

Ministry of Culture of Ukraine  
National Commission of Ukraine for UNESCO  
Tauric Chersonese National Preserve  
Institute of Monument Protection Research

**Nomination Dossier of the Property for  
Inclusion on the World Heritage List**

**The Ancient City of Tauric Chersonese  
and its Chora  
(5th century BC – 14th century AD)**



Sevastopol – 2012

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## Executive Summary

### State party to the Convention

Ukraine

### State, province or region

Sevastopol

### Name of property

The ancient city of Tauric Chersonese and its chora  
(5th century BC – 14th century AD)

### Geographical coordinates and area

<b>Id. No.</b>	<b>Name of the component part</b>	<b>Country/ Region(s)</b>	<b>Coordinates of the central point</b>	<b>Area of the nominated component of the property (ha)</b>	<b>Area of the buffer zone (ha)</b>	<b>Map No.</b>
001	Ancient city of Tauric Chersonese	Ukraine / Sevastopol	44° 36' 39" N 33° 29' 29" E	42.8106	207.220	1.2
002	Chora plot in the Yukharina Gully	Ukraine / Sevastopol	44° 33' 01" N 33° 28' 12" E	150.6227	1235.00	1.3
003	Chora plot in Berman's Gully	Ukraine / Sevastopol	44° 31' 26" N 33° 30' 03" E	19.5574	291.0916	1.4
004	Chora plot on the Bezymyannaya Height	Ukraine / Sevastopol	44° 31' 34" N 33° 32' 48" E	17.2941	1116.00	1.5
005	Chora plot in the Streletskaya Gully	Ukraine / Sevastopol	44° 34' 15" N 33° 28' 39" E	15.2664	shared with No. 002	1.3

006	Chora plot on the isthmus of the Mayachny Peninsula	Ukraine / Sevastopol	44° 33' 44" N 33° 24' 32" E	13.8240	191.7760	1.6
007	Chora plot on Cape Vinogradny	Ukraine / Sevastopol	44° 31' 10" N 33° 28' 12" E	8.1096	117.780	1.7
			<b>Total area (ha)</b>	<b>267.4848</b>	<b>3158.8676</b>	1.1

## **Textual description of the boundaries of the nominated property**

### ***Component Part No. 001:***

bordered by the Black Sea in the north, by Quarantinnaya Bay in the east, by military units in Drevnyaya and Yaroshenko Streets in the south, and by Anna Akhmatova's Park (Ostrovskaya Street) and Pesochnyaya Bay in the west

### ***Component Part No. 002:***

surrounded on all sides by orchard plots and cottages lying between Phiolent Highway and the branch railway adjacent to Sevastopol Cargo Terminal

### ***Component Part No. 003:***

lies in the mouth of Berman's Gully; bordered by orchard plots and cottages on the northern slope and in Berman's Gully thalweg (in the north and east) and by a forest running along the highway between the 5<sup>th</sup> km and the settlement of Pervomayskoye (in the south and west)

### ***Component Part No. 004:***

lies at the top of the Bezymyannaya Height near the settlement of Ushakov; bordered by vineyards belonging to the 3<sup>rd</sup> Branch of Zolotaya Balka Ltd. in the north, by a gully running along the western slope of the Gornaya Height in the east and south, and by orchards and cottages alongside Balaklava Highway in the west

### ***Component Part No. 005:***

bordered by the Phiolent Highway weather centre in the north, by orchard plots and cottages along the western slope of the Streletskaya Gully in the east, by a forest running along Kamyshevoye Highway in the south, and by a tuberculosis dispensary and a nursing home in the west

### ***Component Part No. 006:***

lies on the isthmus of the Mayachny Peninsula; bordered by the 35<sup>th</sup> Battery Memorial in the south and southwest, by orchard cooperative housing in the west and east, and by a military unit in the north, with the central part of the site crossed

by the city highway; incorporates an islet in Kazachya Bay connected to the mainland by a narrow bridge

***Component Part No. 007:***

occupies Cape Vinogradny and adjacent rock cliffs and terraces on the coast of the Heracleian Peninsula; bordered by the Black Sea in the south, west and northwest and by orchard cooperative housing in the north and northeast.

**Map of the nominated property, showing the boundaries and the buffer zone**

Sevastopol city map showing the areas of nominated property (component parts No. 001 – 007) (M 1:25000)

**Justification statement of outstanding universal value**

The polis and chora of Tauric Chersonese are an outstanding example of an ancient architectural and technological ensemble consisting of the urban centre and its agricultural hinterland, which was established as a result of varied economic and commercial activities of Greek colonists between the 4<sup>th</sup> and 3<sup>rd</sup> centuries BC and existed uninterruptedly for nearly 2000 years.

The city of Tauric Chersonese and its chora are exceptionally well preserved examples of an ancient settlement, land-use and landscape formed in the specific natural environment of southwestern Crimea.

The city of Chersonese is the only example of archaeological ruins of an ancient city still extant in its integrity in the Northern Black Sea area, a city which was an important political and economic centre of the region in the period of Greek colonization as well as during the formation and decline of the Roman and Byzantine Empires between the 5<sup>th</sup> century BC and the 14<sup>th</sup> century AD.

After it was abandoned in the 15<sup>th</sup> century AD, the city lay uninhabited, which helped to preserve the remains of its fortifications, housing, utility and religious structures as well as the city layout based on the so-called ‘Hippodamian’ grid in their integrity.

The extant Tauric Chersonese chora sites on the Heracleian Peninsula are basically fragments of the city’s agricultural hinterland laid out on a regular basis in the 4<sup>th</sup> century BC, namely demarcated into more than 400 equal lots in an area of 10000 ha.

A distinctive feature of the Chersonese chora is the fact that it was demarcated based on the orthogonal planning system introduced by Hippodamus of Miletus, thus constituting an ensemble integrity of urban planning and land use within the boundaries of the city and its surroundings.

The ensemble combination of the ancient urban and farmland layouts as well as the principles on which the plots were distributed among the citizens of the Chersonese polis bear a unique testimony to the democratic values of the ancient Greek society as embodied in the monuments of this ancient city and its chora. In addition to that, Tauric Chersonese was an important political, economic and cultural centre of the Black Sea region and played a decisive role in the dissemination of Christianity in southeastern Europe, particularly in Kievan Rus.

### **Criteria under which the property is nominated**

#### ***Criterion ii:***

In the ancient and medieval world, Tauric Chersonese as an ancient Greek colony and outpost of the Roman and Byzantine Empires was the remotest point of contacts between the Mediterranean civilizations and the ‘barbarian’ population of southeastern Europe. Lying at a crossroads of the ancient trade routes, the city was subject to continuous influences of the various cultures of the southwest, north and east.

For over 2000 years, the inhabitants of Chersonese and its chora kept on exerting enormous influence on the neighbouring cultures, playing a decisive role in the Hellenization of Scythians and Sarmatians as well as the Christianization of Goths, Alani and East Slavs. In turn, the penetration of barbarian practices into the everyday lives of the citizens of Chersonese resulted in a unique syncretistic cult of Virgin Parthenos, which gradually became part of their ancient pantheon.

#### ***Criterion iv:***

The ruins of Tauric Chersonese are an example of an urban ensemble whose regular layout was done in the 4<sup>th</sup> century BC on the basis of the orthogonal planning system developed by Hippodamus of Miletus and remained almost unchanged until the decline of the city in the 14<sup>th</sup> century AD and are exceptional in terms of their integrity and state of preservation.

The ruins of the ancient urban housing and archaeological layers illustrate the development stages of the city and continuity of its urban structure and its way of life from the classical period up to the late Middle Ages.

#### ***Criterion v:***

The agricultural landscape of the Chersonese chora on the Heracleian Peninsula, which took its shape between the 4<sup>th</sup> and 3<sup>rd</sup> centuries BC as focused primarily on grape growing, is an outstanding example of a land allocation system of an ancient polis that went in line with a similarly organized Hippodamian urban planning system.

At the same time, the Chersonese chora bears an exceptional testimony to ancient land cultivation technologies as well as its inhabitants’ lifestyles embodied in the

numerous remains of division walls, vineyard planting walls, traffic arteries, water pipelines, farmsteads and fortification complexes.

The chora of Tauric Chersonese illustrates cross-temporal and cross-cultural continuity in the use and development of its cultural landscape from the 4<sup>th</sup> century BC up to the 14<sup>th</sup> century AD.

***Criterion vi:***

Tauric Chersonese was directly associated with important historic events that took place in the area of contacts between the ancient and medieval civilizations and the ancient Black Sea population.

Particularly important was the role Tauric Chersonese played in the dissemination of Christianity among the barbarian peoples of southeastern Europe, particularly among Alani, Goths and East Slavs. It was in Chersonese that Prince Vladimir of Kiev was baptized in 988, which eventuated in the Christianization of the whole of Kievan Rus at the end of the 10<sup>th</sup> century.

**Name and contact information of the official local organization**

Tauric Chersonese National Preserve:

1 Drevnyaya St.

99045 Sevastopol

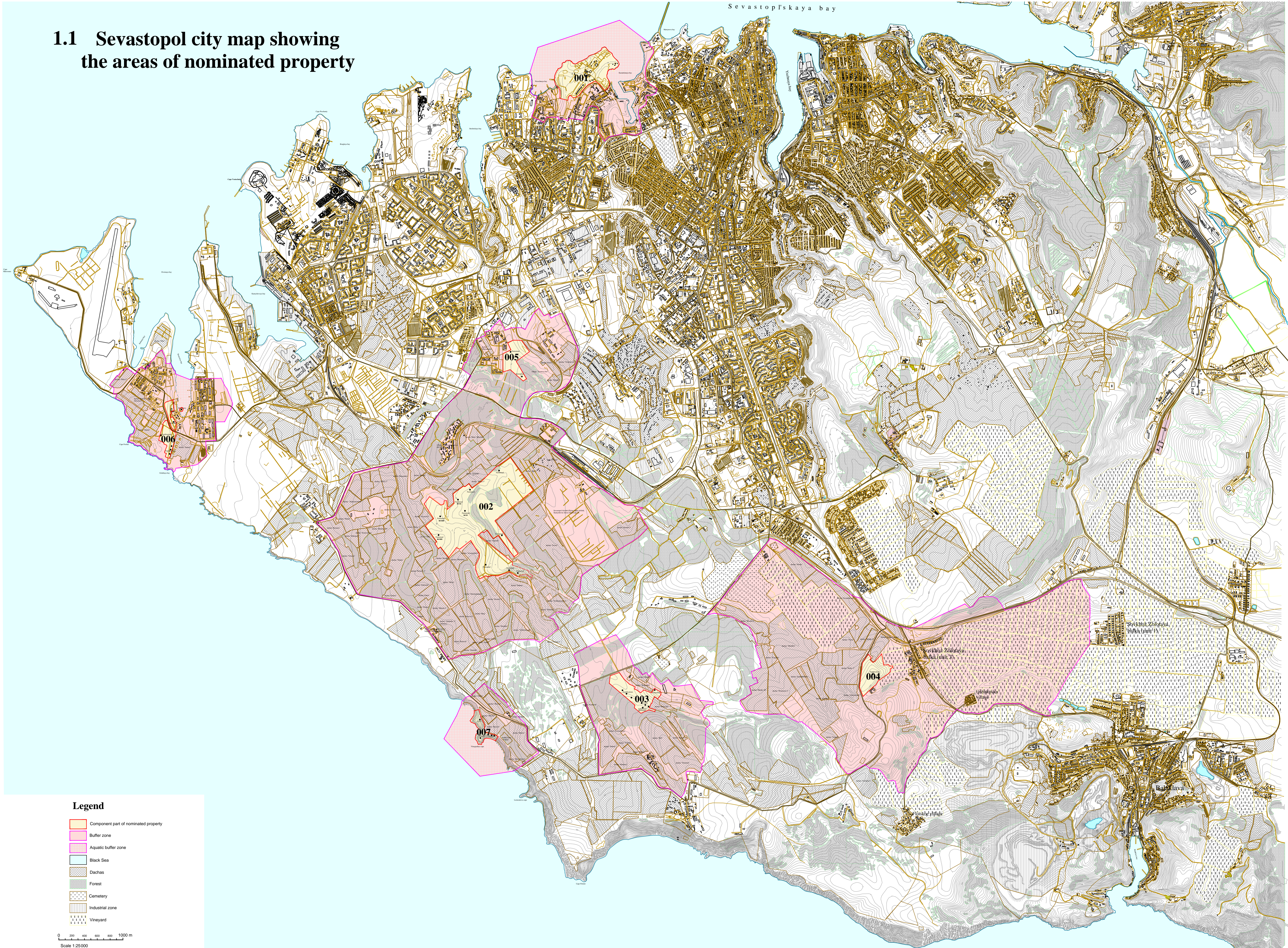
Ukraine

tel/fax: +380692550278,

e-mail: [info@chersonesos.org](mailto:info@chersonesos.org)



# 1.1 Sevastopol city map showing the areas of nominated property



### Legend

-  Component part of nominated property
-  Buffer zone
-  Aquatic buffer zone
-  Black Sea
-  Dachas
-  Forest
-  Cemetery
-  Industrial zone
-  Vineyard

0 200 400 600 800 1000 m  
Scale 1:25000

## Nomination Format

### 1. IDENTIFICATION OF THE PROPERTY

#### 1a. State party:

Ukraine

#### 1b. State, province or region:

Sevastopol

#### 1c. Name of property:

The ancient city of Tauric Chersonese and its chora  
(5th century BC – 14th century AD)

#### 1d. Geographical coordinates:

<b>Id. No.</b>	<b>Name of the component part</b>	<b>Country/ Region(s)</b>	<b>Coordinates of the central point</b>	<b>Area of the nominated component of the property (ha)</b>	<b>Area of the buffer zone (ha)</b>	<b>Map No.</b>
001	Ancient city of Tauric Chersonese	Ukraine / Sevastopol	44° 36' 39" N 33° 29' 29" E	42.8106	207.220	1.2
002	Chora plot in the Yukharina Gully	Ukraine / Sevastopol	44° 33' 01" N 33° 28' 12" E	150.6227	1235.00	1.3
003	Chora plot in Berman's Gully	Ukraine / Sevastopol	44° 31' 26" N 33° 30' 03" E	19.5574	291.0916	1.4
004	Chora plot on the Bezymyannaya Height	Ukraine / Sevastopol	44° 31' 34" N 33° 32' 48" E	17.2941	1116.00	1.5

005	Chora plot in the Streletskaaya Gully	Ukraine / Sevastopol	44° 34' 15" N 33° 28' 39" E	15.2664	shared with No. 002	1.3
006	Chora plot on the isthmus of the Mayachny Peninsula	Ukraine / Sevastopol	44° 33' 44" N 33° 24' 32" E	13.8240	191.7760	1.6
007	Chora plot on Cape Vinogradny	Ukraine / Sevastopol	44° 31' 10" N 33° 28' 12" E	8.1096	117.780	1.7
			<b>Total area (ha)</b>	<b>267.4848</b>	<b>3158.8676</b>	1.1

Coordinates of the extreme points of the component parts of the property are indicated below:

Component part No.	Latitude (north)	Latitude (south)	Longitude (east)	Longitude (west)
001	44° 36' 25" N	44° 36' 52" N	33° 29' 05" E	33° 29' 51" E
002	44° 32' 23" N	44° 33' 25" N	33° 27' 31" E	33° 28' 49" E
003	44° 31' 17" N	44° 31' 37" N	33° 29' 49" E	33° 30' 20" E
004	44° 31' 23" N	44° 31' 45" N	33° 32' 38" E	33° 33' 02" E
005	44° 34' 04" N	44° 34' 25" N	33° 28' 27" E	33° 28' 47" E
006	44° 33' 26" N	44° 33' 55" N	33° 24' 24" E	33° 24' 41" E
007	44° 31' 01" N	44° 31' 19" N	33° 28' 03" E	33° 28' 25" E

### 1e. Maps and plans:

**Map 1.1.** Sevastopol city map showing the areas of nominated property. (component parts No. 001 – 007) (M 1:25000)

**Map 1.2.** Map of the component part No. 001. Ancient city of Tauric Chersonese (M 1:8000)

**Map 1.3.** Map of the component parts No. 002, 005. Chora plots in the Yukharina Gully (No. 002) and the Streletskaaya Gully (No. 005). (M 1: 10000)

