

**Islamic Republic of Iran**  
Iranian Cultural Heritage, Handicrafts & Tourism Organization  
**ICHHTO**



**Implementation Calendar of  
Susa World Heritage Site**

*UNESCO*  
*World Heritage Convention*  
*Tehran 2016*

*In the name of God*

## Geomagnetic survey conduction in the unoccupied area in the Buffer Zone to assess the possible archaeological remains

In winter 2015, a documentation survey program was conducted in the buffer zone of Susa World Heritage Site, in order to prepare a priority plan based on the significances of the site and the threats to it. Susa World Heritage Base carried out the investigation by considering the current status of the site, field surveys and evaluation of civil development plans and their outcomes. The result of these investigations has indicated the priorities for fundamental nondestructive testing activities (e.g. geomagnetic survey) on the site to discover possible archeological remains without excavation.

However, it is noteworthy to know that during the war, the city of Susa and its vicinity were targeted for dozens of times, so the shards of exploded ordnances and other metal objects are among the things that may disturb the results of the geomagnetic surveys. Thus, the areas with a high disturbance are identified and are defined among the list priority choices.

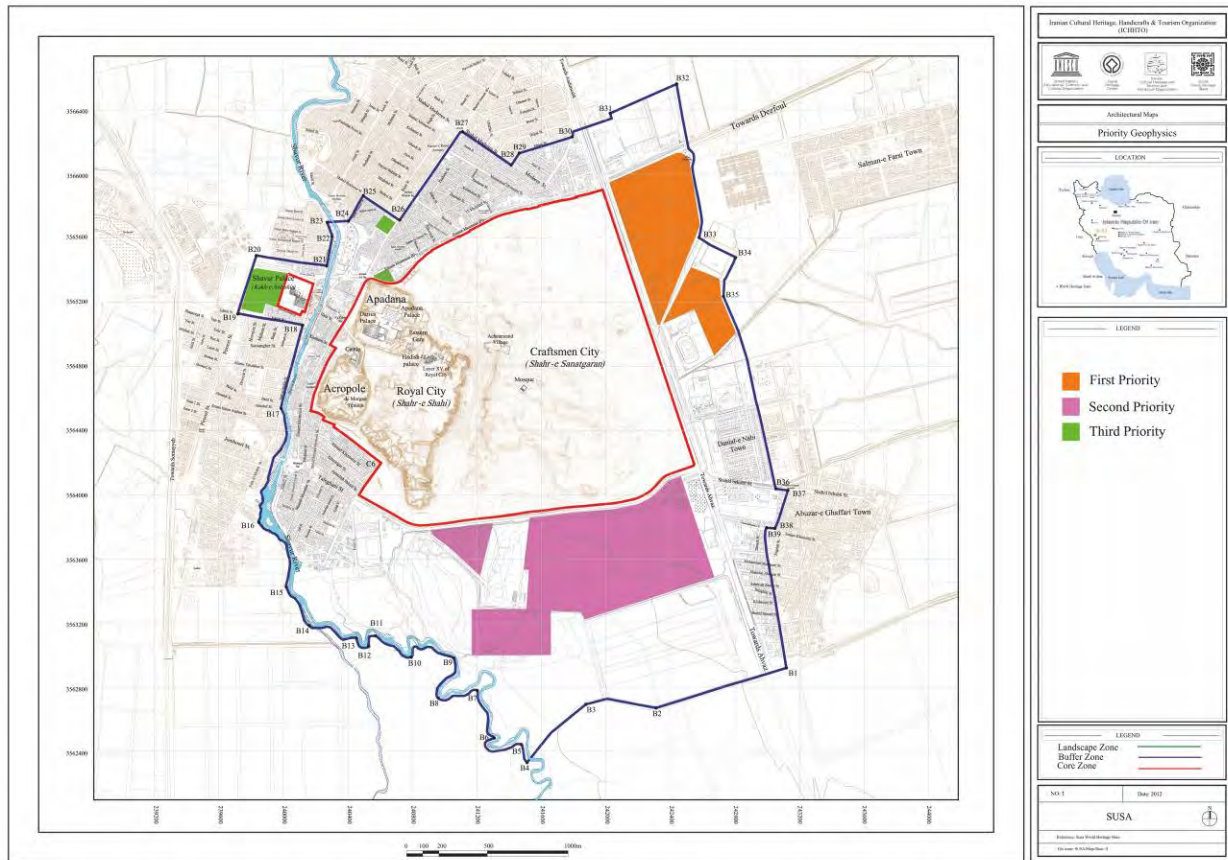


Figure 1. Geomagnetic surveys' Priorities

## Protection and rescue operation of the exposed and revealed archaeological remains in the Buffer Zone (Ayadana)

An important archaeological site within the boundaries of Susa World Heritage Landscape zone is considered to be the mound of Ayadana which is disturbed in past by agricultural activities and

surrounding within the cultivated fields. As the first stage, in order to prevent further possible destructions by local farmers, the Susa World Heritage Base held an awareness-raising session with the field owners of which the mound is surrounded with, about the Outstanding Universal Values of the monument and its significances in their lives. Secondly the process of documentation developed in winter 2015 - spring 2016, including drawing sketch and contour maps, drawing the potsherds assemblage gathered from the site's surface, taking photos and recording the specification of excavated findings.

Subsequently the legal case of the Ayadana was prepared. In summer 2016, also, several temporary cement piles placed to provide circumstances for ensuring the safety of the site and to defend its legal claims before courts and associated institutions, in a way that the boundaries of the monument is marked with the consent of owners.

Moreover, according to the decision of the technical committee of the base, further accurate investigation plans for the recognition of the core area limits of Ayadana will be carried out based on scientific methods.

It should be regarded that; the area is under permanent monitoring actions on weekly and monthly basis by archeological experts and security guards of the base in order to prevent damages or any future risks in Ayadana mound vicinity.



