
Pergamon

Republic of Turkey

No 1457

Official name as proposed by the State Party

Pergamon and its Multi-Layered Cultural Landscape

Location

Town of Bergama, Izmir Province
Aegean Region
Republic of Turkey

Brief description

Rising high above the Bakırçay Plain the acropolis of Pergamon was the capital of the Hellenistic Attalid Dynasty, a major centre of learning in the ancient world. Monumental temples, theatres, stoa, gymnasium, altar and library were set into the sloping terrain surrounded by an extensive city wall. The rock-cut Kybele Sanctuary lies to the north-west on another hill visually linked to the acropolis. Later the city became capital of the Roman province of Asia known for its *Asclepieion* healing centre. The acropolis crowns a landscape containing burial mounds and remains of the Roman, Byzantine and Ottoman empires in and around the modern town of Bergama on the lower slopes.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of nine *sites*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013), paragraph 47, it is nominated as a *cultural landscape*.

1 Basic data

Included in the Tentative List

15 April 2011

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

31 January 2013

Background

This is a new nomination.

Consultations

ICOMOS has consulted its International Scientific Committee on Archaeological Heritage Management and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 23 to 27 September 2013.

Additional information requested and received from the State Party

A letter was sent to the State Party on 25 September 2013 requesting additional maps, and information regarding justification of the series, protection and management. A response was received on 30 October 2013 and the information has been incorporated below.

Date of ICOMOS approval of this report

6 March 2014

2 The property

Description

This is a serial property comprising nine component sites, of which the primary and most visually dominant is the acropolis on Kale Hill, a steep-sided ridge between the Selinos and Keitos rivers which join south-east of the hill to run through the Bakırçay Plain. This primary component includes the Roman aqueducts to the north and extends down the slopes of Kale Hill to include the *Asclepieion* to the south-west. It is surrounded by seven tumuli components to its east, south-east and south with the Kybele Sanctuary component located on Kapıkaya Hill six kilometres to its north-west. The primary component and three tumuli components are together surrounded by a buffer zone of 426,928 ha; the other five components each have their own buffer zone.

1. Pergamon city

The Hellenistic upper city of the acropolis was a monumental urban complex tailored to the difficult topography of Kale Hill. The remains of the Athena Temple, Temple of Dionysus, Temple of Demeter, the Great (Zeus or Pergamon) Altar with its famous sculptural friezes (now in Berlin), the steep theatre cut into the side of the hill, the library, palaces, residential and commercial areas, arsenals, upper agora and stoa combine to illustrate the great achievement of the Attalid dynasty from 283 BC, developing the important trading and cultural centre established under Alexander the Great. Water was brought to cisterns and fountains on Kale Hill (which had no source of its own) by ceramic pipes and lead pipelines under pressure from mountains some 50km to the north of the city, using the principle that water finds its own level to run down and up the intervening valley to a height of almost 200m.

In the Roman period, the water supply was improved to serve the greatly increased population (up to 150,000 from 40,000 in the Hellenistic period) by the addition of

aqueducts to the north of the city. The Selinos river running around the southern base of Kale Hill was covered by two huge tunnels in order to create a flat area for the building of the Serapis Temple (*Serapeion*) under the emperor Hadrian with its sacred courtyard (*temenos*), in the area now known as *Kizil Avlu*. The main temple was flanked by two rotundas either side, each with their own galleried courtyard. The Trajan temple (now partly restored) was constructed on the top of the acropolis, and the city theatre, stadium and amphitheatre were cut into the lower bedrock to the south-west of the Selinos river. This became an area of extensive Roman settlement in the 2nd century AD, known now as the Roman Pleasure District (*Musalla Mezarlik*) and includes remains of a Columbarium. Further to the south-west the *Asclepieion* healing centre was developed under the great physician and pharmacist Galen, with its own theatre, temple to Zeus-Asclepius, sacred fountain, circular treatment building, and connected to Kale Hill by a 1km sacred way. The centre reached its peak of importance in the 2nd century AD as a famous sanctuary for pilgrims seeking a cure. Maps provided by the State Party in response to ICOMOS' queries show the grid alignments of the Hellenistic and Roman towns, which differ slightly.

In the Early Christian/Byzantine period from the 4th century AD, the Church of St John, one of the 'seven churches of Asia' known as the Red Basilica (*Kizil Avlu*) was built within the *Serapeion* in a similar way as had the Church of St Peter at Baalbek within the Temple of Jupiter. The northern rotunda was used as a synagogue and later (for the past 600 years), as a mosque. Archaeological investigations in this area have revealed that the rotunda courtyards were encircled on three sides by caryatids and extensively faced with marble. Remnants of the round bastions of the 12th century Byzantine city wall which followed the line of the late Roman wall are evident in front of the Gymnasium terrace. Supplementary maps provided by the State Party show that the Byzantine town occupied the area within the walls.

The area now occupied by modern Bergama south of the Selinos river was initially settled in the Roman period and became a necropolis and settlement in the Byzantine and Ottoman periods. The area on the slopes north of the Selinos river was occupied from the 14th century by the Orthodox Greek population and is partly within the Hellenistic city walls. Its stone buildings follow streets and lanes constructed as terraces along the contours of the slopes. Later in the Ottoman period, during the 18th century the layout was modified by the creation of a public square on the site of the former Greek market.

The Ottoman layout of bazaar, squares with plane trees, and mosques, madrasas, baths, fountains and civil residential properties from the 19th and 20th centuries is clearly evident on the south side of the Selinos. Remains of the earlier periods continue to be evident amongst the modern development including ruins of Roman bath buildings. Six bridges still in use over the river show derivation from the Roman period and line up with the city gates of the Hellenistic Attalid capital of Eumenes II. Only

three are within the property component's boundary; one is in the buffer zone. Supplementary maps show the extent of the Ottoman and modern towns. The total property area of component 1 is 315,460 ha.

