# Historic City of Yazd (Islamic Republic of Iran) No 1544

Official name as proposed by the State Party Historic City of Yazd

Location Yazd Province Islamic Republic of Iran

#### **Brief description**

The City of Yazd is located in the deserts of Iran close to the Spice and Silk Roads. It is a living testimony to intelligent use of limited available resources in the desert for survival. Water is brought to the city by the ganat system. Each district of the city is built on a ganat and has a communal centre. Buildings are built of earth. The use of earth in buildings includes walls, and roofs by the construction of vaults and domes. Houses are built with courtyards below ground level, serving underground areas. Wind-catchers, courtyards, and thick earthen walls create a pleasant microclimate. Partially covered alleyways together with streets, public squares and courtyards contribute to a pleasant urban quality. The city escaped the modernization trends that destroyed many traditional earthen cities. It survives today with its traditional districts, the ganat system, traditional houses, bazars, hammams, water cisterns, mosques, synagogues, Zoroastrian temples and the historic garden of Dolat-abad. The city enjoys the peaceful coexistence of three religions: Islam, Judaism and Zoroastrianism.

#### Category of property

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

In terms of the *Operational Guidelines* for the *Implementation of the World Heritage Convention* (8 July 2015), Annex 3, it is also an *historic town which is still inhabited*.

# 1 Basic data

Included in the Tentative List 9 August 2007

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

**Date received by the World Heritage Centre** 1 February 2016

### Background

This is a new nomination.

#### Consultations

ICOMOS has consulted its International Scientific Committees on Historic Towns and Villages and Earthen Architecture and several independent experts.

#### **Technical Evaluation Mission**

An ICOMOS technical evaluation mission visited the property from 22 to 28 August 2016.

#### Additional information received by ICOMOS

A letter was sent to the State Party on 6 October 2016 requesting further information about the comparative analysis, inclusion of the Dolat-abad Garden, property boundaries and buffer zone, use of traditional materials and techniques in conservation interventions, documentation of conservation works, environmental pressures, development pressures, status of legal protection and management plan, visitor numbers and impacts, relationship with the management system of the other overlapping World Heritage properties, and the coordination of management.

Additional information was received from the State Party addressing these questions on 6 November 2016; and this has been incorporated into the relevant sections of this evaluation report.

An Interim Report was provided to the State Party in December 2016 summarising the issues identified by the ICOMOS World Heritage Panel. Further information was requested in the Interim Report about documentation on urban levels, the boundaries of the central component and the Zoroastrian component, conservation practices with regards to rendering non-earthen new buildings with earthen plaster, offering guidelines to owners of historic earthen buildings, and capacity building for ICHHTO Base staff.

All additional information received from the State Party on 27 February 2017 has been incorporated into the relevant sections of this evaluation report.

#### Date of ICOMOS approval of this report 10 March 2017

# 2 The property

## Description

The Historic City of Yazd is located in the middle of the central plateau of Iran, 270 km southeast of Isfahan. The nominated property consists of three components covering an area of 195.76 ha and includes the historic city centre, the Zoroastrian district, and the Dolat-abad Persian garden, which is also a component of the serial World Heritage property, The Persian Garden (2011, (i), (ii), (iii), (iv) and (vi)). Traditional water management elements within the nominated property are components of the serial World Heritage property, The Persian Qanat

(2016, (iii) and (iv)). The buffer zone encompasses the three nominated components and covers an area of 665.93 ha.

Throughout its history, Yazd has been of great importance to Iran as a fortified city and for commerce as it is situated close to major trade routes such as the Spice Road, and the Kerman-Rey and Khorasan-Fars roads. Yazd is also an important centre of urban and rural production.

The coexistence of Zoroastrians, Jews and Muslims is an important feature of the Historic City of Yazd. This is reflected in the urban fabric and architecture, including the location of water cisterns that are built to meet the needs of both Muslim and Zoroastrian communities. Celebrations and festivities of one religion involve followers of other religions within the historic city, such as the celebration of *Nowrooz*, a Zoroastrian ancient feast celebrated by all.

The Historic City of Yazd survived and flourished despite the harsh desert environment due to the qanat system of collecting water from the nearby mountains. The nominated property is characterized by its earthen buildings and distinctive architectural features such as wind-catchers, domes, vaults and minarets. It is also characterized by its physical system of spatial organization made up of courtyards, alleyways, streets and public squares as well as roofed and open alleys.

Yazd has about sixty districts. Nineteen districts are located within the Historic City of Yazd. Districts are characterized by professional, ethnic or religious concentrations. For example, Posht-e Bagh is the district of coppersmiths, Tal and Khorramshah are the districts of builders, Sahl ibn-e Ali and Golchinan are the districts of merchants, Fahadan and Shah ab-ol-qasem are the districts for weavers. Jews lived mainly in the area west and southwest of the Jame Mosque, while Zoroastrians lived in specific districts such as Khalaf Khanali, Khorramshah and others.

