

## Archaeological site of Al-Hijr (Saudi Arabia)

No 1293

### *Official name as proposed*

*by the State Party:* Archaeological site of Al-Hijr  
(Madain Salih)

*Location:* Province of Al-Medina  
al-Munawarah,  
Region of Al-Ula

### *Brief description:*

The archaeological site of Al-Hijr, known as Hegra in ancient times, is today known as Madain Salih. It is the largest conserved site of the civilisation of the Nabataeans south of Petra. In particular it includes rock-cut monumental tombs, mainly from the 1st century BCE and the 1st century CE.

Its desert location has protected it both as a result of its very arid climate and its isolation. This has led to the good preservation of the decoration of the facades, and has enabled the conservation of many inscriptions in several ancient languages.

### *Category of property:*

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*.

## 1. IDENTIFICATION

*Included in the Tentative List:* 28 November 2005

*International Assistance from the World Heritage Fund for preparing the Nomination:* None

*Date received by the World Heritage Centre:* 30 January 2007

*Background:* This is a new nomination.

*Consultations:* ICOMOS has consulted its International Scientific Committee on the Management of Archaeological Heritage.

### *Literature consulted (selection):*

Parr, P.J. *et al.*, "Preliminary Survey in North-West Arabia", 1968, *Bulletin of the Institute of Archaeology*, 10, 1972, pp. 23–61.

Healey, J.F., "The Nabataeans and Madā'in Sālih", *Atlat*, 10, 1986, pp. 108–16.

Wenning, R., "Hegra and Petra: Some Differences", *Aram*, 8, 1998, pp. 253–67.

Dentzer, J.-M., *et al.* "Report on the 2001 Season of the Saudi-French Archaeological Project at Madā'in Salih, Ancient Hegra", *Atlat*, 17, 2002, pp. 101–26.

Dentzer, J.-M., *et al.* "Report on the 2002, Second Season of the Saudi-French Archaeological Project at Meda'in Saleh", *ibid.*, 18, 2005, pp. 61–80.

*Technical Evaluation Mission:* 21 August - 1<sup>st</sup> September 2007

*Additional information requested and received from the State Party:* ICOMOS sent a letter to the State Party on 18 January 2008 asking it for additional information on the following points:

- The timeframe for the adoption of the new Draft Antiquities and Museums Law.

- The timeframe for the completion and implementation of the management plan.

The State Party replied on 6 February 2008 in a letter, and provided a management plan on 22 February 2008.

*Date of ICOMOS approval of this report:* 11 March 2008

## 2. THE PROPERTY

### *Description*

The nominated property is an archaeological site located in a large plain at the foot of a basalt plateau forming the south-east of the mountains of Hedjaz. It occupies a surface area of 1,621 hectares. It is surrounded by a buffer zone of 1,659 hectares.

Geographically, it is marked by a number of sandstone outcrops of various sizes and heights, which formed the basis of the development of Nabataean monumental architecture.

The property is located 20 km north of the town of Al-Ula, 400 km north-west of Medina and 500 km south-east of Petra.

1) Epigraphic traces of the pre-Nabataean period remain, and consist of some fifty inscriptions in *Lihyanite* script, which is specific to northern Arabia, and some cave drawings including two lions in an expressive style.

2) The Nabataean city of Hegra or Al-Hijr was formed around a central residential zone and its oasis. The sandstone outcrops at various degrees of proximity offered outstanding possibilities for rock-cut necropoles or spaces, forming a remarkable site for the expression of Nabataean monumental architecture.

The most important remains of this period consist of four main necropoles. They include 111 monumental tombs, of which 94 have decorated facades of varying dimensions. Amongst them, around thirty include inscriptions in the Nabataean language, which enables the dating of their construction. The most active period was between the first two thirds of the 1st century CE, but the site was worked on by the Nabataeans from the 1st

century BCE and probably from even earlier. It includes some 2,000 other non-monumental burial places.

To the north of the site, the necropolis of *Jabal al-Mahjar* includes four parallel outcrops from which tombs have been cut on the eastern and western sides. The facade decorations are relatively small in size, i.e. one metre or less. The most easterly outcrop has larger niches for burial places, which is unique at Al-Hijr.

The necropolis of *Qasr al-Bint*, which has 31 tombs, is the most monumental and the most representative of the site of Al-Hijr. The tombs date from 0–58 CE. The largest facade is 16 metres high, and an unfinished tomb is visible that would have probably reached 30 m. The tombs of Qasr al-Bint include fine inscriptions and decorations, the first concerning the eminent figures for whom the tombs were intended, and the second being decorative elements such as birds, monsters and human faces.

One late tomb on the site dates from the 3rd century CE, and bears an inscription written in Nabataean script in the Arabic language.

The *Area C* necropolis consists of a single isolated outcrop to the south-east of the residential area. It contains 19 tombs cut out between 16 and 61 CE. These earlier tombs have no decorated facades. All are carved high on the sandstone cliff.

In the south-west of the nominated property, the necropolis of *Jabal al-Khuraymat* is the largest of the four. It consists of many outcrops separated by sandy zones, but only eight of the outcrops contain monumental tombs. They are 48 in number and date from 7 CE to 73 CE.