**Map 1.4.** Map of the component part No. 003. Chora plot in the Berman`s Gully (M 1:8000)

**Map 1.5.** Map of the component part No. 004. Chora plot on the Bezymyannaya Height. (M 1: 10000)

**Map 1.6.** Map of the component part No. 006. Chora plot on the isthmus of the Mayachny Peninsula. (M 1: 8000)

**Map 1.7.** Map of the component part No. 007. Chora plot on the Cape Vinogradny. (M 1: 5000)

**Map 2.1.** Map of Ukraine with designated location of the nominated property (M 1:10000000)

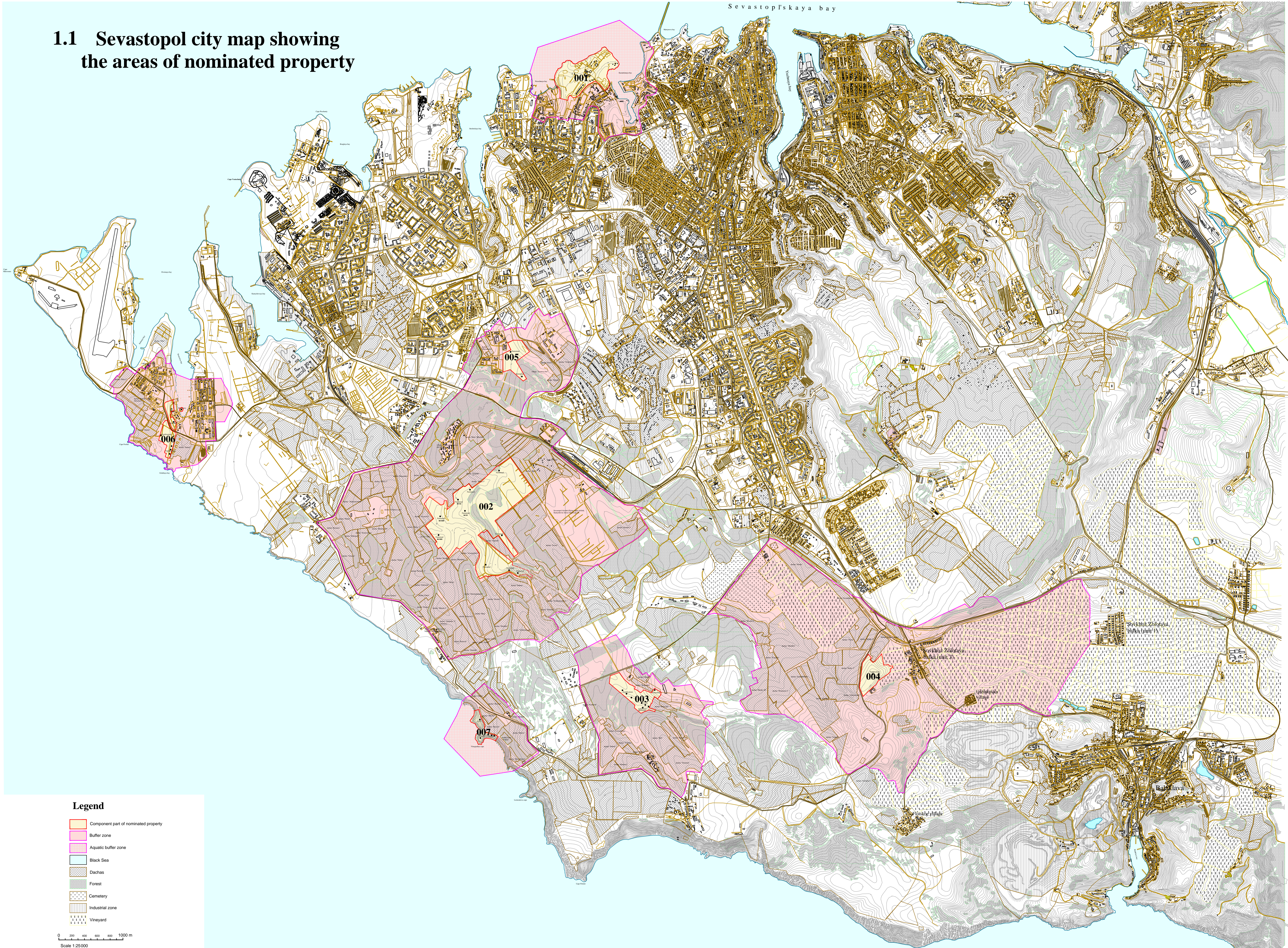
**1f. The area of the nominated property and its buffer zone:**

The property consists of seven component parts, each having its own area and buffer zone (Map 1.1). Areas of the component parts and their buffer zones are indicated in a table in **Section 1d** of this document. Detailed information on the areas is provided below:

<b>Component part No.</b>	<b>Area of the nominated component of the property (ha)</b>	<b>Area of the buffer zone (ha)</b>	<b>Total area (ha)</b>
001	42.8106	207.220	250.0306
002	150.6227	1235.00	shared with No. 005
003	19.5574	291.0916	310.6490
004	17.2941	1116.00	1133.2941
005	15.2664	shared with No. 002	1400.8891
006	13.8240	191.7760	205.600
007	8.1096	117.780	125.8896
<b>Total</b>	<b>267.4848</b>	<b>3158.8676</b>	<b>3426.3524</b>

**Note:** Component parts No. 002 and No. 005 have the same buffer zone.

# 1.1 Sevastopol city map showing the areas of nominated property

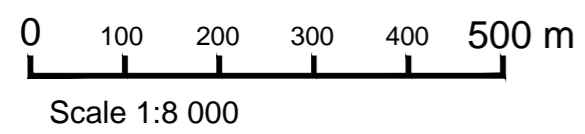
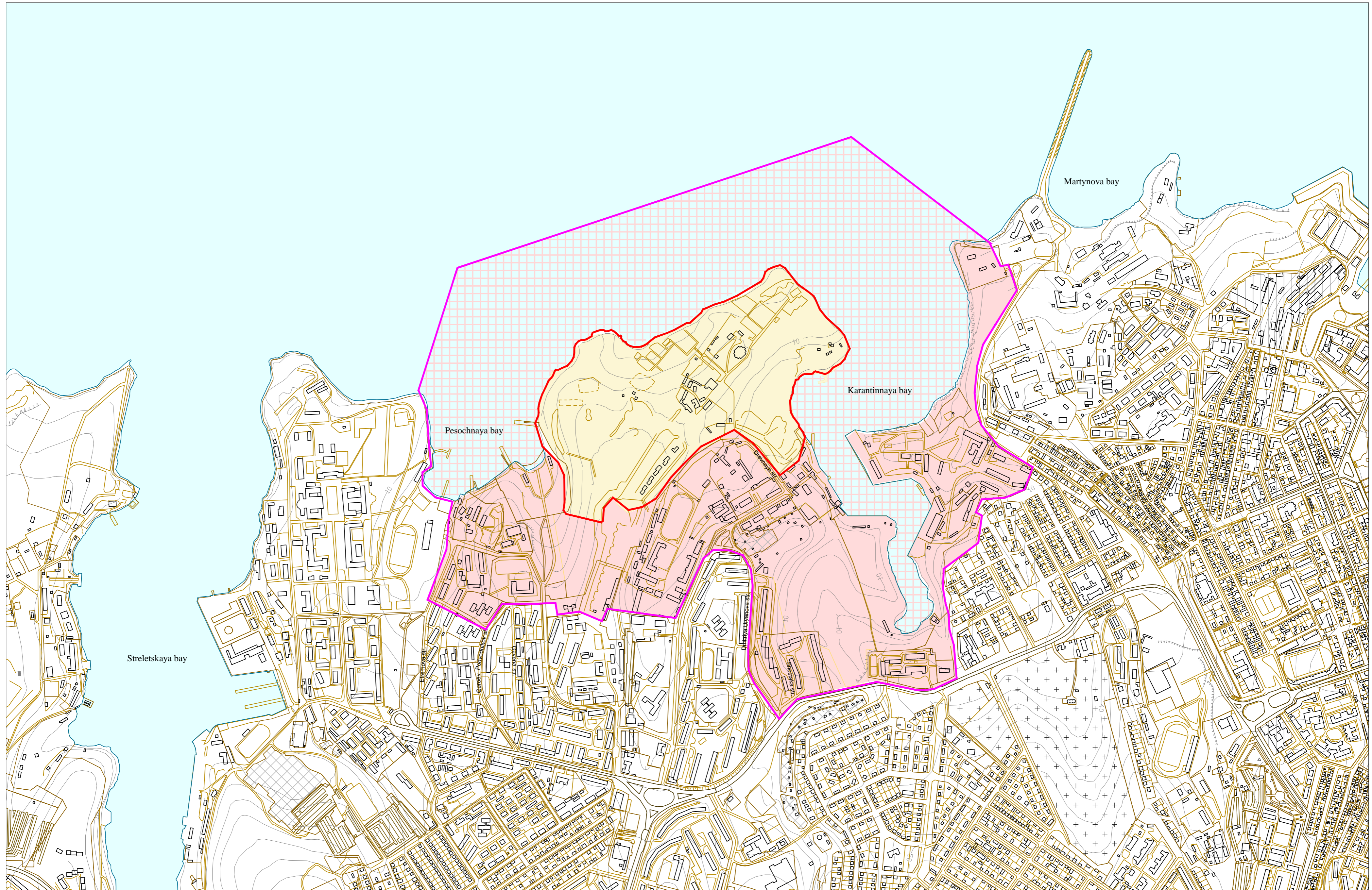



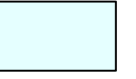


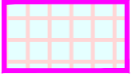
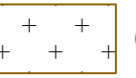
### Legend

-  Component part of nominated property
-  Buffer zone
-  Aquatic buffer zone
-  Black Sea
-  Dachas
-  Forest
-  Cemetery
-  Industrial zone
-  Vineyard

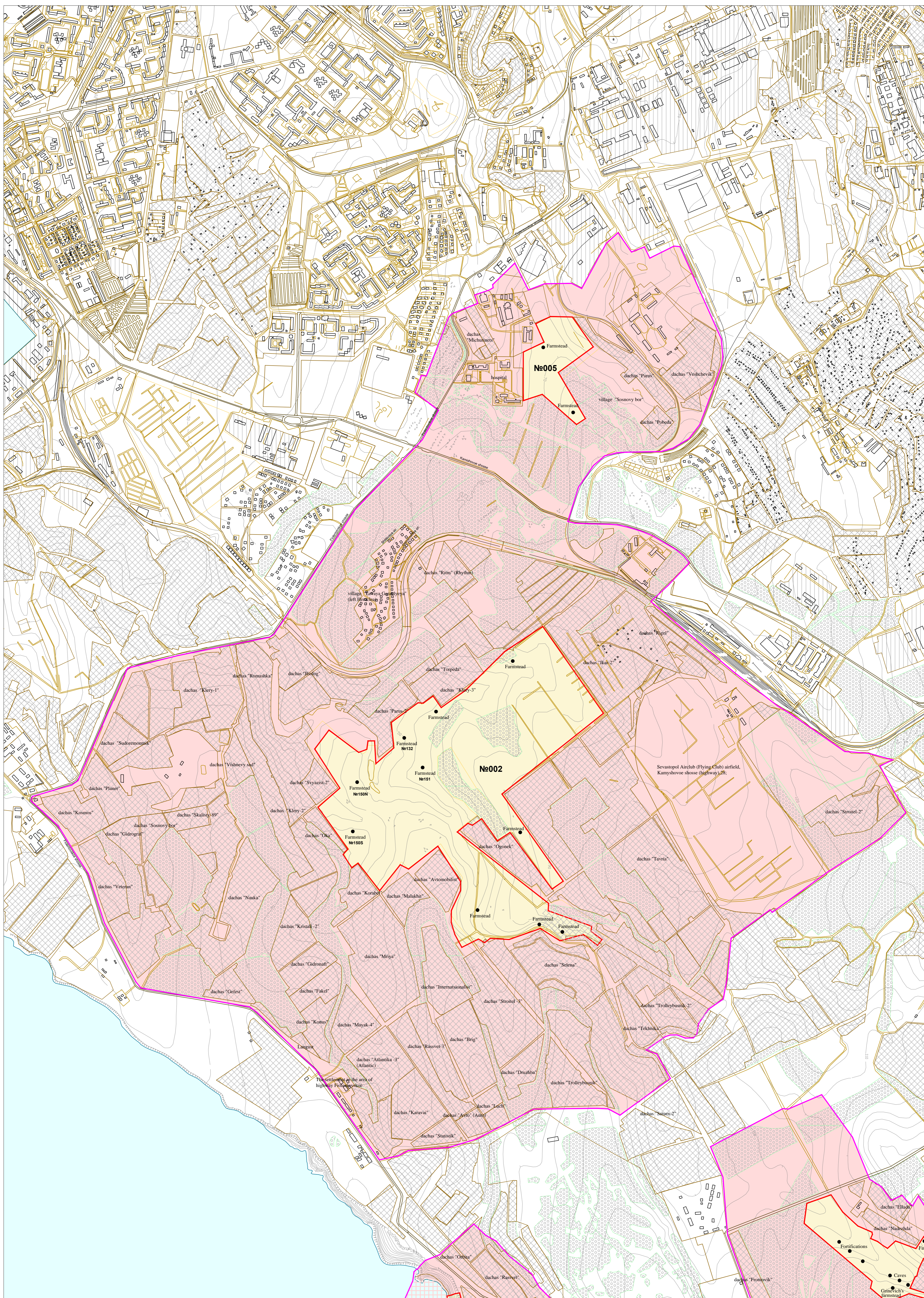
0 200 400 600 800 1000 m  
Scale 1:25000

1.2 Map of the component part №001 (Chersonese ancient city)

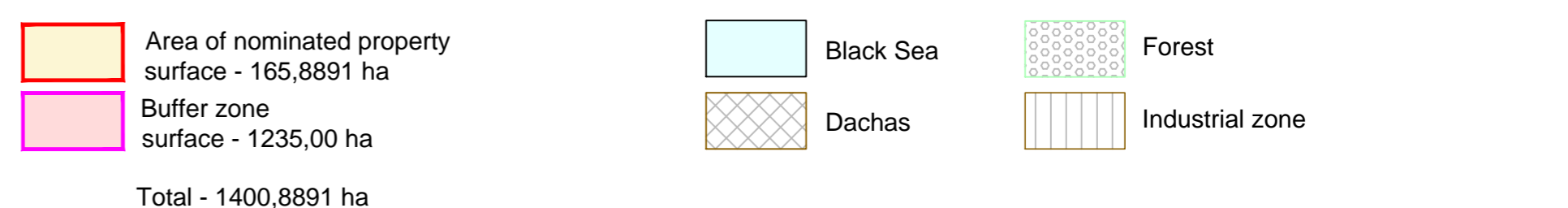


	Area of nominated property surface - 42,8106 ha		Black Sea
	Buffer zone surface - 97,2200 ha		Dachas
	Aquatic buffer zone surface - 110,00 ha		Cemetery
Total - 250,0306 ha			

