
The cultural sites of Al Ain (United Arab Emirates) No 1343

Official name as proposed by the State Party

The Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas)

Location

Abu Dhabi

Regions and districts of: Al Ain Central District, Al Jimi, Al Mutaredh, Al Mutawa'a, Al Muwaiji, Al Qattara, Bidaa Bint Saud, Falaj Hazza, Hili, Jebel Hafit, Sanaiya and Shiab Al Ashkar

United Arab Emirates

Brief description

The various sites of Al Ain and its neighbouring region provide testimony to very ancient sedentary human occupation in a desert region. Occupied continuously since the Neolithic, the region presents vestiges of numerous protohistoric cultures, notably from the Bronze Age and the Iron Age. Very diverse in nature, these testimonies include circular stone tombs, wells and partially underground *afraj* irrigation systems, mud brick constructions designated for a range of social and economic purposes and, lastly, the characteristic landscape of oases. This expertise in construction and water management enabled the early development of oases and their agricultural use for five millennia, up until the present day.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, it is a serial nomination of seventeen *groups of buildings*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008), paragraph 47, it is also a *cultural landscape*.

1 Basic data

Included in the Tentative List

5 February 2008

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

11 January 2010

Background

This is a new nomination.

Consultations

ICOMOS consulted its International Scientific Committees on Archaeological Heritage Management and on Cultural Landscapes, and several independent experts.

Literature consulted (selection)

Al-Jabir Al-Sabah, S., *Les Émirats du Golfe, histoire d'un peuple*, Paris, 1980.

Cleuziou, S., "French Archaeological Mission, 1st mission...", *Archaeology in the United Arab Emirates*, vol I, 1977.

Cleuziou, S., et al., *Essays on the late prehistory of the Arabian peninsula*, Rome, 2002.

Méry, S., *Fine Wadi Suq Ware from Hili and Shimal Sites (United Arab Emirates): A Technological and Provenience Analysis*, 1987.

Said Al-Jahwari, N., "The agricultural basis of Umm an-Nar society in the northern Oman peninsula (2500–2000 BC)", *Arabian Archaeology and Epigraphy*, 20-2, 2009.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 11 to 16 October 2010.

Additional information requested and received from the State Party

Additional information was requested from the State Party on 27 September 2010, concerning:

- Justification for the serial approach;
- The list of monuments inscribed in the inventory of the Abu Dhabi Authority for Culture and Heritage (ADACH);
- The ratification of the Law for the Protection, Conservation, Management and Promotion of the Cultural Heritage of the Emirate of Abu Dhabi;
- The various conservation projects in progress.

The State Party replied on 9 November 2010 with an additional documentation file. The analysis of this documentation is included in the present report.

Date of ICOMOS approval of this report

10 March 2011

2 The property

Description

Al Ain Oasis, formerly called Buraimi, means "spring" in Arabic. Today, it is one of the largest urban centres in the United Arab Emirates. Located close to the border with Oman, the property is near Jebel Hafit. It includes various archaeological, architectural, hydraulic, urban and landscape testimonies. The seventeen ensembles that make up the serial form four main groups, each of which is

characteristic of a period and/or dominant cultural or landscape theme. Even so, elements from different periods may lie close to each other at a given site.

Group1: The Hafit Ensemble

The oldest regional archaeological remains are found around Jebel Hafit, in the form of traces of human settlements and flint tools dating from the Neolithic. In the heart of a desert region, the Jebel forms in itself a spectacular landscape fringed by a red sand desert and opening onto the green vegetation of the oasis.

Dating from the early Bronze Age (3200 – 2700 BC), built vestiges remain in the form of the circular tombs of the Hafit culture. In particular, they are found to the east and north of the Jebel. Built out of large stones, they are structures measuring six to eight metres in diameter, with a thick external wall and a central raised tumulus in the form of a cairn, typical of the Hafit culture. They may be as high as, or even exceed, three to four metres. The funerary chamber had an internal diameter of two to three metres and could contain several bodies. There are few artefacts or bones, as the tombs were generally visited or even reused at later periods. These tombs are the oldest-known stone monuments on the Arabian Peninsula.

1.1 Jebel Hafit Desert Park (site 001) is at the base of the Jebel of the same name; its eastern flank is around 20 kilometres south of Al Ain Oasis. It contains the largest number of Hafit culture necropolises, with 122 tombs identified in an area of over two square kilometres.

Mezyad Fort sits within the park boundaries close to the border. This large mud brick military construction dates from the 19th century and was restored at the end of the 20th century.

This funerary ensemble includes other tombs, along the same line running up the mountain flank to the north, towards Al Ain Oasis. These include the following:

1.2 The tombs to the north of Hafit Jebel (site 002) near Wadi Tarabat.

1.3 The tombs in Al Ain Wildlife Park (site 003) form an intermediate group between the Jebel and Al Ain oasis.

1.4 The West Ridge Hafit Tombs (site 004) form a group that is an immediate extension of the previous group, within the town.

1.5 Al Naqfa Ridge Tombs (site 005) form the northernmost Hafit property, with the remains of a necropolis bordering on the modern cemetery and overlooking the Al Ain central oasis (see 4.1). It includes the ruins of the former Naqfa Fort.

Group 2: The Hili Ensembles

This is a relatively vast archaeological region, to the north of the current Al Ain city and near Jebel Al Hajar. Its occupation dates from the beginnings of the Bronze Age,

around 3000 BC, and continued through to the end of the Iron Age, around 300 BC. The main Bronze Age remains are located in Hili Archaeological Park and its various surrounding sites. The remains from the Iron Age are found further north.

2.1 The Hili Archaeological Park zone (site 006) comprises a central section, the actual park, and a wide ring-shaped band of open land around its periphery. The park is an enclosed public garden which includes the display of its archaeological remains as well as leisure activities. The following are the main elements:

- Hili 1 archaeological site bears witness to human settlement in the Bronze Age, based on the principle of a well at the centre of a built and fortified ensemble. Vestiges of a mud brick fort, a well, a tower, dwellings and a moat remain.
- Hili 10 comprises the remains of a circular mud brick tower and a well. The pottery found at various levels can be used to establish the site's chronology.
- Tombs E and N: the first is a large circular tomb from the 3rd millennium BC with six internal chambers. It has been restored, notably its external wall. These tombs contain numerous remains of human bones and an array of artefacts, and they have played an important role in the interpretation of the Umm an-Nar culture.