*Figure 2. Field survey and monitoring missions on Ayadana*



*Figure 3. Placing cement piles in order to mark the boundaries of Ayadana*

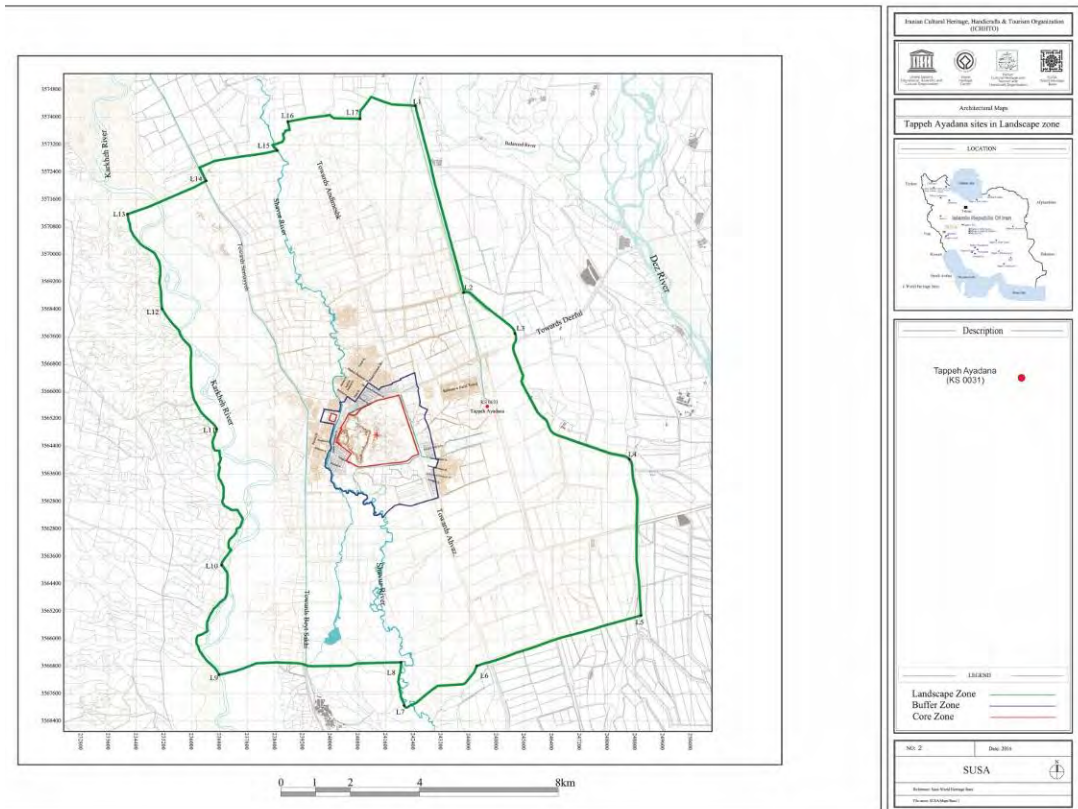


Figure 4. Location of Ayadana in the landscape zone of the site

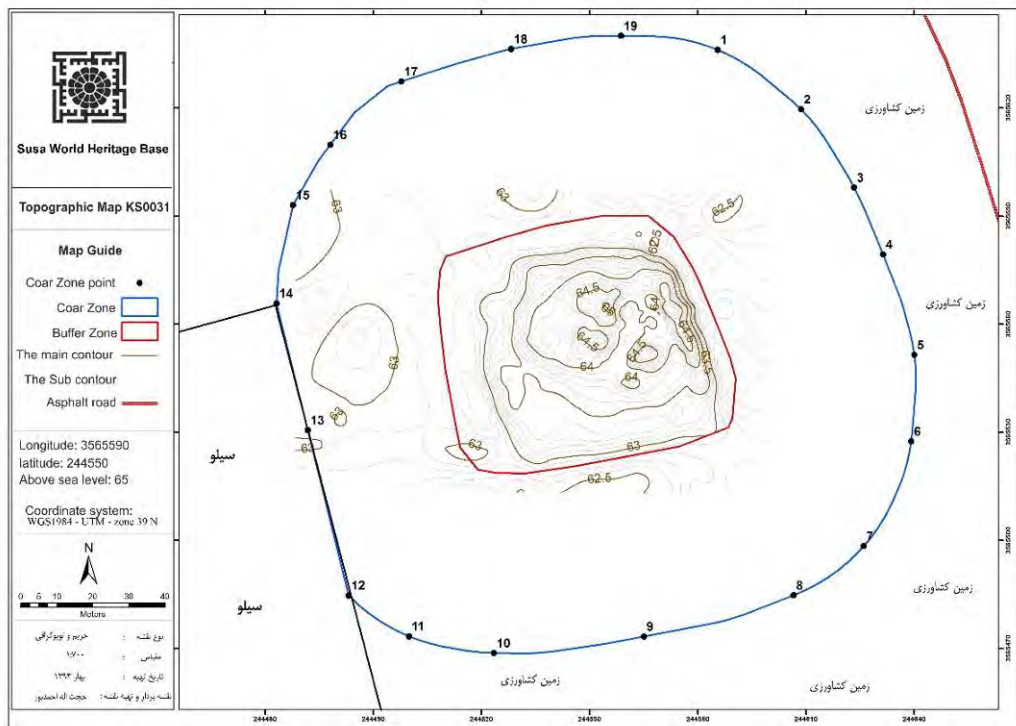


Figure 5. Contour Map of Ayadana with its proposed core zone and buffer zone limits

## Cordoning the exposed and revealed unoccupied areas with archaeological remains in the Buffer Zone

Official inquiries to the responsible authorities clarified the question of land ownership within the boundaries of Susa World Heritage Site between fall 2015 and spring 2016. Then each individual unit identified and registered in a file with all its specifications including the measures of its covering area, ownership type and function, a sketched drawing, and its location within the buffer zone. The next stage will be to order the priorities and to determine the possibilities to facilitate marking and cordoning of the boundaries within the buffer area of the Susa World Heritage Site.

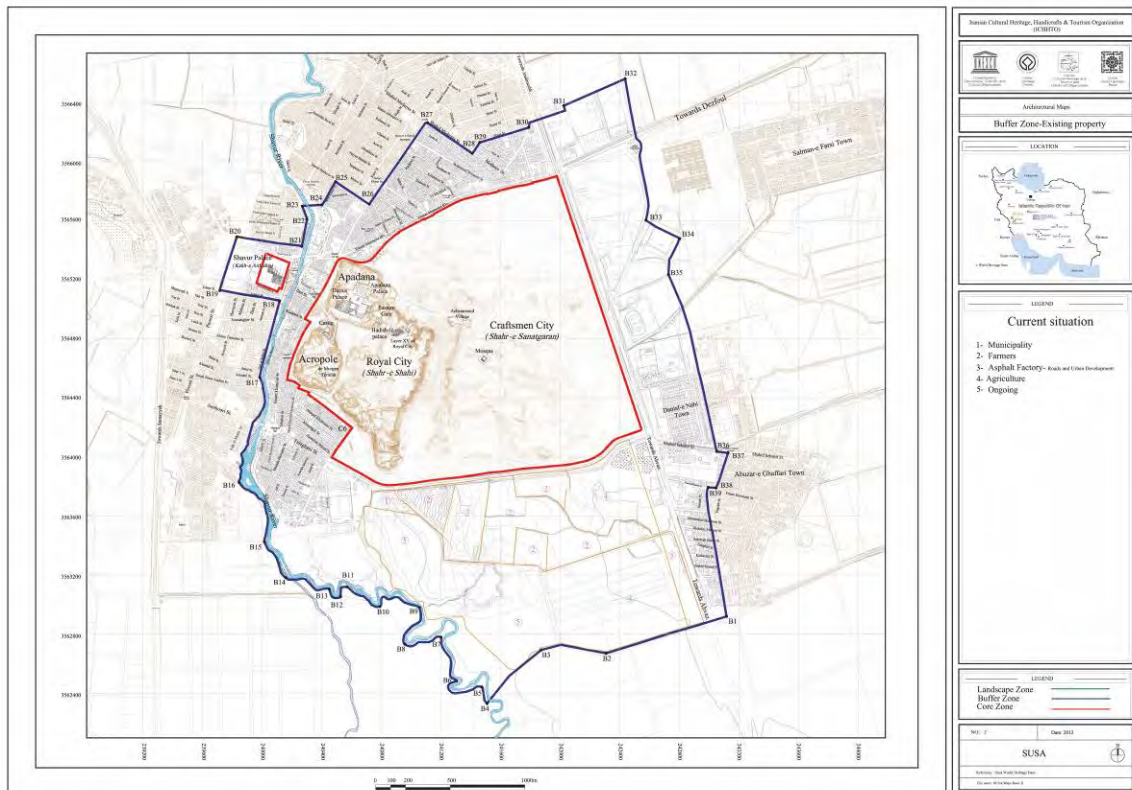


Figure 6. The ownership status of the buffer zone lands



Figure 7. Updated Implementation Calendar regarding the upper mentioned aspects (the file is attached separately)

### Purchasing the entire unoccupied areas in the Buffer Zone

Following the upper mention activities regarding clarification of ownerships, an expert team consisting of different professions including archaeology, architecture, law and survey started to work on the results of each individual enquiry on land possession status and the file prepared for each case.

The next stage is to order the priorities and check possible circumstances of land acquisition for unoccupied areas and purchasing unit from the owners in case of occupied areas by.



Figure 8. Work Team of the Susa World Heritage Base regarding the legal affairs



Figure 9. Official letter To Dr. Neshan, the General Director of ICHHTO in Khuzistan for following the process of acquisition in case of so-called Gas Station archaeological site known as the Heritage Park



Figure 10. samples of official letters to the Organization for Registration of Deeds and Properties, susa branch, enquiring the possession status of the so-called Gas Station archaeological site to be legally pursued by Susa World Heritage Base (left)- A sample of an official letter in response to the Susa World Heritage Base enquiries from the Organization for Registration of Deeds and Properties attached by a map showing the possession status for the mounds in Susa 4<sup>th</sup> quarter(right)



As the land, of which in the property of Mr. Gholamreza Dinarvand, 19946.70 m<sup>2</sup>, located close to the city entrance cross road, in the lands of Abbasieh, between Golzar-e Shohada and the technical and vocational organization, is in the core zone of Susa World Heritage Site (zone D), it is prioritized to be purchased according to the acquisition act, policies and research/ scientific plans to fulfil the requirements to establish further research activities, including excavations, restoration, preservation and in-situ surveys. (Attached is the documentation and legal resolutions pertaining the case)

Signed by:

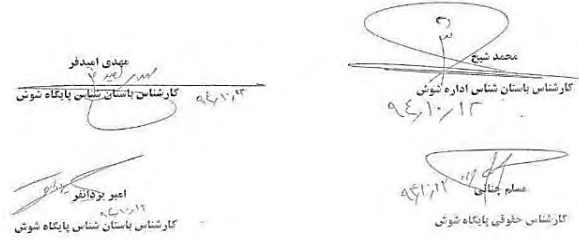
Mohammad Sheikh; Archaeology Associate, Susa ICHHTO Office

Mehdi Omidfar; Archaeology Associate, Susa World Heritage Base

Amir Yazdanfar; Archaeology Associate, Susa World Heritage Base

Moslem Chenani; Law Expert, Susa World Heritage Base

نظریه اینکه ملک مربوط به آقای شلامرضا دیناروند به مساحت ۱۹۹۴۶/۷۰ متر مربع، طبق اسناد پیوستی واقع در چهار راه ورودی شهر در اراضی موسوم به عباسیه اراضی حد فاصل بین گلزار شهیدا و اداره فنی و حرفه ای در عرضه محوطه باستانی شوش (پهنه D) می باشد. لذا با توجه به قانون تملک و سیاستها و برنامه های علمی - پژوهشی و مطالعاتی این مجموعه شامل: بررسی، کاوش، مرمت، حفاظت و پژوهشهای میدانی آبی در محوطه باستانی شوش، در اولویت تملک قرار دارند. (پیوست مدارک و مستندات مربوطه)



بیمبایست گذاری در خصوص تملک:

عمر صبه

Figure 11. A sample of official letters announcing the decisions regarding the acquisition of lands in the core zone of the World Heritage Site



Figure 12. A sample of official letters to the Organization for Registration of Deeds and Properties, susa branch, enquiring the possession status of the following mounds to be legally pursued by Susa World Heritage Base: 1. Abu-Shukha, 2. Ishan-e Roud, 3. Bendebal, 4. Buhalan, 5. Jaderi, 6. Jafarabad, 7. Djawi, 8. Dinarvand, 9. Mirzali, 10. Sharkeni, 11. Karkhane Shir, 12. Abbasieh II, 13. Foroodgah, 14. Fakhraei I, 15. Fakhraei II, 16. Moghdari, 17. Nezam-Maafi, 18. Tala

## Resurveying the area of the Landscape Zone to assess the exact area of occupation of the archaeological sites in that Zone

Before starting any excavation in the area, a list of existing sites in the landscape zone of Susa World Heritage Site prepared. Moreover, the literature of the archaeological investigations on each site was reviewed. Some sites including Djawi, Jafarabad, Bendebal, Buhalan, and Ayadana were previously investigated and excavated. Two out of 23 site were left uninvestigated until recently.

Two experts took the responsibility to conduct the mapping process of the archaeological sites in the buffer zone of Susa World Heritage Site, producing accurate sketch drawings, contour maps, and section drawings of each site. The next stage was the assessment of all 23 defined sites systematically by four of the base’s archaeology experts.

The data collected from each site were registered and added to the database afterwards in an index prepared independently for this purpose including number of the site, site name, UTM geographical coordinates, elevation above sea level, geomorphological specifications of each site, dimensions of the site (length, width, height), cultural material dispersal over the site’s surface, and the risks or damages to the sites.

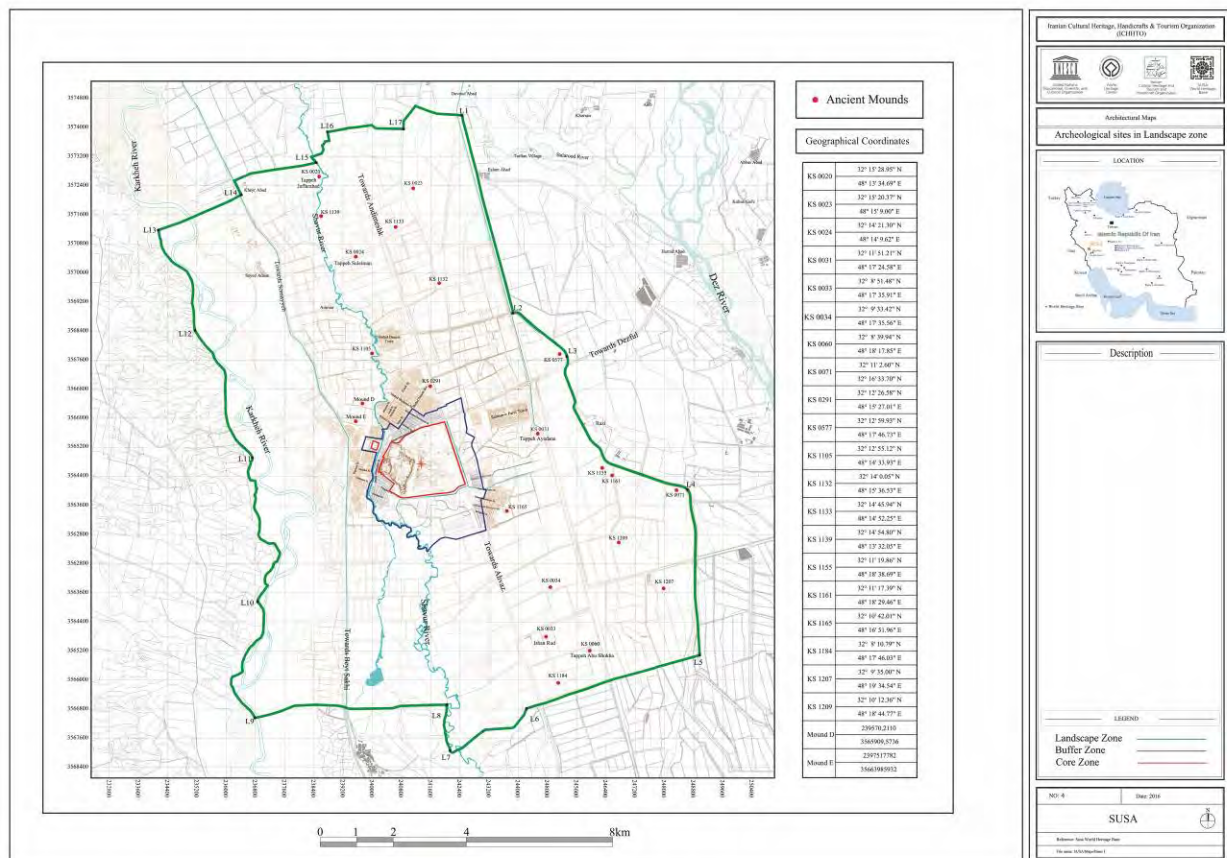


Figure 13. Mapping the archaeological mounds in the Landscape zone

The overview of all the sites and all damages were photographed and typical pottery samples gathered from each site. After cleansing and back-writing of data sets including number of the site and the date of the survey, each potsherd was photographed, drawn, described, and dated in

relation with a chronological period following published sources. Being assessed, studied and documented each collected assemblage were packed in pockets with tags and stored in the ceramics collection of Susa World Heritage Base.

Making use of remote sensing, the World Heritage Base could prepare a proper overview of the archaeological sites, their surroundings and previous damages by comparing the old data sets consist of aerial photos (CORONA) with the modern satellite imagery techniques (BingMap & GoogleEarth). Satellite imagery analysis also helps to recognize threatening factors to the archaeological monuments and sites to be used to conduct further preventive measures.

To conclude, a separate file for each site was provided with the collected data sets to be prepared for the registration of sites on the list of national heritage sites.