1.3 Map of the component parts №02, 005 (Chora plots in the Yukharina Gully (№002) and the Streletskaaya Gully (№005))

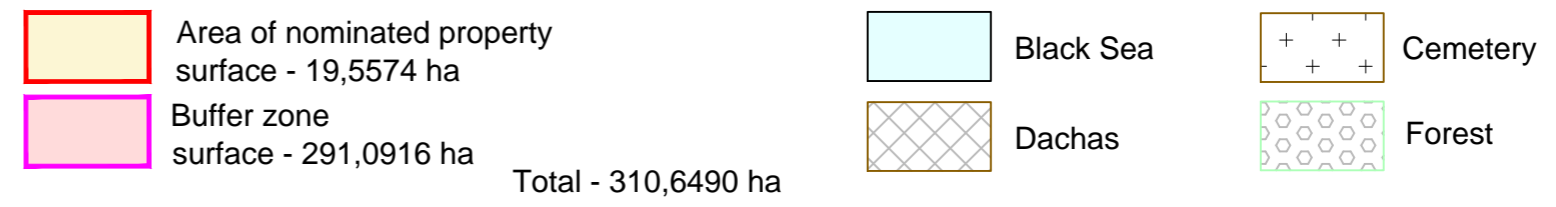
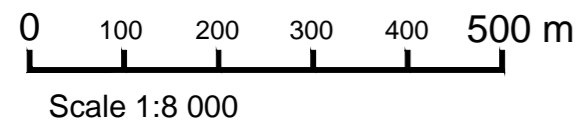
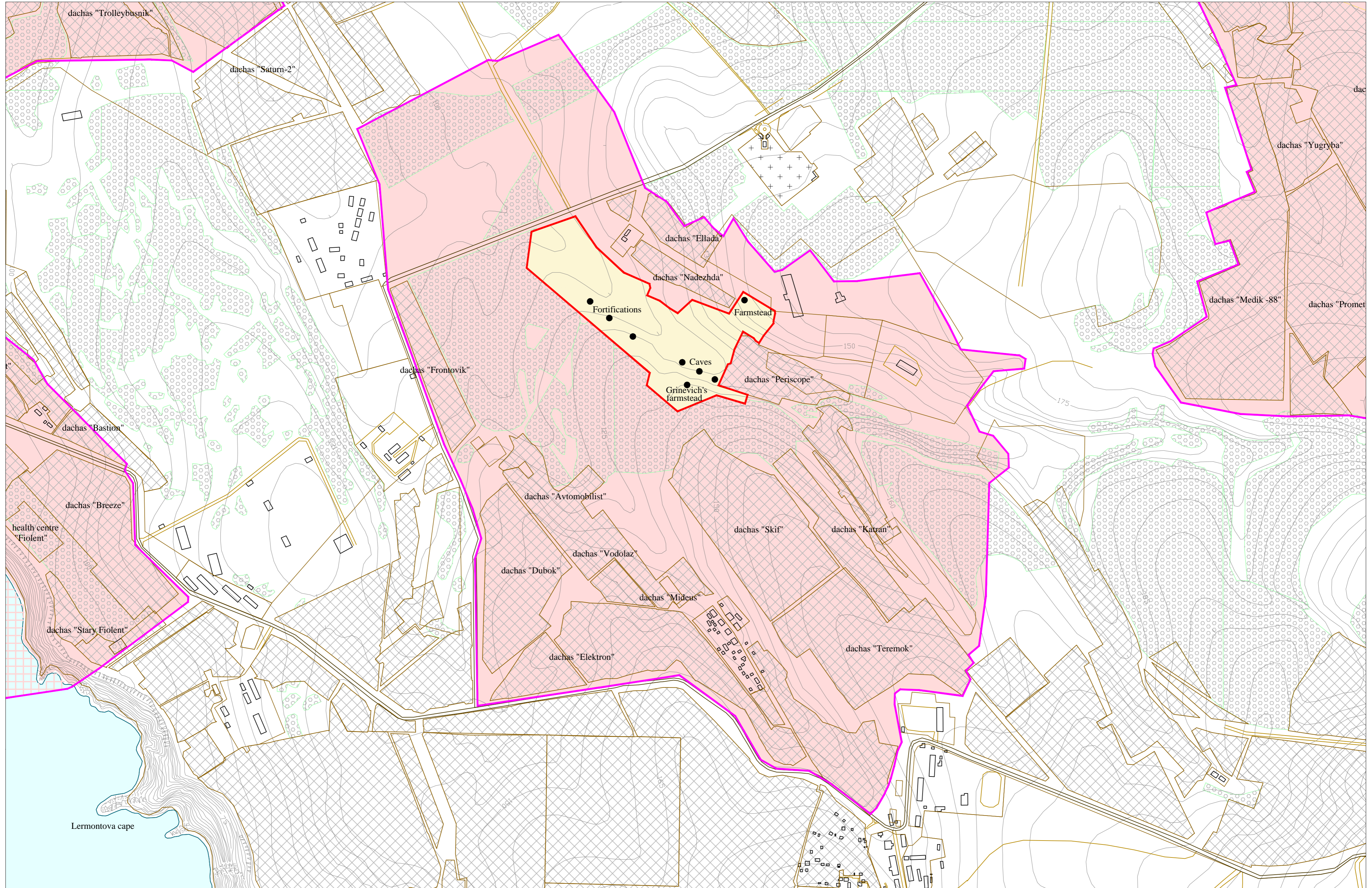


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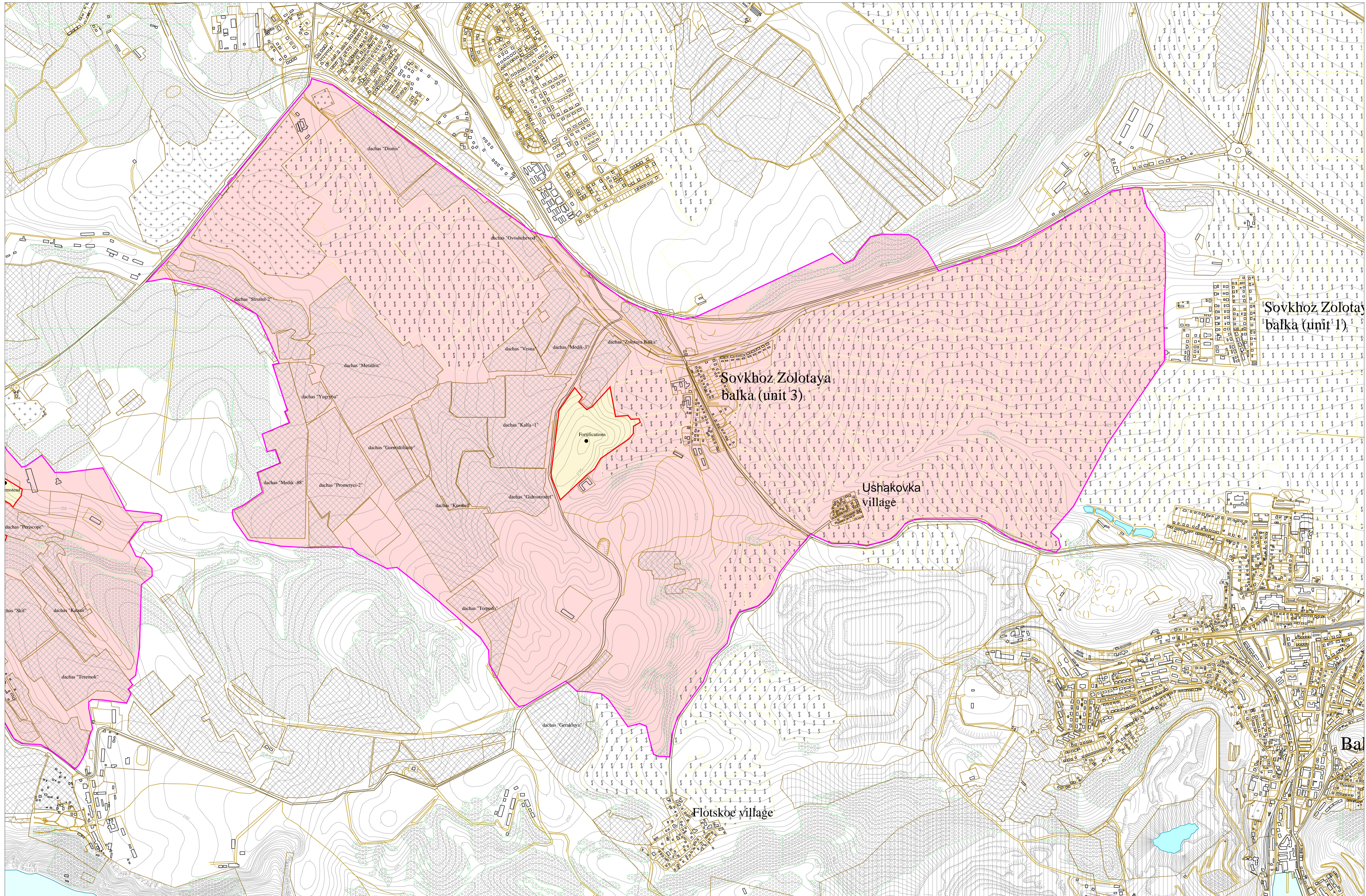
Total - 1400,8891 ha

1.4 Map of the component part №003 (Chora plot in the Berman's Gully)

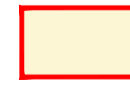

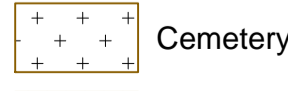
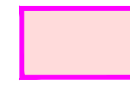








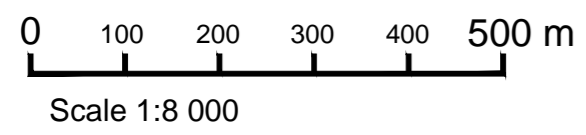
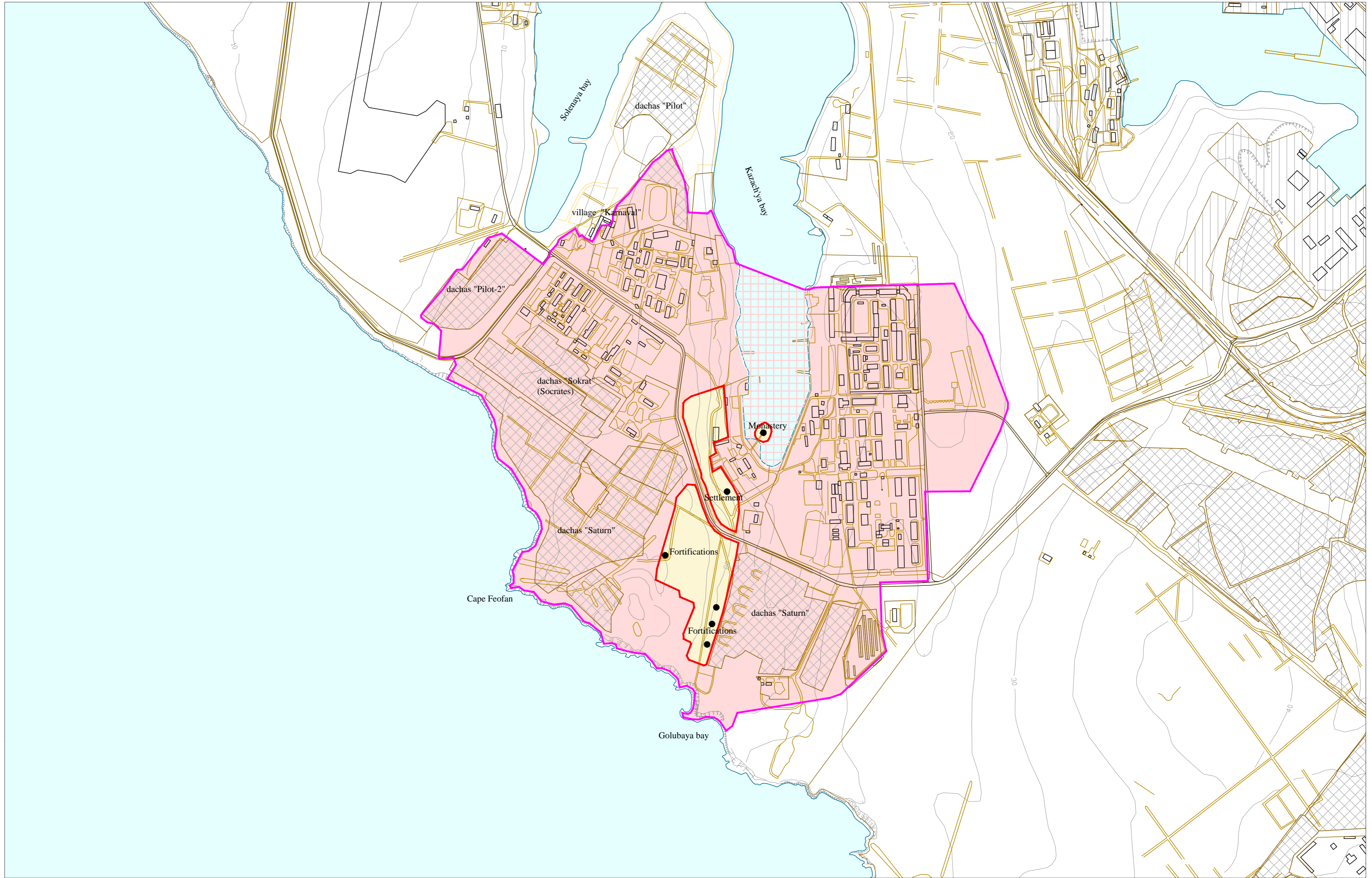
1.5 Map of the component part №004 (Chora plot on the Bezmyannaya Height)


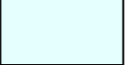
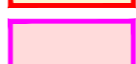

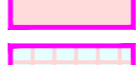



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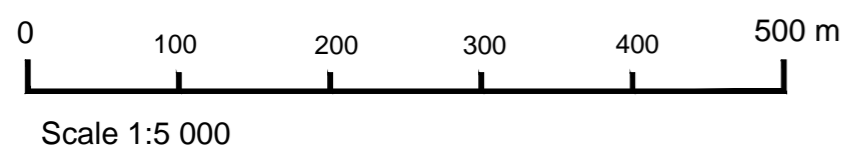
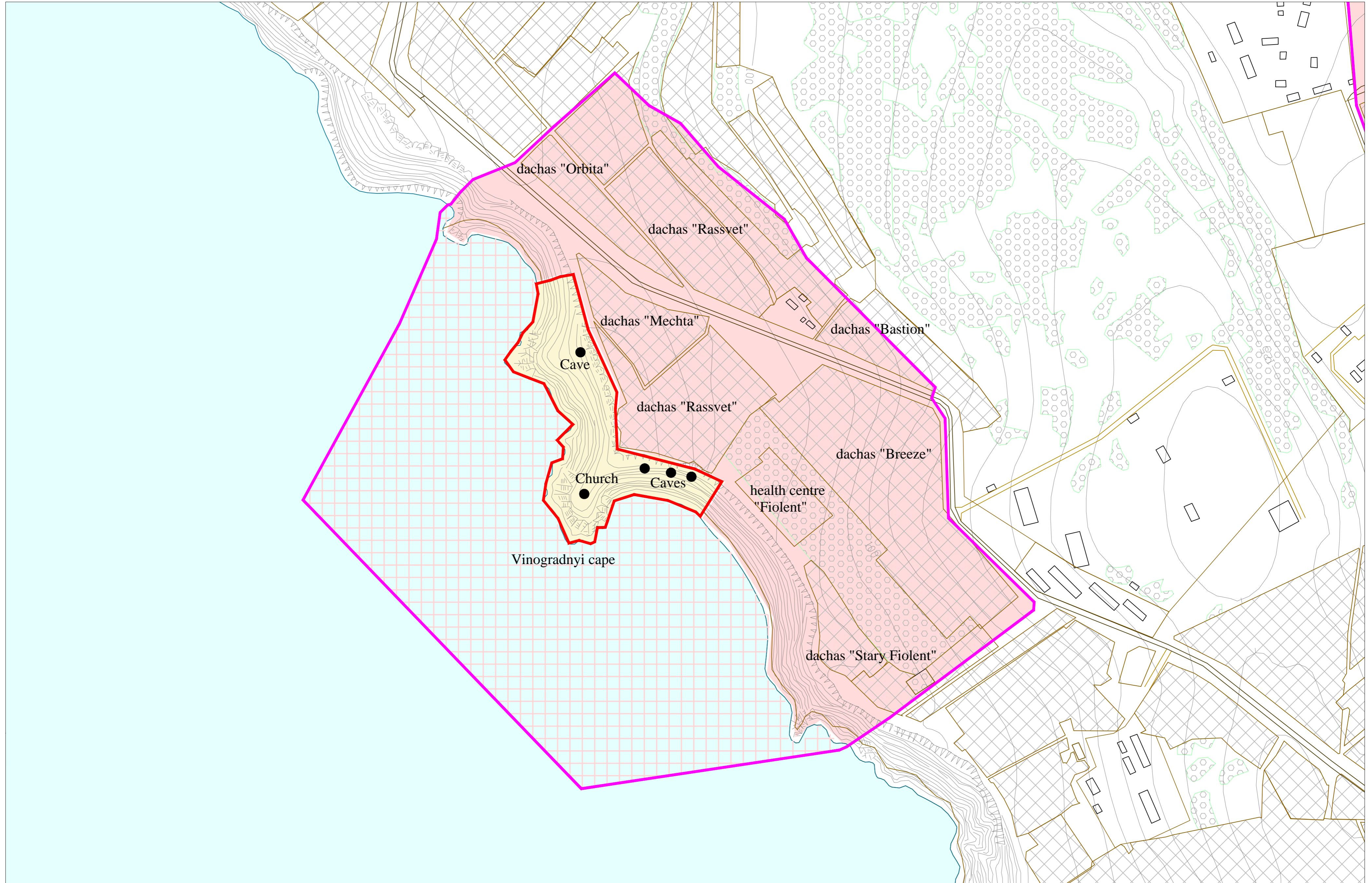
- |   |   |   |           |   |                 |
|---|---|---|-----------|---|-----------------|
|  | Area of nominated property surface - 17,2941 ha |  | Black Sea |  | Cemetery        |
|  | Buffer zone surface - 1116,00 ha                |  | Dachas    |  | Industrial zone |
|   | Total - 1133,2941 ha                            |  | Forest    |  | Vineyard        |

1.6 Map of the component part №006 (Chora plot on the isthmus of the Mayachny peninsula)



	Area of nominated property surface - 13,8240 ha		Black Sea
	Buffer zone surface - 180,4760 ha		Dachas
	Aquatic buffer zone surface - 11,300 ha		Industrial zone
Total - 205,600 ha			

1.7 Map of the component part №007 (Chora plot on the Cape Vinogradny)



	Area of nominated property surface - 8,1096 ha		Black Sea
	Buffer zone surface - 65,200 ha		Dachas
	Aquatic buffer zone surface - 52,5800 ha		Forest
Total - 125,8896 ha			

*Map 2.1.* Map of Ukraine with designated location of the nominated property (M 1:500000)



## **2. DESCRIPTION**

### **2a. Property description:**

The remains of the ancient city of Tauric Chersonese and its chora are located on the Heracleian Peninsula, which is situated in the southwest of the Crimean Peninsula in the Northern Black Sea (the present-day city of Sevastopol) (Map 2.1).