Outside the park, the most notable elements are:

- Hili 8 archaeological site completes the testimonies found at Hili 1 and Hili 10 for the Bronze Age in Al Ain. In particular it reveals the foundations of a vast round tower, surrounded by a moat, which protects a well. It is a mud brick construction with a surface render.
- Hili 14 reveals the remains of a vast 50-meter square building, described as an Iron Age caravansera.
- Hili 15 is nearby; it is the outfall of a *falaj* (underground water collection system, *afaj* in the plural), dating from around 1000 BC. The drain-canal is 450 metres long and is probably the oldest known of this size.
- Hili 17 is an Iron Age human settlement including the remains of several mud brick dwellings.

2.2 Hili 2 (site 007) is an archaeological site to the west of the park. It was a relatively prosperous village in the Iron Age, and some walls are relatively well preserved. It enables an understanding of the habitat, and the finds reflect the development of irrigated agriculture.

2.3 Hili North Tomb A (site 008) is one of the largest tombs characteristic of the Umm an-Nar culture (Late Bronze Age). Utilising large blocks of dressed stone for the circular wall, it has four chambers on two levels. One of these has been found intact; it contained the remains of around twenty bodies and various artefacts, such as pottery, engraved stones in the form of vessels, copper objects and pearls. It bears witness to long-distance trade.

2.4 Hili North Tomb B (site 009) is a nearby tomb, similar in structure to the preceding tomb. Slightly less well preserved, it provides additional testimony to the Umm an-Nar culture.

2.5 Rumeilah Site (site 010) is a rectangular elongated mound measuring around 600 by 100 metres, about three kilometres west of the park. Its excavation has revealed two levels of occupation: the first at the end of the 2nd millennium BC, and the second corresponding to a village of the first millennium BC. A certain number of constructions from this period remain under the mound.

Group 3: Bidaa Bint Saud

Bidaa Bint Saud (site 011) corresponds to a circular outcrop around 25 kilometres north of Al Ain and 14 kilometres from Hili Park.

At the base of the eastern side, the site includes remains from the Early Bronze Age similar to those of the Hafit culture, in the form of circular stone tombs with a central cairn.

Bidaa Bint Saud was also widely occupied during the Iron Age, as demonstrated by large tombs on the outcrop. It was in all likelihood an outpost on the caravan route, on the approach to Al Ain. The tombs adopt a variety of forms, built like those mentioned above with undressed local stone. They are generally circular, with internal walls defining the funerary chambers, but one is square.

To the east of the outcrop lie the remains of a wall and, to the west, the remains of a large mud brick construction. It seems to have been a place for the collective storage of crops and the management of water, as two *afaj* have been discovered nearby along with a well and a large cistern.

Group 4: The oases

There are six Al Ain oases, marking by their presence the main thrust of local development over a lengthy period of history. They form a wide arc open to the east. The oases appeared in the second millennium BC, perhaps even before, in the form of a farm around a well used to irrigate trees, in particular palms, and lower levels of irrigated plants (shrubs and gardens). In particular, they grew with the development of the *afaj*, a system for the collection of underground water, sometimes from considerable distances, providing a permanent and regular source of water. Today, the oases are surrounded by the city and its suburbs, providing simultaneously irrigated date palm gardens and city parks. In addition to their ecological value, they present an important cultural landscape, dating at least from the Iron Age. The crop-growing techniques have changed little, particularly for dates, and they are still provided with water by the *afaj*.

The oases also have numerous specific built testimonies, notably around their perimeters. These generally date from the 19th century, sometimes a little earlier. Designed for military purposes, they are forts, watchtowers and

fortified houses (*murabbas*), used for refuge and storing harvests. There are also markets and mosques.

4.1 Al Ain oasis (site 012) is in the east-central part of the modern city, in the Central District. It is reputed to be the oldest oasis of them all. It is home to dense vegetation and few constructions, the majority being around its perimeter:

- Murab'a Fort is rectangular; it has a three storey tower and a large internal courtyard. Its entrance gate has a roof structure with traditional ceilings. Restored and maintained, it is a good example of the local mud brick construction techniques.
- The fort to the east (Sultan) is associated with the development of the role of the princely Zayed family that reigned over Al Ain and the Abu Dhabi region at the end of the 19th century and early 20th century. It houses the Al Ain National Museum.
- Al Jahili Fort, played a historic role in defending the oasis at the end of the 19th century, similarly to that described above. It retains numerous old architectural elements, notably the round tower which undoubtedly predates the fort. It is an important national historical site which is open to the public; it is also used as an exhibition centre.

4.2 Hili Oasis (site 013) is located north of Al Ain, not far from Hili Archaeological Park. It comprises numerous remains of historical buildings, including:

- Hemad Bin Hadi al Darmaki fortified house located in the centre of the oasis. Today in ruins, it reputedly dates from the early 19th century. It has an enclosure with a large corner tower;
- Two watchtowers are built on artificial mounds: one is square, the other is round.

4.3 Al Jimi Oasis (site 014) is an intermediate oasis in the northern sector, four kilometres from the centre of Al Ain. It has numerous built remains and once belonged to the Al Dhahiri family.

4.4 Al Qattara Oasis (site 015) is close to the above. Its main old buildings are:

- Murayjib constructions belonging to the oldest families of Al Ain, and dating from the early 19th century;
- Qattara Tomb adjacent to the oasis on land associated with an old farm. It does not belong to the Hafit, Hili or Umm an-Nar cultures, as it is rectangular and narrow; it dates rather from the Wadi Suq period of the early second millennium BC.

4.5 Mutaredh Oasis (site 016) is located in the central-west part of Al Ain city. It has various built remains including the house of Sheik Mohammed ben Khalifa. It is an example of a mid-20th century palace in the immediate vicinity of the oasis, of traditional form but built of concrete.

4.6 The small Al Muwaiji Oasis (site 017) to the west of the old city of Al Ain includes Muwaiji Palace, built in mud brick on the remains of an ancient fort. It is a testimony to the history of the Emirate of Abu Dhabi in the 20th century.

Other important testimonies to traditional mud brick architecture are found within the buffer zones and they are protected.