Each district has its own centre for the daily needs of its inhabitants, including bazaars, hammams, water cisterns, mosques, Hoseiniehs, lards (squares in front of a caravanserai), small workshops and access to qanat water. The different district centres are connected by a main thoroughfare. Some district centres continue cultural traditions, while traditions are discontinued in others, depending on the demographic changes in each district.

Thoroughfares of the Historic City of Yazd are built in response to the harsh climate by providing the maximum amount of shade, despite the shortage of vegetation. Shade is provided by the orientation and narrow width of streets, the height of adjacent walls, and the practice of roofing parts of the street by sabats - rooms that bridge two houses across the thoroughfare and cover it, often with overlooking windows which create recurring light and shade changes along thoroughfares. The scarcity of wood was overcome by building with earth, including walls, arches, vaults and domes. Fired bricks were also used. Glazed fired bricks, tiles and stucco were used for decoration. Historic buildings of Yazd are also characterized by decorative wood, metal and glass.

The Islamic endowment system (*waqf*) is a significant contributor to the construction, management and maintenance of many religious, charitable and communal structures in Yazd. The qanat system and all other hydraulic structures, which were instrumental in sustaining the livelihood of the city are almost totally supported by *waqf*.

Some historic buildings such as hammams and houses have been adapted to be reused for modern functions, particularly those serving tourism such as hotels and restaurants.

#### History and development

According to oral history, Yazd was founded in the Achaemenid era on the intersection of the road connecting Rey to Kerman and Isfahan, and the road connecting Pars to Khorasan.

According to historians, Yazd was founded on the ruins of Kaseh. According to silver coins struck during the early Islamic era (from the 7<sup>th</sup> to 10<sup>th</sup> centuries AD), Yazd was under the authority of Fars which was under the governance of Basreh. The palace and garden of the Abbasid ruler were built and later turned into a district which was called 'Mad-abad Kooch-e-Bagh'. Two other districts were built during that period, although one of them was completely destroyed by the flood of 1455 AD. According to the historian Estakhri, the city was fortified and had two gates. The mosque built by Ahmed Zamaji in the 7<sup>th</sup> century was known in historic sources as 'Fort' and is still known by this name. Some of the walls of the Jame Mosque date back to this period.

During the Kakuvid era (from the 10<sup>th</sup> 12<sup>th</sup> century AD), Yazd witnessed its main development and prosperity. A place for prayers was appointed and named 'Dar-ol-Ebadeh'. The flow of water to the city via numerous ganats contributed to the flourishing and expansion of the city. Fortifications were constructed with four main gates. Gardens and farms were expanded in the western and southern parts of the city. Mosques, madrasas and new districts were constructed during this era and the city expanded in three directions: east, west and south. The production of textiles, silk and cotton, gained importance and many bazaars were built. The oldest dated inscription surviving in Yazd today is on the Davazdah-Imam monument, attributing the building to two commanders from this era.

During the Atabeg era (12<sup>th</sup> century AD) the city escaped the destructions, massacres and plunders of Genghis Khan that occurred in other Iranian cities. The city fortifications were restored and new fortifications were added. Four districts were developed and several qanats were constructed to supply the new districts with water. Several madrasas were established, of which only Zia'ieh Madraseh remains today; and hospitals were established. The economic axes of bazaars were formed and led to the expansion of the city towards Mehrijard Gate. Agricultural, industrial and commercial activities flourished. During this era, a destructive flood caused some districts to fall into ruin, and people moved to a higher location and established new districts.

During the Muzaffarid era (14<sup>th</sup> century AD), Yazd flourished, as their rule lasted more than half a century, and gained unprecedented economic and political importance. The Madraseh was extended during this period and became Darol-Elm (house of knowledge) and Sufism gained popularity. No new districts were developed during this era except Abeshahi. However, restorations and reconstructions were carried out for buildings and infrastructure damaged by the floods, and additions and improvements were made to the city walls, gates and watch towers. The city expanded southwards. This era witnessed a development in architectural and decorative features such as the use of honeycomb vaults and mosaic tile work. Some parts of the Jame Mosque surviving today date back to this era, such as the dome chamber, the main ayvan and the portal. This era witnessed the construction of madrasas, a hospital and observatory.

During the Timurid era  $(14^{th} - 15^{th}$  century AD), the city suffered damage as a result of a siege by the Timurids after an uprising by the local inhabitants. The city witnessed a short period of reconstruction and development before being hit by destructive floods in 860 AH (1456 AD) which caused damage to the southern and western parts of the city. Nineteen districts fell into ruin and one third of the population left the city.

The urban structure of the city evolved during this era, trade flourished and the textile industry became prosperous. More than 1,000 houses and other buildings were restored or reconstructed, and the bazaar, which exists today was built close to the Meriz Gate of the city walls. The Mobarakeh Palace complex was built and functioned as the administrative centre and governor's office up to the 1990's. The surviving buildings from this era include mosques, khanqahs, tekiehs, squares, hammams, water cisterns, caravanserai and bazaars. Some parts of the Jame Mosque were built by the Timurids. In the southern parts of the city, the Amirchaqmaq complex was constructed in this era and included a mosque, caravanserai, hammam, water cistern and bazaar.