2. Kybele Sanctuary

The cult of Kybele, symbol of fertility and nature was practised in natural areas that were difficult to access - usually on mountain tops. The Kybele Sanctuary at Kapikaya is a rural rock-cut sanctuary dating originally from the Archaic period, with many internal niches. Located on a craggy peak overlooking the Selinos river, it was developed from the original cave between 282 and 263 BC and has a direct line of visibility with the sanctuary of Athena on Kale Hill. The property component is 1,772 ha and has a surrounding buffer zone of 38,387 ha.

3. Ilyas Tepe

This tumulus is located east of the acropolis and is included in the buffer zone of component 1. It was discovered and excavated in 2010, but the burial chamber had previously been opened by illegal diggers who smashed the chamber's stone door. A skeleton of a man over forty years old was found in a sarcophagus beneath the debris. The lid had been broken open, possibly in antiquity. It is dated by one clay vessel to the second half of the 3rd century BC. It is thought that this the tomb of an eminent person close to the Attalid dynasty. The property area is 3,232 ha.

4. Yigma Tepe

The largest of the tumuli to the south of Kale Hill with a diameter of 158m and height of 35m, this tumulus is aligned with the west side of the Athena Temple and the stairs of the Great Altar On Kale Hill. No tomb chamber has been discovered but archaeological finds date it to the Hellenistic Attalid dynasty. The property area is 6,921 ha and it is surrounded by a buffer zone of 4,548 ha.

5. Ikili Tumuli

This component comprises three tumuli to the west of Yigma Tepe. These were excavated in 1906 by the German Archaeological Institute, resulting in removal of the mounds and leaving only the circular base. Each contained an andesite sarcophagus. In Tumulus II finds including a golden oak wreath, iron swords and a coin with the image of Alexander the Great indicate connections with Macedonia and date the tumuli to the second quarter of the 3rd century BC, the time of Philetairos. The property area is 82 ha and it is surrounded by a buffer zone of 403 ha.

6. Tavşan Tepe

Located south-east of the acropolis, this tumulus has a radius of 100m and is the third largest. It is yet to be excavated, but surface analysis indicates that it dates to the period of the Hellenistic Attalid dynasty. The property is part of a private estate and has an area of 1,245 ha. It is included in the buffer zone of component 1.

7. X Tepe

Located south-west of İkili Tumuli, the diameter of this tumulus is 80m. It was investigated by the German Archaeological Institute and Kiel University in 2010 but no tomb chamber has yet been found. Publication of the research is still awaited but the tumulus is thought to relate to the Attalid dynasty (280-133 BC). The property area is 573 ha and the surrounding buffer zone is 3,719 ha.

8. A Tepe

This tumulus located north-west of Tavşan Tepe has a diameter of 20m and a height of 4m and is thought to relate to the Attalid dynasty (280-133 BC). It was excavated illegally and part of the mound was removed. The tomb chamber has not been found. The property area is 556 ha and it is included in the buffer zone of component 1.

9. Mal Tepe

Located north of X Tepe and İkili Tumuli, this is the second largest tumulus. It is 180m in diameter and 28m high. The edge of the circular base of the tumulus is formed of trachyte blocks. The stone burial chamber is entered via a 45m long barrel-vaulted tunnel from the north leading to an east-west corridor, which in turn leads to the burial chamber at the east side. Stone remains on top of the mound may relate to a memorial temple or monument. The tomb is dated to the Roman period (2nd century AD) due to the mark of a cross found on its walls.

ICOMOS notes that the alignment of the entrance of the tumulus with monuments on the Hellenistic Acropolis parallels the Roman period grid system in the lower city, suggesting the symbolic tying of the administration of the new political elite with the cultural heritage of the city's founders.

History and development

The first Hellenistic city of Pergamon was established by the former Macedonian army officer Philetairos from 282 to 263BC following the defeat of the Persians by Alexander the Great in 334BC. It included the Athena Temple and the Demeter Sanctuary just outside the new city walls. It is thought that Yigma Tepe (4) was built in honour of Philetairos' mother at this time as well as the İkili tumuli (5). The Kybele Sanctuary (2) was created by Philetairos at Pergamon from a cave containing a water source where the cult originated in the Archaic period. The nomination dossier suggests that its alignment with the Athena Temple was an acknowledgement by the first Hellenistic Attalid Dynasty of the equivalent importance of the goddess of the local Anatolian citizens to the goddess Athena who they themselves worshipped, and that this was a strategic political move to win over the local population. It is also suggested that this axis determined the street alignment of the upper city laid out by Philetairos. Threats from the invading Galatians required strengthening of Pergamon's walls and the earliest phase of the *Asclepieion* became a refuge for war refugees. During the reign of Attalos I (241-197 BC) Pergamon

became an ally of Rome and Attalos I is said to have arranged for the meteorite stone idol of the Kybele cult, which he had taken from the Galatians, to be taken to Rome to assist them in their wars with Hannibal. The water pipelines were laid to the Madra springs 20-40 km distant and the Tavşan Tepe (6), X Tepe (7) and A Tepe (8) may date from this period. The city walls were subsequently extended to enclose the area below the acropolis to the south to the limits evident today during the rule of Eumenes II (197-159 BC). This was a period of great building work, including refurbishment of existing temples and the building of the Great Altar, lower agora, gymnasium and library. With support from Rome the city withstood assaults from the Seleucids and this victory was commemorated with the creation of the famous Gaul sculptures for the Athena Temple by the Pergamon sculpture school, which subsequently also produced the remarkable sculptural friezes around the Great Altar commissioned following the defeat of the Galatians by Eumenes II in 166BC. Pergamon held off more attacks and prospered under Attalos II but following his death and that of his son Pergamon ultimately came under the control of Rome and became the capital of the Roman province of Asia c 129BC. The city flourished under the Roman emperor cults of Augustus, Trajan, Hadrian and Caracalla until the 5th century when earthquakes exacerbated its decline.