History and development

The oldest archaeological testimonies date from the Neolithic (8000 to 4000 BC). Nomads who raised goats and sheep occupied the Jebel Hafit region, attracted by the presence of springs. Finds, in the form of pottery shards, indicate ties with the pre-Uruk Mesopotamian culture in the 5th millennium BC.

In the early Bronze Age, from the end of the 4th millennium BC, and the start of the early 3rd millennium, people started to become sedentary in the hinterland of Jebel Hafit, especially on the eastern slopes of the Oman Mountains. This produced the round tombs of the Hafit culture, with their single chamber containing several sepulchres; almost 500 tombs of this type have been identified in the Al Ain region. Although relatively rare because of past pillage, funerary offerings have been found in the form of pottery, small bronze objects, engraved stones and fired pottery beads. They reveal extensive sea trade relations with the south and centre of Mesopotamia (sculpted boats). The importance of the region was probably linked to its copper mines (Jebel Hajar, Oman).

At this time, the region had the dual advantage of its subterranean water resources encouraging human settlement and its importance as a strategic relay on the "copper road". This period saw the start of agriculture irrigated from wells, enabling the subsistence of small communities. The wells were developed in the mid- and late- Bronze Age; they were located inside towers and fortified dwellings. The ensemble forms a sprinkling of small oases on the eastern and northern edges of Jebel Hafit, in the current region of the Hili Archaeological Park and the Bidaa Bint Saud outcrop. The excavations, notably of Hili 8, reveal a considerable diversity of plant and tree species cultivated by humans in the Bronze Age, similar to those in a modern-day traditional oasis. Domestic animal breeding went hand-in-hand with this sedentary farming.

The ties with Mesopotamia are evident in the remains in the Hafit tombs and cuneiform tablets from the end of the 3rd millennium BC, found among the artefacts at later archaeological sites. These relate to the Umm an-Nar culture (2500 to 2000 BC), well represented locally and characteristic of the mid and late Bronze Age. The region of the Al Ain oases then played a role as a caravan and trading stage on the route between the Gulf of Oman and the Persian Gulf, as well as for the copper trade. The construction of watchtowers and ramparts to protect the wells is also characteristic of this period, whereas the tradition of circular tombs continued and evolved into

larger monuments with several funerary chambers (Hili Archaeological Park). Umm an-Nar culture represents an initial high point in the region's development.

In the early 1st millennium BC, a major technical development made it possible to alter the scale of human settlements in mountainous desert regions lacking underground water, such as Al Ain. This was the water collection system called *aflaj* (*qanât* in Iran, *foggara* in the Maghreb). These are long, narrow, inclined channels, sometimes dug into the mountain, that allow underground or surface water to drain off and be conveyed under gravity to the foothills and plains. At their outlet, the provision of a constant supply of water enabled the oases to be extended. The word *falaj* (*aflaj* in the plural) refers to a complete irrigation system for a community. It describes both an engineering and social structure for sharing water between all those entitled to it. The result was an increase in communities requiring centralised management, notably for the management of irrigation. This led to a new, hierarchical and regulated society that settled permanently in the region. This period of innovation is characteristic of the Iron Age during the 1st millennium BC, forming a second high point for the region.

The oases appear to have been used continuously throughout the historical periods, from antiquity to the present day. The Islamic period, starting in the 7th century, appears to have witnessed a revival and development of the oases. However, there are no clearly identified historic remains predating the Modern Era. From the end of the 17th century, the political and military tension between the princes of Oman, the Emirates and Arabia led to the construction of mud brick forts and watchtowers.

From the Bronze Age until recently, the local mud brick architecture appears to have developed continuously in the Al Ain oases. It features thick walls with small openings. The roofs are made of date palm timber and palm fronds. This use of mud bricks is specific to the architectural traditions of the hinterland of the Arabian Peninsula. However, there are few examples from all historical periods through to the early 19th century. It remained the main method of construction in Al Ain until the 1960s. At this time, a significant number of vernacular buildings were demolished, coinciding with urban and population growth associated with the arrival of the oil age.

3 Outstanding Universal Value, integrity and authenticity

Comparative analysis

The arguments set out in the comparative analysis in the nomination file are based on the notion of a culture evolving throughout the millennia and a traditional lifestyle that is now disappearing. Also emphasised is the contribution of this to the growth of Arab society, and, lastly, the interactions clearly visible here between three types of societies: nomadic, oasis dwellers and long-distance caravan traders. Because of this there is

particular reference to the neighbouring Archaeological Sites of Bat, Al-Khutm and Al-Ayn (Oman, 1988, criteria (iii) and (iv)), the *Aflaj* Irrigation Systems of Oman (2006, criteria (v)), and the Iranian properties of Bam and its Cultural Landscape (2004, criteria (ii), (iii), (iv) and (v)) and the Shushtar Historical Hydraulic System (2009, criteria (i), (ii) and (v)). The Al Liwa site, in the south of the Abu Dhabi Emirate, is also referred to, but it essentially uses wells for irrigation and its built remains are far less numerous.

The two Omani properties are culturally very close: the first in terms of its habitat zone and necropolises from the 3rd millennium BC; and the second for its *aflaj* irrigation system. For the State Party, the nominated property has a more complete ensemble and spans a longer period as regards the funerary ensembles. Additionally, the Al Ain *aflaj* are considered older, and similar to the first irrigation systems of this type in the world. The Al Ain *aflaj* are also a living hydraulic ensemble, still in use in the oases. This system subsequently spread to the Mediterranean Basin, the Middle East and Central Asia.

The Al Ain palmeral, taken as a whole, is considered comparable to the Palmeral of Elche (Spain, 2000, criteria (ii) and (v)).

Architecturally, the Al Ain forts and watchtowers are judged very representative of a regional style that appeared at the end of the 17th century. It is an adaptation of the local tradition of mud brick construction for military buildings. A comparison is made with Bahla Fort (Oman, 1987, criteria (iv)) and Qasr al Masmak in Riyadh, Saudi Arabia, built at the end of the 19th century. For the State Party, Al Ain therefore forms an exceptionally complete ensemble, spanning more than five thousand years, of cultures that appeared and developed in the desert.

ICOMOS considers that the nominated property provides a broad range of cultural testimonies from very diverse periods and types, relative to successive desert civilisations. Initially, a series of points of view need to be considered.