During the Safavid era  $(16^{th} - 18^{th} \text{ century AD})$ , the period of growth was followed by political instability and economic depression. Additions and alterations were made to the bazaar and the Jame Mosque. In this era, new districts were constructed with 'Bagh' in their names, indicating that they were adaptations of earlier gardens into residential districts. This era witnessed the rise of the importance of Yazd for regional trade and the

construction of caravanserais on major routes from Yazd to regional trade centres. Silk and other textiles of Yazd became well known in Europe, India and China. However, the prosperity of Yazd declined towards the end of this era. The foundation of great bazaars and Khan Square date to this period, and also two minarets of the Jame Mosque and a hammam.

During the 18<sup>th</sup> century, the central district of Jannat-Abad was established, the city walls were strengthened, and the city expanded to the southwest. The southern part of the bazaar was founded and a new bazaar complex was developed between Amirchaqmaq and Shah Tahmasb Mosques in this period with the flourishing of trade with England and Russia. The remaining buildings from this period include Bagh-e-Dolatabad, Qeisarieh bazaar, two caravanserais, a palace with its cistern and Shah Tahmasb Square.

From the 18<sup>th</sup> to the 20<sup>th</sup> century, during the Qajar era, Yazd regained its former significance, but was then affected by an outbreak of cholera and social chaos. During this era, almost all Iranian Zoroastrians were living in Yazd, in the Zoroastrian district that continues to this day. During this period the majority of the inhabitants were engaged in silk and cotton production. Yazd had 8 districts inside the old city walls and 16 outside. The last repairs and renovations of the city walls took place in 1820 before losing their function due to modern changes in warfare and defensive strategies. A number of bazaars were added including the now-named Khan Bazaar. The majority of the historic residential districts surviving today are from the Qajar era. The late nineteenth century witnessed a new genre of buildings and spaces, illustrated by the Post Office, cinemas, banks and urban green spaces.

# 3 Justification for inscription, integrity and authenticity

#### Comparative analysis

The nomination dossier draws comparisons on two levels. It compares Yazd with other cities in Iran and with other cities around the world, which are inscribed on the World Heritage List and built using earth.

The comparison with cities inside Iran includes the cities of Ardakan, Bam ((ii), (iii), (iv), (v), 2007), Isfahan ((i), (v), (vi), 1979) and ((ii), 2012), Kashan, Kerman, Meybod (on the Tentative List), and Semnan. The comparison is based on the area of the historic fabric, integrity and authenticity, factors affecting city formation, the role of qanats in the formation of the city, historical periods, whether the outstanding historical period is distinguishable, human and natural factors affecting the historic fabric, dominant construction materials and percentage of local presence and residential functions.

The comparison with cities around the world includes the cities of Agadez (Niger), ((ii), (iii), 2013), Ait-ben-Haddou (Morocco), ((iv), (v), 1987), Aleppo (Syria), ((iii), (iv),

1986), Ghadamès (Libya), ((v), 1986), Shibam ((iii), (iv), (v), 1982) and Sana'a (Yemen), ((iv), (v), (vi), 1986), and Itchan Kala ((iii), (iv), (v), 1990), Shakhrisyabz ((iii), (iv), 2000) and Bukhara ((ii), (iv), (vi), 1993) (all Uzbekistan). These comparisons are based on area, authenticity, integrity, dynamism, material, cultural diversity, intangible heritage, architecture and urban planning, innovation and technology.

The comparative analysis concluded that Yazd is unique in a number of ways. Yazd is the largest and longestsurviving earthen city, and is based on four levels of construction: qanats, ground floors, rooftops and windcatchers. Yazd is characterized by specific traditional building techniques and innovations.

In its request for further information, ICOMOS requested that the comparative analysis be extended to include historic cities with Islamic/chahar-bagh gardens in their vicinities. The State Party responded by comparing Yazd and Dolat-abad garden with the historic gardens of Isfahan (Iran), Taj Mahal (India) and Shalimar (Pakistan). The comparison concluded that Yazd and Dolat-abad garden are unique because of the continuation of the architectural features of Yazd into the structures of Dolat-abad, the proximity of Dolat-abad garden to Yazd as opposed to historic gardens in India and Pakistan which are located at a greater distance from urban areas, and the dependency of Dolat-abad on qanat water as opposed to river water.

ICOMOS considers the comparative analysis useful and relevant to the proposed Outstanding Universal Value of the property, although there are some remaining gaps including the use of wind-catchers as the fourth level on which the city is constructed, the cohabitation of the followers of three religions, and claims of the naturefriendly urban design and architecture as well as sustainable energy system.