The Heracleian Peninsula measures approximately 14 km from north to south and 8.5 from west to east and has an area of over 12000 ha. In the south, west and north, the peninsula is washed by the Black Sea with several deep bays, namely Severnaya Bay, Korabelnaya Bay, Quarantinnaya Bay, Pesochnaya Bay, Streletskaya Bay, Kruglaya (Omega) Bay, Kamyshovaya Bay, Kazachya Bay and Golubaya Bay, as well as the Balaclava Valley. In the east, the Heracleian Peninsula is adjacent to the Yuzhnaya Bay and Mount Sapun. The Heracleian Peninsula has a predominantly hilly plain relief, gradually descending towards the southeast (from the slopes of Mount Sapun and the Karansky Heights) and scarred by numerous winding gullies (Photo 1).

Tauric Chersonese and its chora occupy most of the Heracleian Peninsula. Their area of more than 10000 ha is bordered by the Black Sea (in the west and north), the Sarandinakina and Khomutovaya Gullies (in the east) and Mramornaya Gully (in the south). The property consists of two main parts: 1) the Chersonese city – remains of the ancient city of Tauric Chersonese founded in the late 5th century BC during the colonization of the Black Sea coast by Dorian Greeks and 2) the Heracleian chora – agricultural hinterland of Chersonese demarcated by the ancient citizens of Chersonese into separate plots back in the 4th century BC.

#### ***I. Ancient city of Tauric Chersonese (component part No. 001)***

The ancient city of Chersonese is located on a cape separating Quarantinnaya Bay and Pesochnaya Bay (Map 1.2; Plan 1; Photo 2). The ancient city is represented by archaeological remains of Tauric Chersonese, which existed uninterruptedly for over 2000 years – from the 5th century BC until the 14th century AD. After the decline and desolation of the city its area was for many centuries out of use. It was only in the 19th and early 20th centuries that part of it was placed under the control of the military, who developed a quarantine cemetery and several coastal artillery batteries on the outskirts and an Orthodox monastery in the central part of the ancient city, where St. Vladimir's Cathedral and some other monastic constructions were erected. Most of the ancient city area has however remained free of any development or economic activities, which helped to preserve the integrity of the ruins of the ancient and medieval city in an area of more than 40 ha. The length of the city is around 850 m from southwest to northeast, its width is 450 m.

Since the mid-19th century, systematic archaeological excavations have been going on in the ancient city and an archaeological museum has been functioning, which has recently been transformed into a national archaeological preserve (Tauric Chersonese National Preserve). Over more than 150 years of archaeological research, around 10 ha of the area has been explored, with numerous archeological items dating from the ancient and medieval periods excavated and interpreted for visitors.

#### I-1. Defensive fortifications

Since the very beginning of its existence, Tauric Chersonese has been surrounded by fortress walls (Plan 1). The first line of defensive fortifications was there as far back as the 5th century BC. The second one was constructed due to the expansion of the city at the turn of the 4th and 3<sup>rd</sup> centuries BC. Over 3.5 km of the city fortress walls represented by stone curtains, which used to connect numerous defensive towers and gates, are known so far. The explored defensive fortifications separated the city from the land (in the east, west, south and southeast) as well as partly – in the east, from Quarantinnaya Bay, where the Chersonese port area lay. Almost all of the northern line of the city fortifications has been lost as a result of many years of shore erosion. Because of the rise of the Black Sea level, part of the port fortifications have been flooded (there are also some remnants of port quays under water, 5 to 10 m deep and 25 m away from the present-day coastline).

Best-preserved is the southeastern line of the fortress structures (Plan 2; Photo 3). Its lower rows are made of solid rusticated ashlar blocks dated to the 4th century BC. These are covered by Roman and Byzantine masonry. In the 2<sup>nd</sup> century AD, an outwall (proteichisma) was added to the main line of the fortifications, forming an important fortification element – an interwall peribolus with an intricate system of entrance gates and wickets. In some parts the walls of the main fortification line are preserved up to 15 m high, with the proteichisma up till 10 m high.

Most of the unearthed remains of the Chersonese walls and towers have been cleared and conserved, with some areas filled with earth, including the coastal artillery battery earth embankments dating from the 19th and the early 20th centuries.

The archaeological remains in the southeastern part of the fortifications are very well preserved, which makes it possible to reconstruct the city gates, whose total number in the city was no less than 4. Specifically, the gate leading to the city port was constructed in the late 4th century BC. It is preserved almost to its full height, but was filled up in the Byzantine period. In its place (immediately above it, over 4 m high) a vaulted passage (wicket) was erected inside the wall in the medieval period (Photo 4). The Chersonese port gate has been explored, conserved and interpreted for visitors together with the fortifications in the southeast of the city (Photo 5).

An important role in the defense of the city was also played by fortress towers, of which 24 are currently known. The largest of them is the so-called Zeno's Tower, a massive round tower in the southeast corner of the Chersonese fortifications (Plan 3; Photo 6) constructed in the early 3<sup>rd</sup> century BC and considerably expanded by three stone facings (to reach 23 m in diameter) in the 5-6th and 9-10th centuries AD. When constructing the tower, numerous painted stone grave stelea of the Hellenistic period were used (these have been removed from the stonework, restored and put on display) (Photo 7,8).

Zeno's Tower adjoins a massive fortress complex of the Chersonese Citadel designed to accommodate the military garrison, which was there to defend the city port in Quarantinnaya Bay (Plan 2; Photo 3). In the 2<sup>nd</sup> century AD, the citadel was expanded to meet the needs of the Roman military contingent. At that period, along with the fortifications, garrison headquarters, contubernium barracks, thermae etc were erected here. In the Byzantine period, the citadel housed a praetorium and a little Christian church. Although the explorations of the Chersonese Citadel have been going on for over 100 years now, only part of its area has been explored and interpreted for visitors.

### I-2. Street network

After the expansion of the city in the late 4th century BC, the whole area inside the fortress walls was laid out according to a uniform system based on a city planning model introduced by Hippodamus of Miletus, with longitudinal and transverse streets running parallel and forming accurate rectangular quarters (insulae) (Plan 1). It is important to note that the Hellenistic layout remained almost unchanged save that the street passages themselves have become somewhat narrower in some places.

The central part of the city was crossed by the main street (plateia), which was in the Hellenistic period as wide as 6.5 m and had a water supply system and drainage canals (Photo 9). The street connected the southwestern part of the city with a temenos, a sacred enclosure on the northeastern edge of the city. Besides, the quarters with important public structures, including the agora, the city theatre, the mint, the water reservoir etc. also tended to concentrate around the main street. In the ancient period, the main street was lined with statues of honorary freemen on marble pedestals.

### I-3. Public buildings

The agora of Chersonese is believed to have been situated on an area presently occupied by St. Vladimir's Cathedral, which was built in the late 19th century (Photo 10). Findings made here suggest that the place has a whole complex of public and religious buildings, including the temples of Athena, Aphrodite, Dionysus and the patron of the city Virgin Parthenos. In the Byzantine period, the pagan temples on the Chersonese agora were dismantled and replaced by Christian churches, remains of 7 churches having been found during excavations. It must however be

noted that the Chersonese agora is still underexplored and is in need of additional large-scale excavations.

An important public building in the city was its theatre, which was erected in the 3<sup>rd</sup> century BC on a slope of a little gully in a quarter lying between the main street and the South Gate to the city (Plan 4; Photo 11). The Chersonese theatre had a characteristic ancient shape and consisted of a theatron, an orchestra and a proscenium. Archaeological evidence suggests that the theatre was partly reconstructed in the 1st century AD and from then on had a capacity to accommodate up to 2000 spectators. When Chersonese adopted Christianity, the city theatre was closed and its area was used as a dumping ground and a source of stone for building. In the northern part of the theatre area a cruciform Christian church (the so-called Reliquary Church) was constructed (presumably, in the 6th century AD) (Photo 12). The extant remains of the theatre have been conserved in situ, with the missing parts reconstructed to hold theatrical performances.

The main street also had the city mint, where Chersonese money was coined between the 4th and 3<sup>rd</sup> centuries BC (Photo 13). In the premises of this construction, which is made of massive limestone blocks, remains of a melting furnace, foundry slag and coin blanks have been found. The remains of this construction have been partly interpreted for visitors and are covered by an individual canopy pavilion.

Among the public buildings of Chersonese are also the remains of the city water supply system. In the Hellenistic period, the water supply system was based on collecting rainwater in cisterns carved in the rock and on drawing underground water from wells. In the Roman period, however, a more sophisticated water supply system was created, with water delivered through ceramic pipes from springs located outside the city into a large water reservoir, out of which it was further distributed into public fountains, *thermae* and private mansions (Plan 5; Photo 14). The city water reservoir constructions and adjacent public buildings have been interpreted for visitors.

Another, smaller, water cistern has been discovered in the Chersonese agora. Constructed in the 4th through 5th centuries AD, it was basically a deep rectangular reservoir with vaults resting on two marble columns. It is important to note that in the 9th and 10th centuries this water reservoir was used as the city prison, judging by numerous inscriptions and graffiti drawings found on the waterproof plasterwork of the reservoir (Photo 15).

#### I-4. Religious constructions

Religious constructions of Chersonese included the aforementioned remains of pagan temples in the agora as well as a complex of temples and utility structures in the sacred *temenos* area at the northeastern end of the main street (Plan 1; Photo 16). Regrettably, none of these monuments has survived to this day. They were all dismantled by the citizens of Chersonese when the city was undergoing Christianization in the 5th and 6th centuries AD, testifying to their presence here



being numerous found marble architectural details of the Hellenistic and Roman periods (Photo 17,18) as well as grave stelea and religious items found in the city.

Apart from that, numerous remains of Christian churches have been explored within the ancient city boundaries. The oldest of them is considered to be the so-called the Main Street Cave Church, a two-chambered underground construction with an altar apse carved in the rock, which replaced the ancient water collector (Plan 6; Photo 19). It is possible that the place was one of the earliest centres of Christian missionary work afterwards transformed into a memorial church. The monument is in need of additional restoration works.

Another early Christian memorial church lay in the southwest of the city. It was a four-apse centrally planned structure (quadrifolium) erected on the ruins of an early Byzantine lime kiln (Plan 7; Photo 20).

Taking into consideration certain hagiographic sources, this church has been traditionally associated with reverence of St. Capiton, one of the first Chersonese bishops.

Of some interest is also the so-called Kruze's Basilica, which was among the first ones excavated in the city. Its characteristic feature is three conchae in the apse (Plan 8; Photo 21). The structure was built in the 6th century AD and noticeably reconstructed in the 10th and 11th centuries. Kruze's Basilica is undergoing additional research and conservation.

The largest church in the city of Chersonese was the so-called Uvarov's Basilica, which was founded in the late 6th century AD and partly reconstructed in the 10th century. Presumably, it served as the principal cathedral church of the city. The structure consisted of a central nave, two lateral naves, a narthex and an exonarthex and had a mosaic floor. The basilica complex also included a small church, a baptistery and a mansion house, most probably the residence of the local bishop. The area in front of the basilica featured a large atrium with a fountain (Plan 9; Photo 22). Although Uvarov's Basilica complex has been partly interpreted, the monument is in danger because of the shore erosion. The baptistery that is part of the complex is traditionally considered to have been the place where Prince Vladimir of Kiev was baptized in the late 10th century.

Among the early Christian churches of Chersonese was also the Basilica within a Basilica, named so due to the fact that it was erected in the central nave of a larger earlier basilica, which was built in the 6th century and destroyed in the 10th century (Plan 10; Photo 23). The earlier church and its baptistery had mosaic floors (Photo 24). During conservation and interpretation of the monument, the columns of the basilica were placed on their extant bases whereas the floor mosaics were transferred into the storerooms of the preserve for restoration and subsequent exposure in enclosed premises.

There is another early Byzantine basilica in the northern part of the city. It is the so-called 1935 Basilica erected in the late 6th century AD in place of a synagogue, which had been there since the late 4th and 5th centuries AD. The remains of the synagogue's frescos and mosaic floors discovered during excavations

have been submitted to the preserve's museum for display. The ruins of the early Christian basilica have been interpreted for visitors, with the façade of the central nave's western wall restored and Proconese marble columns placed on their authentic bases *in situ* (Photo 25). This picturesque basilica perched on a precipice over the sea is traditionally regarded as the symbol of Chersonese.

Apart from the aforementioned ones, the city contains remains of some other large Christian churches, namely the Western Basilica, the Northern Basilica, the Eastern Basilica, the Five-apse Church in the southern part of the city, the Sixpillar Church in the northeastern part as well as a number of smaller quarter chapels dating from the 10th to 13th centuries AD. Although the ruins of these constructions have been largely cleared and interpreted for visitors, many of them (particularly the ruins of the six-pillar church, the so-called Church on the Vaults and others) are in need of additional conservation and restoration works. After careful research, one of the chapels in the northern district of the city has been almost completely reconstructed using the construction materials found during the excavations (Photo 26).

#### I-5. Residential quarters and city mansions

Around 10 ha of the urban housing area have been found within the city boundaries after many years of explorations. Most of this area consists of residential quarters with private mansions of the citizens of Chersonese. Archaeological excavations suggest that from the foundation of the city until the late Byzantine period the life here never ceased. At all times, the houses of the citizens varied considerably in size and luxury, from the very simple to the lavish. Specifically, ranked among the wealthiest should be several Hellenistic mansions at the eastern and northeastern areas, with buildings made of rusticated limestone blocks, courtyards with stone causeways and floor in one of the premises (most probably, the andronium) decorated with superb pebble mosaics (Photos 27 and 28).

Several mansions of the city still have some remains of production facilities that shed light on their inhabitants' occupations. In particular, wineries and cellars with fragments of pithoi found in one of the mansions suggest that it was a house of a Roman period winemaker (Photo 29). Fishmongers' mansions can be told by numerous deep fish-salting cisterns (Photo 30). Specific layouts of certain constructions and items found inside reveal the mansions of a potter and a fabric dyer.

It must be noted that during the Middle Ages the urban housing area was largely redeveloped, with some quarters expanded (by merging neighbouring ones), private mansions (and therefore courtyards and constructions within the mansions) reduced in size, ancient drainage and water supply canals partly removed and new canals laid in some places. Along with artisans' workshops, a number of stores, inns and other typical Byzantine structures sprang up here in the medieval period. In the 12th and 13th centuries, almost every quarter had small churches or chapels with collective burial vaults. Besides, some Byzantine period residential quarters were

converted into churchyards and, presumably, city residences of some monasteries (around the Western Basilica, the Basilica within a Basilica etc).

## ***II. Chersonese chora on the Heracleian Peninsula (component parts No. 002 – 007)***

Tauric Chersonese chora includes all the land plots that were owned and used by the citizens of the polis (private lands) and the city community (communal lands and sacred places). Originally, in the first half of the 4th century BC, agricultural land plots were demarcated only in the immediate vicinity of the city as well as on the cape areas of the Heracleian Peninsula at its northernmost extremity (the Mayachny Peninsula, Cape Monganari and Cape Peschany). Demarcations went on locally also at a later period, at the turn of the 4th and 3<sup>rd</sup> centuries BC, this time not only on the Heracleian Peninsula but also on the vast coastal areas in the west of the Crimean Peninsula, including those of the ancient cities of Kerkitis and Kalos Limen on the Tarkhankut Peninsula (Plan 11). Still, it was the Heracleian Peninsula uniformly demarcated in the second half of the 4th century BC with a network of roads and division walls into more than 400 equal plots 26.5 ha each that remained the most important part of the divided Chersonese chora (Plan 12). In fact, the whole demarcation layout of the Heracleian chora was based on the orthogonal planning system introduced by Hippodamus of Miletus, which made it possible to regularly demarcate lands in an vast area of more than 10000 ha.

