STATE OF CONSERVATION REPORT

APHRODISIAS (TURKEY) (1519)

2019
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1. Executive Summary of the Report

The works related to the implementation of the World Heritage Committee decisions referenced in document no: 41 COM 8B 28 are stated below:

a) Updating the Management Plan to reflect the revised boundaries and protections for the property,

The assessment of 5-year implementation of the management plan was completed and technical and legal studies regarding the revision of the management plan are underway.

b) Providing the legal protection for the entirety of the buffer zone,

A large part of the area in the buffer zone belongs to the Treasury and protected under the Forestry Law. There are some privately owned parcels with no conservation status but this part of the buffer zone has not been subject to the dense settlement so far. Yet, there is no any issue about further settlement permission in those lands as long as the development plan is procured by the Aydin Metropolitan Municipality. The whole buffer zone is under surveillance of the management plan and it would be possible to define provisions and principals for conservation of these areas within the revised management plan.

c) Increasing efforts to integrate the local community into the management system for the property,

Local people participate in the management planning processes through representatives. All decisions regarding the works carried out under the Aphrodisias management plan are taken together with the representatives of the local people. Besides, education and awareness raising activities are conducted for local people.

d) Formulating and implementing monitoring indicators for the quarry component,

Monitoring indicators have been formulated and implemented for the quarry component by the excavation team.

e) Implementing the drainage rehabilitation plan within the walled city at a quicker pace,

Within the scope of the drainage rehabilitation plan, the excavation of the South Agora Pool was completed, the excavation of the Tetrapylon Street is project to be completed in 2020 and conservation and restoration works are ongoing in these areas. The excavation team is also now engaged in a major project to conserve the ring drain of the pool. In order to control wastewater and rainwater flowing to the site, sewerage and infrastructure works were completed and rainwater channels have been projected by Aydin Metropolitan Municipality.
f) Developing a fire response plan and providing training in fire suppression, as well as mobile water tanks in the summer as an interim measure until a permanent fire suppression system is installed,

Fire response plans and training activities are conducted by excavation team and Aphrodisias Museum Directorate. The museum security cameras can see the whole site, and they are watched 24/7 by the Museum security staff. In order to prevent fire, the site is kept clear of tall grass and vegetation. Fire extinguishing valves and fire cabinets are located around the Museum. The museum has two mobile water tanks on site; they are regularly checked and re-filled.

g) Expanding the patrols by the agricultural guards to include the quarry component and the whole of the buffer zone,

Instead of agricultural guards, which have no legal duty to protect the site, the gendarmerie, located on the site, routinely performs security patrols in and around the ancient city as well as in and around the Marble Quarries and Buffer Zone.

h) Conducting a full 3D inventory of the quarry faces in order to provide a baseline record of their condition,

In order to provide a baseline record of the quarry faces a 3D inventory was conducted by the excavation team.

i) Implementing remedial conservation measures within the quarry component;

The quarries are in a good state of preservation and they require fundamentally not conservation but protection exactly as they are.

2. Response to the Decision of the World Heritage Committee

a) Updating the Management Plan to reflect the revised boundaries and protections for the property,

Within the scope of efforts to revise the management plan; a report on the level of implementation and performance of the Management Plan was prepared and sent to the General Directorate for Cultural Heritage and Museums by the Site Manager in September 2018. In accordance with the legal legislation, a control team was established within the General Directorate for Cultural Heritage and Museums, in October 2018, in order to prepare an evaluation report on the Aphrodisias Management Plan and to take part in studies regarding the revision of the management plan.

An evaluation report was also prepared by the control team considering the legal regulations, the recommendations of ICOMOS and the decision of the World Heritage Committee and submitted to the Coordination and Supervision Board in December 2018. The revision of the management plan was evaluated by the Coordination and Supervision Board in its meeting on 23th, March 2019 and legal decision for revision of the management plan is taken.

