations on the building heights and propose design parameters and prescriptions for the preservation of the streetscape in order to protect the view onto and from the Citadel.
4.b • FACTORS AFFECTING THE PROPERTY

(i) DEVELOPMENT PRESSURES

The Citadel has been protected from the threat of modern development by its location and great height, which have isolated it from the lower city and from modern commercial pressures.

All buildings in Erbil Citadel are governmental property. This is a positive fact for the safeguarding of the site against the risk of pressure by private market-oriented investors who may be attracted to invest in the Citadel for inappropriate development projects (i.e. big scale hotels and commercial centres), should the site become, besides a cultural resource, also an attractive business opportunity for Erbil.

Based on the conservation and rehabilitation policies included in the Management Plan, the HCECR is developing, in collaboration with UNESCO, detailed guidelines and codes of practices on the basis of best practice and direct experience derived from the interventions that are currently being conducted, to ensure high quality intervention in line with international standards and to address the potential risk of inappropriate intervention.

The surroundings of Erbil Citadel are subject to the sort of developmental pressures that any urban area undergoing a fast economic growth and transformation is faced with. Erbil is a city which offers economic business opportunities to both national and international investors. The perimeter of the modern city is expanding, and high-rise buildings are generally being constructed far away from the Citadel.

This risk is fully considered (and relevant solutions addressed) by city planning authorities and a ‘Citadel-sensitive’ development approach is being pursued. The city centre surrounding the Citadel was the target of a specific study within the frame of the preparation of the Erbil City Master Plan (2007-8). The prescriptions adopted by this document have been later reviewed and further restricted by the Urban Design Guidelines for the Buffer Zone of Erbil Citadel (see 5.d).

These Guidelines are now being revised in a bid to facilitate and speed up their implementation. The authorities responsible for town planning at the Erbil Governorate are sensitive to the importance of safeguarding the Citadel’s setting and a Licensing Committee and Monitoring Committee (in which the HCECR is represented) for the Buffer Zone are following the matter up. The Guidelines provide detailed instructions on the type of intervention (for buildings, street layout, street furniture, signage, etc.) for each area of the Buffer Zone, as well as specific design parameters.

Moreover, the northern part of the town just outside the Citadel (al-Mustawfi district), which currently accommodates mostly administrative buildings, is going to be redesigned for conversion into an urban cultural park, and an architectural competition for a new Citadel Park is being announced. This plan has a two-fold objective: on the one hand will reduce encroachment
and partly retrieve the previous relationships between the Citadel and the external open areas towards north and, on the other hand, will host cultural activities such as the new Kurdistan National Museum, thus creating synergies with the Citadel revitalization.

(ii) ENVIRONMENTAL PRESSURES

No relevant environmental pressures are considered a risk factor for the architecture and urban fabric of Erbil Citadel. The city of Erbil has pollution issues mostly due to car traffic, but their effect on the Citadel (soot deposits, blackening of surfaces, acid deposits) have not been measured since they are not visible and, if present, are negligible. HCECR also supervises cleaning and garbage collection. A study on providing an efficient garbage collection system is recommended by the Erbil Citadel Management Plan, in preparation of an increase in the number of permanent residents.

(iii) NATURAL DISASTERS AND RISK PREPAREDNESS

The stability of the slope and the potential for earthquakes are the two major reasons of natural disaster-related risk and concern for the safeguard of the Citadel.

Regarding the stability of the slope, as explained in 4.a, this factor of vulnerability and cause of structural deterioration of the buildings has been extensively studied and solutions for the stabilisation have been proposed.

Concerning seismic risk, Erbil’s zone is between 7 and 8 grade of the modified Mercalli scale, corresponding to “few to many masonry buildings being damaged and isolated to few building collapsing” respectively for each of the grades. Seismic hazard is generally considered to be of moderate intensity, but it is taken into consideration in the design of structural consolidation.

Structural studies conducted by the Conservation and Rehabilitation Master Plan detected patterns and partial collapses observed on site that would be explained as caused by dynamic actions, rather than just decay of materials and effects of slope settlements. To address this potential risk, a specific strategic axis of the Erbil Citadel Management Plan (Aim 2: Conservation, Documentation and Maintenance) is devoted to Endangered Buildings and Risk Mitigation and foresees the preparation of a Risk Map, based on the results of the studies underway, mitigation measures and a risk-preparedness strategy.

(iv) RESPONSIBLE VISITATION AT WORLD HERITAGE SITES

TOURISM IN IRAQ

Tourism in Iraq is growing rapidly. The number of tourists in the Kurdistan Region and in the remainder of Iraq is approximately equal. Tourism in the Kurdistan Region showed strong growth in 2011, with tourist arrivals increasing from 1.3 to 1.7 million compared to the previous year. Tourists in the Kurdistan Region fall into four categories; the tourism statistics for 2011 do not distinguish between Iraqi and foreign tourists, so the brief analysis below is based on the 2010 statistics, which are more detailed.
Nomination of Erbil Citadel to the World Heritage List

4.22 Tourists on the Citadel (HCECR, 2012)

4.23 Tourists and visitors strolling along the main road on the Citadel (HCECR, 2012)

4.24 Rug making (Women’s Livelihood Project) in the Citadel’s textile centre (HCECR, 2010)
TOURISTS FROM THE KURDISTAN REGION

Local tourists visit the principal cultural sites such as Erbil Citadel and make one-day visits to natural sites, beauty spots and cultural sites. The 2010 statistics record 329,536 tourists within the Kurdistan Region, making 25% of the total. This figure may be too low, however, as many local tourists will have gone unrecorded. The highest numbers of local tourists were in June and July and from September to November.

TOURISTS FROM OTHER PROVINCES IN IRAQ

National tourism from other provinces in Iraq is a sector which showed particularly strong growth in 2011, with hotels full at the busiest season. The 2010 statistics record 789,760 visitors from other provinces, making 60% of the total. Particularly important for tourism in Kurdistan is the fact that the largest number of tourists in this category arrived in July, at a time of year which is too hot to attract tourists from other markets.

TOURISTS FROM IRAN AND TURKEY

Iranian tourists arrive in large numbers by road at one of the two principal border crossings at Nawroz and during the principal religious holidays. There are regular bus services from both Erbil and Sulaymaniyah to Iran. For Sulaymaniyah and Duhok governorates, the 2010 tourism statistics record a peak in foreign tourist arrivals in March, coinciding with the Nawroz holiday. In Erbil Governorate the highest number was in September and October and foreign tourist arrivals are more evenly spread throughout the year, reflecting Erbil’s importance as a business centre.

Another market which has shown recent growth is the increasing number of Turkish tourists, who arrive by road from a single border crossing in the north. Kurdistan is yet to establish itself as a tourism destination in Turkey and Turkish citizens who come to Kurdistan at present are linked to the large Turkish business community – it is estimated, for example, that there are 20,000 Turkish nationals resident in Erbil.

INTERNATIONAL TOURISTS

International tourists are arriving in increasing numbers; the 2010 statistics do not distinguish between Iranian tourists and those from other parts of the world and record a total of 71,938 – approximately 15% of the total. International tourism potentially provides one of the highest growth areas and one with the highest economic value. During the previous regime, Iraq had an established place in the market for cultural tourism, but the culture of the Kurdistan Region was not systematically promoted and cultural tourism therefore never reached its potential. Cultural tourism targeting international tourists offers considerable potential.

Before 1990, the Kurdistan Region was also the focus for resort tourism from the Gulf and Saudi Arabia. Such tourists typically arrived by car. The security situation in southern Iraq has, in the short term, destroyed this tourism market, but it will undoubtedly revive when the security situation improves. Kurdistan is in a good position to take over from Syria as one of the main destinations
for Arab tourists from Saudi Arabia and the Gulf, as the current political situation in Syria has destroyed the tourism industry there, at least in the short term.

**TOURISM IN THE CITADEL**

For the time being, the number of visitors is not a source of worry for the carrying capacities of the Citadel. However, this number seems to be visibly increasing and the site receives already tens of thousands of visitors a year. There is few visitor data collection, regarding the past two years, as full statistics are not available yet. Visitor counting made by HCECR during working hours allows estimating the number of visitors between 2,500 and 3,000 per month. Regular guard service is provided at both north and south gates, to limit vehicular access (allowed only to authorised persons and vehicles), to check pedestrian visitors at the entrance and to keep an eye on their circulation within the Citadel, for safety reasons.

Many visitors come within organized groups (e.g. schoolchildren, students, tourists, etc.), others with official foreign or local delegations, some gathered in small relatives’ or friends’ groups. Single and very small groups may wander around but the great majority of the visitors concentrate on the access north-south axis, focusing their sightseeing on the southern area around the Grand Gate (from which they enjoy the view to the lower town and the bazaar) where the major historic buildings as well as the Kurdish Textile Museum and the souvenir shop are located.

The HCECR is starting to develop tourism facilities, such as a café, and has allocated two buildings to the Women’s Livelihood Project of the Kurdish Textile Museum, which will undoubtedly prove an attraction to tourists, where they will be able to see traditional crafts under production. This activity has started in October 2012.

**POLICIES AND PROGRAMMES FOR TOURISM MANAGEMENT**

At a regional level, the General Board of Tourism of the Kurdistan Regional Government has signed a contract with an international consortium for the formulation of a Tourism Master Plan for the Kurdistan Region, which will be completed in early 2013. The Citadel is the single-most important tourism attraction in the Kurdistan Region and the Tourism Master Plan will take the tourism in relation to the Citadel into detailed consideration.

The main objectives of this Tourism Master Plan are:

- to organize the tourism sector, especially as it concerns cultural resources. Since Erbil Citadel is one of the main attractions in Kurdistan, it is expected that part of this increase in tourism arrivals will also affect the Citadel;

- to increase the number of tourists in Kurdistan from the current 1.75 million (statistics of 2011) to 4 million; the trends of this year are very positive in this sense as 1.15 million tourists visited Kurdistan in the period January-July 2012;
to maximise the tourism-related income, increasing it from the current 600 million USD to 1.5 billion USD in 2015.

The main issue remains the unavailability of mid-priced hotels with international standards, so the private sector is encouraged to invest through the provision of 0% interest loans. Although there is no direct reference to the installation of this type of hotels in historic districts in Kurdistan region, there is obviously an interest of HCECR to monitor the evolution and implementation of this Tourism Master Plan.

The HCECR has started cooperation with the General Board of Tourism in order to plan together the full integration of Citadel-related cultural tourism within the Tourism Master Plan and to address issues of management and responsible visitation to the site.

At the level of the Citadel itself, to address the need for a tourism development and management strategy based on concrete data, the Erbil Citadel Management Plan foresees the initiation of a tourism analysis campaign and the preparation of a Tourism Management Plan, by using an appropriate methodology and a range of tools and in close cooperation with public institutions and private operators. Such plan, to be prepared in close cooperation with tourism-related institutions, is expected to contain:

- assessment of the situation and trends of the tourism market in the Citadel and in Erbil;
- analysis of the Citadel’s tourist carrying capacity;
- feasibility study for hotels and tourist services development;
- feasibility study to network with other tourist destinations in Kurdistan and to create a tourist cluster centred on the Citadel;
- identification of the cultural resources in the Citadel and determination of a related site marketing and branding strategy for tourism development;
- identification of goals, objectives, and strategy for tourism development; and
- determination of an action plan and a monitoring plan with achievement indicators.

The preparation of the Tourism Management Plan is scheduled to start since the first year of implementation and to be completed by the third year.

The potential risk of loss of significance and trivialisation due to excessive tourism development in the Citadel is well known to the HCECR and other stakeholders. For this reason the revitalization strategy and land-use proposal contained in the Erbil Citadel Management Plan pursue the approach of a balanced distribution of three main use components: 1. Residential-related (houses and related services for daily life); 2. Tourism-related (small-scale accommodation and related services); and, 3. Culture-related (museums, cultural offices and businesses, handicraft, etc.).
(v) NUMBER OF INHABITANTS WITHIN THE PROPERTY AND THE BUFFER ZONE

Estimated population located within:

Area of nominated property: There were between 4,000 and 5,000 inhabitants occupying the Citadel until 2006. The rehabilitation plans foresees a number of approximately 1,000 residents living in the Citadel, but services are designed for maximum 4,000 people present at one time between residents, visitors and daily users.

Buffer zone: Approximately 45,000

Total: ca. 45,000

Year: Estimate 2012

1 In-depth Survey and Studies Covering the Structural Condition of the Citadel 2009.

2 The FaMVE (Failure Mechanisms Identification and Vulnerability Evaluation) method is a data collection and numerical tool used to assess the seismic vulnerability of historic buildings at an urban scale. Independently of the size of the sample, the method is based on an accurate analysis of the seismic performance of buildings, focusing on construction features, particularly masonry types and connections between structural elements. In-depth Survey and Studies Covering the Structural Condition of the Citadel 2009, p. 40.
5

PROTECTION AND MANAGEMENT OF THE PROPERTY

5.a OWNERSHIP
5.b PROTECTIVE DESIGNATION
5.c MEANS OF IMPLEMENTING PROTECTIVE MEASURES
5.d EXISTING PLANS RELATED TO MUNICIPALITY AND REGION IN WHICH THE PROPOSED PROPERTY IS LOCATED
5.e PROPERTY MANAGEMENT PLAN OR OTHER MANAGEMENT SYSTEM
5.f SOURCES AND LEVELS OF FINANCE
5.g SOURCES OF EXPERTISE AND TRAINING IN CONSERVATION AND MANAGEMENT TECHNIQUES
5.h VISITOR FACILITIES AND INFRASTRUCTURE
5.i POLICIES AND PROGRAMMES RELATED TO THE PRESENTATION AND PROMOTION OF THE PROPERTY
5.j STAFFING LEVELS AND EXPERTISE
Nomination of Erbil Citadel to the World Heritage List
5.a • OWNERSHIP

Erbil Citadel is in public ownership with buildings and plots registered under various governmental institutions such as the Ministry of Municipalities and Tourism, in addition to the Ministry of Culture, Ministry of Finance and the Governorate of Erbil. Some expropriations procedures are still in the process of completion: this is due to the complex ownership of some properties.

The High Commission for Erbil Citadel Revitalization (HCECR) was mandated in 2007 with the responsibility of preserving the values of the Citadel and implementing a programme of adaptive reuse and revitalization of the Citadel. Its activities and achievements are described in sections 4.a-b, 5.e-j, and 6.a-c of this nomination file.