Most of the facades of the Jabal al-Khuraymat necropolis are in a poor state of conservation because of the poor quality of the sandstone and exposure to the prevailing winds. The average height of facades is around 7 metres. The IGN 100 tomb is extremely well preserved. This is one of the largest and most decorated tombs of Al-Hijr, with dwarf pilasters, a pediment above the door, and sphinxes, etc.

The architectural styles of the tomb facades of Al-Hijr can be divided into five types that do not follow a precise chronological order. The decorative motifs were linked to the wealth and social position of the buried person, as were the monumental dimensions of the facade. The stylistic elements borrow from neighbouring civilisations: Assyria (crenellated motifs), Phoenicia, Egypt and Hellenistic Alexandria. They are combined with decorative themes specific to the Nabataeans in original ensembles, for example in an evolved version of the Corinthian capital.

The religious area of *Jabal Ithlib* is in the north-east of the archaeological site, in and near the highest sandstone outcrop of Al-Hijr. The troglodytic part of the area is reached through a narrow corridor 40 m long between high rocks, just as the *Siq* at Petra. This leads to the hall of the *Diwan*, in the form of a *triclinium*. Outside, the religious area includes many small Nabataean sanctuaries cut into the rock, of which several bear inscriptions.

The archaeological residential area of Al-Hijr is in the middle of the plain. The dwellings were built of sun-dried mudbrick, as was the enclosure wall. Few visible traces of them remain. Vestiges of the wall may however be observed on the ground over two-thirds of its length. Recent geophysical archaeological investigations seem to indicate a high population density at the apogee of the Nabataean period.

The former oasis was supplied with water from 130 wells, mainly situated in the western or north-western part of the site, where the water table was at a depth of only about 20 metres. Average well diameter is around 4 metres, but some have diameters of up to 7 metres. Wells are basically cut into the rock; however if the soil is loose, the opening is reinforced with blocks of sandstone.

3) The nominated archaeological zone also includes two built ensembles with no direct relationship to the archaeological site.

- The Ottoman fort of Al-Hijr was built from 1744 to 1757. It forms part of the series of forts built to protect the pilgrimage route to Mecca. It has a square ground plan, with sides of roughly 18 metres. It has twice been restored: in 1906 when the railway was built, and in 1985.

- The Hedjaz railway was built between 1901 and 1908 to link Damascus and Jerusalem to Medina and Mecca, and to facilitate the pilgrimage journey. The railway station built at the time at Madain Salih is in the north of the archaeological zone. It includes several buildings along the railway line, with sandstone walls and red tile roofs.

In addition to its clearly proclaimed religious purpose, the Hedjaz railway was a political and military project at a delicate point in the history of the Ottoman Empire, particularly with regard to its relations with the Arab peoples. A significant part of the Arab revolt during the First World War took place in this region, and railway infrastructures were particularly targeted.

### **History and development**

Most of the monuments and inscriptions of the archaeological site of Al-Hijr date from the 1st century BCE and the 1st century CE. But the inscriptions in *Lihyanite* script and some recently discovered archaeological vestiges are evidence for human settlement as early as the 3rd or 2nd century BCE.

One-third of the tombs, which are amongst the largest, are clearly dated to between 0–75 CE.

At its apogee and for around two centuries, the Nabataean kingdom extended over southern Syria, the Negev and Hedjaz. To the west it came up against the ambitions of the Roman world, and it remained essentially a continental power. It controlled vast arid and semi-arid expanses, and drew its wealth from the development of oasis agriculture and the caravan trade.

The Nabataeans are well known for their role in the commerce of incense, spices and aromatic plants during late Antiquity and the pre-Islamic period. They then

controlled the land routes between the Indian Ocean and the Red Sea and Mediterranean. Land routes were important as navigation remained difficult, particularly in the Red Sea.

Hegra was a major staging post on the main north-south caravan route. A secondary route linked it to the port of Egra Kome, according to a Greek-language source. Two recently discovered Nabataean sites on the shores of the Red Sea could in fact be this port.

The Hedjaz region was integrated into the Roman province of Arabia in 106 CE. A monumental Roman epigraph of 175-177 CE was recently discovered at Al-Hijr. The region then formed part of Roman history, and then Byzantine history, until the 7th century.

In 356, the city of Hegra is again mentioned, as being led by a mayor of local origin, but it seems to have been very modest in size at that time.

The Arab traveller Al-Maqdasi indicated, in the 10th century CE, that Al-Hijr was a small oasis whose activities centred on its wells and on its many peasants. However, there is no other testimony to lasting settlement of the site between the 4th and the 19th century CE. It may be that it was only sporadically and infrequently occupied over this long period, a hypothesis that is strengthened by the lack of damage to the tombs right up to the recent past. Seasonal use was probably made of Al-Hijr by shepherds, traders or pilgrims, but this did not lead to the transformation of the tombs into shelters as was the case at Petra.

In the 14th century, the celebrated traveller Ibn Battuta admiringly described the Nabataean tombs of Al-Hijr, cut into the red stone. He did not mention any human activity at the time.

In 1876-1877, Charles Doughty wrote in his book *Travels in Arabia Deserta*, that peasants from Tayma had put back into use the wells and the ancient agricultural lands of the oasis. Traces of plantation and reuse of the wells have also been found for the 20th century.