Arab attacks during the 6th and 7th centuries prompted the rebuilding of the city walls during the Byzantine period, reusing stones from earthquake-damaged monuments, particularly the Great Altar. During peaceful times in subsequent centuries, settlement and agricultural activity spread into the plain but following the defeat of the Byzantine armies by the Turks at Manzikert in 1071 Turkish settlers arrived in the Aegean region. Pergamon held out under Isaac II (1185-95AD) to become a powerful metropolitan centre with rebuilt, bastioned city walls. The city fell to the Ottomans in 1345, then briefly to the Mongols under Timur before being taken again by the Ottomans under Murat II (1421-1451) and during subsequent peaceful times once again spread into the plain, this time with mosques, madrasas, hans, baths and fountains. During the 15th and 16th centuries development increased with more hans, bazaars, new water supply and treed squares. New trade and dwelling areas were constructed in the 18th and 19th centuries which are still in use today.

ICOMOS notes that the importance of the city derives from its pre-eminence in the Hellenistic period as continued under the Romans, and that there was a strong cultural discontinuity from the 5th century.

Following World War I, the Greek invasion of 1919-22, and the Treaty of Lausanne, which founded the Turkish Republic in 1923, Pergamon became a district of Izmir province. City planning began in 1940-1 with development limited to two storeys. In 1970-1 'archaeological areas' were declared as a protection mechanism and the registration of sites was begun in 1976. The 1980s city zoning plan allowed multi-storey building in the Ottoman

area on the south bank of the Selinos and modern development occurred to the south and east. Multi-storey construction within the Ottoman area was stopped in 2000 and the area was protected as 'historic urban + archaeological areas'.

Details of archaeological excavations and conservation works carried out since 1900 are set out in the nomination dossier. The most extensive restoration work was carried out at the Trajan Temple on top of the acropolis from 1979. Vehicle access was provided to the acropolis in 1935 but the risk of avalanche due to the steep slope led to a cable-car system being constructed at the east side of Kale Hill in 2010. ICOMOS notes that the remains of Byzantine churches other than the Red Basilica (*Kizil Avlu*), notably in the temenos of the Temple of Athena on the acropolis were removed during early 20th century excavations.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The nomination dossier includes a problematic comparative analysis and concludes that while there are many cities of the Classical, Hellenistic and Roman period represented on the World Heritage List, Pergamon is the only Hellenistic dynastic capital that exists to this day – Alexandria and Antioch having been essentially demolished. Within the Aegean Region, comparison is made with the sites of Miletus, Smyrna, and Ephesus and it is argued that these cities did not achieve Pergamon's monumental expression in the landscape due to their topography. Within the wider region of Anatolia and Greece it is noted that while Halicarnassus is comparable as a terraced city it is focussed on the mausoleum; Athens (1987, (i), (ii), (iii), (iv) and (vi)) did achieve domination of the landscape but the city represents the classical period as does Halicarnassus. Aigai (Vergina, 1996, (i) and (iii)) first capital of the Macedonian Kingdom comprises a monumental, decorated palace, remains of a stadium and a series of royal tombs, but was not a great Hellenistic city like Pergamon. Comparison with Rhodes (founded 408 BC) and Priene shows that Rhodes was inscribed on the World Heritage List (1988, (ii), (iv) and (v)) as a medieval city. Priene was a similar size to Pergamon in the Hellenistic period and while terraced on the side of a hill close to the sea and planned on a regular grid, it lacks the adjustment to terrain and monumentality of Pergamon. Hierapolis-Pamukkale (1988, (iii), (iv) and (vii)) developed within Pergamon's sphere of interest and was inscribed for its Hellenistic Attalid remains, Greco-Roman medical treatment centre and Christian architectural complex but lacks Pergamon's town-planning and topographical and architectural monumentality.

It is argued in the nomination dossier that most of the comparative cities do not represent the multi-layered history in the way that Pergamon does, but ICOMOS

considers that the nomination dossier focuses on the Hellenistic and Roman layers and gives almost no information on the Byzantine layer in terms of comparisons. Nothing is presented on the layout of the Byzantine city or details of its structures including other churches. No comparative analysis is made for the Ottoman town. ICOMOS considers that the significance of the Byzantine and Ottoman areas of the site has not been justified by the comparative analysis.

Comparisons are made between individual features of the cities leading to an understanding of the outstanding nature of the Hellenistic monumental buildings, particularly the Great Altar, the great gymnasium, the extraordinarily steep theatre on the western slope of Kale Hill, the water system and the Kybele Sanctuary; the Roman period engineering feat of the platform and tunnels still in use today beneath the *temenos* and former temple of Serapis; extensive development of the *Asclepieion* under the famous physician Galen, and the historical value of the Red Basilica (*Kizil Avlu*) constructed within the *Serapeion*. ICOMOS notes some incorrect statements in the nomination dossier regarding the configuration of Roman theatres and amphitheatres, and Hellenistic figurative decorations in relief.

Selection of serial components

Regarding the serial nomination, the nomination dossier does not include information on burial mounds related to the comparative cities, and these have not been well justified in terms of their functional connection with the city itself beyond archaeological dating. However ICOMOS considers that they are clearly part of the landscape of Pergamon, with a visual connection, and contribute a broader understanding of the social and religious practices of the inhabitants. In response to ICOMOS' query the State Party provided information on the other Kybele/ rock-cut sanctuaries located either side of Kale Hill within the nominated property which are still being investigated, as well as on the Kybele sanctuary 30 km from Pergamon on Mamurt Kale which has remains of a temple built by Philetairos and dedicated to the Mother Goddess Kybele. This was not included in the property due to its lack of integrity and authenticity. Information was also provided on other tumuli within and outside the nominated property. The selected tumuli are those which are seen by their alignments and artefacts to have connections with the ruling elite.

The comparative analysis with the additional information provided by the State Party justifies the selection of sites in showing that Pergamon stands out in combining the Hellenistic/Roman city and its famous monuments with the burial mounds of its rulers and the Kybele sanctuary representing the local Anatolian 'Mother Goddess' cult. It does not justify the significance of the Byzantine and Ottoman part of component 1.