The wealth of the testimonies appears above all valid for the protohistoric periods of the Bronze and Iron Ages, but the comparative study of the archaeological sites needs to be deepened in the United Arab Emirates, in Oman and across the entire region.

Irrigation following the appearance of the *aflaj* is an important aspect of the property but it remains insufficiently documented, and the assertion *ex abrupto* that it pre-dates all other similar sites is risky. Nearby *aflaj* have already been recognised for their Outstanding Universal Value (Oman). These show strong similarities in their comparable environmental and historical contexts; they also show a complex typology and a high level of integrity, the equivalent of which has not been demonstrated for Al Ain. Reconstruction for successive usage clouds the issue of dating and the origins of the *aflaj* still in use.

Furthermore, the long intermediate period from antiquity to the modern and contemporary eras is poorly represented, or not at all, in firmly dated and identified archaeological and heritage terms. The recently reconstructed forts and palaces, on the edge of or in the oases, were built over remains generally dating from the 19th century. The comparisons with properties from historical periods, of recognised outstanding universal value, are therefore not particularly well founded.

In conclusion, while a comparative study with other properties already inscribed on the World Heritage List has been performed with regard to certain specific points, an overall comparative analysis is difficult to establish and justify because of the diversity of the types of testimony taken into account (archaeology, hydraulic techniques, local architecture, military constructions, landscapes, etc.), as well as the diversity of periods considered (from the early Bronze Age through to the very recent period).

ICOMOS considers that the choice of sites and the components of the serial property form an overly disparate and insufficiently justified ensemble. The comparisons made with the properties already inscribed on the World Heritage List show that they are more coherent ensembles, based on a precise and clearly identified theme. Furthermore, the regional comparisons and those with properties on the Tentative List or with similar values, notably archaeological, have not been developed.

ICOMOS considers that the comparative analysis does not justify consideration of this property for the World Heritage List.

Justification of Outstanding Universal Value

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Al Ain is a cultural site that provides major testimony to the Hafit, Hili and Umm an-Nar protohistoric cultures. In themselves, they have outstanding universal value. This testimony includes, in particular, a vast ensemble of circular tombs in the form of cairns and the agrarian sedentarisation of the first oases using water drawn from wells.
- These cultures continued throughout the millennia, up until the present day, and they have shaped a way of life specific to this part of Arabia. To this end, they have developed unique solutions for adapting to the desert in terms of irrigated agriculture, construction of dwellings, military architecture and funerary mausoleums.
- They invented the *falaj* system to collect underground water, making it possible to irrigate extensive oases, as early as the Iron Age. This led to a social organisation for water management and a defensive system of oasis towers.
- They assimilated cultural influences from the Persian Gulf, the Arabian hinterland, Oman, the Indian Ocean and Ancient Mesopotamia.

- Whilst these cultures gradually adapted to historical changes, maintaining their fundamental values, today they are threatened. Their vestiges, still numerous, significant and sufficiently complete, are expressed within the context of a cultural landscape combining the oases, the desert and mountains.
- Al Ain has always been a major post on the trade route between Oman and the Indian Ocean coast of the Persian Gulf and Mesopotamia.

ICOMOS considers that the justification of the property's value has been insufficiently demonstrated for several of the testimonies presented.

The *afaj* appear to be important elements for establishing several of the property's values, at various periods, but they are not described either as archaeological remains or as hydraulic systems in use.

There are virtually no material testimonies ranging from antiquity to the 18th century, which undermines both the demonstration of the continuity of water supply to the oases and the significance of the cultural landscape.

The analysis of the value of the mud brick constructions is backed by very little documentation and it has been severely undermined by numerous reconstructions in the 1980s.

ICOMOS considers that the serial approach for the property is insufficiently justified by the choice of an excessive and overly disparate number of thematic ensembles, and the excessive number of prehistoric and historical periods. The *leitmotif* of water management in a desert country is too general and insufficiently justified; it is also insufficiently represented by coherent and well-documented ensembles. In its current state, the nomination file is more of an addendum of archaeological, architectural, engineering and landscape elements of a district, at all periods, rather than a dossier built around a central, well-illustrated theme with irrefutable testimonies. The protohistoric elements could fulfil this role, but their regional inventories need to be further explored.

Integrity and authenticity

Integrity

The State Party begins by justifying the choice of the seventeen components forming the property. The concern was to include the remains, buildings and oasis spaces testifying to the property's values in as appropriate and complete a manner possible. Sufficient spaces were also required to express the relations between the elements, notably using cultural landscapes (deserts, mountains and oases). Components of the property are often contained within the modern city, in a living relationship that has been the subject, notably for the Al Ain oasis, of particular attention. These projects concern the articulation between the oasis and its built environment and, more broadly, management of the urbanisation to preserve the visual

relationship between the oasis and the mountains and the desert. An effort to conserve the archaeological remains within their landscape has been made in the Jebel Hafit Desert Park (site 001).

Additionally, and despite urban pressure, the management and conservation of the property are based on a policy aimed at maintaining the integrity of the various components.

ICOMOS considers that the archaeological elements testify to various important protohistoric cultures in the form of many tombs as well as the remains of other constructions (wells, *afaj*, dwellings, defence systems, etc.). A regional archaeological inventory and deeper knowledge of these ensembles would be needed to fully justify their integrity. Their nearby environments form landscapes associated with the desert, mountains and existing oases, but they are at times undermined by the proximity of anachronistic elements linked to contemporary development (theme park, modern constructions, road and hotel infrastructure, etc.). More broadly, the conditions of integrity of the nominated cultural landscapes are not fully met.

Begun in the 1960s, the galloping urbanisation has swept away numerous elements of the traditional built environment. Housing in general and working-class housing in particular have all but disappeared from the periphery of the oases. The urban testimony and landscapes historically associated with the periphery of an oasis have been reduced to the monumental restoration of numerous palaces and mud brick forts, generally dating from the 19th century. Furthermore, these palaces are presented as having a good degree of architectural integrity, notably in the additional documentation sent by the State Party which, in recent restoration projects, demonstrates respect for vernacular techniques.

Lastly, there is no descriptive analysis of the *afaj* and their integrity has not been demonstrated.

ICOMOS considers that the nominated elements form ensembles which are too disparate to be able to qualify the serial as having integrity. The landscapes associated with the seventeen components of the property are numerous, and of unequal meaning and integrity.