*Figure 14. An overview of different sites in the landscape zone of Susa World Heritage Site*



*Figure 15. Evaluation and monitoring of archaeological sites in the landscape zone of Susa World Heritage Site*

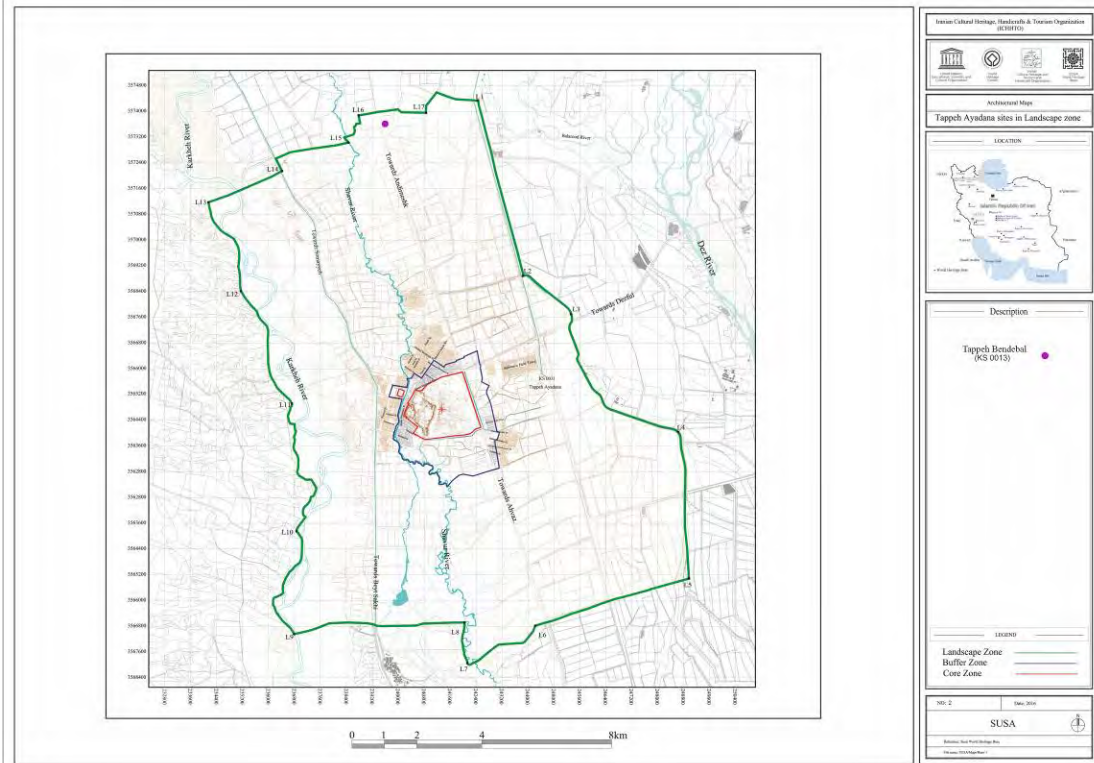


Figure 16. Location of Bendebal in the landscape zone of the site

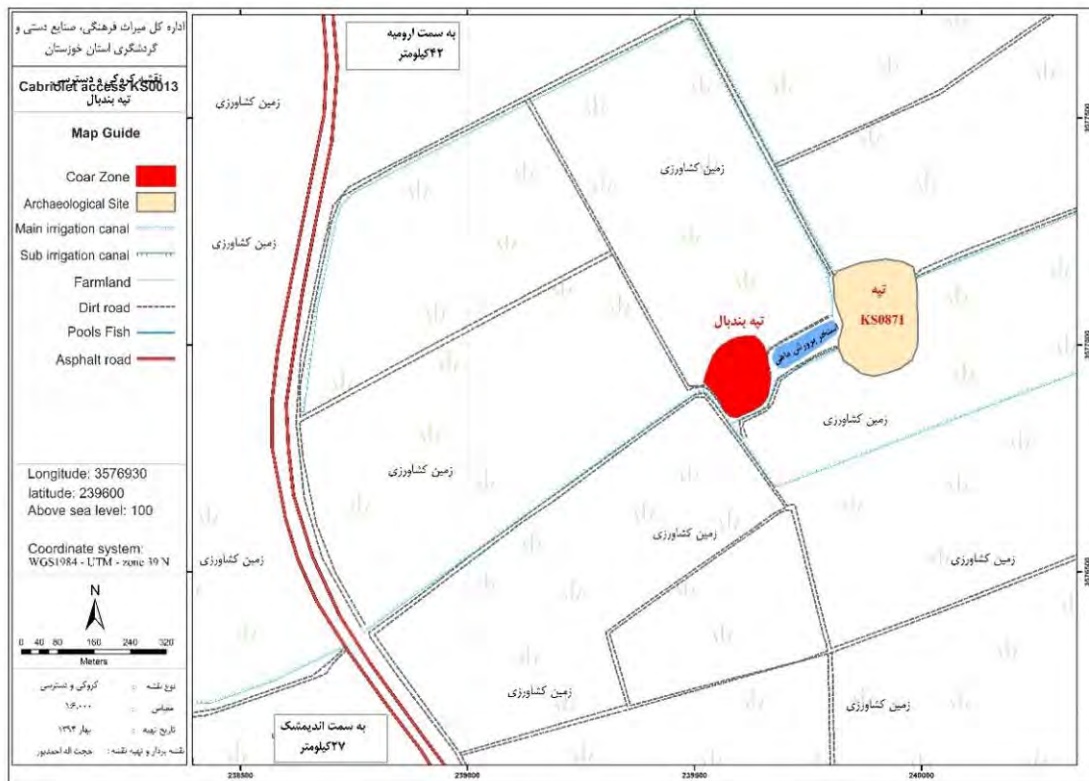


Figure 17. Sketch drawing of Bendebal mound in the landscape zone of Susa World Heritage Site

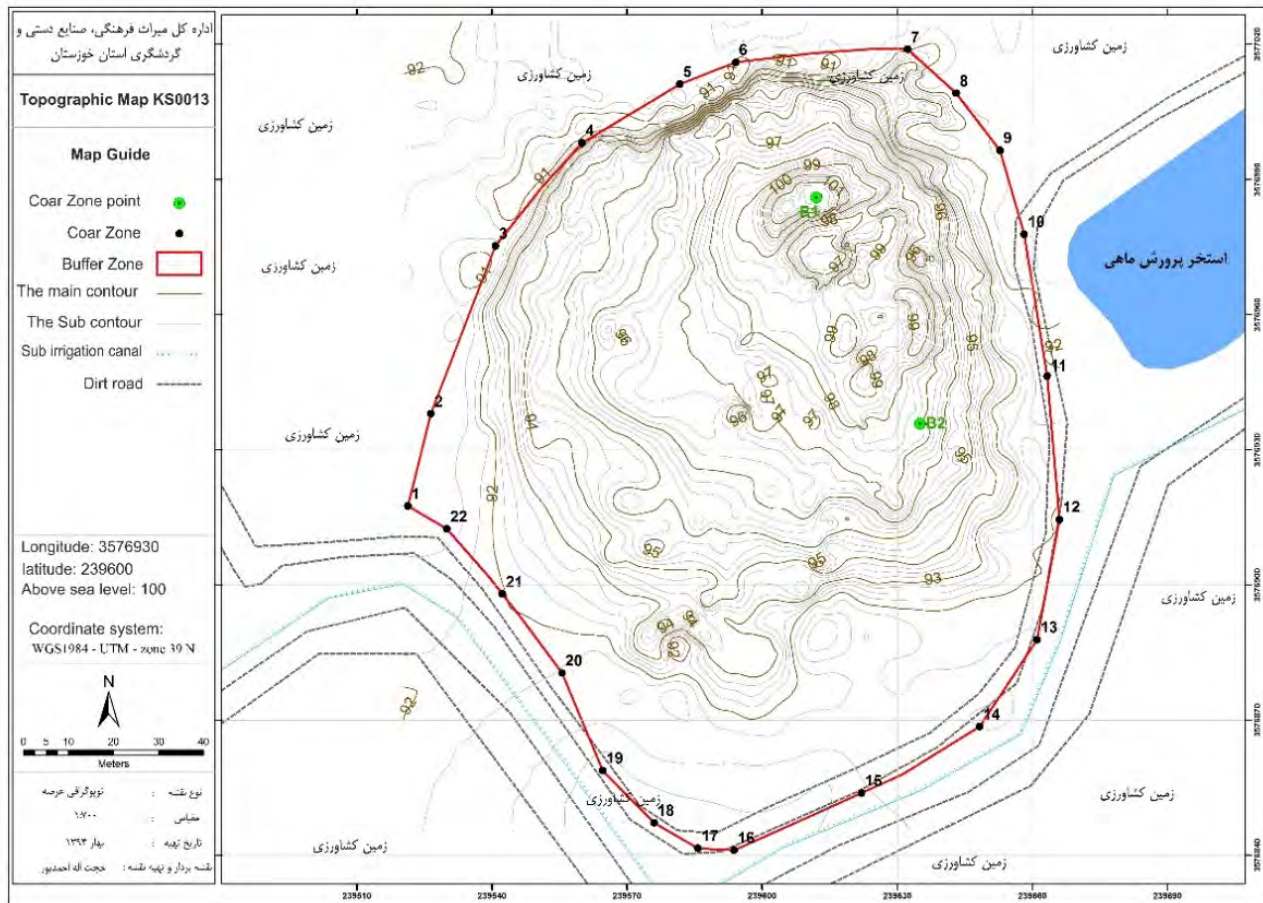


Figure 18. Contour Map of Bendebal mound in the landscape zone of Susa World Heritage Site