The chora plots, each measuring up to 26.5 ha and separated from the others by passage roads, were further subdivided with stone division walls up to 2 m high into 6 equal allotments about 4.5 ha each. Written records and grave stela inscriptions suggest that a plot (a polis land share distributed among the citizens of the polis by lot) consisted of two such allotments. In turn, the allotments were often internally subdivided into fields, vineyard trenchings and farmsteads.

Nowadays, a considerable part of the Heracleian chora (around ¼ of its area) lies under multistorey houses and industrial facilities of the city of Sevastopol. This area has practically lost its ancient layout although locations of some ancient farmsteads are still readable. Another ¼ of the chora area lies under modern farmsteads (private lands and orchard cooperatives), many of the plots retaining the ancient demarcation layout and parcellation principles. Finally, around ½ of the near Chersonese chora remains undeveloped, only some part of it being used as farmland or forestland (Plan 13). The landscape is still intact in an area of no less than 2000 ha, with traces of the ancient chora grid clearly visible in the space photos of the area (Photo 31). Within this area, particularly well preserved are the protected sites containing ancient testimonies – remains of ancient roads, division walls, vineyard planting walls and farmstead ruins – which are sufficient to get an exhaustive idea of the Tauric Chersonese's Heracleian chora (Map 1.1).

### Component part No. 002 – chora plot in the Yukharina Gully

The subproperty lies in the central part of the Heracleian Peninsula, covering most of the Yukharina Gully bed (2.5 km to the southeast of its mouth) as well as adjacent parts of slopes and watersheds, and has an area of around 150 ha (Map 1.2).

This component part of the property contains remains of a Bronze Age settlement (dating from the second half of the 2nd millennium BC), the earliest testimony to the human occupation of the area before it was demarcated by the citizens of Chersonese. The settlement lies on the eastern spur of the Yukharina Gully under the shelter of a steep northeastern slope.

As part of the Heracleian chora, this part of the property was divided in the second half of the 4th century BC into land plots 26.5 ha each, as described above. Five such plots (in the existing classification, Sites 224, 225, 226, 227 and 237) almost entirely fall within the boundaries of the subproperty, together with fragments of another six plots (Sites 192, 193, 236, 238, 268 and 269).

Almost all of the plots contain remains of division walls and vineyard planting walls, preserved as smaller or larger fragments 20 to 50 cm high. Well readable are also the alignments of longitudinal and transverse roads separating the land plots from each other. In addition to that, ruins of ancient farmsteads have been discovered and partly unearthed on Sites 193, 194, 224, 226, 227, 238 and 268 (with remains of twin farmsteads traced on Sites 227 and 268) (Photo 32).

The farmstead on Site 193 was quite large, measuring around 2000 sq. m. It bordered upon a transverse road which crossed the Yukharina Gully (Plan 14; Photo 33). Excavations show that the farmstead operated (with short interruptions) for nearly 1500 years, namely from the second half of the 4th century BC until the 7th century AD. Discovered in the farmstead area have been remains of two defensive towers (a rectangular and a round ones), a gate facing the neighbouring allotment as well as several Hellenistic and Roman utility structures, one of them serving as a winery. In addition to that, a deep pear-shaped water storage cistern has been found and explored in the yard. From the plot side, the farmstead bordered on allotments where fruit and grapes were cultivated.

The farmstead on Site 226 lay within the boundaries of one of those allotments that were remote from any boundary roads and had an area of around 400 sq. m (Plan 15; Photo 34). The farmstead was built in the last quarter of the 4th century BC and operated until the end of the 2nd century BC. Explorations suggest that it had a tower (pirga) with an altar dedicated to Heracles which served as accommodation for a detachment of ephebes, whose function was to guard the neighbouring chora plots and the road to a sanctuary in the Mramornaya Gully (a similar, though yet unexplored, farmstead fortress has been found on Site 238 adjacent to the longitudinal backbone road running along the Yukharina Gully).

The northern farmstead at Site 227 lay near a transverse road crossing the Yukharina Gully and was surrounded by fields with extant vineyard planting walls. Covering an area of over 250 sq. m (Photo 35), the farmstead had 11 structures,

including a rectangular tower erected in the 4th century BC, a larger and smaller utility structures. Excavations have revealed traces of grape selection. The farmstead was abandoned as early as the 2<sup>nd</sup> century BC.

The southern farmstead at Site 227 (the so-called Basilides' Farmstead) lay near a longitudinal road in the central part of the site. Remarkable for its long track record (from the 3<sup>rd</sup> century BC to the 7th century AD), this farmstead also impressed with its size: by the time of its decline this villa, which was surrounded by orchards and vineyards, had up to 40 different premises (Plan 16; Photo 36). Among the farmstead constructions were a tower with an antiram barrier and utility structures with two paved courtyards, a well and a water storage cistern. In the early medieval period, a few enclosures were built around the farmstead for livestock, for which purposes the ancient trenching vineyard walls had been partly dismantled.

One more farmstead has been found and explored in the northwestern part of Site 268. The farmstead is basically a large complex of constructions with a total area of 1500 sq. m, including a defensive tower, adjacent utility structures and a well cistern, the latter partly covered by medieval stonework. The farmstead bordering on the transverse road that crossed the Yukharina Gully remains unexplored as yet.

Apart from the constructions described above, the part of the property located in the Yukharina Gully has ruins of some other unexplored farmsteads with towers, remains of division walls and vineyard planting walls, backbone roads, medieval enclosures for livestock as well as numerous crypts carved in the rock in the southern part of its area (Photo 37 and 38).

The protected area in the Yukharina Gully remains unbuilt and is not used for any economic purposes. The only activities running there are archaeological explorations and conservation works, with almost all of the farmsteads and adjacent areas on ancient Sites 193, 226 and 227 excavated and conserved.

#### Component part No. 003 – chora plot in Berman's Gully

The subproperty lies in the south of the Heracleian Peninsula, covering part of Berman' Gully bed near its mouth and adjacent parts of the slopes, and has an area of around 20 ha (Map 1.4).

This part of the property contains remains of late Stone Age and Bronze Age settlements, which appeared here before the area was demarcated by the citizens of Chersonese in the second half of the 4th century BC into land plots 26.5 ha each. Within the boundaries of this subproperty lie fragments of 2 such plots (according to the existing classification, Sites 346 and 347) (Photo 39). In addition to the aforementioned settlements and ancient land plots, this part of the nominated property contains unearthed ruins of several ancient farmsteads, Roman and medieval towered fortifications as well as remains of the Roman water supply system and medieval cave constructions (presumably, early Christian crypts).

Besides, remains of division walls and vineyard planting walls preserved to a height of over 0.5 m have been discovered in the mouth of the gully.

Site 346 has remains of a few stone tumuli, one of them unearthed. Excavations have revealed burials belonging to the Kemi Oba, Srubna and Kizil Koba archaeological cultures, which appeared here between the late 3<sup>rd</sup> millennium BC and the 3<sup>rd</sup> century BC. In addition to that, remains of an ancient farmstead made of large block stones have been found in the area near a spring on the eastern slope of the gully (Photo 40).

One of the ancient farmsteads is known to be located in the northwestern part of Site 347 on the western slope of the gully. The farmstead had a defensive tower with adjacent Hellenistic utility structures (Photo 41). In the basement of the tower, a storeroom with pithoi used for the storage of wine has been explored. Adjacent to the farmstead in the southeast were some medieval premises, which suggests that the farmstead was in operation for many centuries.

The western slope of the gully in the southern part of the subproperty (Site 347) features the so-called “Grinevich’s Farmstead”, a huge complex of living premises, utility structures and fortifications totaling no less than 6000 sq. m (Plan 17; Photo 42). The complex included a defensive tower with a massive antiram barrier dating from the 4th century BC and adjacent ancient and medieval constructions built on the ruins of the Kizil Koba culture settlement. The southern part of the complex measuring 3500 sq. m was separated by a massive defensive wall with extant loopholes (Photo 43). Within the boundaries of the subproperty also lie some utility structures and yards with wells and water storage cisterns as well as a water pipeline made of stone slabs. One of the premises has traces of a winery and a larder with pithoi for wine.

Adjacent to them in the east is a group of structures concentrated around yet another ancient defensive tower with an antiram barrier and a cellar containing a water storage cistern and holes for pithoi in the floor. Carved in the rock on the slope of the gully underneath these structures were 2 medieval cave constructions connected by a passage (Photo 44). The archaeological material unearthed here is dated to a period between the 4th century BC and the 14th century AD.

100 m to the northwest of the described constructions lie remains of a Hellenistic defensive tower with an antiram barrier, a slabbed yard, a built-on staircase, a water storage cistern and adjacent outbuildings (Photo 45). The area between the towers set along the western slope of the gully is known to have been had structures which were in use between the 4th and 3<sup>rd</sup> centuries BC and the 11th century AD.

It is therefore safe to say that in the Hellenistic period the western slope of Berman’s Gully had a fortified military and economic complex that included several defensive towers erected at an equal distance (about 105 m) from each other with housing and utility structures in between. In the Roman period and during the Middle Ages the complex was reduced to an area of around 1 ha, limited by the southern and eastern groups of structures in the southeast and by the nearest

defensive tower in the northwest. Is it possible that after its housing and utility structures were abandoned, the complex was replaced by a Christian monastery with cave constructions, which existed here between the 13th and 14th centuries.

Only the southern part of the defensive complex has been conserved so far. The rest of the structures require additional research and interpretation.

#### Component part No. 004 – chora plot on the Bezymyannaya Height

The subproperty lies in the southeast of the Heracleian Peninsula in the uppermost part of the Verkhne-Yukharina Gully at the top and on the slopes of an eminence known as the Bezymyannaya Height (the eastern crest of the Karansky Heights, 243 m high on topographic maps) and has an area of over 17 ha (Map 1.5). This part of the nominated property is in fact one of the boundary plots of the Heracleian chora of Chersonese, which designated the southern boundary of the area demarcated in the Hellenistic period (ancient Site 402). It must be noted that the subproperty lies at the highest point of the Heracleian Peninsula and gives a picturesque view of the Chersonese chora as well as the adjoining Balaclava and Inkerman Valleys (Photos 46, 47).

In the first half of the 1st millennium BC, a Kizil Koba culture settlement emerged here, afterwards partly replaced by an ancient settlement. Apart from that, this part of the property contains remains of a multilayer fortification which occupied the top and the northwestern slope of the mentioned height (Plan 18; Photo 48). Archaeological excavations of the fortified area have revealed construction remains dating from different chronological periods, namely Hellenistic, Roman and early Medieval ones.

The fortification on the Bezymyannaya Height had an area of over 5000 sq. m and rested on an almost accurate square. It was surrounded by defensive walls with an outer moat and was flanked by defensive towers at the corners. The inner space of the area was densely covered with housing and utility structures (Photo 49). The complex was constructed no later than the 3<sup>rd</sup> century BC and was there until the 11th century AD. Between the 2<sup>nd</sup> and 6th centuries AD its defensive structures were reconstructed. The southeastern corner of the fortification was destroyed by military earthworks created here during the Crimean (Eastern) War (1853 – 1855) and World War II (1941– 1945).

From the outside, the fortification was surrounded by Hellenistic agricultural structures, which underwent considerable changes in the Roman period. By that time, the settlement that had once occupied the whole of the northwestern slope had dwindled, concentrating on the upper terraces of the slope only (Photo 50). It was within these boundaries that the complex continued functioning during the Middle Ages, the latest archaeological material dated between the 9th and 11th centuries AD.

The obtained archaeological material suggests that the fortification played a crucial role at the southern frontiers of the Heracleian chora, controlling the ancient road between Chersonese and the Balaclava and Inkerman Valleys, the main artery

connecting the city with the mountainous and steppe areas of the Crimean Peninsula.

Only the central part of the fortification has been unearthed so far and this is in need of additional conservation and interpretation.

#### Component part No. 005 – chora plot in the Streletskaya Gully

The subproperty lies in the central part of the Heracleean Peninsula, on the flat top of the southwestern slope of the Streletskaya Gully 2 km to the south of its mouth and has an area of over 15 ha (Map 1.6). Within these boundaries lie fragments of two Hellenistic land plots: Site 151 (in the south) and Site 175 (in the north and centre). The plots contain very well preserved and clearly visible traces of division walls and vineyard planting walls, longitudinal and transverse roads and farmsteads (Photo 51).

The southeastern part of Site 151 contains unearthed and partly conserved remains of Hellenistic vineyard planting walls (Photo 52). Site 175 has remains of two known farmsteads, an ancient one with a defensive tower made of large limestone blocks in the south and an early medieval one in the north (Photo 53). In addition to that, this part of the property contains remains of some other unexplored stone structures, presumably dating from the Middle Ages (Photo 54).

Although explored less than the others, this subproperty is one of the best in terms of conservation of its ancient constructions still hidden in the earth but clearly visible on the surface as shaping a specific archaeological landscape of the Chersonese chora.

#### Component part No. 006 – chora plot on the isthmus of the Mayachny Peninsula

The protected site under consideration lies on the isthmus of the Mayachny Peninsula descending gently from east (Golubaya Bay) to west (Kazachya Bay) and has an area of about 14 ha. The isthmus and a small island in Kazachya Bay containing remains of a large archaeological complex – a fortified Hellenistic settlement identified by most researchers with the so-called Old Chersonese mentioned by the ancient Greek geographer Strabo, the settlement being referred to as Strabo's Chersonese (Map 1.7; Photo 55).

The settlement in question was fenced across the isthmus with two parallel lines of defensive walls with square towers set at a distance of 70 to 75 m from one another (Plan 19; Photo 56). The outer (southeastern) wall was erected along the western slope of the Kazachya Gully. The inner (northwestern) wall was constructed at the top of the watershed plateau in the south of the Mayachny Peninsula. The distance between the two lines of defense ranged between 200 and 210 m. In ancient times, the area of the fortified settlement was around 17.5 ha. Its western part was replaced by casemates of the 35th coastal battery during World War I, its eastern part, except for the aforementioned island, being under water in Kazachya Bay.



The space inside the fortification was divided by cross walls into four almost equal plots about 4.5 ha each. The northwestern part of the fortification did not have any buildings. Fragments of agricultural allotments with traces of vineyard planting walls, which might have been there prior to the fortification itself, have been explored (Photo 57).

The northeastern part of the settlement, which descended in terraces towards Kazachya Bay, lay under dense urban housing with segmentation into quarters, houses, utility structures and a religious complex, which included remains of an altar with an adjacent winery, a large water storage cistern or a well etc (Plan 20, Photos 58 and 59). The layout of the southern part of the settlement is unknown. The southwestern part of the settlement is believed to have had ruins of an ancient temple, which was destroyed when constructing the coastal artillery battery.

Archaeological material suggests that the described settlement and its fortification existed in Hellenistic and Roman times. Occasional medieval materials found on the site are probably related to cave constructions in the rock terrace cliffs and ruins of a Christian monastery on an islet in Kazachya Bay (Plan 21; Photo 60). Church legend points to this islet as a place where the relics of St. Clement of Rome were found in the 9th century AD. Presumably, in ancient times the islet had one of the towers of the aforementioned fortification.

Archaeological explorations suggest that the fortification was erected in the 4th century BC to protect agricultural allotments on the Mayachny Peninsula, one of the first plots where the Heracleian chora was demarcated. Some of the agricultural area thus became part of the fortification and, presumably, was subsequently used as a shelter. At the same time, the area adjacent to Kazachya Bay had urban housing and was probably inhabited by workers who serviced the now sunken port quays.

Only some parts of the unearthed urban housing area on the shore of Kazachya Bay have been interpreted so far. The defensive lines of the fortification as well as the remains of the farmland layout and the monastic structure on the island require additional research and conservation.

#### Component part No. 007 – chora plot on Cape Vinogradny

The subproperty lies in the southwestern part of the Heracleian Peninsula adjacent to the sea coast and has an area of over 8 ha. It includes a rock cliff with a broad terrace and a picturesque cape promontory (Map 1.8).

The upper edge of the rock cliff exposes stone constructions and cultural layers of two ancient land plots (Sites 312 and 313), partly destroyed by shore erosion (Photo 61).

Further down the rock, 2 to 3 tiers of cave constructions that used to belong to a medieval cave monastery can be seen. Archaeological explorations have revealed remains of a cave church, housing and utility structures, a hagiaσμα and a crypt with tombs (Photos 62 and 63). Archaeological items found in the tombs

suggest that the monastery functioned (with interruptions) for many centuries, namely from the 6th and 7th centuries up to the 14th and 15th centuries AD.

Apart from the cave constructions, the monastic complex included a 13-14th century ground-based church whose ruins have been unearthed at the top of the cape (once known as Cape Church). The church was adjacent to a complex of housing and utility structures with a covered courtyard (Photo 64). Quite promising in terms of further excavations seems to be the terrace area with traces of ancient premises and fresh water springs. Findings related to ancient and medieval winemaking are likely to be discovered here.