Upon the above-mentioned decision of Coordination and Supervision Board, technical and legal studies regarding the revision of the management plan are underway.
b) Providing the legal protection for the entirety of the buffer zone,

During the nomination process, the area including all the ancient quarries was registered as the 1st degree archaeological conservation zone by the decision of Aydin Regional Conservation Council on 27th October 2016. By this decision, the former conservation status of the quarries (10 parcels of land as monuments) was abrogated. Therefore, the world heritage boundary for the ancient marble quarries was overlapped with this new conservation status which covers the whole range of quarries and the buffer zone was enlarged. Accordingly, the management plan boundary was enlarged and overlapped with the buffer zone boundaries upon the Ministry’s decision dated 20th of February 2017. The map showing the final situation of the boundaries was presented with the additional information in February 2017.

Due to the absence of any archaeological finding in some parts of the buffer zone, it has not yet been possible to designate a protection status in those areas under the Law on the Conservation of Cultural and Natural Property. However, a large part of the area in question is Treasury land and remains within the forest boundaries (see annex.1) Therefore, this area is protected under the Forestry Law and is not subject to development pressure. In addition, due to the abolition of Geyre's village status by the Metropolitan Law in 2014, a development plan is required for construction, and since there is no development plan for the parcels subject to private ownership, it is not possible to issue a construction permit for the construction of new buildings as long as the development plan is procured by the Aydin Metropolitan Municipality.

On the other hand, the whole buffer zone is under surveillance of the management plan and it would be possible to define provisions and principals for conservation of these areas within the revised management plan.

c) Increasing efforts to integrate the local community into the management system for the property,

In Turkey, as a legal obligation, representatives of local community participate in the processes for management planning. The Mukhtar (headman) of the Geyre Neighbourhood is a member of the Advisory Board of the Aphrodisias Site Management as the representative of the residents of Geyre Neighbourhood. Likewise, Aydin Metropolitan Municipality and Municipality of Karacasu, as representatives of local people, are members of the Coordination and Supervision Board which is responsible for approving and implementing the decisions and provisions of Site Management Plan. Thus, all decisions regarding the works carried out under the Aphrodisias Management Plan are taken together with the representatives of the local people.

The excavation team currently includes several conservation students and graduates from Karacasu Vocational School in the archaeological field team. Senior members of the excavation team give site tours to the local excavation workers each year (c. 60-80 workers) and have trained many local workers in modern techniques of excavation, restoration, and site conservation (photos.1-2).

A workshop in archaeology and history for school children from the surrounding area was run at the site in July and August 2018, coordinated by Gülşay Sert and funded by the Geyre Vakfı. Over the month of the workshop, 600 children from the local region attended. A month-long
archaeology workshop was organised on site in 2019 for locals - mainly children, but also mukhtars, women, and teachers from the region. The number of participants in the workshop was around 600 (photos.3-7).

In addition, "Ara Güler and Prof. Dr. Kenan Tevfik Erim Commemoration and 1st International Aphrodisias Photography, Culture, Art and Tourism Festival" was organized between 15-19 October 2019. The festival provided benefits for the integration of local people into the Aphrodisias World Heritage Site, raising awareness for protection, improving the sense of belonging as well as national and international promotion of the site (photo.8-14).

d) Formulating and implementing monitoring indicators for the quarry component,

The excavation team has taken steps to formulate and implement monitoring indicators for the quarry component. A large body of team members each season will walk over and monitor the quarry areas for any changes. Any changes are to be documented by dated photographs. This programme began in 2018 and was continued in July 2019: a body of c. 25 senior and student excavation team members inspected the quarry faces, and the mounds of working chips to the west of the quarry faces (photos.15-18) Quarry component is also monitored and visually documented by Aphrodisias Museum Directorate (photos.19-21).