It was at the start of the 20th century that changes of some significance appeared, with the construction of the railway and railway station. Some archaeological elements were damaged and the exploitation of the quarries changed the shape of some sandstone outcrops, particularly at Jabal al-Mahjar in the north of the site, and at Qasr al-Sani in the south.

Apart from the early descriptions from some European travellers in the late 19th century, such as Charles Doughty mentioned above, the first genuine study missions were carried out by the Dominican fathers A. Jaussen and R. Savignac, in 1907, 1909 and 1910. They then provided the first archaeological and epigraphic descriptions of the north-west of the Arabian Peninsula and Madain Salih in particular. Their *Mission archéologique en Arabie* is still a standard work on the subject. Several journeys were made by Westerners for archaeological and historic reasons between the First World War and the 1960s, providing descriptions of the site and its vestiges.

Since that period, excavation and preservation missions have been carried out under the supervision of the Department of Antiquities of Saudi Arabia.

At the end of the 1960s and at the start of the 1970s, a programme was carried out in the Madain Salih region to encourage the sedentarisation of the Bedouins. Under this scheme, ancient wells were reused with a modern pumping system that damaged their ancient infrastructures. At the outset, this programme involved the reuse of the zones cultivated in the 19th century. However, the official identification of the archaeological site of Madain Salih, in 1972, resulted in the displacement of the agricultural activities towards the north, outside the site. Moreover, technical changes tended towards a more intensive agriculture based on freshly-dug wells.

The monumental tombs have not been subjected to subsequent reuse of material, or major pillage over the long course of history, and they have been preserved up to the contemporary period. In the 1980s, excavation campaigns led to cleaning operations inside the tombs and the removal of burial vestiges. Today it is very difficult to find any such vestiges in their original state at Al-Hijr.

Since 2001, a cooperation agreement has been in force between France (Ministry of Foreign Affairs, *Centre national de la recherche scientifique*-CNRS) and the Kingdom of Saudi Arabia (Ministry of Antiquities and Museums, King Saud University Riyadh) for the study of the Al-Hijr site. It favours non-destructive methods: aerial photography, geophysical analysis, architectural study, systematic inventory, etc. The agreement was renewed in 2006.

#### *Values of Archaeological site of Al-Hijr*

The nominated property bears a very rich testimony to a major Nabataean settlement, 500 km south-east of Petra, mainly in the 1st century BCE and the 1st century CE. It includes four large necropolises, with more than a hundred tombs cut into the walls of a large number of sandstone outcrops. The facades sculpted into the rock can reach impressive monumental dimensions of up to 16 metres in height.

The decorations sculpted *in situ* provide an original synthesis of motifs from neighbouring cultures (Assyrian, Phoenician, Egyptian, Hellenistic), which are combined with decorative themes and the use of techniques specific to the Nabataeans.

The epigraphy of the site reveals a diversity of inscriptions: Lihyanite script that is specific to Saudi antiquity, Nabataean, a late version of Nabataean, and Roman inscriptions.

The site also includes a religious ensemble with an access corridor between rocks and a troglodytic hall. It also contains vestiges of a relatively populous urban ensemble, protected by a walled enclosure, at the apogee of its occupation.

Al-Hijr is also the site of an ancient oasis, based on more than a hundred wells sunk into rocky ground.

### 3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

#### *Integrity and Authenticity*

##### *Integrity*

The state of architectural and decorative conservation of the site is considered to be excellent over a long period, particularly in comparison with the photographic documents of the missions by Jaussen and Savignac (in around 1910). Except for a significant part of the necropolis of Jabal al-Khuraymat, the sculpted sandstone has remained remarkably stable over two millennia.

Unlike Petra, for example, the Nabataean tombs of Al-Hijr have not been reused at other times in their history. The only direct alteration is the recent removal of funerary contents (See 2 - History of conservation).

The archaeological vestiges have not been subjected to a rehabilitation campaign. The recently added elements for ease of access (iron staircases) or for the protection of inscriptions (Plexiglas fixed into the rock) are reversible and have only very slightly affected the integrity of the monument.

ICOMOS considers that the architectural and decorative integrity of the monuments is outstanding. ICOMOS considers that the archaeological integrity of the property is satisfactory.

The site of Al-Hijr lost all its urban functions from late Antiquity onwards. It did however remain a staging post on the main route to Hedjaz, leading to the construction of a fort (18th century) and then of a railway station of some importance (early 20th century) (see 2). These recent architectural elements affect the northern part of the nominated property and its buffer zone.

Sporadic agricultural reuse of the site took place during its history, particularly reuse of the wells. The wells also supplied a source of water that was appreciated by both nomads and travellers. These transient reuses of the site have not altered the environment close to the monuments and archaeological elements.

The landscape changes resulting from the attempts to encourage sedentarisation and introduce modern agriculture in the 1960s and 1970s were stopped by the management and conservation policy implemented shortly afterwards (See 5). The north of the nominated property and its buffer zone are affected. However, the vestiges left by these sun-dried mudbrick settlements are tending to disappear rapidly, and redensification is now taking place. It is worth noting moreover that this zone was cultivated at the Nabataean period.

ICOMOS considers that the integrity of the areas close to the monuments and archaeological elements is good. ICOMOS considers that the landscape integrity of the property and its buffer zone is satisfactory.

##### *Authenticity*

The material worked by man is sandstone *in situ*. It is particularly stable for most of the nominated property (see Integrity).