ICOMOS considers that while some aspects could be further strengthened, the comparative analysis justifies 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:

- Yazd is a unique surviving example of architecture and urban planning in the deserts of central Iran, relying on an effective water supply system;
- Its location close to main trade routes of commerce for silk and spices contributed to the flourishing of the city as a commercial centre that influenced cities and towns in the region and along the trade routes;
- The builders of Yazd developed methods for survival in the desert by clever management of limited available resources and by bringing water into the city via the qanat system and the use of earthen materials in construction (including houses and other

types of buildings such as hammams, water cisterns, mills, shrines, mausoleums, synagogues and mosques);

- The design of buildings in Yazd is climatically controlled and resistant to earthquakes through the use of thick walls, underground building elements and wind-catchers;
- The city consists of districts, each of which is organized along a qanat and different components; and is an example of the homogenous coexistence of the followers of different religions;
- Yazd is an example of environmentally-friendly construction and sustainable development.

ICOMOS considers that this justification is appropriate, but that it needs to be supported by a clear list of attributes, and the property must meet the requirements of authenticity and integrity. ICOMOS notes that there are questions concerning the authenticity of materials for traditional buildings that need to be resolved in order for this justification to be sustained.

#### Integrity and authenticity

#### Integrity

The integrity of the nominated property is based on arguments about the adequacy of the size and completeness of the selected components in relation to the proposed Outstanding Universal Value of the property. The condition and effective management of pressures are also part of the requirements of integrity. The State Party bases the statement of integrity on the visual, functional and structural integrity of the nominated property.

ICOMOS considers the selection of components for the serial nomination adequate as it represents the attributes of the proposed Outstanding Universal Value that are all managed by the same agency (the Iranian Cultural Heritage, Handicrafts & Tourism Organization (ICHHTO)).

ICOMOS notes that Imam Khomeini Street, Qiam Street and three other large streets cross the historic central component of the nominated property and impact on it in particular due to parking issues, new commercial developments and uncontrolled advertising signs. In the Zoroastrian component, development pressure is high, particularly close to the boundaries. The rising pressure of vehicular traffic on the nominated property is another challenge to its integrity. Another issue is the number of fired brick buildings in the Zoroastrian zone, many of which were constructed before the legislative protection was in place.

Finally, the evaluation of integrity is affected by issues identified by ICOMOS concerning the adequacy of the component boundaries and buffer zones (as discussed below).

#### Authenticity

Cities are highly dynamic and reflect changing cultural processes. The State Party briefly discusses the authenticity of the nominated property from several perspectives, including design, materials, use and function, techniques, setting (including the qanat system) and intangible heritage (such as the culturally diverse communities and the importance of the *waqf* in the social organisation of the city).

ICOMOS considers that the question about the authenticity of the nominated property cannot be well-addressed because of the insufficient and/or inaccurate documentation of earthen buildings; and notes that in some streets of the historic centre component, it is not possible to differentiate the authentic fabric from newer constructions, where new houses have been built, and where older ones have been reconstructed or restored using fired bricks which are covered with earthen render. This is particularly a problem in the Zoroastrian component.

In response to the ICOMOS Interim Report, the State Party clarified that restoration reports include requirements to describe the differentiation between authentic and newer fabric. These are kept in the ICHHTO Base archive. Three methods are suggested by the State Party to differentiate between authentic and new fabric: putting up signs displaying the authentic parts; installation of sign boards displaying the date of the kahgel plaster; and conducting field surveys to document lavers of covered material within the before interventions occur. However, structures ICOMOS notes that the methods presented by the State Party are not yet applied; and that the reports and other information available in the ICHHTO Base are general rather than specific or detailed.

In addition, ICOMOS has noted some important discrepancies between the maps provided by the State Party, and the situation on the ground, especially for the shops facing Imam Khomeini Street which are mostly new but are indicated on the maps as being historic buildings. Also in the Zoroastrian component, new houses are indicated on the maps as historic buildings.

The State Party provided additional information in response to the ICOMOS Interim Report with maps for 'conservation and restoration', 'diversity of materials', and 'periodic map of constructions' (2 maps). However, ICOMOS notes continuing inconsistencies and/or lack of clarity with regards to the information conveyed by these maps.

In response to the ICOMOS Interim Report, the State Party also provided additional information explaining the historical practice in Yazd of using earthen plaster (*kahgel*) of mud and straw. This practice meets cultural and aesthetic purposes as well as providing thermal insulation and acting as a sacrificial layer to protect the structural elements of buildings. ICOMOS notes the appropriateness of this traditional practice with regards to buildings that are built with traditional building materials that, in some cases, may be fired bricks. Rendering of fired brick buildings using earthen plaster is a long-standing traditional practice. However, this practice is not appropriate for new constructions built with modern materials, such as walls built with cement mortar, which is a widespread practice that can be seen on main streets.

ICOMOS considers that the authenticity of the nominated property cannot be reliably determined or monitored, and is vulnerable without clear and accurate identification and documentation of the historic buildings and urban fabric of the nominated property, including materials, age of the structures, and the state of conservation.

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

#### Criteria under which inscription is proposed

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

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 Yazd has developed techniques and methods in using materials and building technologies and design as well as urban planning, to cope with the harsh desert environment; and that this influenced other cities and towns in the Central and Western Asian Region because of its location in the middle of the Silk and Spice Roads.