Key Indicators for Measuring State of Conservation of Ancient Quarries at Aphrodisias

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Periodicity</th>
<th>Location of Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability of main quarry faces</td>
<td>Annual assessment</td>
<td>Institute of Fine Arts, NYU - Cast Gallery, Ashmolean Museum</td>
</tr>
<tr>
<td>Condition of mounds of waste chips</td>
<td>Annual assessment</td>
<td>Institute of Fine Arts, NYU - Cast Gallery, Ashmolean Museum</td>
</tr>
<tr>
<td>Condition of unfinished waste blocks</td>
<td>Annual assessment</td>
<td>Institute of Fine Arts, NYU - Cast Gallery, Ashmolean Museum</td>
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<tr>
<td>Vegetation</td>
<td>Annual assessment</td>
<td>Institute of Fine Arts, NYU - Cast Gallery, Ashmolean Museum</td>
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<tr>
<td>Building activity close to main quarry faces</td>
<td>Annual assessment</td>
<td>Institute of Fine Arts, NYU - Cast Gallery, Ashmolean Museum</td>
</tr>
<tr>
<td>Modern quarrying activity</td>
<td>Annual assessment</td>
<td>Institute of Fine Arts, NYU - Cast Gallery, Ashmolean Museum</td>
</tr>
<tr>
<td>Damage to exposed quarry faces, such as graffiti or carving</td>
<td>Annual assessment</td>
<td>Institute of Fine Arts, NYU - Cast Gallery, Ashmolean Museum</td>
</tr>
</tbody>
</table>

A summary of the monitoring results is sent to the Ministry of Culture and Tourism at the end of every excavation season.

e) Implementing the drainage rehabilitation plan within the walled city at a quicker pace,

The excavation team has been engaged intensely in finding solutions to the problems caused by rising ground water inside the walled city for some years. Within the scope of the drainage rehabilitation plan, the excavation of the South Agora Pool was completed, the excavation of the Tetrapylon Street is project to be completed in 2020 and conservation and restoration works are ongoing in these areas (photos.22-25). One of the main aims of the South Agora Pool Project was to understand the water system of the ancient city, and the excavation team engaged Ilhan Kayan, professor of geology from Ege University, to undertake a full study of the hydrology of the site (see annex.2 for the abstract of this study). His resulting data is being
studied carefully in order to find a way to include the pool in the water drainage and if possible to use the underlying aquifer layers beneath the centre of the city that have been identified in his extensive deep coring in the city centre. A meeting was also held with Prof. Kayan at Aphrodisias on 26-27 July 2019 to discuss possible solutions inside the site. The excavation team is also now engaged in a major project to conserve the ring drain of the pool, with the idea that it might eventually be brought back into use.

The main water problem however lies outside the site, not inside it. A drainage rehabilitation plan that would solve the site's water issues at a quicker pace requires the laying of new pipes at Dörtyol to divert the massive rainwater run-off from the hills to the northeast of the site around the walled city to the west and east. A meeting was held at Aphrodisias on 2 August 2019 with the Regional Director of the State Hydraulic Works for Aydın, Denizli, and Muğla to discuss the site's water problems and in particular the need for drainage outside the site, north of the main Karacasu-Tavas road, to take the run-off from the hills to the northeast before it reaches the site.

In order to control the water usage and wastewater in Dörtyol Neighborhood, located at the upper elevation of the Ancient City, sewerage and infrastructure works were completed by the Aydın Metropolitan Municipality. In addition, rainwater channels have been projected on the main road line in order to control the rainwater flowing from surface. The project is expected to be implemented soon.

f) Developing a fire response plan and providing training in fire suppression, as well as mobile water tanks in the summer as an interim measure until a permanent fire suppression system is installed,

The museum security cameras can see the whole site, and they are watched 24/7 by the Museum security staff. The best fire prevention measure of all is keeping the site clear of tall grass and vegetation. The excavation team regularly cleans the site, cutting the dry grass, weeds, and other vegetation. This work takes up to 50 men working for 1 month.