The excellent level of integrity of the nominated property signifies the complete authenticity of the architectural forms and the main archaeological vestiges. The only alteration issue concerns some wells, which were reused in the 1970s using mechanical means that caused irreversible changes.

Furthermore, the archaeological elements have not been subjected to uncontrolled excavations, and they are today naturally protected by sand and earth.

The impression given by the nominated property and its buffer zone is one of great authenticity.

ICOMOS considers that in view of the remarkable state of conservation of the site of Al-Hijr and the fact it has not been reused or subjected to notable transformations, the various aspects of authenticity of the property are generally excellent.

ICOMOS considers that the conditions of integrity and authenticity have been met.
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##### *Comparative analysis*

Al-Hijr (Madain Salih) is amongst the foremost archaeological sites of the Kingdom of Saudi Arabia, along with Qaryat al-Faw and Najran. For the State Party, it has unique importance, from a monumental, architectural and landscape viewpoint. It can only be compared with Petra.

The Kingdom has two other identified Nabataean sites, containing tombs with facades directly cut into the rock, but they are of lesser importance. They consist of the Al-Bid site in Tabuk province (smaller, simpler and less well preserved than Al-Hijr) and the single tomb of Ad-Disah.

For some two centuries, Nabataean civilisation manifested its presence in a zone about 700 km long, from north to south, by 350 km wide (See 2 - History). Several sites have been identified in this zone, three of which have been inscribed on the World Heritage List:

- The town of *Bosra*, in southern Syria, was a major Nabataean city in the 1st century CE, but was profoundly altered by the Roman and then Byzantine presence. The Nabataean vestiges are few in number, and the inscription on the List primarily concerns the Roman period. Important Nabataean monumental elements remain however, with the monument of the arch with columns, and the Nabataean vestiges included in the great Byzantine cathedral. Recent archaeological excavations tend to prove the urban importance of Bosra at the Nabataean period.

- In the Negev, the series of towns *Elusa/Haluza*, *Mampsis/Kurnub*, *Oboda/Avdat* and *Sobata/Shivta* have also been inscribed on the List, in connection with the incense and spices caravan route from Petra to the

Mediterranean. However, as at Bosra, the majority of the vestiges of these towns are Roman or Byzantine. Mampsis is the most richly endowed with archaeological testimony of the Nabataean period: the towers of the city wall, houses, a caravanserai, a bath, a market, and tombs. It is however difficult to obtain a complete idea of Nabataean town planning and architecture.

- In the south of Jordan, *Petra* is indisputably the major archaeological site of Nabataean civilisation, of which it was the capital. Petra, just like Al-Hijr, is much better conserved than the -mentioned sites, both because of its monumental architecture directly cut into the rock, and the limited later Roman or Byzantine presence.

By comparison with Petra, the site of Al-Hijr has the following specific features:

- 33 tombs at Al-Hijr have precise facade inscriptions indicating the name of the owner of the tomb and his heirs. This ensemble is unique and forms the largest group of Nabataean tomb inscriptions.

- The general conservation of the facades of the Al-Hijr tombs is better than that of Petra, which has suffered more erosion because of the combined attacks of wind and humidity.

- Although the Petra tombs are six times more numerous, there is much less decorative variety in the facades than at Al-Hijr. However, the Petra tombs have specific characteristics such as the urns, which are not found at Al-Hijr.

- The cleaned interiors of the Al-Hijr tombs constitute a very comprehensive ensemble of Nabataean interior funerary architecture.

- The Petra hydraulic system is intended to channel natural sources and recover rainwater in tanks. This leads to an original and spectacular ensemble, which is however completely different from that of Al-Hijr, based on the sinking and exploitation of a large number of wells. On the one hand, the two sites complement each other, showing the mastery of hydraulic techniques by the Nabataeans, and on the other hand, the ensemble of wells at Al-Hijr is unique.

Beyond obvious resemblances, the two sites are quite different, but they are complementary, giving a fuller picture of Nabataean civilisation than Petra itself.

ICOMOS would have liked the comparative study to have ranged more widely than only the vestiges of Nabataean civilisation, taking account of contemporary regional architecture and funerary architecture with facade decoration cut into the rock.

ICOMOS considers that the comparative analysis justifies consideration of this property for the inscription on the World Heritage List.
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### *Justification of the 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:

- It is an outstanding site for architecture and decorations cut directly into sandstone. It is typical of the Nabataean civilisation of which it constitutes one of the most complete ensembles.
- The quality of its preservation since ancient times is outstanding, making it a site that is unique for its integrity and authenticity. It bears testimony to the quality and finesse of the stonework of the Nabataeans.
- The architectural value of the property is strengthened by the very well preserved landscape environment, which has not undergone any important change.
- It bears testimony to the development of Nabataean agricultural techniques from a large number of artificial wells in rocky ground. The wells are still in use today.
- The ancient city of Hegra/Al-Hijr bears testimony to the international caravan trade in the late period of Antiquity.
- The site bears testimony to the interchange of many decorative and architectural influences: Assyrian, Egyptian, Phoenician and Hellenistic.
- Through its epigraphy, the site bears testimony to the presence of many ancient languages over the course of history: Lihyanite, Talmudic script, Nabataean, Greek and Latin. It is of outstanding interest for the study of the origins and development of later Arabic languages and scripts.