ICOMOS considers that these arguments are not supported by evidence that Yazd had a decisive influence on the evolution and promotion of earthen architecture, technology and urban planning within the Central and Western Asian regions. Earthen architecture was widespread in the Middle East for millennia before the establishment of the city of Yazd and exhibits a wide range of settlement patterns.

ICOMOS considers that this criterion has not been justified.

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 Yazd bears witness to millennia-long traditions of living in the harsh desert environment. It is built entirely with earth and developed intelligent methods in creating pleasant micro-climates within buildings and districts, relying on water supplied from

qanats. Its built heritage includes houses, mosques, fire temples, synagogues, mausoleums, hammams, water cisterns, madrasehs and bazaars. It also includes a significant urban tradition developed from the 10<sup>th</sup> to 20<sup>th</sup> centuries, which influenced the development of other desert cities in Iran, based on the qanat system of water management, which could be called "Qanat Civilization". Yazdi qanats are considered by specialists the most skillfully engineered in Iran.

Yazd is associated with the tradition of social organization by the *waqf* system which benefits communal facilities such as water cisterns, hammams and mosques. It is also associated with intangible traditions of commerce and crafts, multiculturalism and the peaceful cohabitation of the followers of Islam, Judaism and Zoraostrians, seen in their festivities.

ICOMOS agrees that Yazd demonstrates the use of construction systems and techniques to cope with the environmental conditions. However, no evidence was presented to support these as millennia-long traditions. ICOMOS does not consider that the arguments concerning "Qanat Civilization" are supported or appropriate, and notes that this was not used previously for other qanat properties inscribed on the World Heritage List.

ICOMOS finds that, whilst a notable feature of Yazd, the co-existence of communities from multiple religions (Islam, Judaism and Zoroastrianism) is not relevant for the justification of this criterion.

ICOMOS considers that this criterion has not been justified.

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 Yazd is an outstanding example of architecture and urban planning for the hot arid climate of the Iranian desert. Its features include sunken courtyards which give access to underground spaces, wind-catchers, and thick earthen walls. On the urban level, each district still retains significant features such as partially-covered streets and different building types such as bazaars, water cisterns, hammams, tekiehs and hoseiniehs, and mosques. The skyline of the city is characterized by wind-catchers, domes and minarets and offers an impressive panorama from different viewpoints.

ICOMOS considers that whilst Yazd is the best surviving example of these features in Iran, it cannot be understood as representing a significant stage in human history. Therefore, the justification of this criterion by the State Party is not supported by relevant evidence. ICOMOS considers that this criterion has not been justified.

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 Yazd is an outstanding example of interaction between people and nature in a desert environment through intelligent management of the limited available resources by the qanat system and the use of earth in constructing buildings with sunken courtyards and underground spaces. Besides creating pleasant micro-climates and efficient resistance to earthquakes, it uses minimum amounts of materials, which provides inspiration for new architecture facing the sustainability challenges of today.

ICOMOS considers that this criterion is potentially appropriate given that Yazd is a rare example of a desert city, characterised by distinctive earthen architectural forms with specific cultural and historical associations. To sustain the proposed Outstanding Universal Value of the nominated property according to this criterion, it is necessary to articulate a clear list of attributes and expand on the inter-linkages between the built and natural environment, including the centrality of the qanat system in the development of the city. It would also be useful to explain how Yazd was able to sustain its long history and withstand several natural disasters. Specific qualities of the earthen construction, its seismic resistance, and the climatic characteristics of traditional architectural designs and urban arrangements need to be elaborated in more detail and supported with specialized technical studies.

ICOMOS considers that this criterion has not been justified at this stage, but could be applicable based on further studies, documentation, and resolution of the issues of authenticity and integrity.

ICOMOS considers that the nominated property could potentially meet criterion (v) through a substantial reformulation of the arguments, new information and analysis, and resolution of the issues raised about the authenticity and integrity of the nominated property.

# 4 Factors affecting the property

The State Party identifies development pressures affecting the nominated property, including the commercial use of historic buildings and the creation of parking lots, especially in commercial streets. The need to provide infrastructure and services to the residents is a source of new development proposals.

Pressures that affect the quality of new buildings and repairs to historic buildings occur because of easy availability and use of non-local and modern building materials and contemporary building systems, and the lack of a skilled workforce. In some instances, the construction of modern buildings is causing some loss of character, particularly within the buffer zone.

Recent drought and decreasing levels of surface water have caused movement in underground levels, mainly in the buffer zone. After monitoring for one year, the State Party reports that no further movement has been recorded. Other environmental pressures include pollution caused by industrial development and the increased number of cars. This creates threats to fired and glazed construction and decoration materials, and less so to earthen materials. The change of function of factories within the historic city and moving industrial activities outside the city is helping to reduce these threats.

Floods and earthquakes have caused destruction to the nominated property throughout its long history. According to the State Party, floods are no longer a threat due to the construction of flood control systems and deliberate planting of trees.