5.b • PROTECTIVE DESIGNATION

The Citadel has been under national protection since 1937 (Official Gazette n. 1587, 16 August 1937), according to the provisions of the Law on Antiquities and Heritage of Iraq (Law 59 of 1936 and its two amendments No. 120/1974 and No. 164/1975). Moreover, the official adoption of the Management Plan prepared in 2012 further strengthens the protection of the Citadel as a cultural heritage site. The **Erbil Citadel Management Plan**, which is described in detail in 5.e (its **Executive Summary** is in Annex 2 and the full document will accompany this nomination dossier) provides a comprehensive strategy for the protection and rehabilitation of the site, including recommendations for the strengthening of the role of the HCECR as the sole managerial and supervisory body for all conservation and development activities on site.

As mentioned earlier (3.1.e), a buffer zone was established in 2011 by Erbil Governorate with UNESCO’s assistance, in close cooperation with Erbil Municipality and the HCECR. The **Urban Design Guidelines for the Buffer Zone of Erbil Citadel** (2011) support the statutory protection of the Citadel with complementary regulations for the setting and surrounding areas. The Buffer Zone encompasses an area of about 268 ha surrounding the Citadel. It includes the area between the first ring-road around the Citadel (Sharaway Road / Qalat Street) and the 30-Metre Road (Barzani Namr St.), including the area surrounding Minaret Park. The Buffer Zone is subdivided in two subzones:

- Buffer Zone A comprises the area immediately surrounding the Citadel (between Qalat Street and the second ring-road), extended southward to include also the historic district of Taajeel. This subzone is subjected to a higher level of prescriptions, given the fact that a large number of historic buildings are present in the area, including the ancient bazaar and a number of public and religious buildings. Prescriptions are designed to protect the largest number of historic buildings as well as the structure of the ancient lower city.
Buffer Zone B comprises the area between the second ring-road (Muzaffaria Street) and the 30-Metre Road, including the area surrounding Minaret Park to the southwest. This subzone, which includes mostly modern construction, is subjected to a lesser degree of prescription designed to protect the visual corridors towards the Citadel.

The rationale for the definition of the buffer zone boundaries is based on the following criteria:

- to establish an area of controlled development around and in proximity of the Citadel.
- to preserve and consolidate the historic and traditional areas developed as successive expansion of the historic town.
- to preserve the historic urban districts and heritage buildings as well as the historic urban fabric and the traditional character.
- to consolidate those areas where modern urban development maintains a traditional fabric and building typology. These areas are a sort of bridge between historic and modern Erbil.

5.1 Boundaries of buffer zones A and B (from: Erbil Citadel Management Plan, 2012, Map 1)
5.c • MEANS OF IMPLEMENTING PROTECTIVE MEASURES

The Citadel is managed by the High Commission for Erbil Citadel Revitalization (HCECR), a dedicated organ of the Kurdistan Regional Government formed in 2007. The Commission manages all conservation and rehabilitation activities on the Citadel.

The Citadel Management Plan approved in February 2012 also provides recommendations for the issuing of bylaws to facilitate the role of HCECR as the official body in charge of conservation, protection, and site management activities on the Citadel. These bylaws are currently being finalized and will be issued in conjunction with the institutionalization of HCECR as the sole managing body of Erbil Citadel.

The HCECR has established standard procedures for the leasing of buildings on the Citadel. For the time being, all building leasing agreements concern cultural activities, such as foreign institutes or NGOs offices and cultural centres, or the installation of traditional handicraft workshops. In the future leasing will also expand to commercial activities, such as boutique hotels, shops, restaurants and cafes.

The HCECR encourages the participation of other actors in conservation activities. In order to maintain a high conservation standard, guidelines are in preparation with UNESCO’s assistance. Conservation proposals are subjected to an approval process. Once approved and during implementation, regular progress reporting, meetings and active monitoring conducted by HCECR’s architects and engineers guarantee proper supervision and quality control. In addition, a standard format must be followed to request approval for the execution of detailed interventions.

5.d • EXISTING PLANS RELATED TO MUNICIPALITY AND REGION IN WHICH THE PROPOSED PROPERTY IS LOCATED

ERBIL CITY MASTER PLAN

A Master Plan for Erbil City to the year 2030, which was prepared by Dar Al-Handasah, an international engineering consultancy firm, and adopted by the Ministry of Municipalities in 2008, shows the future city as a series of concentric circular and radial roads starting from the Citadel and extending more than 30 kilometres in all directions.

In essence, therefore, this Plan confirms previous development schemes based on axes radiating from the circle of the Citadel and concentric rings. Indeed, the second and third ring roads around the first ring road encompassing the Citadel (Sharaway Road / Qalat Street, built on the site of the previous ditch) were created in the 1940s and ‘50s to accommodate the urban growth.

Such an approach emphasises the physical centrality of the Citadel in the modern development of the city. This centrality, however, did not exist until the end of the Ottoman period. The new urban form acquired with the development of concentric ring roads has reduced the legibility of the historic
districts of the lower city, thus leaving the Citadel as the witness to the historic form of the city.

In the immediate surroundings of the Citadel, the Urban Design Guidelines for the Buffer Zone of Erbil Citadel, are designed to integrate heritage conservation with city development, by providing local authorities with practical guidelines for the safeguarding of the urban context of the Citadel.

**ERBIL CITY CENTRE MASTER PLAN**

In parallel with the general Erbil City Master Plan, a Master Plan for Erbil City Centre was also drawn up by the consulting company Dar Al-Handasah. This special study and Plan was never implemented. The Urban Design Guidelines for the Buffer Zone of Erbil Citadel (described in the next section) have been adopted instead and are under implementation.

The overall goal of the Plan was to promote investments
in the city centre and stimulate greater private sector participation in its development, however its methodology was based on a traditional ‘zoning’ approach, which relied mainly on functional (land-use) indicators, with no distinction between morphology and function. One of the key weaknesses of the Erbil City Centre Master Plan strategy resided in the fact that the Citadel was not considered as the main reference element.

The crucial provisions for the objective “increased development of the City Centre” and for building heights were of particular concern, as the increase in building density foreseen by the Erbil City Centre Master Plan would have altered the visual relationship from and onto the Citadel. Hence, the Urban Design Guidelines for the Buffer Zone of Erbil Citadel replace them with more restrictive criteria: new high-rise developments over four storeys high (15 m) will be located beyond the boundaries of the Buffer Zone. Within the Buffer Zone, height will be limited to four storeys in most radial and ring roads, but further reduced up to two or three floors in some specific cases when the view onto the Citadel could be obstructed. In conservation areas and in the modern residential quarters organised as garden cities and as traditional courtyard compounds the maximum height will be two floors.

If, on the one hand, the main strategy of the Master Plan for the historic districts was to maintain “... the maximum amount of heritage fabric while promoting residential and economic growth at a scale compatible with the heritage experience” (page 19) by identifying a series of conservation areas and a total of 99 heritage buildings to preserve, on the other hand it proposed several alterations to the historic street pattern, widening existing streets and opening new ones. Instead, the Urban Design Guidelines for the Buffer Zone of Erbil Citadel recommend that the historic street pattern should be preserved and that its old function as the main connector between the Citadel and the surrounding built fabric should be reinstated, while also increasing the size of conservation areas and bringing to 161 the number of historic buildings under protection in the lower city.

**Urban Design Guidelines for the Buffer Zone of Erbil Citadel**

The document Urban Design Guidelines for the Buffer Zone of Erbil Citadel is a regulatory tool adopted in June 2011 by Erbil Governorate and is currently in force. It is the main output of the project Management of the Buffer Area of the Erbil Citadel, developed within the frame of a three-party initiative (UNESCO, HCECR and Erbil Governorate) in close cooperation with other stakeholders. The HCECR plays a crucial role as the site manager of the Citadel and is a key actor of the Steering Committee (representing all parties) to supervise the implementation.

The Urban Design Guidelines for the Buffer Zone of Erbil Citadel provide prescriptions for a defined zone surrounding the Erbil Citadel, covering an area of about 268 ha between the first ring-road around the Citadel (Sharaway Road / Qalat St.) and the 30-Metre Road (Barzani Namr St.). The document is not intended as an integral planning instrument but has a supplementary nature aimed to complement and detail the planning framework in force and, in particular, to replace the requirements of the Erbil City Centre Master Plan with stricter heritage-sensitive recommendations.
The Urban Design Guidelines were a fundamental tool for the integration of the safeguard of the Citadel and its context in the development of Erbil central areas and for the coordination of the management approach between the nominated property and the Buffer Zone. Furthermore, they fill a critical gap by providing technical guidelines and practical examples but also administrative measures for the proper management of these areas, to avoid the possibility that an improper development will negatively impact the Citadel.

**CENTRALITY OF THE CITADEL**

A funding principle of the Urban Design Guidelines for the Buffer Zone of Erbil Citadel, which amends the approach of the Erbil City Centre Master Plan, is to reinforce the centrality of the Erbil Citadel as a key cultural and visual reference and to promote the integration between the Citadel and the surrounding built form, through the development of a network of roads and parking areas, by controlling development along main radial roads with views to and from the Citadel, and by encouraging small strategic interventions to introduce tourist and cultural uses in the historic districts at the foot of the Citadel mound, through the following strategies:

1. “Improving the permeability and accessibility to the Citadel from surrounding built form through the development of an integrated network of roads and parking areas. The proposed system will be made up of three elements; first, the radial roads and 2nd ring road as key vehicular access routes to the City Centre; secondly a network of parking spaces (new ones and existing ones) which will restrain the vehicular traffic and act as the interchange among vehicular and pedestrian movement. Thirdly,
the network of historic streets as main connectors from the parking areas to the Citadel and the bazaar:"

- "Reinforcing the directionality of key views onto the Citadel by controlling development along main radial roads to be organised following a continuous buildings line which clearly defines the boundaries between private and public spaces. Strengthening the nodes where a key vehicular road intersects an historic street in order to increase the legibility of the access routes towards the Citadel, bazaar and historic quarters:"

- "Promoting the expansion of the benefits of the Citadel to the surrounding quarters through a series of ‘small’ strategic interventions at local level to introduce tourist and cultural uses in the historic districts and attract visitors and users of the Citadel to these districts:"

**BUFFER ZONE BOUNDARIES**

The analysis of the urban fabric in relation to the Citadel has led to the delimitation of two protection levels, based on criteria explained in 5.b: the first for the area surrounding the Citadel and the second for a wider setting. As already introduced, these sub-buffer zones are:

Buffer Zone A is delimited by the second ring-road (created in the 1940s), with an extension towards the south to ensure that the entire historic city is included. This Buffer Zone contains historic buildings distributed in the three southern districts of Arab, Taajeel and Khanaqa, surrounding the bazaar. These historic districts share some urban and architectural qualities with the Citadel, as they feature a similar traditional street pattern and historic built fabric, with the presence of many one/two-storey courtyard houses in bricks. Moreover, this Buffer Zone is in a close physical relationship with the Citadel and it contains the historical access to it. In consequence, this subzone is subjected to a higher level of prescriptions.

Buffer Zone B is delimited by the third ring-road (created in the 1950s) plus an additional area towards southwest, to include the Minaret Park. This Buffer Zone features mainly commercial and residential buildings. Its relationship with the Citadel is principally visual, through the radial roads crossing the area towards the inner rings and the Citadel. This subzone, which includes mostly modern constructions, is subjected to a lesser degree of prescription which is designed to protect the visual corridors towards the Citadel.

**STRATEGIC FRAMEWORK**

Building on the Master Plan for Erbil City Centre, the Urban Design Guidelines set seven strategic objectives:

1. To promote Kurdish traditional townscape character by building on locally distinct patterns of development and culture.
2. To promote a mix of uses that work together to create vibrant places.
3. To promote the quality of the public realm.
4. To promote routes which facilitate the movement of residents and visitors to the Citadel and within the historic districts.
5. To protect and enhance existing views and perceptions from the buffer zone towards the Citadel and vice versa.

6. To promote development that responds to changing social, technological, economic and market conditions.

7. To develop Erbil as a tourist city retaining existing residents and users and attracting new residents and visitors.

**SCOPE AND OBJECTIVES**

The overall objective of the Urban Design Guidelines is to establish concise criteria to safeguard the character of Erbil Citadel and surrounding historic districts, by controlling and guiding development within an area of protection surrounding the Citadel (the ‘buffer zone’). Specific objectives of the guidelines are:

- to enhance the integration and connectivity between the Citadel and the surrounding districts;
- to produce a clear and easily understandable set of recommendations which will guide the development of different buildings and sites within the buffer zone; and
- to advise on the necessary delivery mechanisms according to the particular characteristics of each area and site.

**PREPARATORY STUDIES**

The formulation of the Urban Design Guidelines is based on preparatory studies.

The most important is the *Inventory of Heritage Buildings and Urban Analysis* (December 2010), which consists in the analysis of the historic built fabric within the buffer zone, resulting in the identification of 161 heritage buildings (using a predefined survey form), and their classification by architectural quality, style, and conditions (see below). The architectural study and inventory is complemented by an urban analysis of the character areas (six areas have been identified) and of the views to and from the Citadel.

**CONTENT OF THE GUIDELINES**

The Urban Design Guidelines for the Buffer Zone of Erbil Citadel contain written prescriptions and guidelines, and graphic documentation. The main report is complemented by a glossary and an example of the documentation required to apply for a building license for rehabilitation works to a traditional courtyard house.

They include an annexed document, *Conservation Handbook for the Buffer Zone of the Erbil Citadel* (February 2011), comprising a structured inventory of the typology and architectural features of the traditional architecture of the historic districts of the Citadel’s buffer zone. The handbook, which is complemented by three practical examples for the adaptive reuse of a courtyard house, is composed by inventory charts, organised in four main categories:

1. Typology of buildings.
2. Traditional materials.
3. Architectural features.
4. External surroundings.
INVENTORY OF HERITAGE BUILDINGS IN THE BUFFER ZONE

Architectural quality of the heritage buildings
- 45 buildings of high architectural quality
- 97 buildings of medium architectural quality
- 4 buildings of low architectural quality
- 6 buildings were not analyzed due to difficult access
- 9 buildings without available data

Architectural style of the heritage buildings
- 6 buildings in the earlier Ottoman style
- 31 buildings in the late Ottoman style
- 102 buildings in the post Ottoman style
- 4 buildings in Vernacular style
- 4 buildings in a Modern architectural style
- 1 building in the International Style
- 13 buildings without available data

General condition of the heritage buildings
- 24 buildings in good state of repair
- 74 buildings in ordinary state of repair
- 38 buildings in bad state of repair
- 12 buildings in ruins
- 13 buildings without available data

[Inventory of Heritage Buildings and Urban Analysis, 2010]
5.6 Historic building in the buffer zone of Erbil Citadel (from: Urban Design Guidelines for the Buffer Zone of Erbil Citadel, 2011)

5.7 Historic building in the buffer zone of Erbil Citadel (from: Urban Design Guidelines for the Buffer Zone of Erbil Citadel, 2011)

5.8 Planning areas of the buffer zone of Erbil Citadel (from: Urban Design Guidelines for the Buffer Zone of Erbil Citadel 2011; drawing 2.2)
The main corpus of the Urban Design Guidelines includes:

• General objectives, policy recommendations and strategies for the buffer zone.