The remains of the ground-based church have been conserved and the unearthed cave constructions are being interpreted. This part of the nominated property is one of the most picturesque places on the Heracleian Peninsula and bears testimonies to the continuity of winemaking traditions from antiquity to the Middle Ages.

## **2b. History and development:**

Tauric Chersonese was founded in the Northern Black Sea region during the Great Greek colonization in the 5th century BC and existed without interruptions for 2000 years (through the 14th century AD). The founders of Chersonese were Dorian Greeks, natives of Heraclea Pontica on the south coast of the Black Sea. Tauric Chersonese is repeatedly mentioned in various ancient and medieval written records. Specifically, it is described in Strabo's *Geography*, in Constantine Porphyrogenitus's *De administrando imperio* as well as in the *Russian Primary Chronicle*.

Originally a little trading post around the harbour installations in Quarantinnaya Bay, it had developed by the early 4th century BC into a classic ancient Greek polis, a democratic republic with a slavery system. Apart from the city itself, the polis of Athens included its agricultural hinterland (chora). Testifying to this effect is the text of the oath that had to be taken by the citizens of Chersonese, carved on a marble obelisk found in the 19th century in the agora of Chersonese. It is important to note that the near chora of Tauric Chersonese included the areas adjacent to the city on the Heracleian Peninsula and it was only in the second half of the 4th century BC that the coastal areas in the west and northwest of Crimea were annexed to it.

Winemaking and production of related wine materials in the chora largely determined the comprehensive development of the Chersonese state, which grew between the middle of the 4th century and the first half of the 3<sup>rd</sup> century BC into a major winemaking centre of the Black Sea region. It was at that time that the minor colonial settlement with a harbour in Quarantinnaya Bay developed into a large city with an area of over 40 ha and a regular layout of urban quarters based on a city planning system invented by Hippodamus of Miletus (Plan 1).

Demarcated according to Hippodamus's system were also the lands on the Heracleian Peninsula in an area of around 10000 ha in the immediate vicinity of the city. This area, traditionally referred to as the near chora of the Chersonese, was divided into rectangular plots separated from each other by longitudinal and transverse roads and high division walls. Archaeologists have found more than 400 such land plots, each having an area from 17 to 26.5 ha (Plan 12). The plots were further subdivided into 4 or 6 allotments 4.4 ha each, most of them having internal vineyard planting walls used in ancient viti- and horticulture. The directions of the division walls and vineyard planting walls on the Heracleian chora were in line with the prevailing wind directions, which help to increase the efficiency of grapes and fruit growing. Most of the chora plots had farmsteads, which were normally equipped with defensive towers and stationary winemaking complexes.

The location of Tauric Chersonese at a crossroads of two Black Sea routes, together with the abundance of convenient harbours, provided excellent conditions for transit sea trade, which developed here in the second half of the 4th and the 3<sup>rd</sup> centuries BC. Particularly strong contacts were maintained between Chersonese and the ancient centres in the Southern Black Sea: Heraclea Pontica (its metropolis) and Sinope (a major supplier of olives and olive oil, the latter being one of the main food products in the ancient Greek diet). It is known that Colchis provided Chersonese with honey whereas Heraclea and the islands of Kos, Rhodes and Thásos supplied it with top quality wines. Chersonese also imported party tableware, luxuries, works of art, jewels, fabrics, weapons and construction materials. Indicative of intensive international trade relations of Chersonese are numerous foreign coins as well as the contents of some proxenic decrees.

In addition to that, Tauric Chersonese was an intermediary in trade relations between the metropolis and the populations of northwestern and mountainous Crimea, adjacent valleys and plateaus, the capital of the Scythian state Neapolis and, through the trading posts of Olbia and Bosphorus, the Scythians of the lower Dnieper and Don regions. Chersonese traded wines and handicrafts for grain, leather and other livestock products. Export of grain was particularly important in Chersonese's trade relations with both the local 'barbarian' population and the other centres of the classical world.

A unique feature of the Chersonese pantheon was the cult of Virgin (Parthenos), a syncretistic female deity combining some features of a local female deity with the cult of the Greek hunting goddess Artemis.

Besides, Tauric Chersonese was an important political hub of the northern Black Sea region and a centre of antique culture at the northern frontiers of the ancient Greek and Roman world. Testimonies to this are numerous found pieces of monumental and fine arts, namely encaustic and relief paintings on tombstones and stele, terracotta statues and figurines, shingle mosaics, marble sculptures etc.

The middle of the 3<sup>rd</sup> century BC saw the beginning of Chersonese's decline. What followed was an period of prolonged Greco-Scythian wars, resulting in the

city losing its domains in northwestern Crimea and becoming dependent on Pontus (subsequently the Roman Empire).

In 63 BC, at the request of the citizens of Chersonese, the Romans sent to Chersonese a naval expedition led by Plautus Silvanus, who managed to subdue the Scythians. Between the 1st and 2<sup>nd</sup> centuries AD the citizens of Chersonese were making repeated attempts to restore their independence, but the status of a free city was obtained by Chersonese only in the mid-2<sup>nd</sup> century AD due to the assistance of Heraclea Pontica. Chersonese turned into the base of Flavius's Moesian fleet and the post of the Roman garrison composed of the soldiers of the 5th Macedonian legion, the 1st Italian legion, the 11th Claudius's legion, the 1st Cilician cohort and the 1st Bracars' cohort. Thus, without formally being part of the Roman Empire, Chersonese became a strategic outpost of the Romans in the Northern Black Sea region.

At that time, important changes took place in Chersonese's state structure. The National Assembly was still the supreme legislative body, but real power was concentrated in the hands of a few noble families. And although the presence of the Roman troops contributed to stabilization of everyday life and development of the city's economy, the situation in the chora continued to be disquiet for many years to come, epigraphic findings of the time making repeated mention of 'barbarian raids' and 'big fires in the chora'.

In the Roman period, the agricultural area largely retained the layout established by the mid-4th century BC. Significant changes however took place in how the land was used: since grapes ceased being the main crop, the number of wineries in the chora dwindled, the abandoned vineyard replaced by pastures, enclosures for livestock, stone quarries etc.

Archaeological material suggests that although the lands of the Chersonese chora on the Heracleian Peninsula continued to be intensively used up till the 5th century AD, the leading sectors of Chersonese's economy were now fishing and seafood trade. It was in the Roman period that numerous fish-salting cisterns and large fishery complexes sprang up in the city.

Numerous artisans' workshops were still in operation in Chersonese at the Roman period. Casting molds, slags and various metal articles found here suggest that there were some foundries and forges within the city boundaries. Apart from that, domestic glass manufacturing was started in Chersonese between the 3<sup>rd</sup> and 4th centuries AD.

The Roman fleet cleared the sea trade routes from pirates, contributing to the animation of trade in the second half of the 2<sup>nd</sup> century and the 3<sup>rd</sup> century AD. Among the items imported into Chersonese at that time were a wide range of red lacquered ceramics from Italy, Asia Minor and the island of Samos, lamps from Ephesus and Pergamum, jewels and cosmetics from the Orient as well as various glassware and works of art from the other provinces of the Roman Empire.

Of no less importance for the cultural life of the city at the Roman period was the renewal of local festivities, ceremonies and agons, i.e. the Hellenistic

heritage. At the same time, an important role in everyday lives of the citizens of Chersonese came to be played by private cults and monotheistic elements, related as a rule to worshipping various foreign deities such as Jupiter Dolichenus, Hecate, Cybele and Mitra. The church tradition has it that the first centuries AD were the period when Christianization of the Chersonese population began, due to the missionary activities of Apostle Andrew, St. Clement (the fourth Pope, who was exiled to Chersonese) and seven saint missionaries (St. Basil, St. Eucherius, St. Ephraim, St. Eugene, St. Agaphadorus, St. Elpideus and St. Capito). Archaeological material however suggests that Christianity was not spread among the citizens of Chersonese until the 4th century AD.

The 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD also saw the intensification of urban development: the defensive walls of the city were fortified, new public buildings and temples with Corinthian order ornaments were erected, many kilometers of ceramic water pipelines were laid and the premises of the city theatre were reconstructed.

It must be noted that although the population of the late antique Chersonese was multiethnic, Greeks constituted the majority of the urban population. In the Roman period, the citizens of Chersonese continued to communicate in the Greek language, using it even in official documents. More complicated was the ethnic situation on the Chersonese chora, which was inhabited by numerous descendents of Taurians, Scythians and other ethnic groups.

In the 230s and 240s, the northeastern frontiers of the Roman Empire were incessantly raided by Goths. Faced with the necessity to concentrate their armed forces in the Danube region, the Romans had to withdraw their troops from Tauris (the Crimean Peninsula). Despite this fact, the Chersonese garrison continued to be maintained with subsidies coming from the metropolis. Between the late 3<sup>rd</sup> and the first half of the 4th century AD the Chersonese troops took part in the wars against the Bosphorus Kingdom together with the Roman Empire. This enabled Chersonese to control the vast areas in the southwest of Crimea that were inhabited by Goths and Alani, then the federates of the Roman Empire.

After the breakdown of the Roman Empire in 395 AD, Chersonese was for Rome and Byzantium nothing more than an allied city. At the turn of the 5th and 6th centuries AD, it became a provincial city of the Byzantine Empire and remained so all through the early Middle Ages, used by the metropolis as the northernmost outpost at its frontiers with the 'barbarian' world and as a place of exile for political and religious oppositionists. It is known that at that period the city was governed by a vicar as the head of the polis administration appointed by the emperor. Under Emperor Justinian I (565 – 578 AD) the city became the residence of the duca, the commander of the Byzantine troops in Crimea.

By the second half of the 4th century AD, the economy of Chersonese had stabilized, with volume grain production established and trade relations with the other Black Sea and Mediterranean ports maintained and intensified. According to the Constantinople prefect Themistius (360 AD), Chersonese was among those

supplying grain to the capital of the empire. Testifying to close trade contacts between Chersonese and Constantinople was also the Byzantine historian Zosimus (5th century AD). At that time the city functioned as a major commercial port responsible for the turnover of commodities between the north and the south by way of trading handicrafts and other goods for agricultural products. During Emperor Zeno's rule (474 – 491 AD) the city resumed coining its own money.

As has already been mentioned, Christianization of Chersonese started in the 4th century AD and went on for several centuries. Occasional items bearing Christian symbols and inscriptions have been found in the tombs of the citizens of Chersonese since the late 3<sup>rd</sup> and the first half of the 4th century AD. The first Christian crypts, probably forming a separate part of the cemetery, appeared in the city necropolis at the turn of the 4th and 5th centuries AD. The earliest of known Chersonese churches, the so-called Minor Church in the Southern (Country) Necropolis is dated to the same period (Photo 65). According to some researchers, the 5th century AD was also the time when the church with the triconchial apse, the predecessor of Uvarov's Basilica, was erected in the northeastern part of the city. The existence of Christian churches in the city at this period is also confirmed by such findings as church marble reliefs with Christian symbols dating from the 5th and 6th centuries AD.

In the last quarter of the 4th century AD, Chersonese was already the centre of a separate eparchy, as is suggested by the signature of Eucherius, the bishop of Chersonese, under the resolutions of Ecumenical Council II (381 AD) and such a finding as a tip of a paterissa with the inscription "Christ's bishop of the city of Chersonese..." dated to the turn of the 4th and 5th centuries AD. It is also known that in the 4th and 5th centuries AD Monophysites and a Jewish community were operating in Chersonese.

The late 6th and the first half of the 7th centuries AD were the palmy days of the early medieval Chersonese's economy and culture. The city was under large-scale construction, with redevelopment of nearly all the city inside the existing quarters. Along with new mansions, large basilicas and cruciform churches were erected. Intensive development of trade continued, primarily with the Byzantine cities in North Africa and Asia Minor, which were the principal trading partners of Chersonese between the 5th and 7th centuries AD.

As far back as the late 6th century, Chersonese became a Christian religious centre not only for the inhabitants of the city and the nearby area: at the end of the 6th century AD, Archdeacon Theodosius referred to Chersonese as one of the transit pilgrimage points on the way to the Holy Land. Judging by such findings as clay stamps with inscriptions, in the 5th and 6th centuries pilgrims received the ministrations in the Chersonese churches dedicated to St. George, St. Theodore and St. Phocas.

The importance of the city as a Christian centre grew even more as a result of the activities of the exiled Pope Martin I, who ran an active campaign against the Monophelites and died in Chersonese in 655 AD. The written records of the 7th

and 8th centuries mention ‘the sepulchre of a great man...actively visited by believers from the West and from the East’. It is believed that St. Martin’s tomb was located in the Southern (Country) necropolis of Chersonese in the Quarantinnaya Gully (Photo 66).

In the last quarter of the 6th century AD, the Byzantine name of the city (Cherson) ultimately replaced the ancient one (Chersonese). During the Middle Ages, the city went under different names, too: Khorsun (in Old Russian chronicles), Gorsoni (on Genoese portolans) and Sary Kermen (in Tatar and Ottoman records).

In the late 7th century AD, the Khazars appeared in the Northern Black Sea region as a new political power. In the early 7th century AD, almost the whole of Crimea was in their control. Cherson was the only place free of the Khazar protectorate.

Only a short while ago researchers believed that during the so-called Dark Ages (between the 7th and the mid-9th centuries AD) handicrafts and trade in Cherson were in deep decline. However, excavations conducted over the past few years suggest that the tangible reduction in the exchange of commodities with overseas partners was made up for by the vibrant development of regional trade. In particular, local potters continued to manufacture manifold ceramics that were exported outside, with Chersonese amphorae numerous found on the vast areas of Crimea as well as in the basins of the Rivers Dnieper and Don. At that period, the city remained the centre of an eparchy and, according to St. Theodore Studites, played a significant role in giving shelter to iconodules who were fleeing from the metropolis where they were persecuted by iconoclasts.

In the 9th century AD, the Crimean Peninsula became an arena of vehement struggle among such forces as Khazars, Hungarians and Pechenegs. Although the nomadic invasions did not reach Cherson itself, they did affect the settlements on its agricultural outskirts, particularly in the southwestern areas inhabited by the federates.

The Byzantine power in Cherson was consolidated in 841 AD with the establishment of a specific military and administrative unit – the so-called ‘theme of Cherson and Climates’. The first strategus of the theme was the outstanding Byzantine architect Petronius Camatirus, who designed and built the Khazar Sarkel Fortress. The establishment of the theme with the centre in Cherson was followed by large-scale reconstruction works on the defensive walls and the citadel complex of the city.

Apart from that, it was through Cherson that the Patriarch of Constantinople continued to pursue his missionary activities among the ‘barbarian’ neighbours. In the 860s AD, the city is known to have been visited by one of the inventors of the Slavic alphabet St. Cyril (Constantine Philosopher). Church legend has it that in the vicinity of the city St. Cyril found the relics of St. Clement, which were partly transferred to Rome, with another part kept in Cherson and brought to Kiev by Prince Vladimir in 988 AD.

By the early 10th century AD, Cherson had restored its role as an important centre of transit trade between Byzantium and the neighbouring 'barbarian' population. Along with grain, such goods as leather, honey, wax and fish were delivered to Constantinople via Cherson, with food products, fossils and luxuries coming the other way round. Testifying to this effect are excellent slip-glazed ceramics, bronze articles and jewels of Oriental origin excavated in the city layers dating from the 10th through 12th centuries AD.

An important historical event for Cherson and its theme was the so-called 'Khorsun campaign' of Prince Vladimir of Kiev launched in the 10th century AD. The nine-month siege of the city by Vladimir's troops ended in a dramatic seizure of Cherson-Khorsun, after which Vladimir was baptized and married the Byzantine Princess Anna. Therefore, the importance of Cherson for the spread of Christianity in Kievan Rus can hardly be overestimated, particularly considering the fact that, according to a chronicler, the 'Khorsun priests' were to become the first clergymen in Rus.

Fires and devastations of the late 10th century AD were followed by yet another round of reconstruction of the city quarters, with the original layout of the street network preserved as it was. Archeological findings of the 12th and 13th centuries suggest that at this period Cherson had three major trading partners: Byzantine cities in the Black Sea and Mediterranean, Islamic regions of Asia Minor and Kievan Rus. According to researchers, the population of the city at this period was between 5000 and 6000 people.

In the 10th through 12th centuries AD Cherson was still under the control of the Byzantine emperors. However, with the decline of Constantinople in 1204 and further on up till the mid-14th century AD, the suzerainty of the Trabazon rulers was established and continued to be recognized by the city even after the restoration of the Byzantine Empire in 1261 AD.