Yazd has experienced a number of earthquakes in its history, with severe earthquakes occurring in 1824, 1844 and 1853. According to the State Party, the characteristics of the architecture of Yazd plays a role in reducing the risk from earthquake damage, due to the sabats (which function as buttresses), sunken courtyards and thick walls. The Iranian Cultural Heritage, Handicrafts & Tourism Organization (ICHHTO), endeavours to introduce consolidation techniques, reinforcement of structures and improvement of building materials.

Tourism is not a source of pressure for Yazd at present, and the State Party considers that this will not increase significantly in the future. There is a steady increase in visitor numbers, but it is estimated that only 10-20% of the potential capacity to host visitors has been reached. According to the sixth development plan for Iran from 2015 to 2020, Iran expects to receive 10 million tourists, but no more than 3.5% of them are expected to visit Yazd.

ICOMOS considers that development pressures caused by commercial activities, and the use of modern noncompatible materials by residents for construction, repairs and extensions, are the sources of greatest threat to the nominated property.

ICOMOS considers that it would be desirable that the State Party consider the integration of an Heritage Impact Assessment approach into the management system, so as to ensure that any programme or project regarding the property be assessed in relation to its impacts on the Outstanding Universal Value and its supporting attributes. ICOMOS considers that the main threats to the property are caused by development pressures from commercial activities, use of incompatible materials in the repair/extensions to historic buildings, and earthquakes.

# 5 Protection, conservation and management

# Boundaries of the nominated property and buffer zone

The nominated property consists of three separate components: a large central component, a smaller component in the south of the central zone (Zoroastrian District), and a component containing the Dolat-abad Persian garden to the northwest of the central component. The Dolat-abad garden is a component of the serial World Heritage property, The Persian Garden ((i) (ii) (iii) (iv) (vi), 2011). The three components cover an area of 195.76 ha. The buffer zone roughly aligns with an area known as the historic urban area as it had developed up until the mid-20<sup>th</sup> century. The buffer zone covers an area of 665.93 ha.

The boundaries of both the central and the southern (Zoroastrian District) components include buildings that are entirely modern and do not fully support the proposed Outstanding Universal Value of the property. Conversely, there are other historic buildings that are left out of these two zones, which could support the proposed Outstanding Universal Value of the property. ICOMOS therefore considers that the boundaries of these components require further review to add certain buildings and exclude others.

In a meeting with the ICOMOS Panel on 26 November 2016, the State Party explained that the delineation of boundaries of the central and Zoroastrian components are based on intangible and historical dimensions of the traditional districts. In the Interim Report, ICOMOS requested the State Party to support this with detailed explanation illustrated by the use of maps. In response, the State Party provided further explanation and maps as well as stating the criteria considered for identification of the property.

ICOMOS notes that the additional information submitted by the State Party partially addressed the query by providing the justification of boundaries of two neighborhoods using aerial photos. For the Zoroastrian district, the additional information does not resolve all the issues identified by ICOMOS in relation to the boundaries of the neighborhood. Despite the useful exchanges with the State Party, ICOMOS considers that a stronger rationale is needed for the proposed component boundaries of this nominated serial property.

The boundaries of the buffer zone are mostly adequately justified, including the area near Dolat-abad garden. While this boundary is drawn very tightly, it replicates the designation of the buffer zone used for the World Heritage nomination of the 'Persian Garden'. Because this area is currently located outside the buffer zone, new developments in this area will not be controlled by ICHHTO, weakening the overall protection of the proposed values of the property.

ICOMOS considers that the buffer zone near the Dolatabad Garden could be expanded, and the rationale for all the boundaries and buffer zones needs to be more strongly articulated (particularly for the Zoroastrian district).

#### Ownership

Ownership in the Historic City of Yazd is mixed. While residential and commercial buildings make up the majority of the building stock of the city and are privately owned, religious and communal buildings are owned by non-governmental organizations and *waqf*, while public buildings are owned by governmental organizations including ICHHTO.

#### Protection

The Historic City of Yazd was listed as a national monument in 2005, which provides legal protection according to the Law for Protection of National Heritage (1930) and the Law for Establishing Iranian Cultural Heritage Organization (1979). The nominated property is also subject to laws and standards for the protection of historic cities.

ICOMOS notes that the nominated property enjoys the highest level of protection as a historic city on the national list through cultural heritage legislation and planning tools. According to the Master Plan of Yazd City (2016), the heights of buildings are determined by the number of storeys rather than by measurements: one storey for buildings in the nominated components, and 1-2 storeys for buildings in the buffer zone. However, ICOMOS notes that there is some confusion in the submitted plans as the heights of some buildings are marked as one-storey high but these are actually one storey above the ground floor (ie. two storeys).

ICOMOS notes that the majority of historic buildings within the property are privately owned and are managed and maintained by their owners under the supervision of ICHHTO. Consequently, the effectiveness of the legal protection can be undermined by lack of awareness of the private owners and a shortage of ICHHTO inspectors to supervise and control all the interventions made to the historic fabric (as per the legislation). This is manifested in the widespread practice of interventions carried out by residents and owners without effective supervision by ICHHTO, and the use of incompatible materials and techniques. For this reason, ICOMOS does not consider the legal protection to be fully effective.