ICOMOS considers that the comparative analysis despite weaknesses has justified consideration of the property for the World Heritage List on the grounds of the Hellenistic and Roman periods.

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:

- Pergamon is the only remaining Hellenistic city which demonstrates urban planning of the period.
- Pergamon's topographical location, terracing, water supply, famous monuments and sculpture make it an outstanding site.
- Pergamon brought together the local Anatolian Kybele culture with Hellenistic beliefs and political strategy in a unique visual combination.
- Although dominated by its Hellenistic acropolis, Pergamon is a rare example of a multilayered city where the later overlays of Roman, Byzantine and Ottoman cultures are still clearly evident.

The justification for the serial approach is the historical and visual relationship between the burial mounds and the city, which are now separated by modern development, and the visual and political relationship between the city and the Kybele sanctuary, which is located at a distance of six kilometres from the acropolis.

ICOMOS considers that this justification does not apply to all areas of the property. The justification should focus on the value of the property as the Hellenistic capital of the Attalids and its subsequent inclusion in the Roman Empire which allowed Pergamon to extend its role as a cultural centre. In this respect ICOMOS considers that the serial approach is justified. However ICOMOS considers that Pergamon has not been justified as a multi-layered city.

Integrity and authenticity

Integrity

The property is of sufficient size and includes all the elements necessary to present the city and its outlying features relating to the Hellenistic and Roman periods. The acropolis archaeological site has been meticulously excavated and recorded over more than 130 years and conserved for presentation to the public, although the famous sculptured frieze of the Great Altar was removed to Berlin in the late 19th century and is now on display in the Pergamon Museum there. The Gaul group sculpture is lost and known today only through a Roman copy. The *Asclepieion* and *Serapeion* (*Kizil Avlu*) have been protected and conserved for visitors over a long period.

The Roman period ruins of the aqueduct; theatre and amphitheatre in the Roman Pleasure District, and the tumuli and Kybele sanctuary have not been excavated and essentially retain their integrity as buried archaeology, except for component 5, Ikili tumuli, of

which the mounds themselves were totally removed by excavation in the early 20th century, and component 8, A Tepe, of which part of the mound was removed by illegal excavation. ICOMOS notes that extremely important artefacts were uncovered at component 5, the excavations were well documented and the base of the tumulus is still evident, demonstrating its visual and spatial connection with the acropolis. The Roman Pleasure District has been partly occupied by squatters and similar illegal construction has encroached on component 7, X Tepe. Steps are being taken by the authorities to relocate the inhabitants and remove encroachments. Component 1 is also impacted by some high buildings within its urban area dating from the 1980s and '90s. Heights are now said to be restricted by the 2012 Conservation Plan to two stories. The nomination dossier states that it is expected that the high buildings will be removed within 5-10 years.

The Ottoman period town contains some abandoned houses and efforts are being made by the authorities to find suitable uses for these, at the same time carrying out a conservation and community education program. Remains of Roman monuments to be found amongst the later town are retained and protected under archaeological legislation. Overall the property is well maintained. However there are modern high buildings within the Ottoman town that detract from its integrity.

The Kybele sanctuary (component 2) was selected due to its visual relationship with the city (component 1) as evidence of the political strategy of the Attalid dynasty to encompass the local Anatolian people in its sphere of influence. The other components (all tumuli) were selected as burials related to the Hellenistic and Roman rulers of the city. The reason for including the Ottoman town in component 1 appears to be largely due to it having been built over Roman remains, which occasionally emerge through the Ottoman layer (such as the baths and bridges).

ICOMOS considers that the extent of the Ottoman town included needs to relate only to the remains that are attributes of outstanding universal value and the areas which have potential to contribute to the understanding of outstanding universal value. The nomination dossier indicates that the key attributes of the Roman period include the platform of the *Serapeion* and its *temenos* supported by the tunnels over the Selinos river, suggesting that a possible property boundary could run along the south bank of the Selinos river projecting further south to include *Kizil Avlu* and the bridges. But more information is required on the significance of Roman remains south of the Selinos river.

ICOMOS considers that the integrity of the whole series has not been justified in terms of inclusion of the Ottoman town; this applies to component 1 and the integrity of components 1, 5, 7 & 8 is vulnerable.

Authenticity

ICOMOS considers that the monuments representing the Hellenistic and Roman periods represent remarkably well the architectural canons of each period. Hellenistic Pergamon was well known as a centre of culture between the civilised world and the barbarians of Galatia – its library rivalled that of Alexandria; for the Romans it was the entrance to Asia. The Great Altar of Zeus was famous for its sculptured frieze (now in Berlin); the *Asclepieion* attracted those seeking a cure from all over the Roman Empire; the remains of the *Serapeion* testify to the extravagance of Hadrian and the Imperial cult, and the Red Basilica (*Kizil Avlu*) was known to the Christian world as one of the Seven Churches of Asia. The Hellenistic and Roman archaeological remains of Pergamon credibly express the values of Pergamon through their layout, design, materials and location. Their setting is impacted by the funicular railway along the east side of the hill. Roman remains within the Ottoman town are preserved. Component 5 (Ikili tumuli) retains only the base of the tumuli. Components 1 & 7 have been impacted by illegal construction and component 8 by illegal excavation. The Ottoman period buildings are being conserved according to good practice. The layout of the Ottoman town is preserved, but the authenticity of its setting is impacted by the development in the urban area that occurred during the last quarter of the 20th century.

ICOMOS considers that the authenticity of the individual sites that comprise the series is vulnerable for components 1, 5, 7 & 8.

In conclusion, ICOMOS considers that the conditions of integrity of the whole series have not been justified in terms of inclusion of the Ottoman town; this applies to component 1 and for individual sites, the conditions of integrity and authenticity are vulnerable for components 1, 5, 7 & 8.