In 1280 AD, the Chersonese eparchy was transformed into a metropolis, which controlled Christian parishes all over the southern coast of Crimea up to Sudak (Sugdeia) inclusively from 1390 onwards. At that time Cherson had a lot of functioning Christian churches, with dozens of smaller ground-based and cave monasteries springing up and vibrantly developing on the Heracleian Peninsula, specifically on Cape Phiolent and Cape Vinogradny, in Berman's, Quarantinnaya and Saradinakina Gullies and on the islet in Kazachya Bay.

From the 13th century AD onwards, intensive entrepreneurial activities in the Black Sea area were started by Italian merchants, primarily the ones from Genoa. As soon as Cherson fell into the sphere of their interests, Cembalo, which was to become one of the strongest Genoese fortresses, was erected on the southern edge of the chora (in Balaclava), with the 14th century records mentioning the presence of a mission of Genoese officials in the city itself. At that period Cherson also had a Catholic mission: in 1333 the English Dominican Ricardus, who had the status of a Catholic bishop, started the construction of a cathedral dedicated to St. Clement in the city.



From the mid-13th century AD onwards, Cherson repeatedly fell victim to nomadic raids, which brought fires and devastations. In particular, written records mention that in 1399 AD the city was seized by the troops of Khan Edigey of the Golden Horde. Difficult political and economic conditions of the time brought about gradual decline of the city, although life in Cherson and in its chora continued up till the mid-15th century AD, when the city dwindled to a minor fishing village on the ruins of the former city port.

For over 300 years after the decline of Cherson and its chora in the 15th century AD the area remained uninhabited. It was only in the 19th century that some quarantine barracks appeared in the port area of Chersonese to serve the crews of the Russian Empire's Black Sea Fleet ships, along with a few constructions of St. Vladimir's Monastery in the central part of the city. Dating from the same period are some isolated farmstead settlements whose inhabitants were engaged in agriculture. Economic activities of the citizens of Sevastopol of this period resulted in partial demolition of the ancient ruins of Chersonese and its chora in the hunt for construction materials. In addition, some damage was done to the ruins of ancient Chersonese during the erection of the monastery constructions (namely, the cathedral as well as housing and utility structures) and the coastal artillery batteries in the area of the city between the second half of the 19th century and the early 20th century (Photo 67).

Scientific explorations of Chersonese and its chora started in the middle of the 19th century. The first excavations within the boundaries of the city were carried out in 1853 by Alexey Uvarov whereas systematic excavations were launched by Carl Kosciuszko-Valuzinicz in 1888. The latter was also the founder of the first museum of antiquities in Chersonese (Photo 68). At the turn of the 19th and 20th centuries, excavations were carried out not only in the city, but also beyond its boundaries. At the beginning of the 20th century, intensive excavations were started on the Heracleian chora. Explorations of the ancient and medieval monuments of Chersonese and its surroundings are going on, conducted by the staff of Tauric Chersonese National Preserve with the assistance of experts from various research institutions of Ukraine, Russia, Poland, Italy and the United States.

### **3. JUSTIFICATION FOR INSCRIPTION OF THE PROPERTY ON THE WORLD HERITAGE LIST**

#### **3a. Criteria under which the property is nominated:**

The property is nominated for inscription on the World Heritage List under criteria **(ii)**, **(iv)**, **(v)**, **(vi)**. The justifications are provided below:

**Criterion ii.** In the ancient and medieval world, Tauric Chersonese as an ancient Greek colony and outpost of the Roman and Byzantine Empires was the remotest point of contacts between the Mediterranean civilizations and the ‘barbarian’ population of southeastern Europe. Lying at a crossroads of the ancient trade routes, the city was subject to continuous influences of the various cultures of the southwest, north and east. For over 2000 years, the inhabitants of Chersonese and its chora kept on exerting enormous influence on the neighbouring cultures, playing a decisive role in the Hellenization of Scythians and Sarmatians as well as the Christianization of Goths, Alani and East Slavs. In turn, the penetration of barbarian practices into the everyday lives of the citizens of Chersonese resulted in a unique syncretistic cult of Virgin Parthenos, which gradually became part of their ancient pantheon.

**Criterion iv.** The ruins of Tauric Chersonese are an example of an urban ensemble whose regular layout was done in the 4th century BC on the basis of the system developed by Hippodamus of Miletus and remained almost unchanged until the decline of the city in the 14th century AD and are exceptional in terms of their integrity and state of preservation. The city’s ancient housing remains and archaeological layers illustrate its development stages and continuity of its urban structure and its way of life from the classical period to the late Middle Ages.

**Criterion v.** The agricultural landscape of the Chersonese chora on the Heracleian Peninsula, which took its shape between the 4th and 3<sup>rd</sup> centuries BC as focused primarily on grape growing, is an outstanding example of a land allocation system of an ancient polis that went in line with a similarly organized Hippodamian urban planning system. At the same time, the Chersonese chora bears an exceptional testimony to ancient land cultivation technologies as well as its inhabitants’ lifestyles embodied in the numerous remains of division walls and vineyard planting walls, traffic arteries, water pipelines, farmsteads and fortification complexes. The chora of Tauric Chersonese illustrates the cross-temporal and cross-cultural continuity in the use and development of its cultural landscape from the 4th century BC to the 14th century AD.

**Criterion vi.** Tauric Chersonese was directly associated with important historic events that took place in the area of contacts between the ancient and

medieval civilizations and the ancient population of the Black Sea area. Particularly important was the role Tauric Chersonese played in the dissemination of Christianity among the barbarian peoples of southeastern Europe, particularly among Alani, Goths and East Slavs. It was in Chersonese that Prince Vladimir of Kiev was baptized in 988, which eventuated in the Christianization of the whole of Kievan Rus at the end of the 10th century.

### **3b. Statement of Outstanding Universal Value:**

#### ***1) Brief synthesis***

The polis and chora of Tauric Chersonese are an outstanding example of an ancient architectural and technological ensemble consisting of the city and its agricultural hinterland, which was established as a result of varied economic and commercial activities of Greek colonists between the 4th and 3<sup>rd</sup> centuries BC and existed uninterruptedly for nearly 2000 years. The Chersonese and its chora are exceptionally well preserved examples of an ancient settlement, land-use and landscape formed in the specific natural environment of southwestern Crimea.

The city of Chersonese is the only example of archaeological ruins of an ancient city still extant in its integrity in the Northern Black Sea area, a city which was an important political and economic centre of the region in the period of Greek colonization as well as during the formation and decline of the Roman and Byzantine Empires between the 5th century BC and the 14th century AD. After the city was abandoned in the 15th century AD, its area lay uninhabited, which helped to preserve the remains of its fortifications, housing, utility and religious structures as well as the city layout based on the so-called 'Hippodamian' system in their integrity.

The extant Tauric Chersonese chora sites on the Heracleian Peninsula are basically fragments of the city's agricultural hinterland laid out on a regular basis in the 4th century BC, namely demarcated into more than 400 equal allotments in an area of 10000 ha. A distinctive feature of the Chersonese chora is the fact that it was demarcated based on the planning model introduced by Hippodamus of Miletus, thus constituting an ensemble integrity of urban planning and land use within the boundaries of the city and its surroundings. The ensemble combination of the ancient urban and farmland layouts as well as the principles on which the plots were distributed among the citizens of the Chersonese polis bear a unique testimony to the democratic values of the ancient Greek society as embodied in the monuments of this ancient city and its chora.

In addition to that, Tauric Chersonese was an important political, economic and cultural centre of the Black Sea region and played a decisive role in the dissemination of Christianity in southeastern Europe, particularly in Kievan Rus.

## ***2) Justification for criteria***

The value of the nominated property and its component parts is supported by criteria **ii**, **iv**, **v** and **vi**:

- criterion **ii** is relevant due to the importance of Tauric Chersonese as an ancient Greek colony and outpost of the Roman and Byzantine Empires at a point of contact between the Mediterranean civilizations and the ‘barbarian’ population of southeastern Europe;

- criterion **iv** is met due to the exceptionally good state of preservation of the layout and archaeological remains of the ancient city that existed uninterruptedly across 2000 years;

- criterion **v** applies due to the importance of the extant remains of the Chersonese chora as an exceptional example of an ancient land use system and agricultural landscape of the ancient and medieval periods;

- criterion **vi** is related to Tauric Chersonese’s outstanding role in the history of not only the ancient Northern Black Sea population but also a number of peoples in southeastern Europe.

Detailed justifications for the criteria are provided in **Section 3a** of this document.

## ***3) Statement of integrity***

Tauric Chersonese and its chora are an outstanding example of an ancient site whose ruins have undergone natural archaeologization and have been preserved intact on a vast space.

The ruins of Tauric Chersonese and its chora provide a complete picture of an ancient polis with its historically integrated urban centre and rural hinterland. Each component part of the nominated property reveals certain specific features of the whole ensemble, making its perception full and exhaustive.

Finally, archaeological research makes it possible to accurately reconstruct the layouts of Tauric Chersonese and its chora as an integral ancient urban planning and land use complex.

## ***4) Statement of authenticity***

The nominated property is a piece of heritage containing entirely authentic complexes of archaeological remains that reveal the ancient and medieval city (ruins of urban quarters and individual buildings, archeological layers), its agricultural hinterland (ruins of ancient roads, farmsteads, division and vineyard planting walls) as well as historic interrelations between the urban centre and its chora (the land division system).

All the component parts of the property are undergoing archaeological research, with its results duly documented and ruins of ancient constructions conserved in their authentic state in situ.

## ***5) Requirements for protection and management***

All the land plots under the component parts of the nominated property are owned by the state of Ukraine and managed on behalf of the Ministry of Culture of Ukraine by the administration of Tauric Chersonese National Preserve.

Proper protection and preservation of the property are ensured by the protected status of all its component parts, which is reflected in correspondent bylaws as well as land use and city planning documents. Besides, boundaries and land use regimes have been established for the buffer zones of all the nominated subproperties by orders of the Ministry of Culture of Ukraine.

The component parts of the property are managed by Tauric Chersonese National Preserve in accordance with correspondent sections of the Master Plan, the Territory Organization Plan for Tauric Chersonese National Preserve and the Management Plan for the Property ‘Ancient City of Tauric Chersonese and its Chora’, which have been adopted by orders of the Cabinet of Ministers of Ukraine.

### **3c. Comparative analysis:**

#### ***Introduction***

In the analysis that follows, the unique qualities of the nominated property will be placed in the context of the chronological-regional and thematic frameworks outlined in the ICOMOS report “Filling the Gaps: An Action Plan for the Future” (2005). Within these frameworks, Tauric Chersonese stands out in three areas in particular, as a result of its geographic location and its historical development:

- First, the location of the site at a node in trade routes running from the steppe across the Black Sea to the Mediterranean and its continuous occupation from the 5th century BC to the 14th century AD gave it great importance in the transmission of ideas and the movement of people between these areas in the Greek, Roman, and Byzantine periods. It can thus be associated with the Greek, Roman, and Byzantine chronological-regional categories and the theme of the movement of people. At the same time, the site is located outside the range of all the Greek and most of the Roman and Byzantine cities inscribed on the World Heritage List: its location at the periphery of those worlds is in fact one of the main reasons for its universal value.

- Second, the urban center of the site, with its many monuments of different periods, presents vivid testimony for urban planning, religious buildings, and vernacular architecture at various stages of human history. Its well-preserved grid reflects the ancient Greek ideal of orthogonal planning often associated with Hippodamus of Miletus, while its numerous early Byzantine churches reveal the way the fabric of that original plan was modified during the transition from paganism to Christianity. Just as importantly, the sudden destruction of much of the city in the 13th century resulted in the unparalleled preservation of the houses, industrial facilities, and shops of a provincial Byzantine town in the prosperous period between the late 11th and early 13th centuries. All these stages reflect the

theme of “creative response and continuity” in a town that is no longer inhabited. While neither the orthogonal plan nor the early Byzantine churches are unique to the site, the quantity and quality of the preserved remains of non-elite residential and commercial quarters of the Middle and late Byzantine periods is unparalleled in the Byzantine chronological-regional category.

- Third, the urban center of the site is accompanied by a well-preserved ancient agricultural territory, or *chora*, that was also divided into lots according to an orthogonal grid in the Greek period. At that time, much of this territory was devoted to large-scale commercial viticulture, and the extensive remains of field arrangements for viticulture are still preserved, together with the farmsteads and installations where the grapes were processed into wine. In later periods, the use of the *chora* changed with historical circumstances. It seems to have been exploited less intensively for agriculture, but offers very important information about interactions with other cultural groups during the Roman and Migration periods, and about the increasing monastic activity in the city’s hinterland in the Byzantine period. Each of these phases is clearly inscribed on this extraordinary diachronic landscape, with the original Greek divisions and vineyards remaining visible and vivid behind all later changes. The most striking phase of this cultural landscape thus falls in the Greek chronological-regional category, and in the thematic category of the utilization of natural resources, specifically agriculture. The emphasis on viticulture in a relict Greek landscape sets this site apart from others in both frameworks: no other Greek sites present the same detailed evidence for large-scale commercial viticulture, while World Heritage properties concerned with viticulture all represent living landscapes related to early modern and modern wine production.

Thus Tauric Chersonese should be compared to other sites with similar values and attributes in the following thematic areas:

- The movement of people, and the transmission of ideas and practices, between distinct and different cultural areas: specifically, maritime connections between the Mediterranean world, the Black Sea littoral, and the steppe.
- “Creative response and continuity” in urban design and construction: specifically, orthogonal planning in Greek (and Roman) colonial cities and *chorai*; the development of urban religious topography during the transition from pagan antiquity to the Christian Middle Ages; and the representation of vernacular/non-elite residential and commercial architecture.
- Utilization of natural resources through agricultural practices: specifically, the adaptation of a landscape to the large-scale commercial production of wine, and the preservation of a relict landscape that reveals agricultural and land-use patterns across several periods in the past.

Furthermore, each of these thematic areas should be examined in terms of a chronological-regional framework that includes the categories “Greek city-states” (although this mentions only South Italian and not Black Sea colonies), “Roman Empire”, “Byzantine Empire” (the latter two in both Near Eastern and European

categories), and to a lesser extent, “Eastern Medieval Europe”. It should be noted that none of these categories fully captures the intermediary nature of the Black Sea, which connected East with West and North with South: objects and buildings from Chersonese can be compared with those from Novgorod, the Seljuk Empire, and the Byzantine Peloponnese.

### *Comparison with current World Heritage properties*

#### Movement of peoples

There are very few World Heritage properties in the Black Sea area, but there are two that represent the movement of peoples and maritime trade routes. One is the city of **Nessebar** in Bulgaria, and the other is the city of **Safranbolu** in northern Turkey.

**Nessebar**, like Chersonese, was a Greek colonial city and then a medieval center with Christian churches, and like Chersonese it was a maritime city at a frontier location that connected the Byzantine world with the tribes of the interior. Unlike Chersonese, however, it was not viewed by the Byzantine center as a communications node with the world of the steppe tribes and the Rus, and it was not a trade entrepot. While its churches are impressive, it did not play the same role as Chersonese in the introduction of Christianity and Byzantine ecclesiastical architecture to northeastern Europe (the Rus kingdom). Furthermore, it is still inhabited, and thus does not present as clear a picture of the movement of peoples in antiquity and the Middle Ages as Chersonese.

**Safranbolu** is also still inhabited, and thus differs from Chersonese. Although it was also a city that was instrumental in the movement of people and goods in the Middle Ages, it presents several other differences. First, it was a city on a land-based trade route, rather than a maritime one, and therefore cannot be compared to the information about seafaring and maritime trade that Chersonese provides both on land and underwater. Second, the cultural links it reflects are to the east, not the north, and again the connection between the cities of the Mediterranean and the world of the steppe is not represented. Third, it is not truly comparable in the period represented, since most of the monuments included in the property belong to the 14th century or later, while Chersonese represents a trading city frozen for the most part in the early 13th century. Finally, again, Safranbolu continues to be occupied in the modern period, and thus has been built over many times since the Middle Ages, while the urban center of Chersonese has been altered by very little modern construction.

Further afield, the **Old City of Acre** presents a similar context of cultural interaction and the movement of peoples, especially in the Medieval period and in its juxtaposition of European and Crusader buildings with Islamic architecture. Once again, however, the continuous occupation of the city obscures the details of interaction in periods before the Ottoman phase, and the key elements of value relate to later periods than those represented at Chersonese.

While there are other World Heritage properties that highlight the movement of peoples, neither these nor the properties listed above provide the same combination of Greek, Roman and Byzantine chronological periods and links to both the Mediterranean and the steppe. Nor did any of these sites have the same importance in the transfer of religious belief and architectural styles from one culture to another as Chersonese (the Rus sources associated Byzantine-style bronzework with Korsun, their name for Byzantine Cherson). Chersonese is therefore a unique point of contact and node in the movement of peoples between these very different worlds.