• Technical definitions regarding urban design and building parameters.

• Classification of buildings and sites into different groups (high-quality heritage buildings, heritage buildings, vernacular buildings, vacant land, modern buildings, contrast buildings) and definition of the interventions permitted for two main categories:

  1. **Heritage and Vernacular Buildings:** conservation/restoration, restoration/rehabilitation, reconstruction, and new buildings in historic areas;

  2. **Modern Buildings:** refurbishment, enlargement, new building, harmonisation, and demolition without reconstruction.

• Classification of the land of the buffer zone in seven planning areas and definition of specific guidelines for intervention in each area:

  1. Conservation areas;

  2. Transitional areas;

  3. Remodelling areas;

  4. Urban corridors;

  5. Consolidation and mixed use areas;

  6. New courtyard houses development areas; and

  7. **Regeneration areas.**

• Specific guidelines for open spaces, streetscapes and parking areas.

• Identification and general guidelines for 14 strategic projects, four projects of metropolitan interest and ten projects of local interest. These projects embrace the redevelopment of sites for social/cultural uses, the regeneration of parking spaces, the rehabilitation of streetscape, the regeneration of key-specific sites, among others.

• Streetscape guidance: general recommendations to guide the improvement of the public space within the buffer zone, with special attention to the preservation of the character of the historic streets. Two types of streets are considered: 1. historic streets located mainly in the historic districts; and 2. modern radial streets.

• Assessment of the institutional set-up and recommendations and practical examples for procedures and instruments to facilitate the implementation of the Urban Design Guidelines.

**STATE OF IMPLEMENTATION**

Shortly after the finalisation and endorsement of the Urban Design Guidelines (June 2011), implementation started in July 2011 with the establishment of two committees:

• a Licensing Committee, responsible for reviewing and granting licenses for
buildings in accordance with the regulations of the adopted guidelines; and

- a Monitoring Committee, responsible for monitoring the implementation of prescriptions and recommendations, supervising their application on the ground, and assuring that future development of the city will not negatively impact the Citadel and its nomination on the World Heritage List, nor the surrounding urban heritage.

All relevant stakeholders (HCECR, Erbil Municipality, Department of Antiquities, Erbil General Directorate of Tourism, and other key authorities involved in urban planning) are represented in the committees. The Licensing Committee has an executive role, while the Monitoring Committee is more supervisory.

Implementation is facing some problems which entail negotiations and adjustments, namely:

- accommodating the regulations by the landowners in terms of cost-benefit comparison between the commercial needs and the regulations, especially as the properties are in private ownership;
- persuading the landowners to deal with the new regulations, i.e. building heights, number of storeys, coverage rate, building materials, etc.;
- halting building licenses in some areas, such as regeneration areas, currently under study for design and detailed regulations.

The matter is being addressed through the review of rules and regulations to make them more understandable, the implementation of training courses for the correct interpretation and implementation of the guidelines, the revision and improvement of procedures, taking into consideration UNESCO’s recommendations for the conservation terms of reference.

**OTHER PLANS**

At the municipal/governorate level, there are ideas for the pedestrianisation of the ring-road at the base of the Citadel mound, and the creation of a public transport system to avoid congestion in the nearby street network. The plans are still being drafted and the HCECR will be consulted during all phases of plan development.

A large open area bordering the Citadel to the north and northeast will be developed as a public area, comprising a park, a museum, and subterranean parking. The Governorate building and a number of modern buildings presently used for commercial and industrial activities will be removed in the process, in order to provide public spaces and to open the view over the Citadel façades.
ERBIL CITADEL MANAGEMENT PLAN

The Erbil Citadel Management Plan (2012) (ECMP) was prepared in 2011-12 under the supervision of a steering committee (HCECR, UNESCO), within the frame of Phase II of the UNESCO/HCECR Memorandum of Understanding.

The purpose of the Erbil Citadel Management Plan is to conserve and protect the site from incompatible development, while allowing its revitalization based on a mixed-use strategy in which cultural activities are considered a priority.

The ECMP was developed on the bases of extensive studies and analyses conducted in previous years on the urban fabric and individual buildings on the Citadel (see below, a summary of the Conservation and Rehabilitation Master Plan), through consultations with a wide range of stakeholders, and through the identification and analysis of the fundamental values which define the significance of Erbil Citadel. These values have been identified in its history, archaeological potential, architectural significance, urban setting, scientific and aesthetic elements, as well as in its social, iconic, symbolic, educational, and economic aspects.

Erbil Citadel, as it should be expected from a site that was primarily a living place, does not hold only values that can be defined ‘scientific’, but also (and for some aspects primarily) ‘social’, to the point that these characteristics are clearly reflected in the statement of significance and the vision for the revitalization of the Citadel.

In summary, the values that have been identified throughout the planning process are:

- **Historic** (length of occupation, historic events that it has witnessed);
- **Archaeological** (large tell, potential archaeological finds);
- **Architectural** (styles, materials and techniques peculiar to the region);
- **Urban** (form and centrality of the Citadel, influencing urban development);
- **Scientific** (opportunities to advance knowledge on archaeology, architectural history, conservation practice);
- **Social** (a place where people gather to attend religious services or spend leisure time, and with a strong symbolic value for the community);
- **Memory** (a place that people connect to community or family stories);
- **Associative** (a place where people important to the community have lived);
- **Economic** (potential for tourism and leisure activities).

The Plan’s vision statement derives from the statement of significance that was formulated after the process of identification of the site’s values, and in participation with its stakeholders:
Erbil Citadel is a site of international importance due to its unique features and substantial uninterrupted occupation, making it one of the oldest urban settlements in the world. At the national level, it has symbolic and identity value for the people of Kurdistan.

The purpose of the Erbil Citadel Management Plan is to ensure the historic integrity and authenticity of the Citadel, to recognise it as a symbol of the development of human culture and urban civilisation, and to make it the living, dynamic and self-sustaining centre of the modern City of Erbil and the Kurdistan Region of Iraq.

We will revitalize the Citadel using culture and cultural heritage as vectors for development, through research, conservation, rehabilitation, and presentation, making it available to our community and to our guests and ensuring its transmission to the future generations. (Erbil City Management Plan, p. 89)

The plan is articulated in two main sections. The first section covers the first five chapters and provides an historical overview, a detailed description of the site, and an updated assessment of the site’s administrative and physical conditions at the time the study was conducted.

The second section, articulated in two chapters, presents the policies, strategic axes, and actions for achieving the objective of revitalizing Erbil Citadel in accordance with the indications of doctrinal texts and international best practices.

5.11 Priority intervention areas on the Citadel (from: Erbil Citadel Management Plan, 2012; Map 14)
Policies and strategic axes are articulated around 8 aims:

1. **Research and excavation**
2. **Conservation, documentation and maintenance**
3. **Rehabilitation, reuse and revitalization**
4. **Interpretation and tourism development**
5. **Awareness raising, education and community participation**
6. **Facilities, services and infrastructures**
7. **Legal/institutional framework and capacity building**
8. **Investment, marketing and funding**

The first aim (**Research and Excavation**) is to open the Citadel to major archaeological excavations as a joint venture of foreign and national institutions, informing and involving the public. Site and building analysis, collection of historical documentation from written, iconographic and oral sources, and dendrochronology studies, ongoing since 2008, will continue in order to address protection and conservation decision and to create a Documentation Centre. The centre will develop an advanced archival system incorporating a GIS system to manage the data derived from all previous and newer research. The research programme will include special studies for the potential reconstruction of buildings.

The second aim (**Conservation, Documentation and Maintenance**) is to update and complete the inventory and documentation of historic buildings and other features, as a basis for legal protection and physical maintenance, monitoring and conservation. Activities under this aim include conservation activities planning, preparation of monitoring procedures and schedules, development of technical materials and guidelines to guide interventions in the Citadel and to build capacities of the HCECR’s technical staff and other professionals involved in conservation activities on the Citadel. These guidelines will also provide standards for all teams involved in conservation activities on the Citadel.

The third aim (**Rehabilitation, Reuse and Revitalization**) is to pursue a resettlement and reuse strategy by means of cultural and community initiatives, archaeological research, and tourism and leisure activities which are compatible with the historical nature of the place. Rehabilitation and resettlement efforts include the adaptive reuse of Citadel’s buildings and sensitive new construction where demolitions have occurred, working with the community and other national and international stakeholders to develop an appropriate strategy for the Citadels’ revitalization efforts. New constructions will be appropriate to the context, integrated in the historic urban landscape, and designed according to specific guidelines.

The fourth aim (**Interpretation and Tourism Development**) is to interpret and present the Citadel by means of traditional and new media, to enhance public outreach and increase the opportunities to market the Citadel as a unique tourist and cultural product. Museums and multipurpose cultural institutions are designed to further develop the cultural aspect of the Citadel and increase tourist attractions, but tourism development is considered as only one of the components of a balanced revitalization strategy based on a mixed use approach.

The fifth aim (**Awareness raising, Education and Community participation**) is to develop cultural venues and activities in order to make the local community and the public at large active participants in the conservation efforts. Activities are designed to include programmes of public archaeology, the creation of citizen associations
and their involvement in a number of research, documentation, and other projects concerned with the re-discovery of tangible and intangible aspects of the cultural heritage of the Citadel. This is also to be accomplished through strategic partnerships with NGOs and educational institutions, including universities.

The sixth aim (Facilities, services and infrastructures) is to provide the Citadel with modern facilities and infrastructures, installed under the supervision and monitoring of the HCECR. Specifications for their installation have been prepared in accordance with dedicated guidelines in order to maintain the character and values of the site. Neighbourhood services and facilities are designed to be developed in close cooperation with the private sector and will thus constitute an opportunity to activate the resettlement and to promote investment and creation of small enterprises. This aim also includes specific provisions for access and circulation in the Citadel.

The seventh aim (Legal/institutional framework and capacity building) is designed to strengthen the capacity of the HCECR as the Citadel’s management body in terms of legal, administrative and technical aspects, including a staff structure that will ensure all required professional capacities necessary to sustain the revitalization effort, and financial means adequate to carry out this mission. Capacity building in the field of heritage conservation and management will ensure that the HCECR’s professional and technical staff are able to carry out their duties according to national requirements as stated by the laws and regulations, as well as to internationally accepted standards. The preparation of this nomination file is considered a priority activity under this aim.

The eighth aim (Investment, marketing and funding) is to encourage investment in the Citadel through financial incentives and administrative measures, but closely monitored to avoid activities that are incompatible with the character of the place. Prior to the definition of a strategy for investment promotion, this aim also recommends that studies are undertaken to identify an appropriate marketing approach, funding opportunities and potential donors. Branding is considered a crucial activity, as it should reflect the values and the image of the site and the views of the citizens while attracting the attention of a large segment of constituents.

The plan has a timeframe of five years, with some activities extending up to ten years for completion. The complete Management Plan is annexed to this nomination dossier. Moreover, an updated Implementation Plan is attached in order to show which activities are being implemented.

CONSERVATION AND REHABILITATION MASTER PLAN

The Conservation and Rehabilitation Master Plan was prepared from 2008 to 2011 by a joint venture composed of the Consultancy for Conservation and Development, Huszar Brammah Associates, and Euronet Consulting. This extensive work is one of the outputs of the first phase of the UNESCO/HCECR Erbil Citadel Revitalization Project (see 3.e and 6.c). It is presented in three main sections, a Final Report, its Annexes, and a series of detailed studies based on research, documentation gathering and building analysis. The Master Plan created the main basis for the inventory and classification of the building stock and urban patterns of the Citadel. On the basis of this inventory and associated studies, it has been possible to derive the conservation and management planning activities that are now being undertaken.
5.12 Proposed intervention categories for buildings and areas on Erbil Citadel (from: Erbil Citadel Management Plan, 2012; Map 7)

The Final Report is presented in two main volumes and an annex.

The Annex volume includes the following:

- **Annex A:** Classification and Grading Methodology, describes methods and results of the classification of the buildings based on their location, architectural value, architectural details, authenticity of construction, historical and cultural importance, and age.

- **Annex B:** Interventions on the Basis of Structural Risk, identifies three clusters of perimeter buildings at risk and suggests specific interventions for risk mitigation.

- **Annex C:** Open Space Study, consists in the analysis of 23 open space areas (using a standard evaluation form) resulting from demolitions or collapses that have occurred in the past 40 years, with suggestions for their rehabilitation and integration.

- **Annex D:** Alleyways Case Studies, comprises the analyses of 36 alleyways, based mainly on the comparison of the current views with historic photographs taken from the same angle, with suggestions for the rehabilitation of the streetscape.

- **Annex E:** Development Opportunities, suggests potential adaptive reuse for a number of buildings (over 80 houses and two complete blocks).

- **Annex F:** Block Development Study provides an example of the approach to detailed study, conservation and development of a whole block (block 42), to be done by a private investor under the control of the site management office.

- **Annex G:** Staffing and Budget for Archaeological Excavations, proposes the composition of the archaeological research team and the budget for the main area excavation project.

- **Annex H:** Analysis and Protection of External Views, takes into consideration various views towards the Citadel and insists on the importance of mitigating disturbing elements from these viewsheds, in particular the ones from Minaret Park.

- **Annex I:** Criteria for Applying Strategies for Conservation, determines a series of intervention approaches and categories based on the architectural analysis and conservation conditions, mapping the intervention proposed for each building plot.

This main report is based on a number of detailed studies, namely:

1. **Report on Data Collection** (2008) complemented by an **Addendum** (2008) presents the data collected from various sources: internet, Ottoman archives, publications, previous reports and studies, etc. Other historical documentation reports are included in the other groups of materials (below).