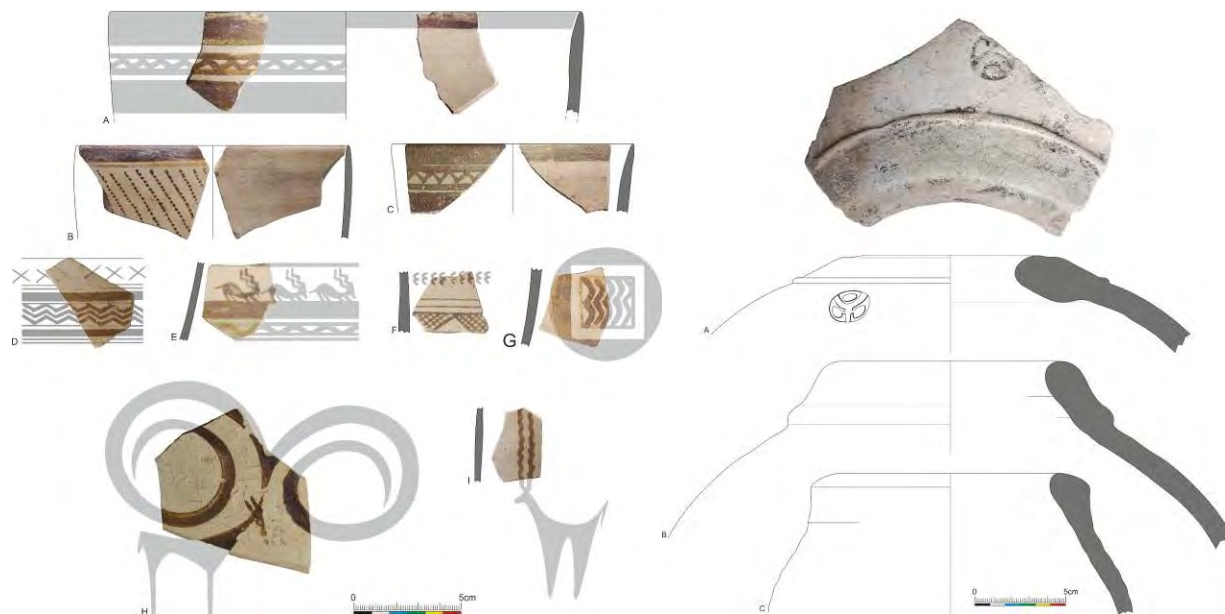


Figure 19. Parthian-Sassanian Potsherds from a site in the landscape zone of Susa World Heritage site

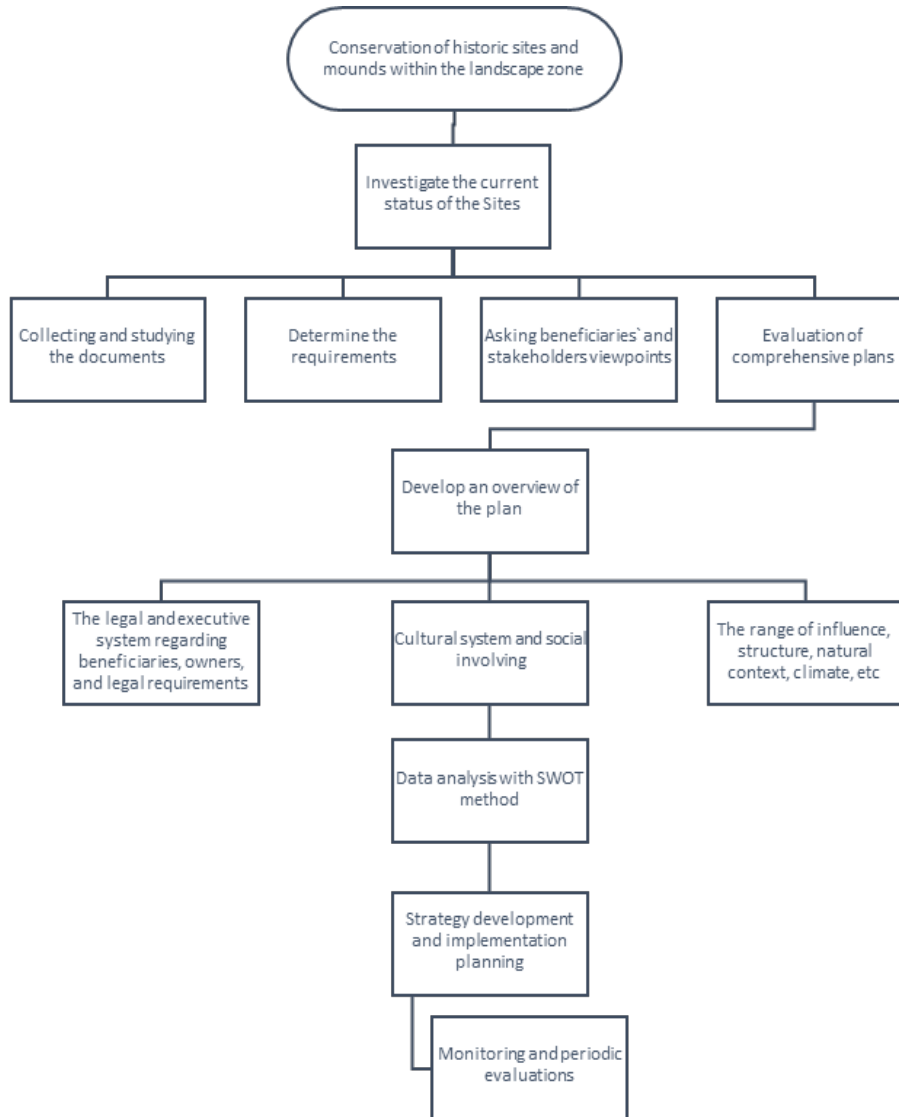


Figure 20. Historic sites conservation process in the area of Susa World Heritage Landscape

## Second phase of the organization process in the store rooms of the castle, Susa

The numerous archaeological surveys and excavations held in Susa and its vicinity (e.g. Jafarabad, Djawi, Bendebal, Buhalan, etc. in the Landscape zone of Susa World Heritage Site) which has resulted in discovery of invaluable sorts of material culture, mostly wares and potsherds, bone fragments and skeletons, spindle whorls, terracotta figurines, and stone objects of which have been stored in bad conditions for a long time; by the very first nomination stages of Susa in the world heritage list, the base developed a project to reorganize the storages in the castle, establish a ceramics collection and reorganizing the script materials (cuneiform inscribed bricks).

During the regular monitoring one of the store rooms found disturbed from a recent earthquake aftershocks which has made some shelves fall off. As the material in the store room needed urgent measures, their reorganization considered as of the priority. Also, there were some sorts

of potsherds kept in improper containers which will be ordered to fit into the first phase storages after processing and relocation. Most of the objects in this store room are exhibitable in the museum of archaeology in Susa. Thus, the World Heritage Base will record them separately and send them for the preservation and reparation processes in the laboratory of the base beforehand.

Each object will be cleansed, classified, dated, and tagged. The data will, then, be recorded in a booklet and afterwards in an electronic database created for this purpose, which is easily accessible for the researchers.



*Figure 21. A sample of a store room in the castle- before reorganization*



*Figure 22. Removing the objects from store rooms and primary cleanings*



*Figure 23. Objects classification to store in new shelves*



*Figure 24. Objects after classification, reorganization, and restoration in a safe storage*

The materials in the store rooms of the Susa World Heritage Base are considered to enrich the museum collections, therefore it is decided to select a number of them to exhibit in the museum showcases and hopefully it will be done as soon as possible. Some of the objects are now under preservation process in the laboratory.