### *Criteria under which inscription is proposed*

The property is nominated on the basis of cultural criteria (ii) and (iii).

*Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design.*

This criterion is justified by the State Party on the grounds that the archaeological site of Al-Hijr is located at a crossroads of various civilisations in late Antiquity, on a trade route between the Arabian Peninsula, the Mediterranean world and Asia. This is demonstrated in the nominated property by the diversity of architectural influences and written languages used. Although the Nabataean city was abandoned at the pre-Islamic period, the route continued to play its international role for the caravans and then for the pilgrimage to Mecca, until it was modernised by the building of the railway at the start of the 20th century.

ICOMOS approves the proposed criterion of the interchange of human values of which the site of Al-Hijr is an outstanding example.

ICOMOS considers that this criterion has been justified.
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*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 site of Al-Hijr bears a unique testimony to Nabataean civilisation, between the 2nd and 3rd centuries BCE and the pre-Islamic period, and particularly the 1st century CE. It is an outstanding example of the specific Nabataean architectural style, consisting of monuments cut directly into rock, with facades bearing a large number of decorative motifs.

The site contains a set of wells, many of which were cut into the rock, demonstrating the hydraulic expertise of the Nabataeans, for agricultural purposes. The wells of Al-Hijr have been used until very recently, both for the caravan route and by pilgrims, and for sporadic agricultural activities.

The testimony of Al-Hijr to the Nabataean civilisation is furthermore of outstanding integrity and authenticity, because it was abandoned at an early date, and because of the highly favourable climatic conditions.

ICOMOS approves of the proposed justification of the site as a unique and outstanding testimony to Nabataean civilisation.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the nominated property meets criteria (ii) and (iii) and that Outstanding Universal Value has been demonstrated.

#### 4. FACTORS AFFECTING THE PROPERTY

##### *Economic and social factors*

The Saudi government has spent some \$US 50 million to acquire parcels of land near and around the site to guarantee the protection of the archaeological area and monuments. There is no longer any housing either in the core zone of the nominated property or its buffer zone. The active farms in the north of the property are not a direct threat to its conservation.

To prevent any possible human intrusion and intrusion by nomadic herds, the site has been fenced.

A farming and agricultural industry development zone currently exists at the village of Al-Ubid, 5 km south of the nominated property.

The closest town, Al-Ula, is 20 km to the south. This is an urban area with a population of about 60,000 people. Under an economic development plan for the period up to 2030, road infrastructures and then residential zones are planned a few kilometres from the site, but outside the buffer zone.

ICOMOS considers that inadequately controlled development of agriculture and housing on the approaches to the site could affect it quite rapidly. It would tend to change the nature of the present arid or

semi-arid environment that is essential for the expression of values.

The site management authority should carefully monitor all economic projects and infrastructure projects under way in the vicinity, and should be consulted and involved in the decisions taken concerning these projects.

##### *Tourism development*

At present, the number of site visitors is low, but it could rise considerably in the future. In view of its geographical layout, the site's capacities to accommodate visitors could *a priori* be extended to several hundreds of visitors a day.

Visitors' behaviour sometimes reflects a lack of respect for the property and its values: minor vandalism, graffiti, use of off-road vehicles on the site, dropping of waste, etc.

ICOMOS considers that the presentation of the site to visitors is inadequate, as it does not inform them sufficiently of the site's great value. The acts of damage seem to be the result of a lack of understanding of this value. They lead to clean-up operations that are prejudicial, and may locally affect the quality of conservation.

##### *Environmental pressures*

At present there is no pollution of mining, industrial or agricultural origin affecting the site. However the lack of solid domestic waste collection, together with a still minimal ecological awareness amongst people living in the vicinity and visitors is causing visual pollution in the approaches to the site. There is no system for the collection and treatment of domestic wastewater. There is a risk of pollution of the water table.

A project to collect solid waste and wastewater has been announced for the town of Al-Ula and the surrounding area.

ICOMOS considers that the collection of solid waste and wastewater should be organised as part of the site management plan.

##### *Impact of climate change*

The general environment of the site is arid or semi-arid. The site itself constituted an oasis at the Nabataean period. It later resumed its agricultural function, but only sporadically.

Archaeological research shows that the climate of Al-Hijr has always remained extremely arid, while benefiting from quite abundant underground water at relatively shallow depth. Mechanical pumping has however affected the level, which has now been lowered by several metres.

Furthermore, periods of freezing are extremely rare, which is one of the explanations for the remarkable state of conservation of the stone work, down to its slightest details.

The measures taken to move agricultural settlements in the 1960s and 1970s gradually restored the site to its desert landscape situation.

ICOMOS notes the re-desertification of the site, and considers that there is no particular climatic threat.

#### *Risk preparedness*

Natural earthquake risks seem to be low, as do risks of flooding or fire. No major disaster has ever been recorded.

At present, there is no plan for protection or intervention in the event of major natural risks or major risks resulting from human action.

ICOMOS considers that despite the relatively low risk of a disaster caused by natural or human causes affecting the site, the new management authority should prepare, as part of its site management plan, an intervention and protection plan covering the major risks, and incorporate it into existing plans at local, regional and national level.