Criteria under which inscription is proposed

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

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

This criterion is justified by the State Party on the grounds of the skill in which the city was built into the slopes at the top of Kale Hill, with its grand monuments dominating the surrounding plain. The Hellenistic piped water supply system bringing water under pressure from mountain springs many kilometres away is considered a masterful technological achievement, as is the Roman construction of tunnels to channel the Selinos River, supporting the *temenos* and temple of Serapis above them.

ICOMOS considers that Hellenistic and Roman Pergamon demonstrates principles of town-planning and landscape design married with monumental architecture, much of it carrying monumental art, to produce an acropolis that is

today without parallel in the Mediterranean world. However ICOMOS notes that the full extent of the Hellenistic water supply system is not included within the nominated property boundaries and the Byzantine layer and Ottoman town have not been justified.

ICOMOS considers that this criterion has not been justified for all areas of the property but could be justified if the nomination is focused on the Hellenistic and Roman remains.

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 city was a meeting point between east and west; that this is reflected in its architecture and sculpture and expressed through the Hellenistic town-planning adapted to the topography. It is also expressed through the visual and political encompassing of the Kybele sanctuary within the city's outlook and the construction of the temple to the Egyptian god Serapis by the Romans over the Selinos river, thus encompassing Egyptian religious beliefs in the city's culture.

ICOMOS considers that the use of Egyptian gods within the Roman Empire in Asia Minor is good evidence for the interchange of human values, as is the relocation of the Kybele meteorite to Rome, facilitated by the Attalids. However the Byzantine layer and Ottoman town have not been justified.

ICOMOS considers that this criterion has not been justified for all areas of the property, but could be justified if the nomination is focused on the Hellenistic and Roman remains.

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

This criterion is justified by the State Party on the grounds that Pergamon bears unique testimony to the Hellenistic Attalid dynasty. The remains of the city's temples, Great Altar, sanctuaries and theatre provide the sole surviving representation of the cultural, artistic and political qualities of a Hellenistic capital. The *Asclepieion* was a renowned treatment centre from the 4th century BCE to the 5th century CE. The offerings and inscriptions found there bear exceptional testimony to the socio-cultural, religious and scientific aspects of healing over this period. The Roman construction over the Selinos river and the remains of the *Serapeion* bear exceptional testimony to the exploits of Rome in its eastern empire. The tumuli bear exceptional testimony to Hellenistic and Roman burial traditions. The Kybele sanctuary bears exceptional testimony to the ancient Anatolian religious cult traditions as adapted under the Attalids.

ICOMOS considers that this argument, while appropriate to the Hellenistic and Roman layers, repeats some of the arguments used for the previous criteria. The Byzantine layer and Ottoman town have not been justified.

ICOMOS considers that this criterion has not been justified for all areas of the property. It is the most appropriate justification if the nomination is focused on the Hellenistic and Roman remains.

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 similar grounds to those argued for the previous three criteria. It is argued that the acropolis is an outstanding Hellenistic ensemble of temples, theatre and other monuments set into and dominating the landscape due to the site's topography. The Hellenistic water supply system and the Roman tunnels under *Kizil Avlu* are considered an outstanding example of technology. The *Asclepieion* represents an important stage in the transition to scientific treatment methods as evidenced in its layout and composition in natural surroundings. Argument is made for the outstanding qualities of the Serapis temple and the brick basilica later built inside it due their size and elaboration. The one new element mentioned is the unusual arrangement of the amphitheatre, which although not excavated is described as being built to hold 50-55 thousand spectators with seats stepping down the slopes of a valley either side of a stream in such a way that the stream could be dammed to fill the amphitheatre. ICOMOS considers that the argument could make more of the siting of the Trajan temple and the layout of the Roman city grid on a slightly different alignment to that of the Hellenistic city, and also of the fact that amphitheatres were not common in the Roman East.

ICOMOS considers that while the argument addresses the Hellenistic and Roman periods, insufficient evidence has been presented for the Byzantine and Ottoman stages of human history.

ICOMOS considers that this criterion has not been justified for all areas of the property and the justification for the Hellenistic and Roman periods is better dealt with under criterion (iii).

Criterion (vi): be directly or tangibly associated with events or living traditions, with ideas or with beliefs, with artistic and literary works of outstanding universal significance;

This criterion is justified by the State Party on the grounds that Pergamon gained sovereignty along the western shore region of Anatolia, while maintaining relations with the Greeks in the west and the Seleucid and Ptolemaic kingdoms in the east largely through the political strategy of accepting the local Anatolian Kybele

cult. This strategy was adopted by Rome in its dealings with Anatolia, due to the transfer of the cult idol to Rome by Pergamon's Attalid king. Due to the subsequent inheritance by Rome of Pergamon due to Attalid bequest in 133 BCE and the consequent settling of Romans in Anatolia, Pergamon is directly associated with the creation of an eastern Roman empire.

Pergamon is also tangibly associated with religious beliefs including the Kybele cult through the Kybele sanctuary; the cult of Serapis through the Serapeion and the Imperial cult through the temple to Trajan and Hadrian. The sculptural frieze of the Great Altar at Pergamon which was removed to Berlin and is now on display there in Berlin's Pergamon Museum is considered to be an artistic work of outstanding universal value, as was the Gaul group of sculptures, of which Roman copies remain in museums in Rome. The location of these is still evident.

ICOMOS considers that these arguments apply to the Hellenistic and Roman areas only, and have already been largely covered under criterion (ii). However ICOMOS considers that the association of Pergamon with the creation of the eastern Roman Empire justifies criterion (vi) in conjunction with criterion (ii)

ICOMOS considers that this criterion has not been justified for all areas of the property but could be justified if the nomination is focused on the Hellenistic and Roman remains.

ICOMOS considers that the serial approach is justified in relation to the Hellenistic and Roman remains and ICOMOS considers that the selection of sites is appropriate, except that the Byzantine and Ottoman period parts of component 1 have not been justified.

ICOMOS considers that part of the nominated property could meet criteria (i), (ii), (iii), and (vi) and conditions of authenticity and integrity if the nomination is focused on the Hellenistic and Roman remains.