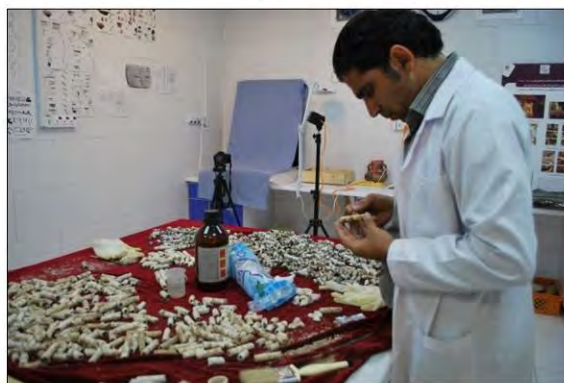


*Figure 25. Iranian scholars conducting research on the reorganized objects in Susa World Heritage Base (left)- An Italian researcher working on ancient weight stones (right)- Archaeology M.A. students studying data sets of the Ceramics Collection in Susa World Heritage Base (middle)*





*Figure 26. A Sassanid stucco relief under preservation process in the Base lab; the object is currently ready to exhibit in the museum*



*Figure 27. Preservation process in Base's lab; the objects are currently ready to exhibit in the museum*



*Figure 28. Model of a boat from late 5th Millennium BC restored and preserved in the lab which is currently exhibiting in the museum of archaeology in Susa*

**Negotiating with the landowners whom the Archaeological sites in the landscape are located in their property to come to an agreement to create a Buffer Zone for the sites**

In the first stage, the Archaeological sites within landscape zone of Susa World Heritage Site was studied and evaluated in a three-month time span (winter 2015-spring 2016). They surveyed the area systematically to recognize the sites possibly not registered in the archaeological sites index.

In the second stage, official inquiries to the governmental authorities clarified the matter of land ownership within the lands surrounding the archaeological sites in spring 2016.

The third stage was to hold meeting sessions with the landlords and members of rural councils to introduce the significances of the site and material culture to the landlords (individuals and governmental) by the World Heritage Base. There also a task force was set up to educate and develop the knowledge of local communities about cultural heritage preservation and conservation in the fields of archaeology, tourism and educational expertise. The target communities consist of local farmers, herders, tradesmen, rural council members and all the people in the society children to adults.



*Figure 29. meeting with local people and rural council members*

As the last stage, the possible boundaries of some archaeological sites were marked with temporary cement piles with the approval of the local communities and rural councils in summer 2016.



*Figure 30. Gain the consent of local communities and owners after explanatory meetings*



Figure 31. Training sessions for locals



Figure 32. Educational events for youngsters and kids

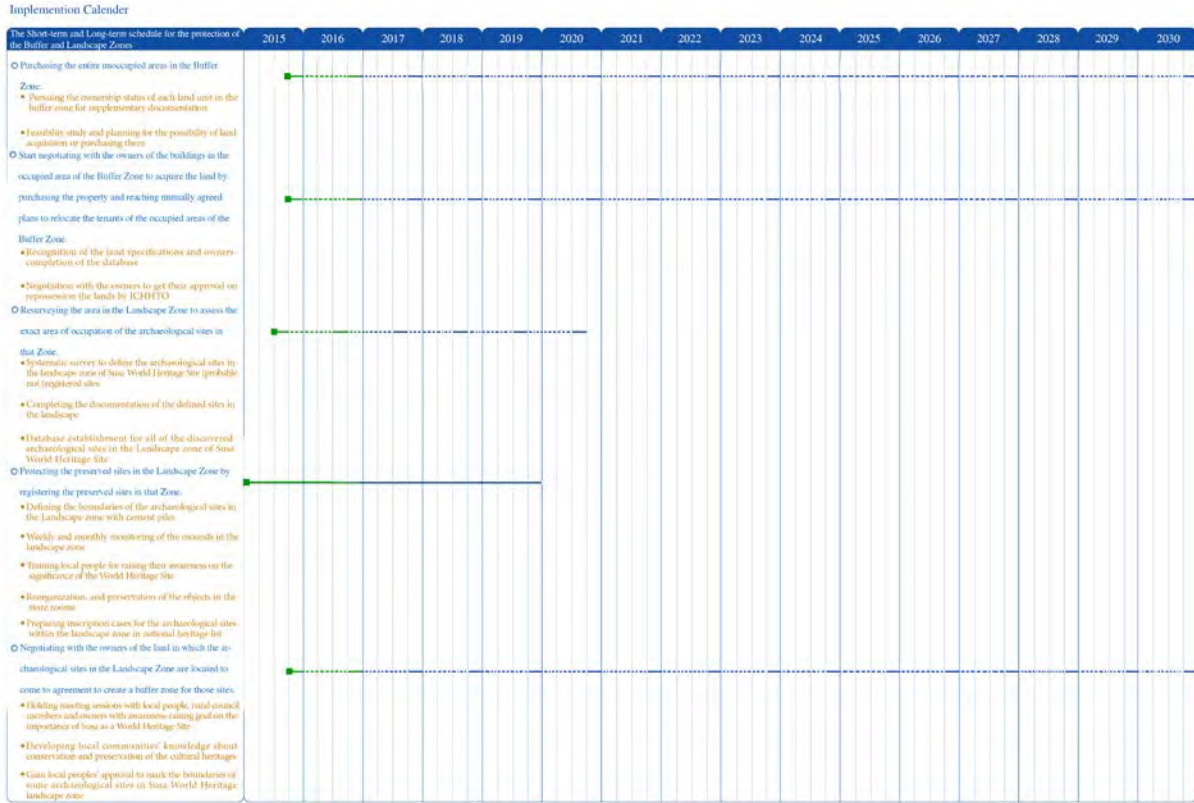


Figure 33. Updated Implementation Calendar regarding the upper mentioned aspects (the file is attached separately)

## Risk management in Susa World Heritage Base

Susa World Heritage site is located in the city of Susa. So, the urban infrastructure organizations and facilities like emergency service, hospitals, municipality services, police, fire services, power source services, and other urban service providers, of which the location is marked in the following map in relation to the boundaries of the Susa World Heritage Site, has the possibility to follow the shortest access routes to fulfil their tasks. Portable units are ready to serve inside the complex in high seasons.