The excavation team is liaising with the fire brigade in Karacasu and exploring the response times for fire brigades to arrive on site and how they would access particular parts of the site - for example, the Hadrianic Baths. The excavation team is also organising fire drills on site. Each worker will be given a responsibility: the best way to control a fire on the site, until the fire brigade comes, is to have large numbers of workers throwing earth on the fire before it spreads.

When the South Agora Pool conservation project is completed, the pool will be filled with water as in antiquity. Permanent pumps will be installed beside the pool, creating a constant water reservoir available for use in case of fire in the centre of the site.

The excavation team has also prepared a full fire response plan for the excavation house (see annex.3). Red fire extinguisher cylinders of different kinds will be mounted at various points under and at staircases and other points in the excavation house compound (photo.26) The excavation team have practiced using them (photo.27).

Fire intervention plans (available only in Turkish) and fire extinguishing training of personnel are provided by Aphrodisias Museum Directorate. The latest training was given by the fire brigade on 15 November 2019 (photo.28). The booster room has been completely refurbished
and a 10-ton water tank is installed, which is equipped with pressure cylinders and pressurized water is supplied to the 2 fire hydrants in the area. In addition, fire extinguishing hydrants and fire cabinets located around the Museum, established for the purpose of fire prevention, were repaired and maintained by the Museum Directorate (photo.29-30). In order to prevent fires during the summer months, an additional mobile water tank with pressure engine has been provided in addition to the existing mobile water tank and the number of mobile water tanks have been increased to 2 for emergency response (photo.31-32). The mobile water tanks are regularly checked and re-filled.

g) Expanding the patrols by the agricultural guards to include the quarry component and the whole of the buffer zone,

Agricultural guards have no legal duty to protect the site. However, the Geyre Gendarmerie Station Command, which was allowed to be built for the protection of the Aphrodisias Ancient City with the permission of the Ministry, is located between the ancient city and the marble quarries. The gendarmerie routinely performs security patrols in and around the ancient city. Likewise, for the protection of the Ancient Marble Quarries and the surrounding area, the gendarmerie patrol with vehicles is regularly secured.

h) Conducting a full 3D inventory of the quarry faces in order to provide a baseline record of their condition,

In order to provide a baseline record of their condition, a proposal was made to create a 3D model of the quarries and quarry faces. This task has now been completed by the excavation team. Though raw and detailed data belonging to the visual documentation of marble quarries is available within the Ministry and excavation team archives, the final 3D image of marble quarries is attached (see annex.4).

i) Implementing remedial conservation measures within the quarry component;

The quarries are in a good state of preservation. They did not suffer from significant geomorphological change or intensive human activity since antiquity. No restoration, conservation, or interventions have taken place. The quarries are in broadly the same situation they were in ancient times and they require fundamentally not conservation but protection exactly as they are.

The excavation team monitors their condition each season and has taken measures to provide an accurate 3D record of the quarries and their quarry faces against which any future damage or deterioration might be measured. The excavation team has also designed and produced an information panel about the quarries, set up at the entrance of the site (photo.33-34).

3. Other current conservation issues identified by the State(s) Party(ies) which may have an impact on the property’s Outstanding Universal Value

N/A

4. In conformity with Paragraph 172 of the Operational Guidelines, describe any potential major restorations, alterations and/or new construction(s) intended within the property, the buffer zone(s) and/or corridors or other areas, where such developments
may affect the Outstanding Universal Value of the property, including authenticity and integrity.

N/A

5. Public access to the state of conservation report


6. Signature of the Authority

[Signature Image]

Gökhan YAZGI
General Director
General Directorate of Cultural Heritage and Museums
Ministry of Culture and Tourism
PHOTOGRAPHS

Photo.1: Excavation team (locals, students, professionals)
Photo.2: Workers lecture
Photo.3-7: Archaeology and history workshop
Photo.8-14: Ara Güler and Prof. Dr. Kenan Tevfik Erim Commemoration and 1st International Aphrodisias Photography, Culture, Art and Tourism Festival
Photo.15-16: Quarries - Monitoring
Photo.20-21: Quarries – Monitoring
Photo.22-23: Tetrapylon Street excavation and restoration works.
Photo.24: South Agora Pool after the excavation