4 Factors affecting the property

Urban development pressure is felt primarily in the area of the city south of the proposed buffer zone for component 1 - around component 9, Mal Tepe and to a lesser extent around components 4, Yigma Tepe and 7, X Tepe. An Environment Plan by the Bergama Museum Directorate was submitted to the Izmir Regional Conservation Council for Cultural Properties no. 2, which aims to preserve the landscape connection between Mal Tepe and Kale Hill (component 1). The 2012 Conservation Plan requires a new Environment Application project to decrease development pressure for all tumuli in the modern urban area. Urban development is also an issue in the privately-owned part of the Roman Pleasure District of component 1. Measures are in place to deal with this. Within the buffer zone of component 1, the 2012 Conservation Plan

restricts buildings to a height of 3-5 stories. The population of the property area is estimated to be 11,941, all within component 1, and 7,699 within the buffer zone of component 1, with 69 in the buffer zone of component 9, Mal Tepe.

Other threats include illegal digging, which is being addressed by increased police surveillance; seismic (Pergamon is in a first degree earthquake zone), which is being addressed through construction regulations based on a geological/ geotechnical survey report; and forest fire, which is being addressed through fire protection strategies including fire watch points and access to five fire-fighting helicopters in the surrounding area; municipal emergency response plans in the urban area, with fire hydrants provided in the steep Ottoman district on the north bank of the Selinos which is not accessible to the fire department truck. Flood threat is possible in the Selinos river during the winter and this is being addressed through investigating new drainage strategies, including cleaning the river bed.

Tourism is considered to be well under capacity. It is controlled through ticketing the Acropolis, *Asclepieion* and *Kizil Avlu* sites. Visitors to these sites come mainly with tour operators and a guide and rarely visit the tumuli or urban area. They mostly access the top of the site by funicular railway and may walk down to the other sites and back to the point of departure at the base of the funicular. Some also travel up the rough vehicle track in taxis or private cars. The Kybele sanctuary is not accessible to visitors due to the difficult terrain.

ICOMOS considers that the main threats to the property are development in the urban area and forest fire.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundary of component 1 follows topographical and administrative lines and covers the extent of the town at the end of the Ottoman period. In the nomination dossier the boundary of component 2, Kybele sanctuary was shown as an arbitrary circle and the additional information provided by the State Party shows the boundary now established to cover its archaeological surroundings and protected as a first degree archaeological site on 10 October 2013. The buffer zone remains unchanged. The tumuli property boundaries follow the perimeter of the mounds at their base. In the nomination dossier the boundary of Ilyas Tepe (component 2) was also being investigated and the additional information states that it remains as shown in the original documents and was confirmed as a first degree archaeological site on 29 March 2013.

ICOMOS considers that the value of the property is related to the Hellenistic and Roman periods and that

justification of Outstanding Universal Value does not cover the Ottoman period. ICOMOS considers that the boundary of component 1 could be adjusted to represent the Hellenistic and Roman remains as justified by criteria. The remaining area of the Ottoman town should then be covered by the buffer zone.

ICOMOS considers that the buffer zone boundaries of components 4, 5, 7 & 9 are too tight and that the buffer zone of component 1 should be extended to enclose these components in order to preserve their visual connection with the acropolis. It is noted also that funeral mounds are traditionally located along roads leading to and from the city and these tumuli are located along the route which linked ancient Pergamon to the sea. This route should be protected within the buffer zone.

ICOMOS also considers that the buffer zone for the Kybele sanctuary (component 2) should be extended to comply with the natural protection zone beyond the river to the south and west.

In conclusion, ICOMOS considers that the boundaries of the nominated property and of its buffer zone are inadequate at present.

Ownership

In general all areas of the property declared as first degree archaeological sites are owned by the State. This includes components 1, 3, 4, 6, 7 & 9, except for the south part of the Roman Pleasure District (*Musalla Mezarlik*) in component 1, which is privately owned, and part of its northern area is owned by the Bergama municipality, which also owns the Kybele sanctuary (component 2). The Ministry of National Security uses the eastern part of *Kizil Avlu*, and an area of the eastern part of the *Asclepieion* – all State-owned. The aqueduct area of component 1 is privately owned, as are components 5 & 8 (Ikili tumuli and A Tepe), the second degree archaeological sites within component 1, the third degree archaeological sites and some properties in the urban site within component 1. Some of the properties within the urban site of component 1 are owned by the General Directorate of Waqfs Islamic Foundation.

The unlicensed buildings in the Roman Pleasure District which are on State-owned and privately-owned land are under an evacuation and expropriation process which will take 5-10 years.

Protection

The first degree archaeological sites within the nominated property components including Kale Hill, aqueducts, *Asclepieion*, *Musalla Mezarlik* (Roman Pleasure district), *Serapeion*, tumuli, Kybele sanctuary, and the urban area within the property boundary are said to be protected by the National Law on the Conservation of Cultural and Natural Property no. 2863, 23 July 1983 as amended. All works are subject to approval from the Izmir Regional Conservation Council for Cultural Property no. 2. Also all works in the urban area must be in accordance with the 2012 Conservation Plan prepared by Bergama

Municipality. This covers street facades and traditional construction techniques, details, materials, layout and setting. Other areas within the property are zoned as second or third degree archaeological sites at the national level, but these allow different degrees of protection in terms of what can happen there. The buffer zone includes areas zoned as third degree archaeological and historic urban sites. According to the Urban Conservation Plan building heights can be up to six storeys (18.5m) in the historic urban area, although elsewhere in the nomination dossier it is said that heights are limited to two stories within the nominated property and 5 storeys in the buffer zone.

ICOMOS notes that the protection in place has not prevented illegal settlement in parts of the property, and that construction above two storeys is allowed in the buffer zone.

ICOMOS considers that the whole property including all areas of its components should be protected as one entity at the National level with the highest protection measures. The property and buffer zone should be protected in such a way as to ensure that construction is limited to two storeys.

In conclusion, ICOMOS considers that the legal protection in place is inadequate at this stage.