2. **Comprehensive Survey of the Physical Situation of the Citadel**, in four volumes:

   - **Vol. 1 – Assessment report** (2008), contains the results of site assessment and the methodology of building analysis and classification according to a predetermined three-grade system, using a standard inventory form based on a series of parameters: location, architectural value, architectural details, authenticity of construction, historical and cultural importance, and age.
Vol. 2 – Inventory of the Citadel buildings, perimeter blocks (2009), in six parts, presents inventory forms and annexed graphic and photographic documentation of all the graded buildings located on the Citadel perimeter.

Vol. 3 – Inventory of the Citadel buildings, inner blocks (2009), in six parts, presents inventory forms and annexed graphic and photographic documentation of all the graded buildings located on the Citadel inner blocks.


3. In-depth Survey and Studies Covering the Structural Condition of the Citadel, in four volumes:

   Vol. 1 – Technical report (2009), describes the methodology for assessing structural conditions and includes the results of building materials and structural elements analyses, geotechnical investigations, and the assessment of the causes of structural decay.

   Vol. 2 – Inspection forms for In-depth Structural Studies (2009), in two parts, contains the survey forms compiled for the numerical structural analysis.

   Vol. 3 – Inventory of structural conditions (2009), in two parts, one for the perimeter and the other for the inner blocks, contains all the assessment survey forms resulting from the visual inspection of all graded buildings.

   Vol. 4 – Additional data (2009), contains a description of Erbil by James Buckingham (1827) and weather data for the period 2007-9.

4. Architectural Documentation of the Existing Fabric of the Citadel, Buildings and Streets, in 4 volumes:

   Vol. 1 – Studies (2009), contains several studies and conservation recommendations: an analysis of the evolution of the urban form of the Citadel, a study on the form and function of the alleyways, a classification of the architectural elements, an analysis of the building technology, a study on conservation materials, and a study on the causes of deterioration of the building fabric.


   Vol. 3 – Historical documentation (2009), presents the references to Erbil in classical sources.

   Vol. 4 - Block studies (2011), is a detailed analysis of each block within the Citadel, each building within the block, and the phasing of each wall within a building.

More details on the Annexes to the Conservation and Rehabilitation Master Plan are presented in 6.c below.
5.f • SOURCES AND LEVELS OF FINANCE

Financial assistance for the revitalization of the Citadel and the administrative functioning of the HCECR derives from the Kurdistan Regional Government (KRG), according to the following figures:

**2008-2011:** 4,239,282 USD from the KRG (including 1,475,000 USD allocated for Phase I of UNESCO/HCECR Erbil Citadel Revitalization Project)

**2010-2013:** 12,920,340 USD from the KRG (Phase II of UNESCO/HCECR Erbil Citadel Revitalization Project)

**2011-2012:** 120,000 USD for running costs from the KRG

**2012:** 2,560,000 USD from Erbil Governorate

**2013:** planned allocations from Erbil Governorate:
- 6,000,000 USD for Infrastructure Services of Erbil Citadel.
- 9,890,000 USD for studies and execution of conservation, restoration, rehabilitation and maintenance works for Erbil Citadel buildings.

Running costs: 12,000 USD/month (144,000 USD per year) – Allocated by the Ministry of Finance, Kurdistan Region.

Moreover, specific agreements with cultural delegations of various countries include provisions for the rehabilitation of buildings allocated to their use. Future conservation works may also include private funding for the development of specific commercial activities, after the approval and under the supervision of HCECR.

5.g • SOURCES OF EXPERTISE AND TRAINING IN CONSERVATION AND MANAGEMENT TECHNIQUES

The HCECR’s professional staff is composed of architects, engineers, archaeologists, and technical experts graduated from Iraqi universities. The HCECR also takes advantage of the services of international professionals as needed.

The HCECR, in cooperation with UNESCO, regularly organizes capacity-building activities for its staff to reinforce their skills and to expose them to new scientific and managerial international experiences. Since 2008 the following activities have been implemented:

**Training in Istanbul for HCECR staff members**
**October-November 2007**

Within the framework of the HCECR-UNESCO MOU/Phase I activities, ICCROM conducted an Architectural Conservation training programme between 18 October and 3 November 2007 in Istanbul.
PROJECTS CONDUCTED IN PARTNERSHIP WITH UNESCO

A. ERBIL CITADEL REVITALIZATION PROJECT

PHASE I
Project Funding: Kurdistan Regional Government
Total Budget: USD 1,475,000.00
Duration: September 2007 - complete

The main objectives of the project were:
- To reinforce local capacities in the field of conservation and restoration techniques;
- To undertake urgent remedial works to prevent further damages;
- To establish a Conservation and Rehabilitation Master Plan.

PHASE II
Project Funding: Kurdistan Regional Government
Total Budget: USD 12,920,340.00
Duration: May 2010 - ongoing

PROJECT OBJECTIVES
The activities of the project fall under the following main objectives:

1. Establishment of clear management and operational procedures that will ensure the sustainable management and conservation of the Citadel of Erbil;
2. Enhancing the capacities of local personnel to ensure their involvement in the management, conservation and rehabilitation of the Citadel;
3. Restoration and rehabilitation of parts of the Citadel as priority zones;
4. Minimizing the further deterioration and instability of structures at the Citadel.

B. MANAGEMENT OF THE BUFFER AREA AT ERBIL CITADEL
(Partnership UNESCO/Erbil Municipality)

Project Funding: Kurdistan Regional Government
Total Budget: USD 340,000
Duration: May 2010 - ongoing

PROJECT OBJECTIVES
To implement a project with the overall aim of establishing clear guidelines and regulations for managing the urban historical city centre of Erbil, assuring that future development of the city would not negatively impact the heritage districts and buildings within its surroundings.
Training and Study tour in Erbil and Turkey for HCECR staff members
June 2008
Within the framework of the HCECR-UNESCO MOU/Phase I activities, UNESCO organized a training programme between 24 May and 23 June 2008 in Erbil, Istanbul and Ankara in the field of conservation and heritage site management for 11 HCECR staff members. The programme included theoretical and onsite training courses in Erbil for three weeks and a study tour in Turkey for one week. The company “Consultancy for Conservation and Development” conducted the training programme.

Study tour in Lebanon for HCECR-UNESCO Steering Committee
September 2008
Within the framework of the HCECR-UNESCO MOU/Phase I activities, UNESCO organized a study tour to Lebanon between 8 and 11 September 2008, in the field of management and conservation of heritage sites for three members of the HCECR accompanied by UNESCO staff.

On-site training in Erbil for HCECR technical staff
February-March 2010
HCECR with the collaboration of UNESCO, contracted two experts in the field of conservation and restoration to conduct a one-month on-site training course on maintenance and restoration techniques of traditional buildings for five architects and 18 local builders in order to enhance the local capacities for monitoring, inspecting, carrying out condition assessment and executing limited and temporary preventive and maintenance works at the Citadel in order to minimize further deterioration and instability of the built structures.

Training courses in Erbil for HCECR architects and engineers
August-December 2010
Within the historic preservation program of The Iraqi Institute for the Conservation of Antiquities and Heritage, four HCECR architects participated in the training courses conducted by the Institute in Erbil between August and December 2010. The training courses covered conservation and preservation principles, decay of materials, architectural documentation, assessment, planning and on-site training.

Study Tour in Turkey for HCECR Board members
October 2010
A study tour in Turkey for six HCECR Board members was conducted on 22-29 October 2010, in order to acquaint them with the management aspects of heritage and historic sites including mainly World Heritage Sites in Istanbul, Ankara, Safranbolu, Beypażari and Cappadocia. The study tour was organized by Baran İnşaat AŞ, the company which was contracted by UNESCO for implementing the project Implementation of Urgent Preventive Works on 4 buildings at Erbil Citadel.

Study Tour in Syria for HCECR staff members
November 2010
Within the framework of the HCECR-UNESCO MOU/Phase II activities, a study tour in Syria was conducted for 14 participants from HCECR technical and administrative staff, between 21 and 28 November 2010. The overall objective of the study tour was exposing the participants to issues related to heritage management, especially with regards to the management of World Heritage Sites and their buffer zones. The sites visited included Damascus, Aleppo, Al-Raqqa and Latakia. The study tour was implemented by Gema Art Group.
Study Tour in France for HCECR architects and engineers
October 2011
Within the framework of the cooperation agreement between HCECR and Ifpo (Institut français du Proche-Orient) a study tour in France for four HCECR architects and engineers, was organized by the Department of Culture of the French Embassy in Iraq from 23 to 29 October 2011. The main objective of the study tour was to reinforce scientific and technical capacities in the field of conservation and management of cultural and architectural heritage by visiting cultural and architectural heritage sites, such as the Louvre Museum in Paris and the World Heritage Sites of Avignon and Arles. The company MB Conservation, specialized in architecture, heritage and archaeology, conducted this study tour.

Training and Study tour in Erbil and Italy for the Buffer Zone Panel
November 2011
Within the framework of the Governorate of Erbil-UNESCO MOU for the Management Plan of the Buffer Area of Erbil Citadel, UNESCO organized a training programme including theoretical training in Erbil between 16 and 20 October 2011, and a study tour to Italy between 20 and 27 November 2011 for the Licensing Committee members in charge of applying the regulations within the management of the buffer area of Erbil Citadel. The Committee consists of the representatives of the related Governmental departments including a HCECR representative. The overall objective was to expose the participants to issues related to the management of World Heritage Sites and their buffer zones. The sites visited included Rome Ferrara and Venice. The Study tour was implemented by ARS Progetti S.p.A., Rome.

Study tour in Poland for HCECR Board members
7 -14 May 2012
Within the framework of the collaboration agreement between the HCECR and the Polish Embassy, a study tour to Poland was organized by the Ministry of Foreign Affairs of the Republic of Poland for four HCECR Board members from 7 to 14 May 2012. The visit was oriented towards the management of historical places and sites, particularly in terms of promotion, interpretation and cultural tourism.
Nomination of Erbil Citadel to the World Heritage List

5.17 The entrance to the textile centre (HCECR, 2012)

5.18 Activity in the textile centre (HCECR, 2012)

5.19 The Yaqoub Agha mansion to be rehabilitated as visitor centre (from: Conservation and Rehabilitation Master Plan, 2011)

5.20 Shihab Chalabi house, now the headquarters of Ifpo Iraq (HCECR, 2011)

5.21 Rehabilitation of the Textile Museum, Erbil Citadel (HCECR, 2012)
Protection and Management of the Property

Capacity-Building Programme
Developed by consultants F. Cristofoli and S. Ricca (2011), within the frame of the UNESCO-HCECR/Phase II activities, provides a training framework aiming to reinforce managerial and technical skills of the HCECR’s personnel. The two-year programme offers training modules for different target groups of professionals (archaeologists, managers, architects, engineers) and practitioners (craftsmen, supervisors, workers) and includes a study-visit programme and detailed terms of reference.

In addition to these activities, the HCECR staff work in close contact with experts implementing conservation activities, foreign missions engaged in conservation and research projects on the Citadel, and with UNESCO staff and experts, thus ensuring that professional growth is also achieved through on-the-job activities and ‘learning by doing’.

5.h • VISITOR FACILITIES AND INFRASTRUCTURE

The Citadel is a site where extensive conservation activities are under implementation, and is open to the public. Some areas are currently restricted for safety reasons. Visitor facilities are being developed and are part of Phase 1 (with a time frame of 2-3 years) of the site management plan implementation programme.

The HCECR is developing a series of visitor and interpretation tools which include:

- Trained Tourist Guides (available on site and receiving further training)
- A Guidebook (in press)
- Interpretative Panels (in preparation)
- A Textile Centre in two historic houses, in which traditional skills are transferred from older to younger craftpersons (implemented in October 2012)
- A proposal for the development of a Visitor Centre located in the existing and partially rebuilt portions of Yaqoub Agha mansion (near the northern Ahmadi Gate)
- The development of a Visitor Route around the Citadel, with stops at predetermined locations where small rest areas and, in some cases, refreshments will be available
- Public toilets / washrooms
- The opening of a café in one of the restored houses along the perimeter wall
- The opening of a small restaurant in one of the restored houses along the perimeter wall
- A charity organization is planning the opening of a small Clinic on the Citadel
- The opening of a Craft Area where craftsmen will be able to work and sell their production
- A Community Centre
- Infrastructure development (including the installation of a new sewerage and drainage system, as well as of an electricity network. This is being implemented by the Municipality of Erbil under HCECR supervision).
Two other initiatives should be mentioned:

Ifpo (Institut français du Proche-Orient) has completed the conservation and rehabilitation of one of the historic buildings in the Saray quarter (house 24/2 – Shihab Chalabi house), which is now used as the Iraq Office of the organization, including classrooms and a space for cultural initiatives.

The Kurdish Textile Museum is a private initiative displaying one of the principal aspects of Kurdish culture. It is housed in building 2/6 (the Hashim Chalabi house), in the south-eastern part of the Citadel, and includes a gift shop. In 2012 comprehensive upgrading and conservation have been undertaken, implemented by the Governorate of Erbil with the support of the German government. This includes the reconstruction as a major display gallery of the upper storey of the north-western façade, demolished in the 1980s, on the basis of historic photographs and existing architectural drawings.

5.i • POLICIES AND PROGRAMMES RELATED TO THE PRESENTATION AND PROMOTION OF THE PROPERTY

Since 2007 and, in a more intensive way, since 2010, the HCECR and other concerned authorities and stakeholders have deployed remarkable efforts to pursue initiatives aiming at the identification, protection, conservation, presentation and transmission to future generations of the cultural heritage values of the Citadel. The contribution of the Kurdistan Regional Government to the development of the ambitious programme implemented in partnership with UNESCO has been crucial.

A milestone for the knowledge of the site and its condition is the already mentioned Conservation and Rehabilitation Master Plan (2011), an initiative that has involved a multidisciplinary team of local and international experts who studied the site for over three years. Identification of the property, with classification and compilation of inventory forms of all the heritage buildings, is one of the major results of this work, which serves as a fundamental tool not only for protection, conservation and management, but also for presentation and promotion.

The research initiated during the preparation of the Master Plan is being continued by the HCECR, including, for example, further historical and archaeological research, archive research (for example on historic photographs) and the architectural documentation of individual historic buildings.