Authenticity

The State Party considers that, in the spirit of the Nara Declaration, the components forming the property correspond to a high degree of authenticity, notably in terms of form, design and usage. The various sites represent particularly well the techniques developed by the successive Al Ain cultures and the vernacular architecture of the periods preceding the oil age. Respect for the materials and architectural styles has been a general rule for work on the buildings, especially since the 1980s. A programme to bring work done previously up to this standard is planned.

The shifting of the oasis towards a western perspective has aided conservation of the authentic archaeological, architectural and technical elements, notably those relating to the older Hafit, Hili and Umm an-Nar cultures.

ICOMOS considers that the majority of the monumental tombs from the protohistoric eras were in ruins when discovered by archaeologists in the second half of the 20th century. While there is no doubt as to the authenticity of the sites and associated artefacts, certain tombs, often those considered the most important, have undergone restoration or even substantial reconstruction, notably the Grand Tomb in Hili Archaeological Park, which limits the scope of their authenticity. To be able to fully assess the authenticity of these ensembles, it would be necessary to provide a more complete study of the archaeological sites (detailed maps and surveys) and an analysis of the reconstruction work carried out. Similarly, while the presence of *affaj* in the Iron Age seems finally authenticated, the absence of any documentation about the *affaj* precludes any assessment of their authenticity as a system.

The many restorations of palaces, forts and towers are necessitated by the use of mud bricks which need to be regularly maintained. Depending on when the work was performed and each specific case, respect for the initial architectural authenticity is variable. ICOMOS notes that this point has been insufficiently documented at this stage. Generally, considerable effort has been made to utilise vernacular techniques, using mud brick, palm wood and palm fronds, but there seems to be a significant level of interpretation, notably in restorations done in the 1980s performed primarily with a view to reuse.

The conditions of authenticity in terms of the usage of the oases are indeed very fragile, threatened by agricultural abandonment and the structural lowering of the aquifers exploited by the *affaj*. For the time being, this is offset by the artificial injection of water brought in from the outside. The oases, notably Al Ain, have undergone major restorations of their paths and walls and they have tended to be transformed into public gardens.

ICOMOS considers that the conditions of integrity and authenticity of the property have not been met at this stage.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (iii), (iv) and (v).

Criterion (i): represent a masterpiece of human creative genius;

This criterion is justified by the State Party on the grounds that the Hili complex is one of the oldest irrigation systems using *affaj*, if not the oldest. In particular, it proposes the invention of the *falaj* as early as the Iron Age, as an undeniable element of human creative genius. It is a complex technical achievement with considerable and lasting consequences for the

creation and development of artificial oases. It demanded mastery of numerous scientific and technological elements for the calculation, construction, management and maintenance of an extensive hydraulic system.

While ICOMOS considers that the great value of the *affaj* hydraulic systems is undeniable in its principle as it is in its regional importance for the development of oases, from as early as the protohistoric periods, the property in itself only partially illustrates their birth and early technical development. Moreover, there is a lack of understanding about them and they need to be documented within the context of the property.

ICOMOS considers that this criterion has not been demonstrated at this stage.

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

This criterion is justified by the State Party on the grounds that the property provides a unique and exceptional testimony to the development of the successive cultures of the Bronze Age - Hafit, Hili and Umm an-Nar. They demonstrate sustained human development, reflecting the transition from hunter and nomadic societies to sedentarisation in oases. This socio-technical system is notably amplified by the management of water provided by the *affaj* in the 1st millennium BC, and which continued throughout the historical eras while adapting to new contexts. These various periods also provide unique and diverse archaeological, architectural and urban testimonies, such as the circular tombs, towers, habitat and defence systems built in mud brick, administrative buildings and palaces, etc.

ICOMOS considers that the nominated property provides a diverse ensemble of testimonies to the cultural traditions of successive human groups throughout various protohistoric eras. A better definition of the property and deeper comparative analysis with the region's archaeological sites are needed to demonstrate this criterion. The argument of the continuity of the development of the cultural tradition of oases through to the present day is insufficiently justified in terms of its being a unique or exceptional fact.

ICOMOS considers that this criterion has not been demonstrated at this stage.

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

This criterion is justified by the State Party on the grounds that each element of the property provides one or several exceptional examples of a type of construction, architecture or engineering ensemble, or

landscape, at a given time or period. In particular, this refers to the necropolises composed of circular tombs in the Bronze Age and for various cultures, the *afraj* hydraulic system in the Iron Age, mud brick public and private built ensembles, watchtowers, defence systems around wells at various periods, and palaces and mosques from the Islamic period. The oases provide a cultural landscape illustrative of the development of irrigated agriculture since the early Bronze Age.

ICOMOS considers that the property provides eminent examples of several types of architectural and engineering constructions from various protohistoric periods. The tombs and architectural remains of the Hafit, Hili and Umm an-Nar cultures provide an exceptional illustration of human development in the Bronze Age and the Iron Age on the Arabian Peninsula. The *afraj* system, introduced as early as the 1st millennium BC, is testimony to the management of water to develop artificial oases in desert regions. A better definition of the property and a more detailed analysis of the conditions of integrity and authenticity of these constituent elements are required to demonstrate this criterion.

ICOMOS considers that this criterion has not been demonstrated at this stage.

Criterion (v): be 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;

This criterion is justified by the State Party on the grounds that the Al Ain oases have their roots in Bronze Age and Iron Age cultures. They represent in an outstanding manner a traditional and continuous use of a desert region. Their creation, supply with water and agricultural use required a set of skills and knowledge to sustainably master this interaction between man and one of the most challenging of natural environments. This interaction led to a model of social organisation for the equitable control of resources. Oases are fragile environments, and are today under threat. The fact that they continue to exist intact within modern urban ensembles is a symbol of the life of the past and the ability of the oldest civilisations to cope with the challenges of the desert.

ICOMOS considers that the man-made oases of Al Ain appear to testify, over a very long period of history, to the capacity of the civilisations of the northeast of the Arabian Peninsula, notably in the protohistoric periods, to sustainably and positively master a relationship with the desert environment. They knew how to establish the sustainable exploitation of water resources to create an environment of greenery, life and agricultural resources produced using sophisticated irrigation systems. However, neither the continuous use throughout historical periods, nor the exceptional value of the

testimonies, nor the conditions of integrity and authenticity of the material remains of the cultural landscapes of the oases have been demonstrated.