Conservation

The inventory for the German archaeological investigations over the past 130 years of the Hellenistic, Roman and Byzantine sites is available at the office of the German Archaeological Institute in Istanbul, at the Ministry of Culture and Tourism and also at the Museum of Bergama and the Office of World Heritage Management of Bergama Municipality.

The inventory of the Ottoman town and the archaeological remains within it is regularly updated in collaboration with the office for World Heritage Management and the Bergama Municipality showing the state of progress of the inventory of urban construction not only in the central zone of the hill (Kale Hill and the Ottoman town) but also in the buffer zone. The inventory is currently being extended to the area south of the Selinos river, where it is the responsibility of Bergama Municipality and the Waqf. The ancient bridges and the tunnels under *Kizil Avlu* are regularly surveyed. The 2012 Conservation Plan requires traffic to be restricted over the bridges.

The current program of research is concentrated on conservation of the archaeological monuments and the built heritage of the Ottoman period and on survey rather than excavation. The Ministry of Culture and Tourism is responsible for research and restoration. The work is carried out by the German Archaeological Institute in Istanbul in collaboration with the Ministry and the Director of Museums of Bergama and must be agreed with the Izmir Regional Conservation Council for Cultural Properties No. 2. Conservation measures for the built urban heritage are controlled by the Ministry of Culture

and Tourism in accordance with the requirements of the Izmir Regional Conservation Council for Cultural Properties, No 2.

ICOMOS considers that the conservation measures are appropriate to maintain the integrity of the property. They are carried out according to accepted canons. Traditional techniques are integrated with modern conservation technology. Conservation on the acropolis is concentrated on the Temple of Trajan; Building Z with its mosaic floors (which have a protective roof); the temple of Demeter; repair of the city walls, restoration of *Kizil Avlu* including the statues, and restoration of Mal Tepe is planned. Spoil from ancient excavations is being cleared and boardwalks are installed on the acropolis and in the *Asclepieion* in order to provide access for persons with reduced mobility. The *Asclepieion* is subject to maintenance regulated by the Museum of Bergama.

However ICOMOS considers that monitoring for seismic movement should be carried out in all the archaeological zones particularly on the acropolis but also including the tumuli, theatre and amphitheatre at *Musalla Mezarlik*, the *Asclepieion* and the Kybele sanctuary.

In conclusion, ICOMOS considers that conservation is adequate but seismic monitoring is required.

Management

Management structures and processes, including traditional management processes

Management of all components of the nominated property is coordinated by Bergama Municipality World Heritage Management Office, established at the end of 2011, and by the Advisory Body, established at the end of 2012, which includes representatives of State and local administrative institutions, universities, non-government organisations including ICOMOS Turkey, and the mukhtars.

A risk management plan will be prepared as part of the Management Plan. Funding is provided from the annual budgets of the Ministry of Culture and Tourism; the Bergama municipal budget for restoration and preservation plus 10% of property taxes and 5% of ticket sales; the budget of the German Archaeological Institute; the Waqf foundations for their properties and from other institutions responsible for works to the rivers and roads.

Sufficient well-trained professionals are employed in the relevant institutions. Training has been provided through the Turkish National Commission for UNESCO and personnel also participate in relevant conferences in the region.

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

The current policy framework is provided by the Environment Management Plan for the Manisa-Kütahya-Izmir Region covering the Bakırçay Basin, approved on 14 August 2009 and the Urban Conservation Plan prepared by Bergama Municipality and approved by the Izmir Regional Conservation Council for Cultural Property on 8 June 2012. The World Heritage Management Office and Advisory Body have begun preparation of a Management Plan, of which an outline is included in the nomination dossier. This is expected to be completed by mid-2013. It includes visitor management and presentation projects.

ICOMOS considers that the tourism and presentation plan should be aimed at both general tourists and more specifically cultural tourists, with updated presentations in the museum. The funicular railway has an unfortunate visual impact on the site but is functionally necessary and used by most tourists. The location of a proposed new car park near *Kizil Avlu* for the lower station is of concern, as is the car park at the upper station. It is not clear why the latter is necessary. ICOMOS considers that it would be preferable to ban private cars and allow only taxis to access the acropolis by the track.

Involvement of the local communities

Two objectives of the Management Plan relate to the involvement of local communities in the protection and conservation of the property and in regular discussions regarding the Plan.

ICOMOS considers that the current management system of the property is adequate overall but that special attention is needed to seismic monitoring; restriction of vehicle access to the acropolis; and museum presentation.

In conclusion, ICOMOS considers that the management system should be extended to include seismic monitoring. Furthermore, ICOMOS recommends that vehicle access to the acropolis be restricted to taxis, and that museum presentation be updated. Finally, the Management Plan should be completed and implemented.

6 Monitoring

The monitoring system covers monuments and buildings with one set of indicators, and the overall state of the archaeological sites with another. As provided in the nomination dossier it could be improved by specifying which organisation is responsible for monitoring each indicator – the table gives only the periodicity and the location of records. It should also include seismic monitoring.

ICOMOS considers that the monitoring system should be improved.

7 Conclusions

The nomination is for Pergamon the multi-layered landscape but the nomination dossier is inconsistent in that the comparative analysis focuses on the Hellenistic and Roman areas and does not justify the Byzantine layer and Ottoman areas. ICOMOS considers that the key criteria are (i), (ii), (iii) and (vi), and that the nomination should focus on the value of the property as the Hellenistic capital of the Attalids and its subsequent inclusion in the Roman Empire which allowed Pergamon to extend its role as a cultural centre. The comparative analysis justifies the selection of sites in showing that Pergamon stands out in combining the Hellenistic /Roman city and its famous monuments with the burial mounds of its rulers and the Kybele sanctuary representing the local Anatolian 'Mother Goddess' cult. ICOMOS considers that criteria have not been justified for all areas of the property and that the Ottoman part of component 1 should be reduced to relate to justified Outstanding Universal Value. ICOMOS considers that the conditions of integrity are vulnerable for the whole series and for individual sites, the conditions of integrity and authenticity are vulnerable for components 1, 5, 7 & 8. ICOMOS considers that the boundaries of the nominated property and of its buffer zone are inadequate at present. The property boundaries enclose part of the property for which criteria have not been justified and the buffer zones are insufficient for components 2, 4, 5, 7 & 9. The buffer zone of component 1 should cover the remaining Ottoman area and be extended to enclose components 4, 5, 7 & 9 in order to preserve their visual connection with the acropolis. The legal protection in place for the whole site as nominated is inadequate and vehicle access to the acropolis should be restricted. The monitoring system needs improvement and should include seismic monitoring. The Management Plan needs to be completed and implemented.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Pergamon and its Multi-Layered Cultural Landscape, Republic of Turkey, 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:

- Refocus the nomination on the Hellenistic and Roman periods to justify the value of the property as the Hellenistic capital of the Attalids and its subsequent inclusion in the Roman Empire which allowed Pergamon to extend its role as a cultural centre;

- Reduce the Ottoman part of the nominated area of component 1 to relate to justified Outstanding Universal Value of the Hellenistic and Roman remains;
- Include the remaining area of the Ottoman town in the buffer zone of component 1;
- Extend the buffer zone of component 1 to include all the tumuli and their visual connections to the acropolis;
- Extend the buffer zone of component 2 to comply with the natural protection zone beyond the river to the south and west;
- Provide legal protection at the national level to the whole property including all areas of its components as one entity with the highest protection measures;
- Reinforce the legal protection of the property and buffer zone in such a way as to ensure that construction is limited to two storeys;
- Complete and implement the Management Plan.

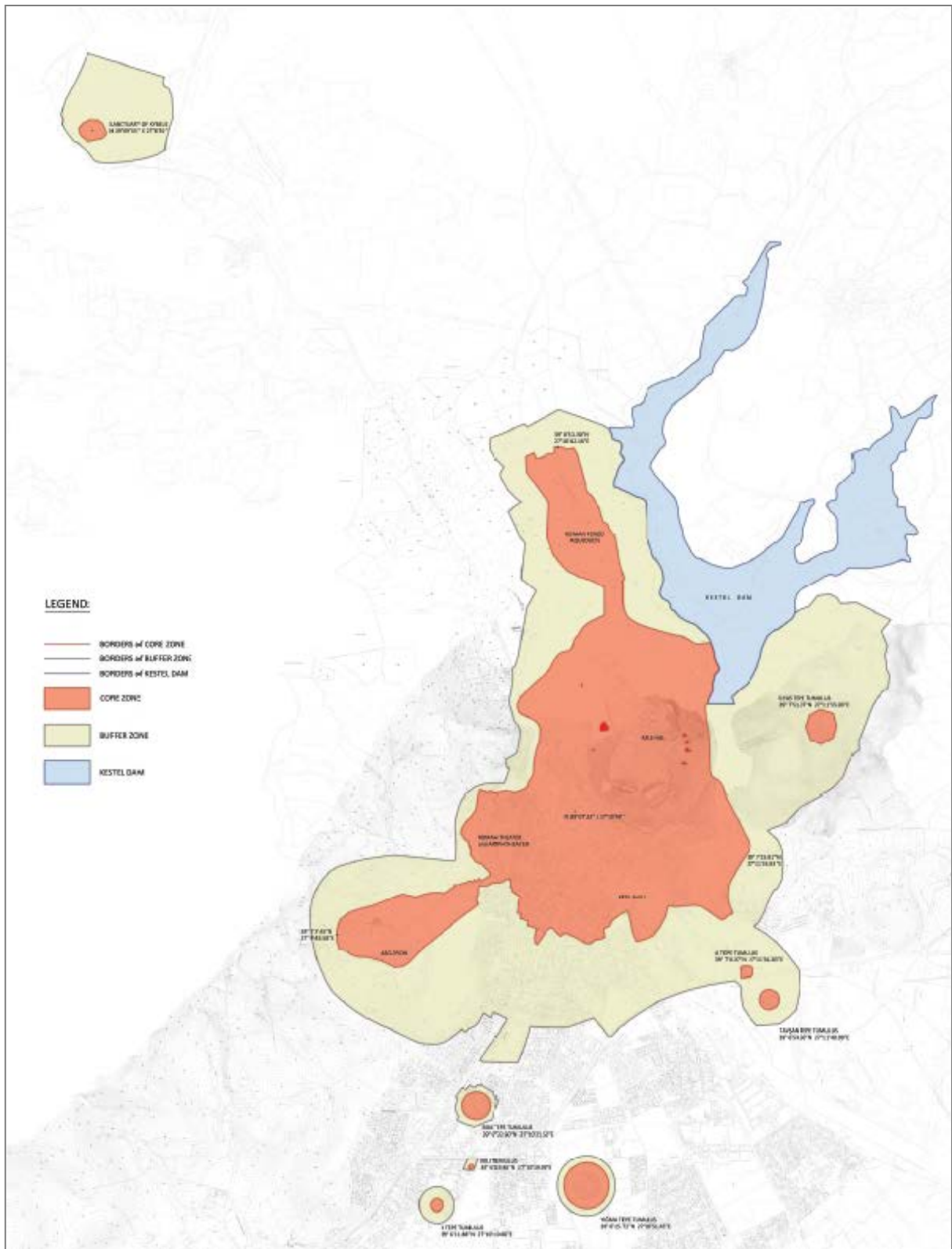
ICOMOS further recommends that the name of the property should not include 'multi-layered cultural landscape' since ICOMOS does not consider that the property belongs in this category.

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

Additional recommendations

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

- Improving the monitoring system by specifying which organisation is responsible for monitoring each indicator and include seismic monitoring;
- Restricting vehicle access to the acropolis to all except emergency services.



Map showing the boundaries of the nominated properties



Aerial view of Kale Hill



Church of St John in the *Serapeion*



Kybele Sanctuary



Yigma Tepe