ONGOING PROMOTIONAL ACTIVITIES

Concurrently with the implementation of the activities framed in the Management Plan, many other promotional initiatives are being conducted by HCECR, with the result that the site is becoming more and more the centre of interest and attraction for different groups of visitors (students, scholars, businessmen, official delegations, tourists, etc.) as well as the venue for cul-
5.22 Exhibition in one of the mansions of Erbil Citadel (HCECR, 2011)

Various presentation and promotional activities have been and are being continuously organised in the Citadel. The hammam and the Kurdish Textile Museum have been until recently the only venues available, which have hosted a range of activities: exhibitions (among which the results of the international architectural competition for the redesign of the area along the north-south axis), educational events such as presentation of Citadel related students’ work, etc. It is expected that these events will increase considerably now that other buildings have been rehabilitated and are ready for use to host new initiatives.

Another crucial achievement of the HCECR for site presentation and promotion is the preparation and finalisation of the tourist guidebook, titled **Highlights of Erbil Citadel: a Visitor Guide**, which is currently in press in three languages: Arabic, Kurdish, and English. The document is meant to disseminate information on the site history but also to present, in a simple way, technical description of architectural heritage, by illustrating a sample of notable houses. This activity is part of Aim 4 of the Management Plan: **Interpretation and tourism development**.

Erbil Citadel is frequently visited by schoolchildren and students of Erbil’s schools of different level. Currently, such visits are not...
scheduled on a regular basis and teaching of the site history is not included in the school standard educational programmes. To address the need for a more effective and far-reaching awareness raising, targeting in particular the youngsters, a specific strategic axis is foreseen within the framework of Aim 5 of the Management Plan: **Awareness raising, education and community participation**. One example of outreach to schools was the organisation in 2012 of a painting competition on the Citadel for different ages of school-children.

**POLICIES AND PROGRAMMES**

The policy regarding activities connected with presentation and promotion are summarised in the main policy statements for the two relevant issues: Presentation and promotional activities of these two objectives are organised around seven strategic axes:

- Interpretation and site presentation
- Publication and media
- Tourism development and management
- Educational activities for schoolchildren
- Relationships with universities and colleges
- Community participation and awareness raising
- Communication and cultural activities
The main action foreseen to fulfil these objectives is the development of a comprehensive interpretation and presentation framework to guide future projects. Moreover, the establishment of an interpretation centre in one of the largest and richest houses of the Citadel is among the key priorities. It will be the focal point of the visitor circuit, located approximately half way. An education centre and other activities in cooperation with local schools are also in the plans to develop an integrated strategy for heritage education.

Training visitor guides is another very important objective for site presentation. The production of a Citadel guidebook, which is included in the strategy, has already been completed and will be complemented with other publications and multimedia. ‘Citadel Days’ and ‘Citadel Days’ are also envisaged as an occasion to gather different community target groups and raise awareness on the potential Outstanding Universal Value of the site.

Another important initiative is the creation of an association of ‘Friends of the Citadel’ to facilitate collaboration and exchange of information between the HCECR and the large public. The association will hold periodical meetings and public lectures on topics concerning cultural and social aspects of life on the Citadel and will ensure the participation of the public in programmes of research and documentation.
Promotional activities are intended to target also the scientific community, to share information and to raise interest among scholars. The organisation of an international conference every two to four years on the status of research at the Citadel, from archaeology to modern history and including oral histories and other aspects of intangible heritage, are intended to showcase successful conservation projects and encourage further activities.

Collaboration with academic institutions in Iraq and other countries for archaeological research, especially in the context of the proposed excavations, is intended also as a means for raising awareness of the site significance and disseminating the results of archaeological excavations. A public archaeology programme is also envisaged to ensure that the public is kept informed about the results of the research, and is able to visit the excavation and volunteer in activities under the guidance of professionals.

Promotional activity will seek the large use of most modern media to attract in particular youth, through documentaries and internet resources, including the updating the Citadel’s website. However, more traditional and direct media will be used, such as public meetings to inform the citizens on the progress of the rehabilitation and revitalization project.

Publications and documentaries are also produced to spread awareness about the Citadel. Two publications are in press as of December 2012:

**Highlights of Erbil Citadel; a Visitor Guide** (2012). It is a guidebook to the Citadel with the addition of itineraries to discover the most important elements of the Citadel’s urban environment, as well as a summary of its history.

**Erbil on the Cuneiform Sources: a Catalogue and Historical Assessment** by the KRG’s Ministry of Culture and Youth (2012) assisted by Consultancy for Conservation and Development (J. MacGinnis, University of Cambridge and McDonald Institute for Archaeological Research) in English, Kurdish and Arabic versions. A French translation is also being prepared. It presents historical facts and events illustrated by cuneiform sources conserved in museums and archives. The study analysed about 300 texts dating from c. 2200 BC to 331 BC. They constitute a fundamental basis to inform future archaeological excavations.

For a full illustration of the strategy for presentation and promotion, please consult the annexed Management Plan.
5.j • STAFFING LEVELS AND EXPERTISE

The HCECR’s staff includes professional architects, engineers, and archaeologists trained in Iraqi universities. These universities do not offer courses in conservation, and the capacities of the staff are therefore being built through ongoing training programmes and initiatives, described under 5.g.

Technical staff and specialized workers are employed by the HCECR on a permanent basis. Their existing expertise is increased by their working in contact with local and foreign experts assisting in or supervising various conservation projects on site.

The HCECR plans to sharply increase the number of its staff within the next 5 years and to continue programmes of capacity building and training in order to ensure a high level of expertise for all its areas of activity.
6
MONITORING

6.a KEY INDICATORS FOR MEASURING STATE OF CONSERVATION

6.b ADMINISTRATIVE ARRANGEMENTS FOR MONITORING PROPERTY

6.c RESULTS OF PREVIOUS REPORTING EXERCISES
6.a  •  KEY INDICATORS FOR MEASURING STATE OF CONSERVATION

Since its creation in 2007, the High Commission for Erbil Citadel Revitalization (HCECR) has deployed considerable efforts in establishing its structure and building the capacities of its staff, while at the same time starting site monitoring and daily maintenance activities. The preparation of the Conservation and Rehabilitation Master Plan, which included the international assistance by structural engineers and architects specialising in the structural conservation and repair of historic buildings created the occasion to build monitoring capacities of both professionals and workers.

In 2010 maintenance teams were established and organised and conservation maintenance is gathering pace. Monitoring is conducted through daily visual inspection, which is facilitated by the presence of the HCECR Management Office and operational teams on the site. The building maintenance and monitoring activity conducted so far has consisted principally in checking structures at risk (which have been identified and mapped) and interventions for the safeguarding of buildings, as well as ensuring visitor safety, through:

- shoring and propping roofs and walls;
- dismantling and removing parts added by squatters;
- limited roof repairs, by adjusting the slope, repairing holes, covering deteriorated or collapsed roofs with plastic sheets;
- repairing deteriorated brick walls; and
- site cleaning, by garbage collection, and by clearing out debris from alleyways and open spaces.

6.1 Tell-tale for measuring movement in cracks (from: Conservation and Rehabilitation Master Plan, 2011)
Interventions have been made to 179 houses as of December 2012. For more detailed information on the types of intervention to monitor building state of conservation and to address specific maintenance and conservation issues, see Chapter 4 and the table in Annex 6.

Specific crack monitoring with the installation of tell-tales was conducted in 2008-9 (within the framework of the Conservation and Rehabilitation Master Plan) for the assessment of the structural conditions. This monitoring is being reactivated in connection with the analysis of the slope stability.

An example of the standard sheet prepared for the new crack-monitoring campaign is shown in figure 6.2.

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>PERIODICITY</th>
<th>LOCATION OF RECORDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tell-tales for structural analysis</td>
<td>Nine months in 2008-9</td>
<td>110 perimeter houses</td>
</tr>
<tr>
<td>Tell-tales for structural analysis</td>
<td>Planned to start on January 2013</td>
<td>Perimeter houses</td>
</tr>
</tbody>
</table>

6.2 Sample of a crack-monitoring form developed by HCECR
The HCECR is continuously improving monitoring methodology and is defining a more systematic organisation of this activity as foreseen in Aim 2 – Conservation, documentation and maintenance of the Management Plan. Nevertheless, current monitoring is effective and the HCECR teams are daily improving their capacity and performance. The presence of various international teams conducting condition assessments and studies within the framework of the UNESCO/HCECR Erbil Citadel Revitalization Project ensures high-level technical assistance and training.

6.b • ADMINISTRATIVE ARRANGEMENTS FOR MONITORING PROPERTY

The HCECR is the agency responsible for the monitoring of the state of conservation of the site.

Continuous monitoring and daily maintenance of the site and the buildings is provided by the technical teams of the HCECR Site Management Office, with the advice of other technicians when specific need arises. For overall supervision and monitoring of activities undertaken as well as for decisions concerning new projects, the Office is supported by the HCECR Board of Members.

Currently, the Board of Members functions as a steering committee and meets regularly, as well as when specific issues need being discussed and/or approvals being made. Meetings discuss and take decision on general issues, such as strategies, rehabilitation and conservation projects, building allocation proposals, coordination with other parties, etc.

CONTACT INFORMATION:

Mr. Dara Al-Yaqoobi
Head, HCECR
Erbil Citadel
dalyaqubi@yahoo.com
+964 750 445-0838

Ms. Ranan Khasraw Tawfiq
Site Manager, HCECR
Erbil Citadel
ranan.hcecr@yahoo.com
+964 750 442-0820
6.c • RESULTS OF PREVIOUS REPORTING EXERCISES

STUDIES AND REPORTS UNTIL 2007

The first report on the state of conservation of the Citadel is found in a study produced in 1958, at a time when the inhabitants of the Citadel started to move to the lower city, thus providing important information on this critical phase in the history of the Citadel. Only in 1971 the first study on the revitalization of the Citadel was produced, followed by a series of conservation projects and reports in the decade between 1978 and 1988. Since 2004, in-depth studies and reports are available, also as part of a comprehensive programme for the revitalization of the Citadel. A summary of the main reports prepared since 1958 is presented below.

Ekistic Analysis of the Town of Arbil, by Doxiadis Associates (1958). Doxiadis Associates, a successful Greek consulting firm in the 1950s, was entrusted the preparation of a study on Erbil with a view to the compilation of a master plan for the modern city. Although the target of Doxiadis Associates was the wider modern city rather than the preservation of the Citadel, nevertheless the reports and visual material preserved in the Constantin A. Doxiadis Archive in Athens are a valuable source of information on the Citadel (in the wider context of the whole Erbil) as it existed fifty years ago.

The recognition of the archaeological interest of the Citadel (under national protection since 1937) included in Doxiadis’ report did not prevent losses and demolitions in the 1950s and 60s. The 1970s was a period when the need to preserve urban heritage and to take serious actions became increasingly acknowledged. Studies were initiated by local authorities seeking for technical assistance by national and international consultancy for studying, surveying and assessing the condition of the Citadel, in view of the preparation of rehabilitation and revitalization projects. An important report resulting from this activity was:

Qal’a of Arbil, a feasibility study for the preservation, conservation and revitalization of a historic town, ordered by the Commission of Northern Affairs, to revitalize the Citadel. Developed by Collin Buchanan and Partners and Iraq Consult (1971), it is the earliest study concerned with the Citadel and the nearest in date to the 1960s, when changes to the social structure of the Citadel started. It contains the standard range of data and the approaches to be expected in an urban study, including proposal for the upgrading and rehabilitation of the lanes between the houses.

During the decade between 1978 and 1986 studies, survey drawings and reports were produced in connection with the various works undertaken, ranging from simple repair and restoration to complete reconstruction, under the direction of the High Committee for Erbil Citadel Development, a Baghdad based department affiliated to the State Antiquities Organisation of Iraq (Ministry of Culture and Arts), which was responsible for the site at that time. The reports, conserved at both SBAH and HCECR archives, are simple
documents of few pages each, sometimes including a sketch, describing in a very concise way the works undertaken.

From 1987 to the end of the 1990s the lack of analysis and conservation reports reflects the situation of neglect on the Citadel, with intervention limited to minimal maintenance and repair works, which from 1991 were under the responsibility of the regional Ministry of Municipality in coordination with the Directorate of Antiquities.

The technical documentation regarding the works on individual buildings or groups in the period 1978-2006 is listed below.

<table>
<thead>
<tr>
<th>OBJECT OF INTERVENTION</th>
<th>PERIOD</th>
<th>REPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hammam</td>
<td>1978-84</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>Grand Gate</td>
<td>1979</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 1/3</td>
<td>1981</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 2/2</td>
<td>1979-84</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 2/3</td>
<td>1979-84</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 2/4</td>
<td>1979</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 2/5</td>
<td>1979-83</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 2/6</td>
<td>1979-80</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 3/1</td>
<td>1978-84</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 3/9</td>
<td>1979</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 3/10</td>
<td>1986-87</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 24/1</td>
<td>1978-84</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 24/2</td>
<td>1985-87</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 38/1</td>
<td>1985-87</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 38/2</td>
<td>1985-87</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 38/3</td>
<td>1985-87</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 38/4</td>
<td>1985-87</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>House 58/3</td>
<td>1985-87</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>Reconstruction of perimeter façades</td>
<td>1978-88</td>
<td>HCECR archive</td>
</tr>
<tr>
<td>Construction of retaining walls along the base of perimeter façades</td>
<td>1978-88</td>
<td>HCECR archive</td>
</tr>
</tbody>
</table>
The beginning of the 21st century marks a turning point with regard to national’s and international’s interest in the safeguarding of the Citadel, with the identification of the potential of the Outstanding Universal Value of the site (expressed through its inclusion in Iraq’s Tentative List of World Heritage sites) and an increase in other initiatives. From 2004 onwards, the Kurdistan Regional Government made efforts to raise awareness of the cultural heritage values and of the need to conserve the Citadel, through establishing committees to prepare studies, surveys, condition assessments, etc.

The safeguarding of Erbil Citadel gained international interest thanks to the inscription on the World Monuments Watch (in 2000, 2002, 2004, although this nomination was made by a private British-Iraqi architect, and it was not endorsed by official institutions). Various issues regarding the safeguarding of the site were presented and debated in the international conference Renovation of Hawler (Erbil) Citadel is the preservation of Human Culture which was held on 27-29 March 2004. The proceedings were published, with papers in English, Kurdish and Arabic on a wide range of topics.

All this debate resulted in the recognition that the safeguarding and revitalization of the Citadel demanded a more systematic approach through the establishment of a site management structure and the preparation of a holistic conservation master plan. For this purpose, project proposals including Terms of Reference were put forward by international consultants and UNDP.