In response to the Interim Report, the State Party submitted additional information on different awarenessraising and training workshops and activities carried out for different stakeholders by the ICHHTO Base. ICOMOS notes that despite the awareness-raising activities led by ICHHTO Base staff, there is a need for training and capacity building focused on international best practices as defined by ICOMOS charters and recommendations with regards to the philosophy of conservation, degrees of intervention, values-based conservation and the safeguarding of authenticity and integrity.

ICOMOS considers that the legal protection in place is appropriate but is not yet effective, due to the need to improve the awareness of the local communities and the capacity of ICHHTO staff.

#### Conservation

The Historic City of Yazd has enjoyed a long history of conservation. This can be divided into five main periods, each with work on inventories, recording and research:

- 1930 to 1979: Individual grand monuments and buildings were registered in the national heritage list and conserved;
- 1981 to 1991: The vision changed to include the urban fabric and the whole city was addressed. The first comprehensive plans for the city were considered and rehabilitation for individual buildings was initiated;
- 1991 to 2001: Governmental organizations coordinated efforts regarding restoration, rehabilitation and reuse of historic buildings;
- 2001 to 2011: Yazd was registered as a city on the national heritage list, with a more inclusive approach and consideration of tourism requirements; and
- Recent years: Approaches have highlighted the role of local communities, with more participatory approaches in conservation projects and consideration for intangible heritage.

ICOMOS notes the importance of collaboration between ICHHTO and the Architectural Department of Yazd University and recommends further coordination on documentation, research and conservation aims for the nominated property.

The present state of conservation for the Historic City of Yazd as a whole is quite exceptional as it escaped destruction by modernization efforts, particularly in the last fifty years, due to its legal protection, the work of traditional institutions such as the *waqf*, and the preferences of the inhabitants of the city.

Almost all district centres and streets leading to them are in a good state of conservation. Some sabats and alleyways need minor repairs and revitalization, such as paving and lighting, which are presently under construction.

Historic urban squares (meydan) are in good condition and are regularly monitored. Some of them are subject to research, executive plans, and methodical and historical reconstructions. Active rehabilitation and adaptive reuse are carried out for historic houses, hammams and other historic buildings, whilst cleaning qanats and reconstructing wind-catchers are executed under the supervision of ICHHTO. Key monuments are regularly monitored.

ICOMOS notes some important discrepancies between the maps provided by the State Party, and the state of conservation observed on the ground, including the locations of instances of the widespread practice of plastering modern structures with earth plaster, obscuring the differences between new interventions and authentic fabric. ICOMOS recommends that these issues be addressed to ensure the accuracy of maps and of the presentation of buildings.

ICOMOS notes the challenging state of conservation for the areas located around the main commercial streets (Imam Khumeini and Qiam), due to traffic flow and the local practice of using incompatible modern materials such as cement and fired bricks for conservation interventions. This requires effective supervision from ICHHTO regarding the conservation and management of privately owned historic properties. There is also a need for raising public awareness about international best conservation practices.

ICOMOS notes that there is a need for guidelines for ICHHTO supervisors and local communities on how to maintain and conserve earthen houses, and how to differentiate between various intervention aims and levels within international standards of practice, such as the differences between conservation, restoration, renovation and reconstruction.

In response to the ICOMOS Interim Report, the State Party submitted a translation from Farsi to English of a text titled 'Summary of the Guidelines for Owners and Users of the Earthen Historic City of Yazd'. ICOMOS notes that these guidelines address specific interventions on facades, but that further guidance is needed to address the interiors of buildings in detail.

ICOMOS considers that special attention is needed to ensure the accuracy of maps and of the presentation of historic buildings on the ground; to build the capacity of ICHHTO Base staff and local communities; to increase the level of coordination with the University of Yazd; and to develop best practice guidelines for the conservation and maintenance of historic earthen houses.

#### Management

Management structures and processes, including traditional management processes

The management of the nominated property is centralized in ICHHTO, which coordinates efforts with local and national authorities as well as non-governmental organizations, the traditional *waqf* system, and the local communities. ICHHTO has a number of policies that underpin the management system for the nominated property.

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

An action plan has been developed with short-term (two years), medium-term (five years), and long-term (ten years) actions. Sources and levels of finance include provincial budgets and state budgets as well as donations and *waqf* resources. ICHHTO is adequately staffed, and the staff have the required expertise across a wide range of disciplines. ICHHTO staff have access to training through international, national or local programs.

ICOMOS considers that the action plan is a valid framework that requires further development and more detailed planning, including management policies and mechanisms.

ICOMOS considers that the training of ICHHTO Base staff is good, but could be further extended to include philosophies of conservation, conservation of earthen buildings, and public awareness skills.

The State Party prepared a tourism plan in 2016, including a series of other plans with several objectives, especially keeping the rate of tourism constant. The nominated property is also part of a larger tourism plan, named the National Plan for Expanding Tourism Nationwide, organising guidelines, designs and tourism development projects at a national province level.