ICOMOS considers that the main threat to the property and its buffer zone is the insufficiently controlled development of agriculture and residential areas on the approaches. This could cause the alteration of landscapes and a deterioration of the water table. The question of waste collection and treatment should be dealt with in the management plan as it is a threat to appropriate expression of the site's values. The site management authority should be involved in the discussions and decisions about these questions.

## **5. PROTECTION, CONSERVATION AND MANAGEMENT**

### ***Boundaries of the nominated property and buffer zone***

The nominated property corresponds to the zone of the necropolises and the archaeological discoveries. It is surrounded by a metal fence that affects the site's arid or semi-arid landscape, but which is acknowledged to be essential (See 4). The boundary of the core zone is 200 m inside the line of the metal fence. One gate to the north and another to the south, located where the roads arrive at the site, enable access.

The archaeological zone of the ancient city of Hegra is protected by a second fence.

The nominated property occupies an area of 1,621 hectares. It is uninhabited.

The principle of the buffer zone has been mentioned ever since the establishment of the national supervisory authority on monuments and archaeological sites, at the start of the 1970s. A minimum automatic buffer zone of 200 metres has been announced in the upcoming Law of Antiquities and Museums.

The buffer zone around the property is usually larger than that based on the 200 metre distance rule, except in the north and south where it is close to this distance. The zone is wider in other areas. The approach is to follow

the limits of the cultivated land acquired by the government at the start of the 1970s. Basically it follows the road environment of the site, which tends to bypass the site, except in the south and south-west. Its main purpose is to maintain agricultural development projects to the north and south of the site at a sufficient distance.

There is landscape continuity between the core zone, the buffer zone and most of the adjoining spaces outside the zones.

The buffer zone area is 1,659 hectares. It has been inhabited since the acquisition of the sedentarisation settlements in its northern part.

The boundaries of the buffer zone were approved by the municipality of Al-Ula on 3 October 2007.

ICOMOS considers that the boundaries of the core and buffer zone of the nominated property are adequate.

### ***Ownership***

The archaeological site of Al-Hijr, consisting of the nominated property and its buffer zone, is owned by the Kingdom of Saudi Arabia.

### ***Protection***

#### *Legal Protection*

Cultural heritage protection is currently ensured by the 1971 Law on Antiquities, promulgated by royal decree 26M of 23/6/1392.

Its application is the responsibility of the Division of Antiquities attached to the Ministry of Education and the High Committee of Antiquities.

A new Law on Antiquities and Museums is in preparation. It has not yet been promulgated.

#### *Traditional Protection*

The religious traditions of Madain Salih have made the site of Al-Hijr sacred, which has made a major contribution to its protection over the course of history, because of the absence of reuse and the prohibition of unauthorised excavations.

These traditions are not precisely defined, and are subject to interpretations. In their strictest interpretation, they include prohibitions of dwelling on the site. The strictest interpretations could lead to local reluctance concerning the future tourism development of the site and about the development of excavations.

#### *Effectiveness of protection measures*

The law of 1971 led, from 1972 onwards, to the organisation of the acquisition of the lands and the removal of sedentarisation plans to areas outside the archaeological perimeter. This law also enabled the legal identification of the site and its buffer zone.

The buffer zone is protected by the Law of 1971.

Following the request made by ICOMOS, the State Party provided the following information: the new draft law for the Protection of Antiquities was examined by the Council of Ministers from November 2006 onwards and during 2007. It was then transmitted to the Bureau of Experts (Hayat al Khubara), which has until the end of 2008 to make revisions and give a ruling on the draft law's conformity. The draft law will then be examined by the Council of Shura (Majlis al Shura) for preliminary approval and the formulation of any remarks or amendments. The Council of Ministers then approves the definitive law and promulgates it. Promulgation is expected during 2009, though there is no formal guarantee that this date will be respected, as the legislative and executive bodies are sovereign.

The State Party also considers that this law is an updated version of the previous one, and that – with regard to archaeological sites such as Al-Hijr – there will be only slight changes compared with the law currently in force, which already ensures a good level of legal protection.

ICOMOS considers however that the framework law currently in force dates back to the origins of the Kingdom's protection system, and that it should be completed and adapted to new requirements that have arisen since then in the management of monumental and archaeological sites.

ICOMOS considers that the legal tool of 1971 has been extremely useful in defining and protecting the site. However, the promulgation of the new Law on the Kingdom's Antiquities is necessary to strengthen and bring up to date the protection of the nominated property.

## **Conservation**

### *Inventories, recording, research*

An archaeological inventory was planned in 1976 by the Division of Antiquities, and this was followed by excavations of tombs and cleaning interventions in the 1980s.

The scientific programme signed with France in 2001 was renewed in 2006 (See 2 - History of studies and conservation). The programme provides for the drawing up of a systematic architectural and epigraphic inventory leading to the publication of a thorough atlas of the site with commentary. The first volume is in the process of publication.

An excavation programme is also planned from 2008 onwards.

### *Present state of conservation*

The integrity analysis (See 3) has demonstrated the excellent general state of conservation of the tomb facades, except for a substantial proportion of the tombs at Jabal al-Khuraymat, because the sandstone is less resistant.

The epigraphs are also well preserved.

Traces of human damage, particularly on the lower parts, have increased over the last few years, as a result of minor vandalism, graffiti, etc.

The state of the urban space and its protective wall is that of archaeological vestiges.

### *Active Conservation measures*

The fencing system, despite its visual drawbacks, strongly contributes to the protection of the site against uncontrolled human presence and the presence of animals.