Master Plan for the Conservation and Rehabilitation of Erbil Citadel, prepared by K-P Costain in 2004. The document is the technical proposal of a range of services offered by the consulting company within the frame of a prospective consultancy agreement. Among these services are: the establishment of a management structure, various studies, rehabilitation works, training and an overall approach and programme for the compilation of a Master Plan and the rehabilitation of the Citadel. It also includes the proposal for the preparation of the World Heritage nomination.

Study of options for preservation and rehabilitation of Citadel in Erbil, by Gema Art Group a.s. (2006), with the support of the Czech government and of the KRG’s Ministry of Culture. The study was developed by a team of experts from Czech institutions and the Salahaddin University. It covers and reviews the activities of other organisations, provides information on demographic and social issues connected with the population evacuation and resettlement as well as on buildings ownership management. The study recommends a range of actions for setting up an archaeological research programme, for the establishment of a documentation centre on the Citadel and identifies nodal issues for the management. It contains annexes covering planimetric documentation, archaeological training, geophysical measurements, the stability of the tell and the buildings and the stabilisation of masonry.
Assessment report on Erbil Citadel rehabilitation - Preliminary draft by iMed (2007), within the frame of the UNDP mission Provision of Consulting Engineering Services for the Rehabilitation of Erbil Citadel is a relatively short report compared to the others. Nevertheless, it provides some useful information on the background and state of the Citadel, in terms of physical conservation and management issues, just after the evacuation, proposing some recommendations for institutional and capacity development aiming at an improved conservation and management.

STUDIES AND REPORTS 2008 TO PRESENT: ERBIL CITADEL REVITALIZATION PROJECT

The year 2007 is marked by important undertakings. Besides creating the HCECR as site management body, the Kurdistan Regional Government signed two MoUs with UNESCO to develop the ambitious integrated Erbil Citadel Revitalization Project, comprising various studies and plans (in the first place the Conservation and Rehabilitation Master Plan and the Erbil Citadel Management Plan) in addition to physical interventions and training. Within the framework of this Project, which started in 2007 and is ongoing, in-depth analyses and reports on the state of conservation of both the Citadel buildings and the slope have been developed so far, addressing conservation activity (see box below for a list of reports generated so far, and the box in section 3.1.e for a description of the initiative).

Working in a strategic partnership with UNESCO, the HCECR has developed both technical and management capacities and, especially from March 2010, has taken the lead in the comprehensive programme for the conservation and revitalization of the Citadel, through the initiation of new analysis and research programmes on the history and state of conservation of the site, while ensuring continuous maintenance and initiating repair and rehabilitation as well as promotional activities.

The reports concerning specifically the analysis of the state of conservation produced since 2007 are listed in the box. It is to be noted that all studies and reports were carried out in continuous and coordination with the HCECR and UNESCO.
REVITALIZATION OF ERBIL CITADEL - PHASE I

Project: Conservation and Rehabilitation Master Plan
Contractor: Joint Venture between Consultancy for Conservation and Development, Huszar Brammah and Associates, and Euronet Consulting. (This Plan is presented in detail in section 5.e)

Reports:
ACTIVITY 1: DATA COLLECTION

ACTIVITY 2: COMPREHENSIVE SURVEY OF THE PHYSICAL SITUATION OF THE CITADEL
ACTIVITY 3:  **IN-DEPTH SURVEY AND STUDIES COVERING THE STRUCTURAL CONDITION OF THE CITADEL**

- In-depth Survey and Studies Covering the Structural Condition of the Citadel, Vol. 3, Parts 1 and 2: Inventory of structural conditions, 2009.

ACTIVITY 4:  **ARCHITECTURAL DOCUMENTATION OF THE EXISTING FABRIC OF THE CITADEL FINAL SUBMISSION OF 20 BUILDING SURVEYS: 2 DECEMBER 2010.**


ACTIVITY 5:  **CONSERVATION MASTER PLAN**

- Conservation and Rehabilitation Master Plan, Parts 1 and 2, 2011.
- Summary of Conservation and Rehabilitation Master Plan, 2011.

ACTIVITY 6:  **FINAL REPORT AND IMPLEMENTATION ACTION PLAN**
Project: Urgent Preventive Works for 10 Houses
Contractor: The Centre for Conservation of Islamic Architectural Heritage (CIAH)

It contains a geotechnical investigation based on a visual inspection, an analysis on the structural and material causes of decay, a proposal for a pilot study on the conservation of historic brick structures, a heritage assessment on the Citadel, geotechnical recommendations for reconstruction, restoration and structural assessment. Reports include photo documentation, brick surface investigation, environmental investigation, technical report on core samples, geotechnical report and structure report.

Reports:
- Urgent Preventive Works for Houses 6/10, 6/11, 6/12 and 7/1, Erbil Citadel – Kurdistan Iraq, Volume II: Drawings, Specifications and BOQ, August 2009.
- Urgent Preventive Works for Houses 13/1, Erbil Citadel – Kurdistan Iraq, Volume II: Photo Documentation and Reports, August 2009.
- Urgent Preventive Works for Houses 15/3 and 16/1, Erbil Citadel – Kurdistan Iraq, Volume I: Drawings, Specifications and BOQ, August 2009.
- Urgent Preventive Works for Houses 15/3 and 16/1, Erbil Citadel – Kurdistan Iraq, Volume II: Photo Documentation and Reports, August 2009.
Project: Capacity Building
Contractor: ICCROM

Reports and Outputs:
- Training on Architectural Conservation, in Istanbul, Turkey (18 October - 3 November 2007).

Project: Capacity Building
Contractor: Consultancy for Conservation and Development (CCD)

Reports and Outputs:
- Training in Conservation, in Erbil and Istanbul, Turkey (24 May - 23 June 2008).

Project: Capacity Building

Reports and Outputs:
- A study tour was organized to Beirut during the period between 8 and 11 September 2008.
### REVITALIZATION OF ERBIL CITADEL - Phase II

**Project:** Establishment of Procedures for the Management of the Erbil Citadel  
**Contractor:** ARS Progetti S.P.A.

### Reports:
- Erbil Citadel Management Plan and Annexes, January 2012 [See detailed description in 5.e.]
- HCECR Institutionalization, January 2012. (By-law and internal regulations).
- Executive Summary (Management Plan of Erbil Citadel), January 2012.
**Project:** Studies for the Stabilization of the Erbil Citadel Slope and Perimeter Facades

**Contractor:** ARS Progetti S.P.A.

**Reports:**

  
  This report presents the result of the accurate survey using a 3D laser scanner, reproducing graphically the morphology of the slope and of the upper structures with high details and photographic texture quality. This high quality survey constitutes a fundamental document to witness the present condition of the tell.

- Phase B Report: Geotechnical Field Investigation and Laboratory Testing, September 2011, with additional requirements in April 2012.
  
  Phase B has consisted in geognostic investigations, with the execution of boreholes and extraction of disturbed and undisturbed soil sample. A further extension of geognostic investigation was provided for an improved characterisation of the design parameters, focusing on those areas where instability phenomena and erosion were more significant. Moreover, seismic investigation using HVSR and MASH methodology were carried out to estimate earthquake effects. These investigations are able to interpret the local dynamic amplification of the site of interest, and provided a site specific design response spectrum, useful for the structural calculation of the design parameters.

  
  This final report includes the results of soil investigations, expert assessment and previous studies. The gross slope stability as well as superficial slumps has been studied, taking into consideration the adverse impact of seismic activities on the slope and on buildings stability. Possible remedial alternatives to address the root causes of slope decay have been identified, including costs/benefits consideration and practicality of application.
Project: Studies for the Conservation and Rehabilitation of Eight Building Groups at the Erbil Citadel

Contractor: INES Ingenieros Consultores S.L.

The study encompasses eighteen houses selected on the basis of guidelines provided by the Conservation and Rehabilitation Master Plan.

Reports:

- Survey and architectural documentation for the eight building groups, including photographic documentation, December 2011.
- Architectural Study, Analysis and Drawings Illustrating the Building’s History and the Changes that have occurred on it Over Time, April 2012.
- Sampling and Analysis of the Existing Building Materials, January 2012.
- Condition Assessment of the State of Damage and Deterioration of Each Building, February 2012.
- Assessment of the Structural Stability, February 2012.
- Conservation/Restoration Project Group 1, August 2012. (No. 4/7 and 4/10, and includes bill of quantities).
- Conservation/Restoration Project Group 2, August 2012. (No. 6/8 and includes bill of quantities).
- Conservation/Restoration Project Group 3, August 2012. (No. 8/2 and 8/3 and includes bill of quantities).
- Conservation/Restoration Project Group 4, August 2012. (No. 19/4 and includes bill of quantities).
- Conservation/Restoration Project Group 5, August 2012. (No. 20/4 and 21/3 and includes bill of quantities).
- Conservation/Restoration Project Group 6, August 2012. (No. 30/4 and 30/5 and includes bill of quantities).
- Conservation/Restoration Project Group 7, August 2012. (No. 42/1, 42/2 and 42/10 and includes bill of quantities).
- Conservation/Restoration Project Group 8, August 2012. (No. 38/1-4 and 58/3 and includes bill of quantities).
- Technical Specifications, August 2012.
- Report and Damages and Deterioration Patterns and Typical Solutions, August 2012.
Project: Execution of Urgent Preventive Works of Four out of Ten Houses – Erbil Citadel, Iraq – Execution of Works (Houses 15/3, 16/1, 1/2 and 1/3)
Contractor: BARAN INSAAT TURIZM SANAYI ve TİCARET LTD. ŞTİ.
Progress: Project completed, March 2012.

Project: Execution of Urgent Preventive Works of Four Houses – Erbil Citadel, Iraq – Execution of Works (Houses 6/10, 6/11, 13/1 and 17/2)
Contractor: GEMA ART GROUP a.s.
Progress: Project to be completed January 2013.

Project: Assessment of Current Overall Situation and Conservation Needs
Contractor: CRAterre-ENSAG
Reports:
  - Conservation of Erbil Citadel, Iraq – Assessment of the Situation and Recommendations

Project: Training: Organization and Implementation of Study Tours to Syria
Contractor: GEMA ART GROUP a.s.
Reports and Outputs:
  - Study Tour to Syria 21-28 November 2010.

Project: Capacity Building Programme
Consultants: Simone Ricca and François Cristofoli
Reports:
  - Training Programme, March 2011.
  - Study Tours Programme, March 2011.
  - Capacity Building Programme, March 2011 (it consolidates the two above programmes in one report).

MOU: Management of the Buffer Area at Erbil Citadel – Iraq (MOU signed between UNESCO and Governorate of Erbil):
Nomination of Erbil Citadel to the World Heritage List

**Project:** Management of the Buffer Area of the Erbil Citadel  
**Contractor:** ARS Progetti S.P.A.

**Reports and Outputs:**

- Review of City Centre Master Plan, December 2010.
- Development Management for the Buffer zone of Erbil Citadel, February 2011.
- Pilot Projects for the Buffer Zone of Erbil Citadel, March 2011.
- Geodatabase.
- Urban Design Guidelines for the Buffer Zone of Erbil Citadel, June 2011.

---

**Project:** Assessment of current overall situation and conservation needs  
**Contractor:** CRAterre-ENSAG

**Report:**

Project: Technical Assistance for the Implementation of the Buffer Zone Management Plan
Contractor: ARS Progetti S.P.A.

Reports and Outputs:
- Four training workshops in Erbil between October 2011 and January 2012.
- Study tour to Italy for six members of the licensing committee, November 2011.
- Revision and advice on the applications of building licenses and management procedures.

OTHER STUDIES AND REPORTS SINCE 2007

Report on Studies and Investigations for the Reinstatement of the Grand Gate of Erbil Citadel, developed by the HCECR (May 2012) presents the project for the reconstruction of the Grand Gate through the detailed illustration of the historical context, the description of documentation, historical sources and methodology adopted for the study, based upon which a first proposal of architectural and structural drawings is presented.

Study for the Restoration Project of Rashid Agha Diwakhana (B2/2): is a project developed by the Italian Institute for Africa and the Orient (IsIAO) 2010, within HCECR – IsIAO MOU/ KRG – Italian Cooperation Project for Erbil Citadel. The study included the following actions:
1. Detailed documentation of the building and its decoration.
2. Restoration plan of the building, including structural investigations and assessment; architectural design of the restoration.
3. Studies and investigations on decorated surfaces and building materials, and assessment; consequent restoration plan for different surfaces and materials.
4. Structuring all collected data into a relational database and connecting them to GIS (Geographic Information System).

The reports produced within the project are:
1. Historical Report.
3. Project Statement.
Study for Restoration and Rehabilitation Project for Chalabi House (B24/2):
is a project developed by the Institut français du Proche-Orient (Ifpo) in 2010, within HCECR-Ifpo partnership agreement, for establishing an Ifpo research centre in Iraq for archaeology and social sciences at Erbil Citadel House 24/2, in order to develop scientific researches and to implement cultural cooperation actions in the fields of archaeology and social sciences.

The study included the following actions:

- Architectural documentation.
- Prepare a condition assessment study to elaborate a complete mapping of different pathologies affecting the building.
- Propose a technical study for the rehabilitation and restoration of the house.
- Preparing re-use plan of the building.

The reports produced within the project are:

- Documentation.
- Condition Assessment.
- Re-use Plans.
- Technical Drawings and Implementation Phasing.