#### Involvement of local communities

ICOMOS notes that ICHHTO involves the local communities in its programs. However, further involvement is recommended, with particular attention being given to awareness-raising and provision of guidance on how to use, maintain and repair historic earthen buildings.

ICOMOS notes the risk preparedness that is in place with regard to mitigation of flood risks, and cooperation with Risk Management Organizations in riskpreparedness training. ICOMOS recommends further collaboration with Yazd University for seismic risk preparedness.

ICOMOS considers that the management system is generally adequate, but could be extended to include more detailed planning. Training of staff and capacitybuilding could be extended, including collaboration with the local university on seismic risk preparedness.

# 6 Monitoring

The State Party has outlined indicators to monitor the state of conservation of the property. These cover conservation and restoration; cultural and social aspects; planning and sustainable development; urban health and hygiene issues; tourism; infrastructure; and urban services. These are aligned with the content of the management plan. ICHHTO is the responsible body for coordinating the monitoring with relevant agencies and stakeholders.

ICOMOS considers that the monitoring measures for the property are adequate.

# 7 Conclusions

ICOMOS considers that the Historic City of Yazd has a strong potential to meet the requirements for Outstanding Universal Value on the basis of criterion (v), but that Outstanding Universal Value has not been demonstrated, due to important issues of authenticity and integrity that need to be resolved. These include the pressing need for accurate documentation, and consistently-applied means for differentiating the age, materials and state of conservation of buildings within the nominated property.

While some areas of improvement have been identified, the comparative analysis is generally adequate and justifies the consideration of this property for inscription in the World Heritage List. However, further work on the documentation of the values of the property and articulation of the attributes are urgently needed, and could also allow the State Party to reformulate this nomination according to criterion (v).

ICOMOS has identified a few issues with the delineation of the boundaries of the central and southern components (particularly the Zoroastrian district). Currently, they are not adequate as they include buildings that do not support the nomination while excluding significant buildings. The delineation of the buffer zone could be adjusted to provide enhanced protection to the setting of the Dolat-abad garden which is currently exposed to development pressures. ICOMOS considers that capacity building actions are needed to ensure the effectiveness of the systems for protection, conservation and management.

ICOMOS considers that the main threats to the property are caused by development pressures from commercial activities, use of incompatible materials in the repairs/extensions to historic buildings, and earthquakes. The management system in place is generally adequate, although it could be improved by adding more detail, especially in relation to these key threats.

ICOMOS has identified a number of further recommendations to strengthen the capacity of ICHHTO and residents to better protect, conserve and manage the nominated property.

## 8 Recommendations

#### Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of the Historic City of Yazd, Islamic Republic of Iran, to the World Heritage List be **deferred** in order to allow the State Party, with the advice of ICOMOS and the World Heritage Centre, if requested, to:

- a) Substantially reformulate the nomination according to arguments relevant for criterion (v), including the provision of evidence that can demonstrate the specificities of the architectural style and techniques in creating pleasant conditions for urban life in a desert setting,
- b) Strengthen the ability of the nominated property to demonstrate its authenticity and integrity through accurate and detailed documentation of the urban elements, layouts and buildings; and resolving the important discrepancies that have been identified by ICOMOS between the maps and actual state of residential buildings in the city,
- c) Compile a clear list of attributes of the nominated property in relation to the reformulated justification of Outstanding Universal Value according to criterion (v),
- d) Revise the boundaries of the central and Zoroastrian components to incorporate the attributes of the proposed Outstanding Universal Value. This will involve both expansion of the boundaries (to ensure the inclusion of all significant historic buildings), and also some small and specific reductions (to exclude areas without attributes),
- e) Develop and implement conservation policies and management strategies to address the issue of plastering non-earthen and non-historic buildings with earthen plaster, obscuring the differences between authentic historic fabric and new interventions or new constructions, with the aim of meeting the requirements of authenticity,
- f) Deepen the level of detail in the action plan for managing the property, based on the need for decisions to be values-based; and develop heritage impact assessment processes for evaluation of the impacts on the Outstanding Universal Value of larger developments;

Any revised nomination should be visited by a mission to the site.

#### Additional recommendations

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

a) Undertaking analytical studies of the Historic City of Yazd, elaborating the relationships between the

intangible aspects of each district (including social, cultural and religious dimensions) and the tangible aspects (such as the qanats, water cisterns and religious structures),

- b) Considering extending the buffer zone in the area of the Dolat-abad garden to provide improved protection of its setting from the impacts of future development,
- c) Conducting research on risk preparedness for the property with regards to earthquakes,
- Developing guidelines for the use, maintenance and conservation of earthen historic buildings, with attention to interiors, that will assist private owners of historic buildings,
- e) Training ICHHTO staff on relevant conservation philosophies, and the impacts of different interventions on the integrity and authenticity of the nominated property;



Map showing the boundaries of the nominated properties



Aerial view of the historic city of Yazd



Zia'ieh Madraseh



Kolombu and water citern windcatcher



Malekzadeh House