ICOMOS considers that this criterion has not been demonstrated.

ICOMOS considers that the serial approach is not satisfactory because of the accumulation of testimonies, themes and periods that are too different from each other. A redefinition of the property and a revision of the selection of its constituent elements are required.

ICOMOS does not consider that the criteria and Outstanding Universal Value have been demonstrated at this stage.

4 Factors affecting the property

Development pressures

Urban development has been very present in the immediate vicinity of several elements of the property since the early 1960s. This refers in particular to:

- Urban development around the periphery of Al Ain oasis (site 012);
- The industrial zone south of Al Ain, not far from the property's Group 1 components;
- The construction of motorways and express roads bordering on certain elements of the property, north of Jebel Hafit, for example (group 1);
- Hotel complexes, at times very visible within the landscape (site 001);
- The operation of large quarries and oil exploration infrastructure in the 1970s and 1980s that have left visible traces on the landscape.

Traditional agricultural production in the oases, dates especially, is tending to become much less profitable than in the past, within an otherwise prosperous economy. Two trends have arisen: the temptation to improve crops using non-traditional methods or the replacement of crops and farming with more profitable activities.

Tourism pressures

Al Ain has several large modern hotels, leisure parks and cultural centres, some of which are close to the property's constituent elements or even within their perimeter.

Hili Archaeological Park (site 006) is both a leisure and theme park. Its installations are too close to the archaeological sites and tend to undermine their cultural and environmental context. Plans for a major tourism centre have been announced adjacent to the northern perimeter of Jebel Hafit, near Mezyad Fort.

ICOMOS considers it necessary to provide details and guarantees regarding the visual impact of the projected

tourist complex near Mezyad Fort, in conformity with paragraph 172 of the *Operational Guidelines*, if the property is inscribed.

ICOMOS considers that the use of 4x4 vehicles for off-road excursions is a mode of leisure activity that affects the natural environment and undermines the perception of authenticity of the sites concerned.

The current visitor numbers to the property's sites does not pose any particular problem and could increase significantly in park areas and open-air monuments. The situation is different in the oases where visitors must respect the agricultural work in the various private properties. The wide spaces and the isolation of certain components of the property may leave them open to deterioration and vandalism.

ICOMOS considers that one of the indirect consequences of excessive mass tourism would be increased pressure on the aquifer and would only aggravate the current situation of declining levels.

Environmental pressures

The natural environment is threatened in the eastern part of Jebel Hafit by the increased size of camel and goat herds.

The main air pollution is attributable to urban and periurban automobile traffic, together with airborne dust from soil erosion and wind.

There is a risk of water pollution from various potential sources: excessive fertilizer, lack of wastewater treatment, chemical contamination, etc. ICOMOS considers that this could damage the soil of the oases as they are located on lower ground and collect run-off when it does rain.

Natural disasters

The Al Ain sites are not threatened by any major earthquake, flooding or fire risks.

Impact of climate change

The main risk from climate change is the further drop in the aquifers. This is already a structural trend which for the time being is offset by the injection of additional water into the old *afaj* system from desalination or wastewater treatment.

ICOMOS considers that the main threats to the property are poorly or uncontrolled urban and tourism growth near the sites and sometimes within their perimeter (Mezyad tourism complex), and the fragile aquifer system of the oases.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The surface areas of the various components of the property and the associated buffer zones are listed in the following table:

Site No (group)	Surface area	Buffer zone
001 (1.1)	3,828.52 ha	a = 5,909.92 ha
002 (1.2)	281.84	A
003 (1.3)	65.39	b = 166.93 ha
004 (1.4)	92.86	B
005 (1.5)	0.78	A
006 (2.1)	193.83	c = 518.40
007 (2.2)	1.71	C
008 (2.3)	0.57	C
009 (2.4)	0.12	C
010 (2.5)	5.43	C
011 (3)	112.09	d = 659.20
012 (4.1)	119.78	A
013 (4.2)	63.55	C
014 (4.3)	78.81	e = 274.73
015 (4.4)	64.38	D
016 (4.5)	24.90	f = 43.80
017 (4.6)	10.89	g = 32.48
Totals:	4,945.45 ha	7,605.46 ha

The number of people living within the components of the property is negligible; there are few inhabitants in the historic buildings in the oases.

The total population in the buffer zones is around 78,000, that is 16% of the population of Al Ain.

ICOMOS considers that it is difficult to assess from the dossier, at this stage if all the attributes of the potential outstanding universal value of the property are included in the nominated sites, and thus to make a decision about the appropriateness or otherwise of their boundaries.

ICOMOS considers that the boundaries of the nominated property's sites and the buffer zones need to be reviewed within the context of a new definition of the property. Furthermore, ICOMOS encourages marking out the boundaries of the property sites and buffer zones in open areas.

Ownership

The various property components fall under three different types of ownership. The main two are: ownership by the government of the Emirate of Abu Dhabi for the museums and forts, private ownership for the most part of the oases and other buildings, and the exceptional case of royal ownership of the Muwajji palace and oasis.

For the Emirate-owned components, ownership is exercised by the Abu Dhabi Authority for Culture and Heritage (ADACH).

ICOMOS considers it is necessary to clarify ownership. With regard to land, it is necessary to clarify who owns the parks (for example, Hili Archaeological Park seems to be a municipal property), to what extent the oases are in private ownership and who are these owners, and who own the tombs located outside the parks.

Protection

Legal Protection

The various components of the property are protected by the following texts and regulations:

Nationally:

- Al Ain Oases Law of 2004 which provides guarantees for cultural and heritage conservation;
- Law of 2005 on the Preservation of Palm Oases of Al Ain, forbidding any new construction within the oases and defining the missions of the Abu Dhabi Authority for Culture and Heritage (ADACH).

The Al Ain Town Planning Department, known as G+4, forbids the construction of any new buildings of more than four storeys and a maximum height of 20 metres.

The main historic monuments and archaeological sites within the property and its buffer zones are protected by their inscription on the national inventory managed by ADACH, as indicated in the additional documentation of November 2010.

Authorisations for archaeological excavations are issued by a special department of ADACH, which is also responsible for their protection. A Directive issued by Sheik Zayed Bin Sultan Al Nahyan created a protection zone around Hili Archaeological Park in order to facilitate excavations and conservation of the archaeological remains.