OTHER ACTIVITIES

Monitoring activities by HCECR also includes preventive and remedial maintenance and emergency interventions. These have been conducted on 179 houses so far, between 2010 and December 2012. The table in Annex 6 summarizes these activities.
7 DOCUMENTATION

7.a PHOTOGRAPHS AND AUDIOVISUAL IMAGE INVENTORY AND AUTHORIZATION FORM

7.b TEXTS RELATING TO PROTECTIVE DESIGNATION, COPIES OF PROPERTY MANAGEMENT PLANS OR DOCUMENTED MANAGEMENT SYSTEMS AND EXTRACTS OF OTHER PLANS RELEVANT TO THE PROPERTY

7.c FORM AND DATE OF MOST RECENT RECORDS OR INVENTORY OF PROPERTY

7.d ADDRESS WHERE INVENTORY, RECORDS AND ARCHIVES ARE HELD

7.e BIBLIOGRAPHY
# 7.a - Photographs and Audiovisual Image Inventory and Authorization Form

<table>
<thead>
<tr>
<th>Id. No</th>
<th>Image thumbnail</th>
<th>Caption</th>
<th>Format (slide/print/video)</th>
<th>Date of Photo (mo/yr)</th>
<th>Photographer/ Director of the video</th>
<th>Copyright owner (if different from Photographer/ Director of video)</th>
<th>Contact details of copyright owner (Name, address, tel/fax, and email)</th>
<th>Non exclusive cession of rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aerial view of the Citadel mound from the northwest</td>
<td>digital photograph</td>
<td>04/2012</td>
<td>WCA Productions</td>
<td>Golden Eagle Global</td>
<td>Hemin Qazi</td>
<td>Golden Eagle Global +964 750 335 3111 <a href="mailto:h.qazi@goldeneagleglobal.com">h.qazi@goldeneagleglobal.com</a></td>
<td>✓</td>
</tr>
<tr>
<td>2</td>
<td>Aerial view of the Citadel mound from the west</td>
<td>digital photograph</td>
<td>01/2008</td>
<td>Jack Pascal</td>
<td></td>
<td></td>
<td>Jack Pascal +1 860 8680439 <a href="mailto:jackpascal2@gmail.com">jackpascal2@gmail.com</a></td>
<td>✓</td>
</tr>
<tr>
<td>3</td>
<td>The Citadel mound from the northwest</td>
<td>digital photograph</td>
<td>08/2011</td>
<td>Gaetano Palumbo</td>
<td></td>
<td>Gaetano Palumbo</td>
<td>+33 6 76216379 <a href="mailto:gaetanopalumbo@hotmail.com">gaetanopalumbo@hotmail.com</a></td>
<td>✓</td>
</tr>
<tr>
<td>4</td>
<td>Citadel mound and the southern perimeter</td>
<td>digital photograph</td>
<td>06/2011</td>
<td>ARS Progetti</td>
<td>UNESCO and HCECR</td>
<td>UNESCO Iraq Office +962 6 5902340 <a href="mailto:iraqoffice@iraq.unesco.org">iraqoffice@iraq.unesco.org</a> HCECR +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Citadel mound and southern perimeter</td>
<td>digital photograph</td>
<td>11/2011</td>
<td>Silvia Cravero</td>
<td></td>
<td>Silvia Cravero</td>
<td>+39 0172 05 43 38 <a href="mailto:s.cravero@archiworld.it">s.cravero@archiworld.it</a></td>
<td>✓</td>
</tr>
<tr>
<td>6</td>
<td>Citadel mound and southeast perimeter</td>
<td>digital photograph</td>
<td>06/2011</td>
<td>ARS Progetti</td>
<td>UNESCO and HCECR</td>
<td>UNESCO Iraq Office +962 6 5902340 <a href="mailto:iraqoffice@iraq.unesco.org">iraqoffice@iraq.unesco.org</a> HCECR +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Citadel mound and buttressed perimeter façades</td>
<td>digital photograph</td>
<td>06/2011</td>
<td>ARS Progetti</td>
<td>UNESCO and HCECR</td>
<td>UNESCO Iraq Office +962 6 5902340 <a href="mailto:iraqoffice@iraq.unesco.org">iraqoffice@iraq.unesco.org</a> HCECR +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Caption</td>
<td>Format</td>
<td>Date of Photo (mo/yr)</td>
<td>Photographer/Director of the video</td>
<td>Copyright owner (if different from Photographer/Director of video)</td>
<td>Contact details of copyright owner (Name, address tel/fax, and email)</td>
<td>Non exclusive cession of rights</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td>--------</td>
<td>-----------------------</td>
<td>-----------------------------------</td>
<td>----------------------------------------------------------------</td>
<td>----------------------------------------------------------------</td>
<td>--------------------------------</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Mound and houses on the northern perimeter</td>
<td>digital photograph</td>
<td>05/2008</td>
<td>HCECR</td>
<td>Dara Al-Yaqoobi HCECR +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Citadel urban form, looking east</td>
<td>digital photograph</td>
<td>07/2012</td>
<td>HCECR</td>
<td>Dara Al-Yaqoobi HCECR +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Citadel urban form, looking southeast</td>
<td>digital photograph</td>
<td>05/2011</td>
<td>HCECR</td>
<td>Dara Al-Yaqoobi HCECR +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Alleyway</td>
<td>digital photograph</td>
<td>12/2012</td>
<td>HCECR</td>
<td>Dara Al-Yaqoobi HCECR +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Alleyway with decorative brickwork</td>
<td>digital photograph</td>
<td>05/2009</td>
<td>Consultancy for Conservation &amp; Development</td>
<td>UNESCO and HCECR</td>
<td>+962 6 5902340 <a href="mailto:iraqoffice@iraq.unesco.org">iraqoffice@iraq.unesco.org</a> +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Curving branch alleyway</td>
<td>digital photograph</td>
<td>12/2012</td>
<td>HCECR</td>
<td>Dara Al-Yaqoobi HCECR +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Alleyway façade with early decorative brickwork</td>
<td>digital photograph</td>
<td>11/2010</td>
<td>Consultancy for Conservation &amp; Development</td>
<td>David Michelmore Consultancy for Conservation +44 1924 277552 <a href="mailto:home@buildingconservationervices.com">home@buildingconservationervices.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Alleyway façade with early decorative brickwork</td>
<td>digital photograph</td>
<td>11/2010</td>
<td>Consultancy for Conservation &amp; Development</td>
<td>UNESCO and HCECR</td>
<td>+962 6 5902340 <a href="mailto:iraqoffice@iraq.unesco.org">iraqoffice@iraq.unesco.org</a> +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Id. No</td>
<td>Image thumbnail</td>
<td>Caption</td>
<td>Format (slide/print/video)</td>
<td>Date of Photo (mo/yr)</td>
<td>Photographer/Director of the video</td>
<td>Copyright owner (if different from Photographer/Director of video)</td>
<td>Contact details of copyright owner (Name, address, tel/fax, and email)</td>
<td>Non-exclusive cession of rights</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>---------</td>
<td>---------------------------</td>
<td>----------------------</td>
<td>----------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>16</td>
<td>Brick construction</td>
<td>digital photograph</td>
<td>08/2011</td>
<td>Gaetano Palumbo</td>
<td>Gaetano Palumbo +33 6 76216379 <a href="mailto:gaetanopalumbo@hotmail.com">gaetanopalumbo@hotmail.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Hammam and minaret of the Great Mosque</td>
<td>digital photograph</td>
<td>11/2011</td>
<td>Silvia Cravero</td>
<td>Silvia Cravero +39 0172 05 43 38 <a href="mailto:s.cravero@archiworld.it">s.cravero@archiworld.it</a>; ✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Doorway to a courtyard</td>
<td>digital photograph</td>
<td>04/2008</td>
<td>HCECR</td>
<td>HCECR +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Doorway to the Rashid Agha diwakhana</td>
<td>digital photograph</td>
<td>05/2008</td>
<td>HCECR</td>
<td>HCECR +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Courtyard, Yaqoob Agha diwakhana</td>
<td>digital photograph</td>
<td>08/2010</td>
<td>Consultancy for Conservation &amp; Development</td>
<td>UNESCO and HCECR UNESCO Iraq Office +962 6 5902340 <a href="mailto:iraqoffice@iraq.unesco.org">iraqoffice@iraq.unesco.org</a> HCECR +964 750 4450838 <a href="mailto:dalyaqubi@yahoo.com">dalyaqubi@yahoo.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Salih Chalabi courtyard in the rain</td>
<td>digital photograph</td>
<td>12/2009</td>
<td>Jessica Johnson</td>
<td>Jessica Johnson +964 750 1992405 <a href="mailto:jessicasjohnson@gmail.com">jessicasjohnson@gmail.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Sheikh Jamil Afandi courtyard</td>
<td>digital photograph</td>
<td>05/2010</td>
<td>Adam Mirani</td>
<td>Adam Mirani +964 750 8883120 <a href="mailto:adam@ngcigroup.com">adam@ngcigroup.com</a></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Abdulra Pasha diwakhana</td>
<td>digital photograph</td>
<td>10/2011</td>
<td>Silvia Cravero</td>
<td>Silvia Cravero +39 0172 05 43 38 <a href="mailto:s.cravero@archiworld.it">s.cravero@archiworld.it</a>; ✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Nomination of Erbil Citadel to the World Heritage List

The copyright owners of the images listed above have given a non-exclusive cession of rights to the HCECR for use in the World Heritage nomination and any subsequent uses by UNESCO in connection with the nomination.

<table>
<thead>
<tr>
<th>Id. No</th>
<th>Image thumbnail</th>
<th>Caption</th>
<th>Format (slide/print/video)</th>
<th>Date of Photo (mo/yr)</th>
<th>Photographer/ Director of the video</th>
<th>Copyright owner (if different from Photographer/ Director of video)</th>
<th>Contact details of copyright owner (Name, address tel/fax, and email)</th>
<th>Non-exclusive cession of rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td><img src="image1.png" alt="Conserved courtyard" /></td>
<td>Conserved courtyard</td>
<td>digital photograph</td>
<td>05/2012</td>
<td>Gaetano Palumbo</td>
<td></td>
<td>Gaetano Palumbo +33 6 76216379 <a href="mailto:gaetanopalumbo@hotmail.com">gaetanopalumbo@hotmail.com</a></td>
<td>✓</td>
</tr>
<tr>
<td>25</td>
<td><img src="image2.png" alt="Side wing of Faiṭah Chalabi courtyard" /></td>
<td>Side wing of Faiṭah Chalabi courtyard</td>
<td>digital photograph</td>
<td>08/2010</td>
<td>Consultancy for Conservation &amp; Development</td>
<td></td>
<td>David Michelmore Consultancy for Conservation +44 1924 277552 <a href="mailto:home@buildingconservationservices.com">home@buildingconservationservices.com</a></td>
<td>✓</td>
</tr>
<tr>
<td>26</td>
<td><img src="image3.png" alt="Early façade with decorative parapet" /></td>
<td>Early façade with decorative parapet</td>
<td>digital photograph</td>
<td>12/2012</td>
<td>HCECR</td>
<td></td>
<td>Dara Al-Yaqoobi HCECR +964 750 4450838 <a href="mailto:dailyaqubi@yahoo.com">dailyaqubi@yahoo.com</a></td>
<td>✓</td>
</tr>
<tr>
<td>27</td>
<td><img src="image4.png" alt="Early decorative brick façade" /></td>
<td>Early decorative brick façade</td>
<td>digital photograph</td>
<td>04/2010</td>
<td>HCECR</td>
<td></td>
<td>Dara Al-Yaqoobi HCECR +964 750 4450838 <a href="mailto:dailyaqubi@yahoo.com">dailyaqubi@yahoo.com</a></td>
<td>✓</td>
</tr>
<tr>
<td>28</td>
<td><img src="image5.png" alt="Group of national tourists" /></td>
<td>Group of national tourists</td>
<td>digital photograph</td>
<td>12/2011</td>
<td>Gaetano Palumbo</td>
<td></td>
<td>Gaetano Palumbo +33 6 76216379 <a href="mailto:gaetanopalumbo@hotmail.com">gaetanopalumbo@hotmail.com</a></td>
<td>✓</td>
</tr>
<tr>
<td>29</td>
<td><img src="image6.png" alt="School visit to the Citadel" /></td>
<td>School visit to the Citadel</td>
<td>digital photograph</td>
<td>04/2012</td>
<td>HCECR</td>
<td></td>
<td>Dara Al-Yaqoobi HCECR +964 750 4450838 <a href="mailto:dailyaqubi@yahoo.com">dailyaqubi@yahoo.com</a></td>
<td>✓</td>
</tr>
<tr>
<td>30</td>
<td><img src="image7.png" alt="Cultural event in a courtyard" /></td>
<td>Cultural event in a courtyard</td>
<td>digital photograph</td>
<td>05/2011</td>
<td>HCECR</td>
<td></td>
<td>Dara Al-Yaqoobi HCECR +964 750 4450838 <a href="mailto:dailyaqubi@yahoo.com">dailyaqubi@yahoo.com</a></td>
<td>✓</td>
</tr>
</tbody>
</table>
7.b • TEXTS RELATING TO PROTECTIVE DESIGNATION, COPIES OF PROPERTY MANAGEMENT PLANS OR DOCUMENTED MANAGEMENT SYSTEMS AND EXTRACTS OF OTHER PLANS RELEVANT TO THE PROPERTY

The Citadel has been under national protection since 1937 (Official Gazette n. 1587, 16 August 1937), according to the provisions of the Law on Antiquities and Heritage of Iraq (Law 59 of 1936 and its two amendments No. 120/1974 and No. 164/1975). The copy of the page of the Official Gazette designating Erbil Citadel as a protected national property is attached here. Please see Annex for the Executive summaries of Erbil Citadel Management Plan, Conservation and Rehabilitation Master Plan, and Urban Design Guidelines for the Buffer Zone of Erbil Citadel.

7.c • FORM AND DATE OF MOST RECENT RECORDS OR INVENTORY OF PROPERTY

Several databases are being developed by HCECR, derived from the extensive work conducted during the preparation of the Conservation and Rehabilitation Master Plan, and still ongoing in the framework of various maintenance and conservation activities. The Annex includes some examples of these inventories.

7.d • ADDRESS WHERE INVENTORY, RECORDS AND ARCHIVES ARE HELD

High Commission for Erbil Citadel Revitalization (HCECR)
Erbil Citadel
Erbil, Kurdistan Region, Iraq
<table>
<thead>
<tr>
<th>Name &amp; Province or Township</th>
<th>Site Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erbil</td>
<td>Erbil Citadel</td>
</tr>
</tbody>
</table>

7.1 Copy of Iraq Gazette No. 1587 (1937) placing Erbil under national protection
7.e • BIBLIOGRAPHY

REFERENCE
Encyclopædia Iranica Online, New York: Columbia University.
http://www.iranicaonline.org/

REPORTS


Erbil Governorate Profile (Factsheet), 2011. Inter-Agency Information and Analysis Unit


Nomination of Erbil Citadel to the World Heritage List


CLASSICAL SOURCES
Diodorus Siculus

Bibliotheca Historica, 17.53-647

Flavius Josephus

Antiquities of the Jews, 20, 2, 1-4, 3

Plutarch

Lives of the Noble Greeks and Romans, Alexander, 31: Camillus, 19; Pompey, 36

ARABIC, SYRIAC, OSMANLI AND PERSIAN SOURCES
Abu al-fida’ Isma’il Ibn ‘ali Ibn Mahmud al-malik al-mu’ayyad ‘Imad ad-din


Anonymous


Anonymous, 1908

Mosul Year Book (in Ottoman Archives, Istanbul)

Astarabadi, Mirza Mehdi Khan


Bar Hebraeus, G.