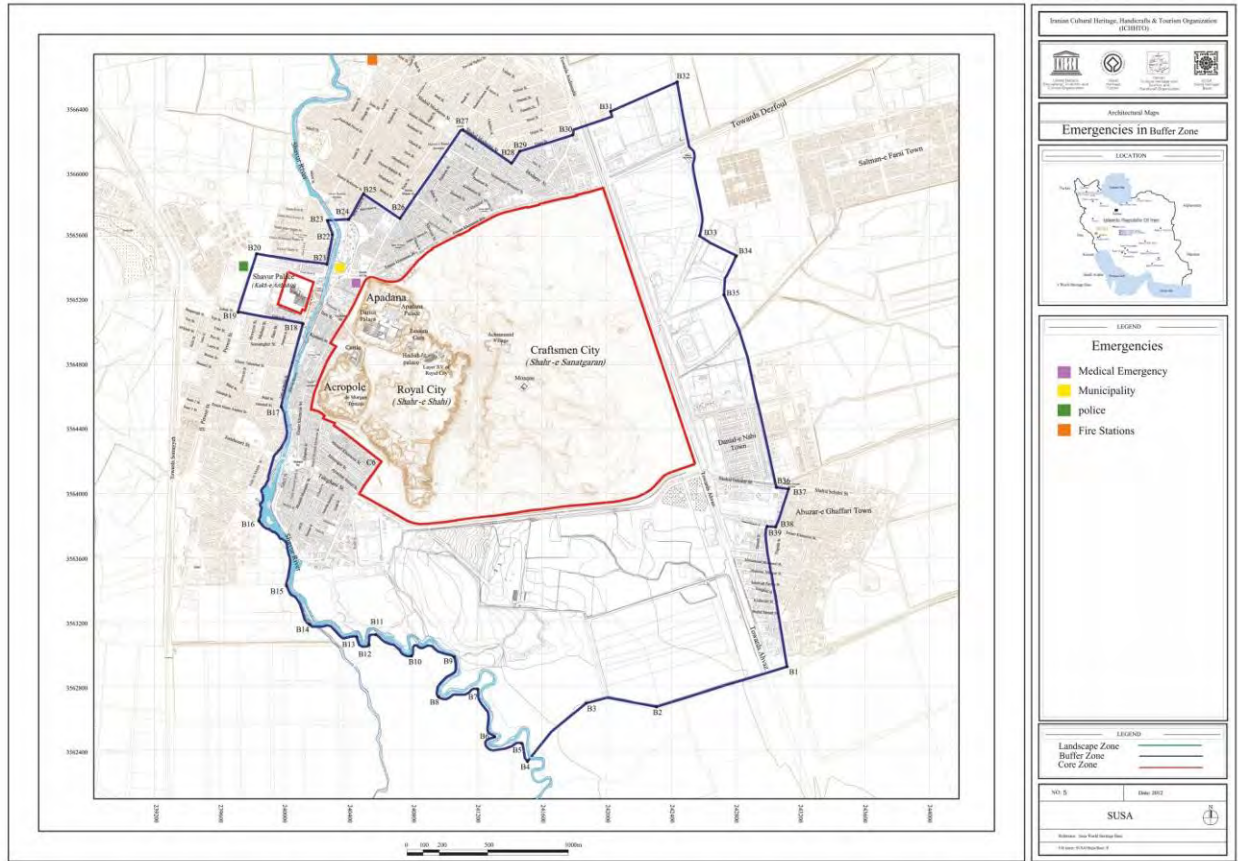


Figure 34. location of urban infrastructure organizations and facilities



Figure 35. Emergency Service in Susa World Heritage Site Complex



Figure 36. Fire Extinguisher in the Museum of Susa World Heritage Base

A close cooperation, also, is provided with association and non-governmental organizations to use their capacities to guide tourists, and also to control the tourism pressures in high seasons like New Year holidays (Norooz). Also, security guards are permanently on patrol in different points of the site's core zone and buffer zone to control the traffic and to prevent any probable destruction in each part of the complex.



Figure 37. Susa World Heritage Site Guards

To achieve better preservation of Susa World Heritage Site and establish a better cooperation with civil management system, a plan is under preparation to comprise the risk management, with focus on sustainable development and on conservation of Susa World Heritage Site and its surroundings.

### Monitoring

Regarding Susa World Heritage landscape zone, Susa World Heritage Base has maintained a close connection with rural councils and farmers concerning raising awareness about their surrounding archaeological sites to prevent any destruction. Currently local people are involving with the process of monitoring the site. In the other hand, they themselves inform the officials or the base in case of possible threats to the sites or unpredicted events when needed.

A camera control system with closed circuit television cameras is established in all sections of the main area of the World Heritage Site, specifically the archaeological complex, the museum, and the storages to monitor probable risks, etc. Fire safety system is also available and is set to

be checked regularly for the best function. Also, the electricity power system maintenance is inspecting on regular basis.



Figure 38. Camera Control System in the site and in the Safe Storage of Susa World Heritage Site

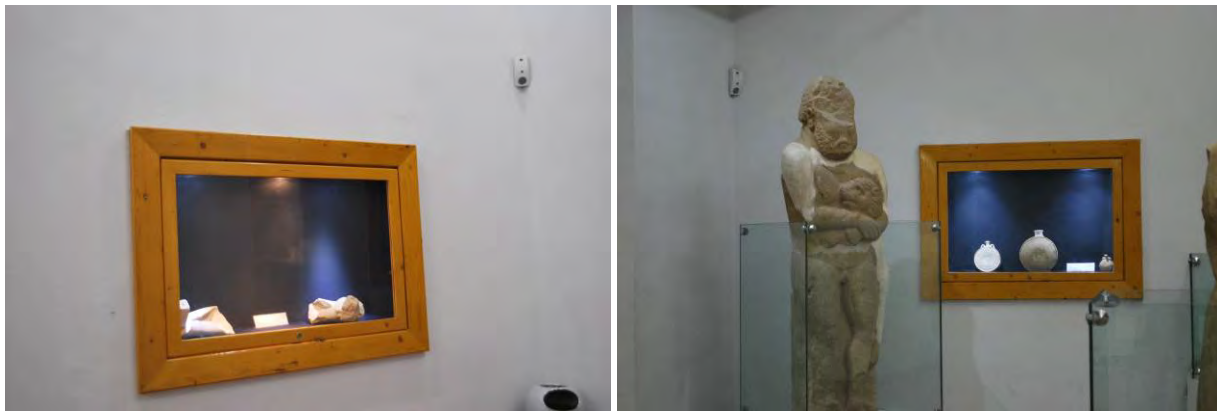


Figure 39. Movement Control System in the Museum of Susa World Heritage Site

Highly significant elements locating on the site are covered with temporary coverage to protect against natural disasters especially heavy rainfall and lightning.



Figure 40. Temporary Covering of Achaemenid Columns in Apadana

The whole complex is, also, monitoring carefully after each rainfall, specifically Apadana, Ville Royale grande tranchée (15<sup>th</sup> layer of the city), and the Shaur palace would be revisited.



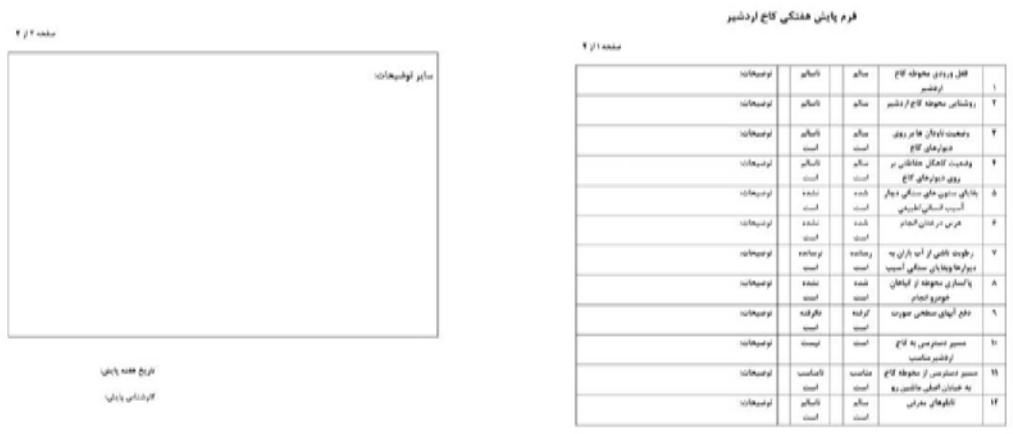


Figure 41. Sample of monitoring forms for the site inspection in Susa World Heritage Landscape

**Other measure to be predicted within the implementation calendar of Susa World Heritage Site**

- Providing supplementary lighting to the core zone of the site
- Improving electric safety equipment in the core zone of the site
- Developing the publications in different levels for different audiences in order to raise knowledge on the importance and significances of site in various aspects
- Documentation of inscriptional bricks used to build the castle
- Development of Susa museum plan and its implementation
- Preparing a comprehensive tourism development plan
- Developing the conservation and rehabilitation plan of the royal city as a live museum
- Pursuing the documentation, categorization and reorganization of material cultures within the store rooms, open-air museum and in the boundaries of the Site
- Pursuing the conservation and restoration of objects whether excavated, in the museum or in the store rooms
- Developing a research outlook document for the boundaries of the World Heritage Site
- Educational and training courses
- Pursuing the archaeological surveys and studies in the core and buffer zone
- Restoration of Susa Castle