The Municipality of Al Ain and the ADACH's Historic Environment Department provide protection of the desert and steppe regions that are part of the property's cultural landscape.

The Abu Dhabi Environment Agency, in charge of Jebel Hafit Park, limits camel and goat herd numbers to protect the steppe areas of this part of the property. ICOMOS notes that this plan is to be strengthened and extended.

A law is currently under preparation for the protection, conservation, management and promotion of the cultural heritage of the Emirate of Abu Dhabi. It is expected to integrate, extend and coordinate the existing provisions. The additional documentation provided in November 2010 included a copy of the draft law.

A law has been announced to protect the water resources supplying the *afaj*.

Traditional Protection

Water management expertise and practices, farmland irrigation and traditional agriculture by the oasis populations are an important aspect of the property's protection.

Effectiveness of protection measures

ICOMOS considers that the property's protection is provided by numerous sectorial arrangements reflecting the complexity of the property's definition. The State Party will have fully effective protective measures once the new laws on heritage and on the water sources supplying the *afaj* have been passed.

ICOMOS considers that the legal protection in place will be entirely appropriate once the new laws on the protection, conservation, management and promotion of cultural heritage, and the law on the water sources supplying the *afaj*, have been passed.

Conservation

Inventories, recording, research

The list of the national inventory and ADACH's additional thematic lists form a database including a description and documentation specific to each monument. It serves as a diagnostic tool and for the preparation of works programmes for the conservation of the protected components.

The additional documentation provided in November 2010 lists 84 protected buildings and historic sites in the property and its buffer zones.

ICOMOS notes that a new information coordination and management system is planned.

Present state of conservation

The conservation of the Hafit ensemble (group 1) is related to the overall management of the foothill areas of Jebel Hafit, notably to the north and east. This refers both to territorial management and conservation of the landscapes, and to the protection of the archaeological components. Seven tombs have been restored in accordance with their original forms. Two intact tombs remain, many others exist only in a vestigial state.

For the archaeological ensemble of the Hili sites (group 2) and Bidaa Bint Saud (group 3), excavation work is longstanding and well advanced, but it needs to be pursued in several places before any conservation work can be contemplated. It has been necessary to backfill several excavation sites to protect the remains of mud brick walls. Several archaeological sites have been protected with fences since their discovery.

The Hili Archaeological Park (006) and the Bidaa Bint Saud tomb site (011) are fenced.

In the oases and their peripheries (group 4), there has been numerous restoration of forts, palaces and houses, almost all in mud brick, notably in the 1980s. Of the 84 monuments inscribed, 40 have been restored. The initial trend was to encourage reconstruction-restoration of buildings, then in a very poor state or abandoned, in order to make them places of memory, museums and spaces for collective activity, notably around the urban periphery of the oases. This work was announced as being respectful of the heritage, but without the backing of appropriate scientific studies necessary for the restitution of these site's conditions of integrity and authenticity. In the past few years, the policy has been to either carry out far more scrupulous restorations in terms of respect for vernacular traditions, or to no longer perform any work on ruins and to leave them as they are. The latter case raises the problem of unauthorised use by poor immigrant workers. The mud brick walls and paths of the oases have undergone extensive restoration. In addition to their agricultural use, the oases have become pedestrian precincts for the city's inhabitants and visitors. The state of conservation of the *affaj* is not mentioned.

Active Conservation measures

ADACH's Strategic Plan (2009-2013) sets out the conservation priorities and the programme of actions to be implemented for the conservation of the monuments and archaeological sites. Five main projects are underway or planned: Al Jahili Fort, Hemad Bin Hadi al Darmaki House, Mohammed Bin Khalifa House, Sultan Fort and Muwajji Palace. Extensive additional documentation was provided by the State Party in November 2010 regarding these programmes.

ADACH has an emergency works programme for the conservation of monuments.

The conservation of Al Ain oasis is carried out under the Al Ain Oasis Cultural Quarter Master Plan. There are specific programmes for the Qattara and Jimi oases. A restoration plan for six palmerals is in progress.

Any new development project that may potentially have an impact upon the landscape of the historical and archaeological sites requires a preliminary study by ADACH before its submission to the Town Planning Department.

There are various secondary research and/or conservation programmes, sponsored by various scientific or cultural institutions. They are authorised and supervised by ADACH.

ICOMOS considers that it is necessary to develop an overall archaeological programme for the property as part of its Management Plan.

Maintenance

ADACH's Historic Environment Department has a maintenance plan and has two patrols to oversee cleaning

and minor repairs. Both parks have supervisory staff providing similar functions.

Ai Ain Municipality is responsible for maintaining the oasis paths and the public thoroughfares around its periphery. It is also responsible for managing the oasis water through its Water Directorate.

Effectiveness of conservation measures

ICOMOS considers that the current conservation measures are effective and well directed. However, a scientific review of the restoration-reconstruction activities carried out in the 1980s and 1990s needs to be performed, in order to better understand the actual conditions of authenticity of certain built and archaeological components of the property.

It is necessary to consider a similar approach to document the *affaj* and, more broadly, to guarantee their functional conservation by appropriate measures for water resources and their quality. Finally, it is necessary to develop an overarching programme for the archaeology and to include it in the Management Plan.

ICOMOS considers that the conservation of the property needs to be reinforced by programmes, integrated in the Management Plan, concerning: knowledge and conservation of the *affaj*, evaluation of the restorations performed in the 1980s on the mud brick buildings and on the protohistoric tombs, and an overall archaeological programme.

Management

Management structures and processes, including traditional management processes

The Abu Dhabi Authority for Culture and Heritage (ADACH) is a semi-autonomous public body charged with a general mission for the preservation of cultural heritage. It reports directly to the Emirate government; it defines preservation and conservation policies and implements them. It has several specialist departments coordinated by the Strategic Planning Office such as the Conservation Department and the Historic Environment Department, which includes the Cultural Landscapes, Historic Buildings and Archaeology Divisions.

For the management of the various sites, ADACH's Strategic Planning Office is responsible for the property's overall coordination. It works with the Municipality of Al Ain, notably its Town Planning Department, the Abu Dhabi Tourism Authority, the Environment Agency of Abu Dhabi, and the Abu Dhabi Urban Planning Council.