Photo.25: Restoration works at the South Agora Pool
Photo.26: Fire extinguishers and blankets
Photos.27-28: Fire extinguisher training

Photo.29-30: Examples of hydrants and fire cabinets

Photo.31-32: Mobile water tanks
Photo.33-34: Information panel about the quarries
Annex.2

Paleogeographical Research and Geoarchaeological Interpretations on the Aphrodisias Wetland Area

İlhan KAYAN, Ertuğ ÖNER, Mehmet DOĞAN, Rifat İLHAN

Abstract

The ancient city of Aphrodisias is located in the Karacasu tectonic trough (graben), on the foot-plain of the Akdağ mountain range. The plain was formed on the terrestrial deposits (alluvial fans and lakes) covering the bottom of the graben in the Neogene, and then changed into a plateau by incision of the Karacasu River (Dandanaz) and its tributaries. These properties are not suitable for the presence of a widespread ground water table under the surface. However, Aphrodisias has plenty of water, which reaches to the surface and accumulates in the pits. These waters came out from springs which are originated from tectonic-karstic processes and now covered by alluvial-colluvial surface deposits, to the northwest of the area. This study is carried out to investigate the effects of the water on the development of physical characteristics of geographical environment, and settlement and cultural development since the prehistoric times. For this purpose, physical and paleontological properties of the sediments obtained from 15 percussion drillings in the Aphrodisias city area were investigated and chronological data were used. The deepest part of the wetland sediments reaches a thickness of up to 13 m in the South Agora Pool of the Roman period. Here, it was possible to separate three stratigraphic units in terms of the morphology of the depression, where the wetland sediments were deposited, and the characteristics of the sediments. The upper level of the second unit was dated 40,000 years ago, according to 14C analysis. Thus, the formation of the wetland dates back to the pre-Holocene times. The oldest known settlement time goes back to 5000 years ago (Late Bronze-Chalcolithic periods). These settlements are undoubtedly related to the presence of water. The water also was an important factor in the development of the Hellenistic and Roman cities. Urbanization started as a sanctuary near the water and gained value with architectural structures such as bath and agora pool. Today, water accumulated among the remains of the city is a problem for archaeological excavation and restoration works. Instead of considering this situation as a problem and thinking of draining the water directly, we think it would be interesting to include water presence in restoration planning and re-use them in water structures, and we recommend such an application.
FIRE EMERGENCY PROCEDURE

1. SOUND ALARM
   - Alert team members nearest to you
   - Alert fire brigade – A Turkish-speaking team member must call the fire brigade immediately and give answers to the following questions:
     - Where is the fire located?
     - What is burning?
     - Are there injuries?
     - Name of person calling the fire brigade?

2. RESCUE
   - Get any injured persons, any children, and anyone with special needs out of the danger area.
   - Remember: Rescuing people comes before fire-fighting!
   - Assembly Point: The open space (meydan) in front of the museum. Gather around the lion statue there and await further instructions.

3. TACKLING THE FIRE
   - Only tackle the fire if you are sure you can succeed.
   - Close the door of any room that is on fire.
   - Never fight a fire alone!
   - For first attempts to extinguish fire, use Fire Blankets and Portable Fire Extinguishers.
     - Fire Blankets are kept on every floor of the Excavation House buildings.
     - Portable Extinguishers are kept under the staircase of the Main House and of the Garage House, Museum House, at the entrance to the Conservation Lab, and in the Blue Depot.
   - Follow the instructions of the Firebrigade and Emergency services.

4. EMERGENCY NUMBERS
   - Fire brigade Karacasu: 110
   - Ambulance / Police: 112
   - Jandarma: 156
   - Thomas: 0531 675 03 67
   - Serra: 0535 793 22 01
   - Muhamed çavuş: 0536 561 28 79
Annex.4

Aphrodisias mermer ocaklar