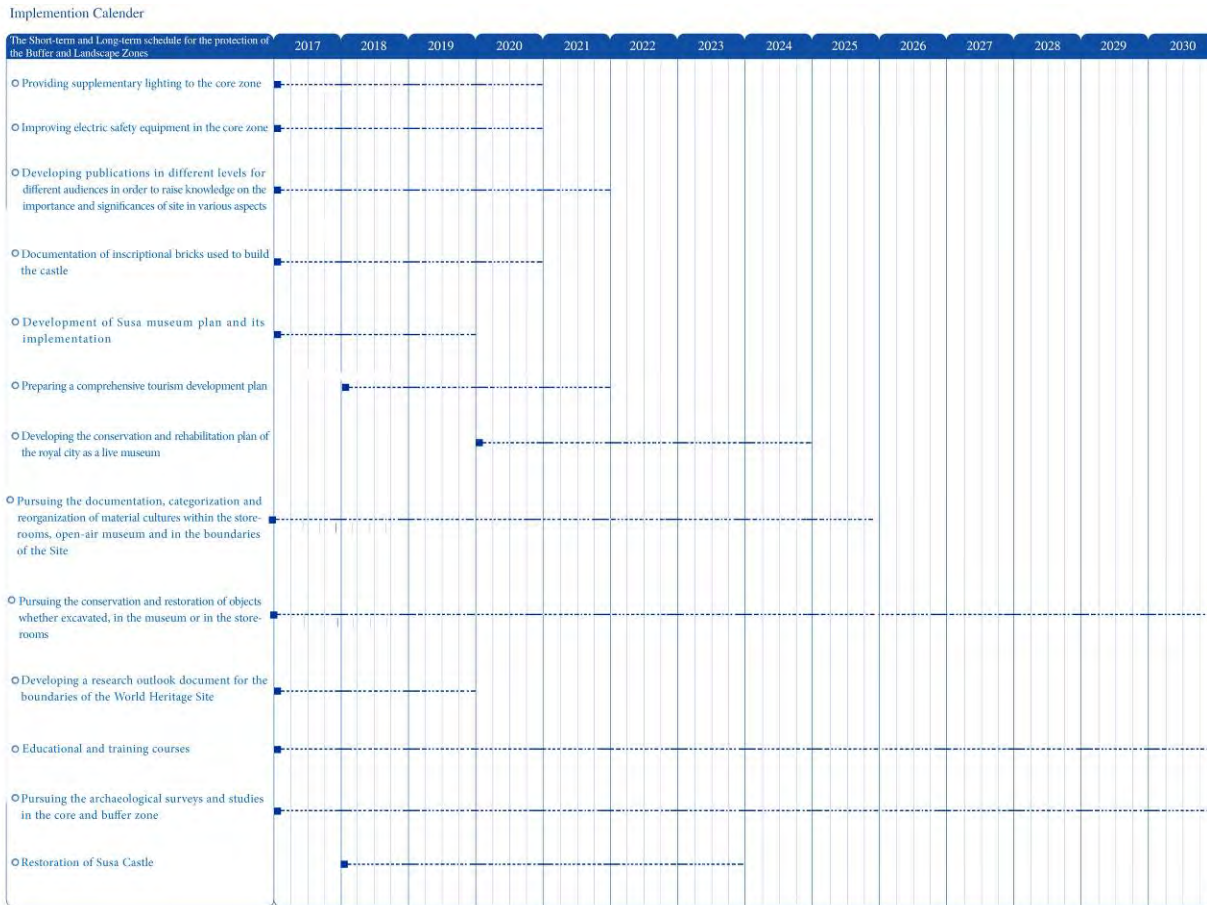


Figure 42. Other measures to promote the World Heritage Status of the Site

## Involving other organizations and authorities to take part in the promotion of Susa as a World Heritage Site

Susa World Heritage Base takes advantage of a technical committee as well as a board of trustees to help in the cooperation with beneficiaries, solving the management issues of the site, as well as benefiting from the utmost of potentials and capacities of the city and the province. Thus, some of the city official and provincial managers are asked to serve in these teams. The councils also usually invite other relative officials and individuals to be involved in decision-making process.



Figure 43. Signification of the board of trustees members (left)- Signification of the technical committee members (right)

No.	Members of the board of trustees	No.	Members of the technical committee
1	Mr. Abdulhossein Moghtadaei	1	Mr. Khosrow Neshan
2	Mr. Saeid Mehrparvar	2	Mr. Mehdi Rahbar
3	Mr. Alireza Razeghi	3	Mr. Hossein Rayati Moghaddam
4	Mr. Mohammad Hossein Arastoozadeh	4	Mr. Mir Abedin Kaboli
5	Mr. Omid Hajati	5	Mr. Alireza Gholinezhad
6	Mr. Yousef Zamani Asl	6	Mr. Bijan Heydarizadeh
7	Mr. Khosrow Neshan	7	Mr. Mehdi Omidfar
8	Dr. Mohammad Hassan Talebian	8	Mr. Mohammad Ebrahim Mozaffari
9	Mr. Alireza Gholinezhad Pirbazari	9	Mr. Abbas Moghaddam
10	Mr. Abbas Moghaddam	10	Mr. Alireza Razeghi
11	Mr. Mirabedin Kaboli	11	Mr. Mohammad Hossein Arastoozadeh
12	Mr. Mehdi Rahbar		
13	Mr. Behrouz Hosseinifar		
14	Mr. Alireza Kazemi		
15	Mr. Bijan Alipour		
16	Mr. Masoud Sadri		

## Legal measures to aid controlling the development according to the regulations of the World Heritage Site

The Higher Council of Architecture and Urban Development, in their session on 15 September 2014, with the goal of respecting the requirements of World Heritage Convention and in order to conserve and manage World Heritage Sites and Sites in the UNESCO's tentative list, within the civil development plans as well as in evaluation and adoption of detail plans and rural strategic plans commissions appointed:

The secretariat of the Higher Council organizes a workgroup with the attendance of the representatives of the Cultural Heritage, Tourism and Handicrafts Organization, the Department of Environment and the Interior Ministry of Islamic Republic of Iran, in the session of which the work plans regarding the upper mentioned aspects would be evaluated and submitted to the higher council to gain the final approval within a short notice.

In addition, the required anticipations for the text to be included within the 6<sup>th</sup> development plan of IRI should be taken into account by providing the requisite suggestions and commands.



Figure 44. Signification of decision regarding any urban development plan to consider the requirements of World Heritage Convention in the associated zones

# Implementation Calendar

The Short-term and Long-term schedule for the protection of the Buffer and Landscape Zones

2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

- Providing supplementary lighting to the core zone
- Improving electric safety equipment in the core zone
- Developing publications in different levels for different audiences in order to raise knowledge on the importance and significances of site in various aspects
- Documentation of inscriptional bricks used to build the castle
- Development of Susa museum plan and its implementation
- Preparing a comprehensive tourism development plan
- Developing the conservation and rehabilitation plan of the royal city as a live museum
- Pursuing the documentation, categorization and reorganization of material cultures within the store-rooms, open-air museum and in the boundaries of the Site
- Pursuing the conservation and restoration of objects whether excavated, in the museum or in the store-rooms
- Developing a research outlook document for the boundaries of the World Heritage Site
- Educational and training courses
- Pursuing the archaeological surveys and studies in the core and buffer zone
- Restoration of Susa Castle

# Implementation Calendar

The Short-term and Long-term schedule for the protection of the Buffer and Landscape Zones	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p> <ul style="list-style-type: none"> <li>● Pursuing the ownership status of each land unit in the buffer zone for supplementary documentation</li> <li>● Feasibility study and planning for the possibility of land acquisition or purchasing them</li> </ul> <p>○ Start negotiating with the owners of the buildings in the occupied area of the Buffer Zone to acquire the land by purchasing the property and reaching mutually agreed plans to relocate the tenants of the occupied areas of the Buffer Zone.</p> <ul style="list-style-type: none"> <li>● Recognition of the land specifications and owners-completion of the database</li> <li>● Negotiation with the owners to get their approval on repossession the lands by ICHHTO</li> </ul> <p>○ Resurveying the area in the Landscape Zone to assess the exact area of occupation of the archaeological sites in that Zone.</p> <ul style="list-style-type: none"> <li>● Systematic survey to define the archaeological sites in the landscape zone of Susa World Heritage Site (probable not (registered sites</li> <li>● Completing the documentation of the defined sites in the landscape</li> <li>● Database establishment for all of the discovered archaeological sites in the Landscape zone of Susa World Heritage Site</li> </ul> <p>○ Protecting the preserved sites in the Landscape Zone by registering the preserved sites in that Zone.</p> <ul style="list-style-type: none"> <li>● Defining the boundaries of the archaeological sites in the Landscape zone with cement piles</li> <li>● Weekly and monthly monitoring of the mounds in the landscape zone</li> <li>● Training local people for raising their awareness on the significance of the World Heritage Site</li> <li>● Reorganization, and preservation of the objects in the store rooms</li> <li>● Preparing inscription cases for the archaeological sites within the landscape zone in national heritage list</li> </ul> <p>○ Negotiating with the owners of the land in which the archaeological sites in the Landscape Zone are located to come to agreement to create a buffer zone for those sites.</p> <ul style="list-style-type: none"> <li>● Holding meeting sessions with local people, rural council members and owners with awareness-raising goal on the importance of Susa as a World Heritage Site</li> <li>● Developing local communities' knowledge about conservation and preservation of the cultural heritages</li> <li>● Gain local peoples' approval to mark the boundaries of some archaeological sites in Susa World Heritage landscape zone</li> </ul>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>	<p>○ Purchasing the entire unoccupied areas in the Buffer Zone.</p>