Through its many executive prerogatives, notably supervision and authorisation, ADACH provides a global institutional framework for the overarching management of the elements comprising the serial property.

Policy framework: management plans and arrangements, including visitor management and presentation

The ADACH Strategic Plan (2009-2013) deals with the conservation of the property's various components. It ties in with various local and regional plans and planning studies. In particular, these refer to:

- Strategic Economic Review and Tourism Sector Study for Al Ain and Its Region (2000) prepared for the Local Government (Dewan) of the Eastern Region
- Al Ain 2015 Master Plan (2007, Municipality of Al Ain, Town Planning Department);
- Al Ain 2030 Structure Framework Plan. This plan includes the Al Ain Cultural Quarter Master Plan concerning the city's central oasis and its near environment. It aims to coordinate the development of the oasis, its use by pedestrians, the development of its urban environment, the preservation of its landscapes and the visual authenticity of the oasis, interpretation of the site, museums, cultural centres and hotels;
- Al Ain Central District Plan (2010).

ICOMOS considers that the current plans, especially the Strategic Plan and various sector projects included in the additional documentation, need to be augmented with an overall programme iterating the planned actions and the schedule for their implementation.

Risk preparedness

The State Party is taking decisions in several areas to reduce air pollution (limiting vehicle speeds, rail transport, etc.) and to manage water (agriculture, sensible usage, etc.). It is also taking decisions aimed at soil conservation.

Involvement of the local communities

Participation by the local communities exists in theory through the *Aflaj* Council under the Municipal Water Directorate, but it no longer seems very active with the abandonment of agriculture and the issue of the exhaustion of traditional sources of water supply.

Resources, including staffing levels, expertise and training

ADACH has access to the public funds needed for its programmes and operation. It is a strategic project for the State Party and the funding is guaranteed for the long-term.

ADACH has its own human resources which are backed up by contributions from external firms and companies specialising in a variety of fields.

ADACH has the following scientific and technical employees:

- The Strategic Planning Office is headed by an archaeologist, specialising in heritage conservation

and management. He is assisted by two engineers and an administration manager.

- The Department of Conservation has a town planner and an architect, both specialists in heritage conservation, a chemist, thirty conservation technicians and labourers, and two archivists; additional recruitment is underway, notably for a building conservation supervisor.

Numerous partnerships with regional and external universities and leading internationally-renowned scientific institutions are being established in various areas relative to the archaeology, history and conservation of the property. ADACH contributes to the training of architecture and archaeology students through internships.

Effectiveness of current management

ICOMOS considers that a management system for the property is in place via the technical, scientific and coordination action exercised by the Abu Dhabi Authority for Culture and Heritage (ADACH) and the various sector plans announced in the additional documentation. Its functional resources are guaranteed and it has the human resources required to implement its actions. Its Strategic Plan provides an overall view of the serial property, but it needs to be augmented with an overarching management plan regrouping all the programmes of action and their implementation timeframes.

Its main local partner for the management of the property is the Municipality of Al Ain. Together, they would benefit from opening up to local communities by revitalising the *Aflaj* Council or an Oases Council, reviving the ancient community traditions specific to the region.

ICOMOS considers that the serial property benefits from an appropriate management system, but that it would be useful to augment it with an overarching management plan regrouping all the programmes of action and their implementation timeframes, as well as with an *Aflaj* Council or an Oases Council involving the traditional communities.

6 Monitoring

The culture and heritage authority ADACH is in charge of monitoring the property. It is closely involved in the inventory and documentation work currently in progress (see Conservation). Two levels of monitoring are implemented. The first involves the monitoring and standard maintenance of the property sites with frequencies ranging from daily to weekly. The second is for the scientific monitoring of the individual components that make up the serial property, updating information about current knowledge and state of conservation. It employs systematic technical methods such as digital databases, photogrammetry, etc. Three monitoring indicator tables have been defined for the Hafit ensemble, the Hili and Bidaa Bint Saud ensembles, and the oases. Frequencies are annual; in some cases they are biennial.

Particular attention is paid to the physical and social threats liable to affect the conservation of the property's components.

ICOMOS notes that the monitoring of the delicate issue of water, its uses, and the conservation of the *aflaj* is not mentioned. Monitoring the growth in tourism uses of the property would also be useful.

ICOMOS considers that the monitoring is effective but needs to be extended to include the *aflaj* and tourism.

7 Conclusions

ICOMOS considers that the nominated sites form an accumulation of an excessive number of themes and overly different periods for the outstanding universal value of the serial property to be demonstrated. The very general name proposed for the property illustrates this difficulty. It is necessary to review the property's definition and the selection of the serial components and to focus them on a main theme and/or a more coherent and better defined period. The testimonies of the protohistoric cultures could meet such a requirement. However, a more detailed study of the archaeological sites and a comparative analysis extended to include similar neighbouring and regional properties are required.

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of the Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas), United Arab Emirates, to the World Heritage List be **deferred** in order to allow the State Party to:

- Review the property's definition and the selection and identification of the components forming the serial, by supplying more complete scientific documentation about the archaeological sites and the ancient *aflaj* hydraulic systems, in order to enable the determination of the property's Outstanding Universal Value;
- Extend the comparative analysis to the protohistoric sites in the United Arab Emirates, Oman and the region;
- Clarify the situation regarding public ownership within the property, for the parks and the tombs outside the parks in particular, as well as for the private ownership of buildings and land within the property;
- Pass the new law for the protection, conservation, management and promotion of cultural heritage and confirm the drafting of a law on the protection of water resources for the traditional *aflaj* system;

- Pursue research to clarify the issues of authenticity and integrity of the restorations of the protohistoric tombs and mud brick constructions performed prior to the 2000s;
- Augment the strategic plan and the various sector plans with a management plan describing the actions actually programmed for the ensemble of the serial property and their implementation schedule;
- Develop an overall archaeological programme and include it in the management plan.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS further recommends that the State Party give consideration to the following:

- Extend the systematic monitoring to include tourism;
- Improve the distinction between the archaeological spaces and leisure spaces in the Hili Archaeological Park;
- Mark out the boundaries of the property sites and buffer zones in open areas.



Map showing the boundaries of the nominated properties



Al Ain Oasis and Sheikh Zayed Palace Museum



Mezyad Fort with Jebel Hafit in the background



Hili 8



Bidaa Bint Saud tomb