The site is currently under the surveillance of 16 guards attached to the national police force.

There is no site conservation plan and no global interpretation plan for visitors.

ICOMOS considers that the conservation measures are mainly based on dissuasion. Active management measures involving the presentation of the site's values and its interpretation should also be encouraged.

ICOMOS considers that special attention is needed for the constitution and setting up of a site conservation plan. A global interpretation plan for visitors is also necessary to ensure active and preventive conservation.

## **Management**

### *Management structures and processes, including traditional management processes*

Since 2003, the site is under the management supervision of the Deputy Minister for Antiquities and Museums. Its practical management is the responsibility of the Supreme Commission for Tourism that has a technical organisation and specialist sectors.

The need for a specific site management organisation has been recognised. It must be capable of monitoring the state of conservation, carrying out the practical management of the site, and monitoring changes in the local situation, to understand needs and expectations linked to the requirements of the lasting preservation and conservation of the site.

ICOMOS considers that the recent merging of the Division of Antiquities with the Commission of Tourism has not yet resulted in any changes in the local management of the site.

Responsibilities for the management of the site are exercised in the general framework of the administration of the Kingdom, in Riyadh.

In its reply to ICOMOS, the State Party indicated that a local site management authority was set up during 2007.

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

For several decades, the Kingdom of Saudi Arabia has been giving priority to the creation of a modern state. it



has however lacked the human resources capable of defining and applying a coherent and scientifically based policy for each important site of its cultural heritage.

The Commission of Tourism, assisted by internationally renowned external consultants, has defined the strategic objectives necessary for a national tourism development policy of high quality. Its conclusions will enable the definition of the basis for the proposed management system for the site of Al-Hijr, with short, medium and long term objectives.

Following the requests made by ICOMOS, the State Party provided administrative details about the exercise of responsibilities on the site, and provided a new detailed management plan recently approved by the *Supreme Commission for Tourism*. The documents furthermore prove the progress made in setting up the local authority in charge of this management plan during 2007 and 2008:

- The *Local Management Unit* for the site, announced in the initial dossier, was set up during 2007, and the managing director of the Al-Hijr site was definitively appointed by the *Supreme Commission for Tourism, Antiquities and Museums Section* (decision no. 619 of 11 February 2008). Administratively, it is attached to the Supreme Commission for Tourism in Riyadh, and in carrying out site management it is supported by the *Local Committee*.
- The *Local Management Unit* has its own budget and has administrative control of its personnel.
- The *Local Committee* supports and advises the Local Management Unit; it coordinates the activities of the different players on the site and in its environs; it holds debates on future changes to the site and its management.
- The *Local Management Unit* includes a scientific research department (archaeology, architecture and the environment), an educational department, a tourism department, a human resources and administration service (general administration of the site, logistics and maintenance, site security and guarding).
- Each of the departments will have a university-level director, and the competent personnel and employees needed to fulfil the department's missions. Tenders will be organised to make use of external resources under contract. There will also be a site security director.
- The *research department* will be directed by an archaeologist-conservator. This person will make use, on contractual projects, of high-level external scientific competences in the following fields: archaeological inventory of site, risk mapping, excavation plans, site conservation, hosting of archaeological missions.

#### *Involvement of the local communities*

Up to now, the municipal authority of Al-Ula has not been involved in the management process. However, its recent approval of the buffer zone (2007) has brought it into a process of cooperation with the new site management authority, particularly for the control of habitat, and the use of groundwater.

The new *Local Committee*, which is being set up as the consultative body of the site's *Management Unit*, will include representatives from the municipality of Al-Ula and local residents' and farmers' associations.

#### *Resources, including staffing levels, expertise and training*

The preservation and conservation of the site are ensured by the local policy, the governor of the region, and by the antiquities and local museum team.

The 16 guards are under the control of the local police. They are equipped with patrol vehicles for visitor control. They have their own building at the south entrance to the site.

ICOMOS considers it is necessary to have surveillance personnel who have received heritage training, and who are able to actively participate in the preservation and conservation of the site, and to interact with the public in an informative and formative way. More broadly, an authority with responsibility for management should be set up on the site itself.

ICOMOS commends the management plan and recommends that it be implemented as soon as possible. Furthermore, ICOMOS recommends that the management authority should participate in the definition of local, regional and national economic and urban development plans that could affect the site's immediate environment.

## **6. MONITORING**

The only permanent monitoring currently in place consists of the presence of guards. Their role is visitor control and prevention of human intrusions and vandalism.

Until now, there was no technical system or permanent organisation for the monitoring of the site, nor any local site management structure except for that of the guards. The Local Management Unit now being put in place (2007-2008) should however rapidly change this situation.

The monitoring carried out up to now consists of the reconnaissance and study missions on the site for the purposes of the scientific cooperation programme between the Division of Antiquities and its French partner, the CNRS, since 2001. This has involved scientific work consisting of applying the best practices of international archaeology (See 2 - History of preservation). It has made a strong contribution to a better knowledge of the site and the production of important data for the setting up of permanent monitoring, which has not yet however been organised.

ICOMOS considers that the scientific elements have now been brought together to enable the creation of a permanent monitoring system for the site. This could initially consist of regular and systematic photographic monitoring of the different elements of the site. Its objectives, its monitoring indicators and a method of implementation remain to be defined, by drawing on international experience in this field.