Ibn Hauqal


Ibn Khallikan


Mĕšīḥā-Zĕḵā


Mösinger, G., 1878

History of Karkā ḍ Bēṯ Selōk. Monumenta Syriaca ex Romanis codicibus collecta, 2, Innsbruck, pp. 63-75
Naqšbandi (an-), ad-Din H., 1989

Qazwi (al-), Abu Yahya Zakariya’ Ibn Muhammad
Athar al-bilad wa-akhbar al-‘ibād, Wüstenfeld, F. (Hrsg.), Göttingen, 1866

Yaqt (al-Hamawi)
Dictionary of Countries, Jacut’s geographisches Wörterbuch aus den Handschriften zu Berlin, Wüstenfeld, F. (Hrsg.), Leipzig, 1866

Yazdi, Sharaf ad-Dīn Ali
The history of Timur-Bec, known by the name of Tamerlain the Great, emperor of the Moguls and Tartars, being a historical journal of his conquests in Asia and Europe . . . Darby, J., translated from the Persian text Zafar-Nam, 2 vols, London, 1723

WESTERN TRAVELOGUES
Buckingham, J.S., 1827
Travels in Mesopotamia, London

Campanile, G. (P.M.), 1818
Storia della Regione del Kurdistan e delle sette di religione ivi esistenti (Histoire du Kurdistan). Études kurdes, N° Hors série I - Avril 2004

Černik, J., 1875
Technische Studien-Expedition Durch Gebiete Des Euphrat Und Tigris Nebst Ein-Und Ausgangs-Routen Durch Nord-Syrien, Gotha

Clément, A., 1866
Excursion dans le Kourdistan Ottoman Méridional de Kerkout a Ravandouz. Le Globe, Journal géographique V, pp. 184-277

Cuinet, V., 1891
La Turquie d’Asie. Géographie administrative, statistique descriptive et raisonnée de l’Asie minore, Paris

Niebuhr, C., 1778
Reisebeschreibung nach Arabien und andem umliegenden Ländern, 2. Copenhagen

Olivier, G.A., 1803
Voyage dans l’empire Othoman, l’Égypte et la Perse, vol. 4. Paris

Rauwolf, L., 1582
Leonharti Rauwolffeni Aigentliche beschreibung der Raiß/ so er vor diser zeit gegen Auffgang in die Morgenländer/ fümemlich Syriam, Iudæam, Arabiam, Mesopotamiam, Babyloniam, Assyriam, Ameniam etc. nicht ohne geringe mühe vnnd grosse gefahr selbs volbracht (...), Lavingen
Nomination of Erbil Citadel to the World Heritage List

Rich, C.J., 1836
*Narrative of a Residence in Koordistan, and on the Site of Ancient Nineveh: with Journal of a Voyage down the Tigris to Bagdad and an Account of a Visit to Shiraiz and Persepolis, Volume 1 & 2, London*

Sestini, D., 1786
*Viaggio da Costantinopoli a Bassora fatto dall’abate Domenico Sestini accademico etrusco, Yverdun*

Soane, E.B., 1912
*To Mesopotamia and Kurdistan in Disguise, New York*

Yousif, E.I., 2009
*Les villes étoiles de la haute Mésopotamie. Édesse, Nisibi, Amida, Mardin, Arbil, Kirkouk, Sulaymaniya, Dohuk, Paris.*

**PUBLICATIONS**

Albenda, P., 1980
An unpublished drawing of Louvre AO 19914 in the British Museum. *Jewish Theological Seminary, 12, pp. 1-8*

Ammann, B., 2006
The town of Amadiya in the Light of European Sources. Presentation at the World Congress of Kurdish Studies (Erbil, 6-9 September 2006).

Anastasio, S. et al., 2012
*La collezione orientale del Museo Archeologico Nazionale di Firenze, Volume I. I materiali di Qasr Shamamuk. Collana di studi mesopotamici 3, Rome*

Axworthy, M., 2007
*The Army of Nader Shah. Iranian Studies, vol. 40, no. 5, pp. 635-46*

Bianca, S., 2000
*Urban Form in the Arab World. Past and Present, Zürich*

Bizzarro, A., 2011
The Graphic Documentation of the Rashid Agha diwan khanah. Cereti and Giunta (eds.), 2011, pp. 13-16

Burns, R., 1998
*Monuments de Syrie. Guide historique, Damascus*

Cerasi, M., 1976
*Lo spazio collettivo della città, Milano*

Cereti, C.G., and Giunta, R., 2011
*Preservation of Cultural Heritage in the Kurdistan Region of Iraq, Istituto Italiano per l’Africa e l’Oriente, Rome*

Cuneo, P., 1986
*Storia dell’urbanistica. Il mondo islamico, Rome-Bari*
Dangle, F., 2004  
La refortification d’Afamiyya - Qal’at al-Mudiq sous le sultanat ayyoubide d’Alep (fin XIIe- mi XIIIe s.). Mesqui, J. et al. (eds.), La fortification au temps de Croisades, PURenne, pp. 189-204

Diba, D. et al., 2001  
La Maison d’Ispahan, Paris

Frankfort, H., 1950  

Fusaro, F., 1984  
La città islamica, Rome-Bari

Garcin, J.-C., 2001  

Gonella, J., 2008  
The Citadel of Aleppo, Geneva

Grosz, K., 1988  
The Archive of the Wullu Family. CNI Publication 5, Copenhagen

Gelin, M., 2007  

Hassan, M.K.R., 1986/87  
The impact of the Citadel on the form of Arbil City. Al-Turath Wal-Hadhara, 8-9

HCECR, (forthcoming)  
Highlights of Erbil Citadel. A Guide, Erbil

Ismail, B.Z., 1986  

Kaptein, N.J.G., 1993  
Muhammad’s Birthday Festival: Early History in the Central Muslim Lands and development in the Muslim West until the 10th/16th century, Leiden

Kennedy, H., 1996  
Kopanias, K. et al., (forthcoming)

Kostof, S., 1991
The City Shaped. Urban Patterns and Meanings through History, London

Kozad, M.A., 2012
The Beginnings of Ancient Kurdistan (c. 2500-1500 BC): a Historical and Cultural Synthesis, Ph.D. Dissertation, Leiden University

Kramers, J. H., 1986

Kubaisy (al), F., 2010
Mosul. The Architectural Conservation in Mosul Old Town – Iraq, CreateSpace

Layard, A.H., 1850
Nineveh and its remains, London

Lissner, J.G., 2000
Adiabene, Jewish Kingdom of Mesopotamia. www.khazaria.com (last visited 2/11/2012)

MacGinnis, J., (forthcoming)
Erbil in the Cuneiform Sources: a Catalogue and Historical Assessment, Erbil

May, T., 1996
Chormaqqan Noyan: The First Mongol Military Governor in the Middle East, Master of Art, Department of Arts in the Department of Central Eurasian Studies, Indiana University

Mühl, S., 2012
Tell: Social and Environmental Space. Hofmann R. et al. (eds.), Proceedings of the International Workshop “Socio-Environmental Dynamics over the Last 12,000 Years: the Creation of Landscapes II” (Kiel, 14th –18th March 2011), Volume 3, Universitätssforforschungen zur prähistorischen Archäologie, Band 207

Neusner, J., 1964

Neusner, J., 1966

Nevling Porter, B., 2004
Ishtar of Nineveh and her Collaborator, Ishtar of Arbela, in the Reign of Assurbanipal. Iraq, Vol. 66, pp. 41-44
Nigro, L., 1999
Yamkhad/Aleppo: Investigating the Second Millennium B.C. Capital of
Northern Syria through Islamic, Byzantine and Classical Town. Petruccioli,
A. et al. (eds.), *Environmental Design: Trails to the East, Essays in Memory of
Paolo Cuneo*, Rome, pp. 46-55

Nigro, L., 2010
Tell es-Sultan/Jericho and the Origins of Urbanization in the Lower Jordan
Valley: Results of Recent Archaeological Researches. Matthiae P. et al.
(eds.), *6 ICAANE. Proceedings of the 6th International Congress of the
Archaeology of the Ancient Near East. 5 May – 10 May 2008*, Sapienza

Nováček, K., 2011
Archaeology of the Town under the Citadel Erbil. Subartu (*Archaeological
Journal of the Kurdistan Region of Iraq*), vol. 4-5, pp. 10-13

Nováček, K., (forthcoming)
Arbil, Iraqi Kurdistan: the “longue durée” of the City According to New
Data. *6 ICAANE. Proceedings of the 8th International Congress of the
Archaeology of the Ancient Near East*, Warsaw

Nováček, K. et al., 2008
Research of the Arbil Citadel, Iraqi Kurdistan, First Season. *Památky
Archeologické* 99, pp. 259-302

Nováček, K. and Ali Muhammad Amin, N., (unpublished)
A Medieval City behind the Assyrian Wall: the Continuity of the Town of Arbil
in Northern Mesopotamia.

Postgate, N., 1972

Reade, J.E., 2002
The Ziggurat and Temples of Nimrud. *Iraq*, Vol. 64, pp. 135-216

Robinson, Chase F., 2004
Empire and Elites after the Muslim Conquest: The Transformation of
Northern Mesopotamia, Cambridge Studies in Islamic Civilisation,
Cambridge

Saatçi, S., 2007
The Urban Fabric and Traditional Houses of Kirkuk. Istanbul

Sarre, F. and Herzfeld, E., 1920
*Archäologische Reise im Euphrat- und Tigris-Gebiet II*, Berlin

Sissakian, V.K. and Fouad, S.F., 2011
The origin of Amadiya Plateau, Dohuk Governorate, North Iraq. *Iraqi

Soof (al), B. A., 1968
Excavations at Tell Qualinj Agha (Erbil), Summer, 1968. Interim Report.
*Sumer*, 1969, vol. 25, no. 1-2, pp. 3-42
Nomination of Erbil Citadel to the World Heritage List

Sourdel D., 1986

Streck M., 1986

Tilia, S.S., 2011
Topographic Survey and Cartography in the Ancient Center of Erbil. Cereti and Giunta (eds.) 2011, pp. 9-12

Ur, J., (forthcoming a)

Ur, J., (forthcoming b)

van Ess, M., 2010
German Institute of Archaeology is locating Ancient Mound of Erbil. Press release on http://www.dainst.org/en/pressrelease/german-archaeologists-have-taken-archaeological-excavations-iraq?ft=all (last visited 22/02/12)
CONTACT INFORMATION OF RESPONSIBLE AUTHORITIES

8.

8.a PrepArer

8.b Official Local Institution/Agency

8.c Other Local Institutions

8.d Official Web Address
8.a • PREPARER

Name: Mr. Dara Al-Yaqoobi  
Title: Head, HCECR  
Address: Erbil Citadel  
City, Province /State, Country: Erbil, Kurdistan Region, Iraq  
Tel: 964 750 445-0838  
E-mail: dalyaqubi@yahoo.com

8.b • OFFICIAL LOCAL INSTITUTION/AGENCY

High Commission for Erbil Citadel Revitalization (HCECR)  
Erbil Citadel  
Erbil, Kurdistan Region, Iraq

8.c • OTHER LOCAL INSTITUTIONS

. The Iraqi Institute for the Conservation of Antiquities and Heritage (IICAH)  
Address: Qalat Street, in front of Ministry of Health, Erbil, Iraq  
Contact: Mr. Abdullah Khorsheed, IICAH Director  
E-mail: i.institutec.a.h@gmail.com  
Tel: +964 750 448-4148, +964 770 448-4148

. The Kurdish Textile Museum (Non Governmental Organization)  
Address: Saray District, Erbil Citadel, Erbil, Iraq  
Contact: Mr. Lolan Sepan, Museum Director  
E-mail: info@kurdishtextilemuseum.com  
Tel: +964 750 451-4125

. Institut français du Proche-Orient (Ifpo)  
Address: Saray District, Erbil Citadel, Erbil, Iraq  
Contact: Mr. Hosham Dawod, Ifpo-Erbil Director  
E-mail: dawod.hosham@gmail.com

8.d • OFFICIAL WEB ADDRESS

http://www.erbilcitadel.org

Contact name: Mr. Dara Al-Yaqoobi  
E-mail: dalyaqubi@yahoo.com
SIGNATURE ON BEHALF OF THE STATE PARTY
Dalal Najimaldin Nomanoglu
Deputy Permanent Delegate of Iraq to UNESCO
Nomination of Erbil Citadel to the World Heritage List
No: 13234  
Date: 19 December 2012

To /World Heritage Centre  
Subject/Erbil Citadel Nomination File

Greetings...  
Find Enclosed Erbil Citadel File for nomination on the World Heritage List.  
For your kind consideration with much appreciation.

Attachment:  
Erbil Citadel Nomination File

Dr. Amira Aidan Aldhahab  
Iraq Representative at the World Heritage Committee

Copy to  
- Ministry of Tourism and Antiquities /Office of the Minister  
- National Committee for Education, Culture and Science (NATCOM).  
- Department of Museums/Office of the Director General.  
- Department of Museums /Filing.
Credits for the full-page images:
Executive Summary, page viii-ix: Ars Progetti, 2011
Executive Summary, page x: HCECR, 2007
Chapter 1, page 2-3: G. Palumbo, 2011
Chapter 1, page 4: HCECR, 2011
Chapter 2, page 10-11: ARS Progetti, 2011
Chapter 2, page 12: Consultancy for Conservation and Development, 2010
Chapter 3, page 80: HCECR, 2007
Chapter 4, page 118-119: G. Palumbo, 2012
Chapter 4, page 120: A. Mirani, 2010
Chapter 5, page 150: S. Cravero, 2011
Chapter 6, page 182-183: A. Mirani, 2010
Chapter 6, page 184: HCECR, 2009
Chapter 7, page 204-205: Consultancy for Conservation and Development, 2010
Chapter 7, page 206: A. Mirani, 2010
Chapter 8, page 222-223: Consultancy for Conservation and Development, 2010
Chapter 8, page 224: HCECR, 2011
Chapter 9, page 226-227: S. Cravero, 2011
Chapter 9, page 228: A. Mirani, 2010