ICOMOS considers that a permanent site monitoring mission should be organised in the framework of the future management authority. Its objectives, its indicators and its working methods should be defined, together with the human and material means required.

## 7. CONCLUSIONS

ICOMOS considers that the Outstanding Universal Value of the archaeological site of Al-Hijr has been demonstrated.

The State Party is furthermore in the process of updating and completing the legal protection of its archaeological sites, by the Law on Antiquities that is currently being examined and that should normally be promulgated in 2009.

The State Party has thus drawn up the site management plan, and it is now organising its implementation, in particular by the setting up of a Local Management Unit for the site with significant prerogatives.

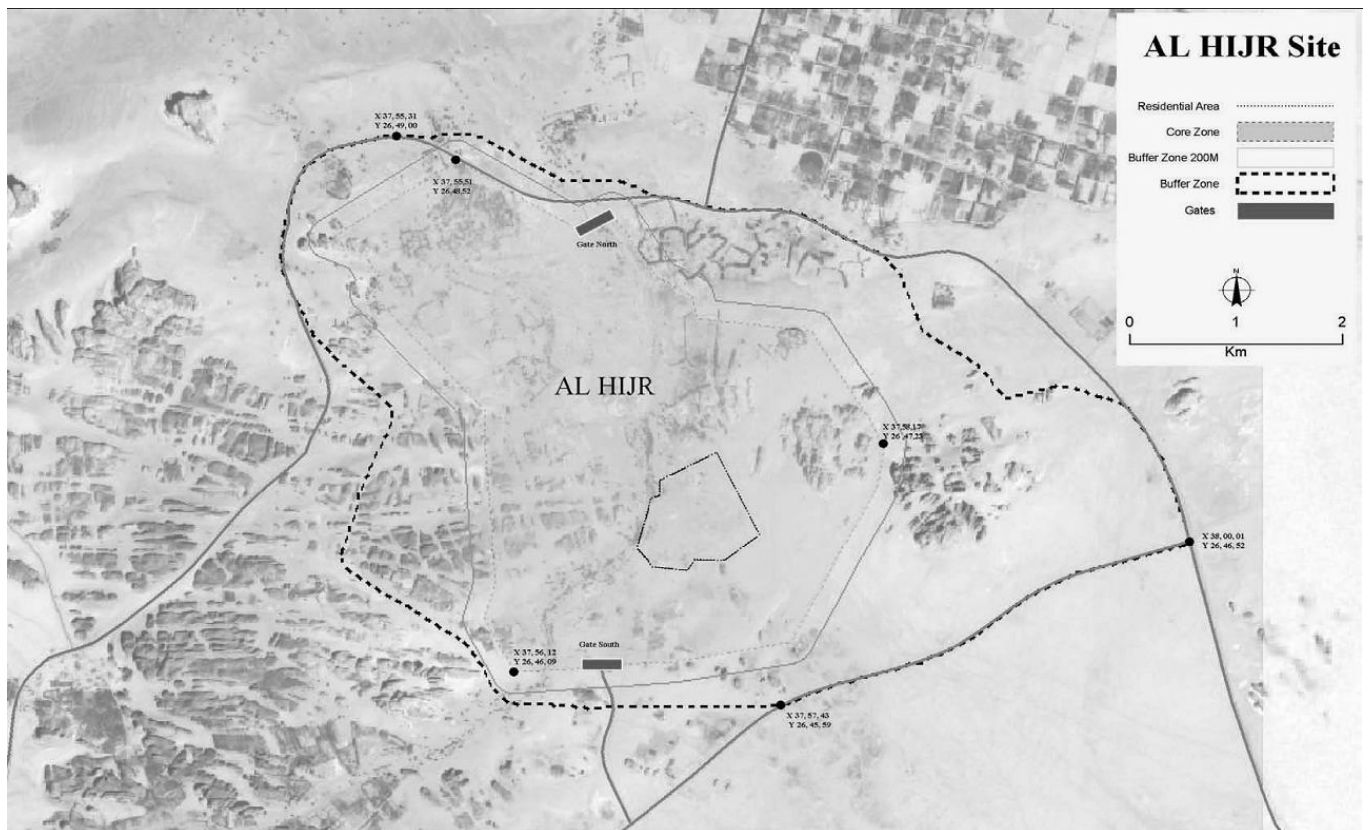
### *Recommendations with respect to inscription*

ICOMOS recommends that the nomination of the archaeological site of Al-Hijr, Kingdom of Saudi Arabia, should be *referred back* to the State Party to allow it to:

- Implement the management plan and complete the setting up of the Local Management Unit for the site.
- In the framework of the management plan and the Local Management Unit, set up a system for the permanent monitoring of the site.

ICOMOS also recommends that:

- The new framework law on the Kingdom's Antiquities and Museums be promulgated, bearing in mind that the 1971 Law on Antiquities is still in force.
- Care should be taken to ensure that the development of tourist facilities at the site is in keeping with the expression of the site's outstanding universal value, and with the quality of the site's natural environment.



Map showing the boundaries of the nominated property



**View of Jabal Ithlib**



**Qasr al-Bint necropolis**



**Qasr al-Farîd**



**Lihyante rock drawings, Jabal al-Khuraymât**