#### Creative response and continuity

Since this category refers very generally to monuments, groups of buildings, and sites, it is naturally the largest, and there are many ancient settlements that might be compared with Chersonese on a generic level. Specifically, however, the elements that are most characteristic of Chersonese are its Greek orthogonal plan, which was maintained, unusually, throughout the medieval period; its early Byzantine religious topography; and its extensive Middle and late Byzantine non-elite residential and commercial structures.

The closest comparison, culturally and geographically, is again **Nessebar**, but here again the differences are substantial. Nessebar does not preserve to the same extent an original Greek orthogonal plan, and it does not include a similarly extensive secular environment of the 10th-13th centuries. It is similar primarily in its religious topography, although the preserved churches are primarily of periods later than those at Chersonese (Middle and late Byzantine, rather than early Byzantine).

Another close parallel can be found at **Butrint** in Albania. Butrint was also a Greek colony and then a Roman city, with continuous occupation through the Byzantine period. Like Chersonese, it preserves its original Greek walls, and surpasses Chersonese in the number of public and religious buildings and monuments from the Greek and Roman periods. It also has several impressive ecclesiastical and secular buildings from late antiquity and the early Byzantine period. Unlike Chersonese, however, the urban fabric is not as well investigated, Greek and Roman grids have not been traced to their full extents, and there is no parallel for the rich evidence for Middle and late Byzantine daily life preserved at Chersonese. Chersonese also boasts a much more extensive religious topography, with many more basilicas, churches, and ecclesiastical complexes both inside and outside the walls.

Other sites on the list include one or two of the attributes of Chersonese, but not all three, and they also lack the chronological span of Chersonese. The **Ancient Villages of North Syria**, as a collective property, reveal both a rich ecclesiastical topography of the early Byzantine period and extensive evidence for vernacular architecture and non-elite daily life. These towns do not reveal the strict adherence to regular lots that was characteristic of Greek urban planning and representative of



Greek political ideals, however. Furthermore, they existed primarily between the late Roman period and the Islamic conquest, and therefore do not represent the same historical periods as Chersonese. Finally, while the buildings are exceptionally well preserved, they do not contain the same wealth of contextualized material that is present at Chersonese as a result of its fiery destruction in the 13th century.

Similarly, **Cyrene** in Libya offers Greek and Roman orthogonal planning and more spectacular architectural remains, but lacks the evidence for later Byzantine daily life and religious activity. **Mystras** in Greece includes better-preserved examples of domestic structures and high-quality vernacular architecture, but the houses there are primarily elite dwellings, and the settlement was established only in the period that followed the destruction of Chersonese. Also, from a cultural point of view, the Frankish character of the settlement contrasts with the Byzantine orientation of Chersonese. **Tipasa** in Algeria represents a coastal settlement with substantial Roman remains and a well-developed early Byzantine religious topography, but here the site is abandoned in the 6th century AD, and thus does not display the later phases of urban development visible at Chersonese. **Timgad** in Algeria and **Volubilis** in Morocco show orthogonal urban planning of the Roman period, together with extensive remains of domestic architecture of the Roman and late antique periods, but represent neither Greek urban-planning systems nor later medieval developments, since both were abandoned before the last phases at Chersonese (Timgad in the early Middle Ages, Volubilis in the 11th century). **Novgorod** in the Russian Federation presents extensive evidence for urban life in the later Middle Ages, and shows many material connections with late Byzantine Chersonese, but it is not influenced by any earlier Greek or Roman history or city planning.

Chersonese is thus an unparalleled example of a combination of characteristics: a Greek colonial Hippodamian grid-plan respected throughout the city's history, a complex early Byzantine religious topography, and extensive Middle and late Byzantine residential architecture, industrial areas, and commercial spaces. No other property on the World Heritage List presents this combination of elements, each of which is of universal value in its contribution to our understanding of Greek or Byzantine culture.

#### Utilization of natural resources

On the broad level of agriculture and human interaction with the landscape, two World Heritage sites can be compared directly to Chersonese and its agricultural *chora*. The closest comparison is the **Plain of Stari Grad** in Croatia, where another colonial Greek land allotment of roughly the same period (4th c. BC) resulted in a divided landscape that is still visible today. This divided landscape is significantly different from that of Chersonese in several ways, however. Most importantly, it is only the grid that is preserved at Stari Grad. The continuous use that makes the landscape so exceptional has also guaranteed that

very few remains of the original Greek system are preserved. The visible division walls themselves actually belong to the medieval period, and the underlying Greek grid is inferred from the units of measurement of the plots delimited by the medieval walls, which appear to respect the Greek lines (the units of measurement allow these divisions to be distinguished from Roman centuriation elsewhere in Croatia). No Greek farmhouses, field systems, or built features seem to be preserved, although there are archaeological finds from the areas closer to the ancient city. Finally, only tiny fragments of the ancient city itself have been investigated, since it lies under medieval and early modern Stari Grad, and the urban plan is not known. At Chersonese, by contrast, both the urban center and the chora are preserved, and the lack of later agriculture in the area of the chora has allowed the preservation of the original Greek system in all its respects (farmhouses, fields, planting walls, roads, etc.). The stone division walls at Chersonese are not the result of medieval rebuilding, but have been archaeologically dated to the moment of the original division of the chora in the 4th century BC.

**Cyrene** also shows traces of a divided Greek chora. In the plateau between the urban center of Cyrene and the Mediterranean Sea, a rural system involving roads, defensive towers, terracing walls, tombs, and farmsteads has been identified. The road system also seems to outline a cadastral division with a basic unit of 60 by 60 meters; the division probably dates to the 4th or 3rd century BC, roughly contemporary with Chersonese. Once again, however, the divided Greek chora was identified on the basis of aerial photographs, and although traces of roads and fortifications are visible on the ground, one can form a clear picture of the arrangement of the landscape only through maps and specialist publications.

There are no ancient properties inscribed on the World Heritage List that include cultural/agricultural landscapes dedicated to large-scale commercial viticulture. There are several early modern and modern wine-producing areas that have been inscribed on the list (the **Alto Douro** wine region in Portugal, the **Tokaj** wine region in Hungary, the **Jurisdiction de Saint-Emilion** in France), but all of these are living, productive landscapes, while the *chora* of Chersonese is a relict landscape that demonstrates the interaction of ancient Greek culture in particular with the natural environment. The ancient divided *chora* of Chersonese and the evidence it provides for intensive viticulture and wine production in the Greek period is therefore a unique ensemble, with no direct parallels among the sites currently inscribed on the World Heritage List.

### ***Comparison with properties on the Tentative Lists***

#### Movement of peoples

Two sites on the Tentative Lists are comparable with Chersonese in their geographic location and their connection with maritime trade and the movement of people.

The fortified settlement of **Sudak**, in eastern Crimea, is on the Tentative List of Ukraine. It bears many similarities to Chersonese, including its maritime trade connections with the Mediterranean (evidenced by its role as a Genoese outpost) and the northern Anatolian coast. Geographically, it is relatively near to Chersonese, and it also had a long continuous occupation, from the 6th to the 16th century AD. On the other hand, its most important connections were with Italy in the later Middle Ages, and it lacked the close relationship Chersonese enjoyed, as the result of its location, with the Rus and the people of the steppe. It was also less important than Chersonese, politically and culturally, for the Byzantine Empire, and played little role in the transmission of religion and artistic styles to the north.

Further away and earlier in time, the Greek colony of **Tanais**, at the head of the Sea of Azov, is on the Tentative List of the Russian Federation. This site, established in order to trade with the nomadic populations of the steppe, became an extremely important point of contact between Greeks and Scythians in the Hellenistic and Roman periods, and archaeological excavations have revealed substantial portions of the ancient city. Thus Tanais is very similar to Chersonese in its role as intermediary with the steppe in the Greek and Roman periods – but the site is abandoned by the 5th century AD, while Chersonese continues to play the same intermediary role with successive waves of steppe tribes and the Rus throughout most of the medieval period.

Thus no sites on the Tentative Lists exhibit the same duration and intensity of contact between the Mediterranean world and the steppe as that visible at Chersonese across nearly 2000 years.

#### Creative responses and continuity

Again, this is a very broad category, so this discussion will be limited to sites that present close analogies to Chersonese in the presence of an orthogonal plan, a rich Byzantine religious topography, and evidence for daily life and non-elite secular architecture.

Only one site presents close analogies in all these areas: **Nicopolis ad Istrum**, inscribed on the Tentative List of Bulgaria. Like Chersonese, Nicopolis was laid out according to an orthogonal plan; like Chersonese, it boasted a number of early Byzantine ecclesiastical monuments; and like Chersonese, it preserves substantial evidence for craft production and non-elite domestic architecture. Unlike Chersonese, however, its heyday was in the early Byzantine period, and it was not a significant city in the Middle and late Byzantine periods. Although there was a Bulgarian settlement there during that time, the site does not present the same rich record of life and vernacular architecture in those periods. Furthermore, the site was founded in the early 2nd century AD, and therefore provides no evidence for Greek colonial city planning.

#### Utilization of natural resources

There are several properties on the Tentative Lists that include modern wine-producing areas (in Serbia, Slovakia, Italy, France, and South Africa). There are, however, no properties on the Tentative Lists of any countries in geographic and cultural regions similar to that of Chersonese that include a Greek divided agricultural landscape or an ancient agricultural landscape used for intensive viticulture.

### *Comparison with properties otherwise known*

This section will focus on properties in the Black Sea area, Anatolia, and the Western Greek colonies, since these offer the closest cultural and/or geographic parallels with Chersonese.

### Movement of peoples

The three most important sites in this category are **Olbia**, **Kerch (Panticapaeum)**, and **Feodosia (Theodosia)**, all of them in Ukraine. Each of these sites was a colonial Greek foundation, and each of them was very significant in antiquity or the Middle Ages as a point of contact and exchange between cultures. Olbia and Panticapaeum, the capital of the Bosphorus Kingdom, were centers of a hybrid culture that emerged from close interactions between Greeks and Scythians. Theodosia became the Genoese port of Kaffa, one of the most important entrepôts along the route from Italy to the Sea of Azov. Olbia was important in this sphere only until the Roman period, however, when the city was gradually abandoned, and Theodosia was most important only in the Medieval period. Kerch/Panticapaeum, by virtue of its position at the Cimmerian Bosphorus and its harbour, was important across the same span of time as Chersonese, but the evidence of its intercultural role is mainly limited to tombs, and much less of the ancient city survives.

### Creative responses and continuity

In the area of urban development, there are a large number of sites in the Black Sea area and Greek colonial world that display orthogonal planning. **Olbia** is again an example of Greek colonial architecture and city-planning in the Black Sea area, as is **Apollonia** in Bulgaria and **Istria** in Romania. The city of **Tyras**, the largest ancient settlement on the Dniester estuary, has extensive Hellenistic and Roman remains, although most of the ancient settlement is now covered by the Bilhorod-Dnistrovskiy fortress, which dates to the 14th-18th centuries AD.

Besides, sites with large numbers of Byzantine churches are also common in both the Black Sea area and the Aegean. There are very few sites in either area, however, that present a well-preserved Byzantine urban fabric complete with non-elite residential quarters and commercial or industrial establishments. All of the sites listed in the previous paragraph were abandoned or diminished by the medieval period. Major sites in the Mediterranean, on the other hand, are almost invariably built over in the modern period (this is true of Istanbul, Thessaloniki,

and Athens, for example). There are a few sites in Turkey that present evidence for daily life as rich as that found at Chersonese: the site of **Amorium** and the late Byzantine settlement at **Pergamon** are among the best examples. Amorium even has its own fiery destruction. These sites, however, bracket the period of Chersonese's most extensive development: Amorium is destroyed and abandoned in the 9th century, and the houses at Pergamon (which at that time is hardly more than a village) are primarily of the 13th-14th century.

#### Utilization of natural resources

There are other divided Greek agricultural territories in Crimea, and in the Mediterranean world. In Crimea, the cities of **Kerkinitis** and **Kalos Limen** and the rich grain-growing land of the Tarkhankut Peninsula to the north were brought under the political control of Chersonese in the 3rd century BC. This "far chora" was also divided, and traces of the division grid have been identified in aerial photographs. Settlements in the chora have also been identified through recent intensive field survey. The divisions themselves, however, did not take the form of stone walls as they did at Chersonese, and the settlement pattern seems to have involved larger farming communities or villages permanently established on the land, rather than fields that were probably owned and worked by people who were resident in the city, as at Chersonese itself.

A similar situation holds in the **Kerch Peninsula**, where an extensive agricultural landscape was cultivated under the rule of the Bosphorus Kingdom. Here, as in northwest Crimea, the flat steppe lands were conducive to wheat rather than grapes, and the less rocky soil did not encourage the construction of stone division walls. Here, too, the settlement pattern favoured a large number of small, dispersed towns and villages, rather than a single major urban center controlling an agricultural territory in its immediate vicinity. As a result, although traces of chora divisions have been identified in several parts of the Kerch Peninsula and across the Cimmerian Bosphorus on the Taman Peninsula, none of these form part of a rich, detailed chora/urban-center ensemble like that found at Chersonese.

Divided *chorai* are also known from other parts of the Greek colonial world, and many of these have been the subject of intensive research over the last few decades. In general, information about these agricultural territories is derived from two sources: the analysis of features visible in aerial photographs or satellite imagery, and the identification of sites and settlement patterns through intensive, systematic field survey, sometimes supported by limited excavation. The closest parallel to Chersonese, and the best example of the application of both types of analysis, is found at the colonial Greek site of **Metaponto** in South Italy. Metaponto boasts both a reasonably well-preserved urban center, with several examples of monumental architecture, and an extensive chora. Division lines in this *chora* were first recognized in aerial photographs in the mid-20th century. Intensive field survey has revealed almost a thousand rural sites of the ancient period, and a program of excavation uncovered farmhouses, sanctuaries,

necropoleis, and even the division lines themselves. These division lines proved to be different from those at Chersonese, however: they were represented not by stone walls but by wide ditches or canals, probably intended to deal with hydrological problems that were compromising the productivity of the *chora*.

Although at Metaponto, as at Chersonese, remains of both an urban center and its attached agricultural territory have been investigated, the divided *chora* is both less visible and less well preserved at Metaponto than it is at Chersonese. The use of ditches rather than walls in the management of the landscape means that nothing is visible on the surface, and extensive deep mechanized plowing carried out in South Italy in the last fifty years has irrevocably altered the entire landscape. Furthermore, the *chora* of Metaponto seems to have functioned rather differently than it did at Chersonese. Where the bulk of the population at Chersonese seems to have resided in the urban center, travelling out to the fields to farm, the settlement pattern at Metaponto suggests a permanent rural population. In this sense the two sites are complementary, and Chersonese serves as a better example of a classical polis model in which the urban center and *chora* are much more closely integrated.

A colonial Greek divided landscape has also been identified from aerial photographs in the agricultural hinterland of **Agde**, near Marseille (ancient Greek Massalia) in southern France. Here the Greek grid is reconstructed from a few traces visible in aerial photographs, and very little archaeological work has been carried out on the ground. The Greek character of the division is assumed from the use of a base of about 180 meters, which seems to correspond to the Attic stadion. The date of the division itself is uncertain, lying between the 4th and the 2nd or even the 1st century BC. At Agde, too, the ancient urban center lies under a modern city.

Finally, various colonial *chorai* in Sicily and South Italy (most notably, the territories of **Croton**, **Gela**, **Agrigento**, and **Selinunte**) have now been thoroughly investigated through intensive field surveys. These surveys have produced a great deal of information about the settlement and use of the landscape, and in some cases it has been possible to identify land-division systems indirectly through the distribution of sites. None of these territories, however, preserve visible remains of ancient inhabitation, land use, or Greek land division, and all of them have been substantially transformed from their ancient appearance by the introduction of mechanized agriculture in the 20th century. It is also worth noting that none of these *chorai* present such clear evidence for the crops being grown as is available at Chersonese.

Not only is the divided landscape at Chersonese better preserved and more visible than at any other comparable site on or off the World Heritage List, then, but it is the only divided Greek landscape that presents clear evidence for intensive commercial agriculture.

### *Conclusion*

The urban center of Chersonese is thus exceptional among the Greek colonies and medieval cities of the Northern Black Sea coast. Because almost the entire area of the city is free of modern building, and because, uniquely, it preserved its ancient Hippodamian plan throughout its history, it provides a much better understanding of the city as a whole during each of its historical stages than other Greek colonies. Moreover, its economic and political importance for the Roman and Byzantine Empires meant that it was far more extensively involved in mercantile and cultural exchange throughout Late Antiquity and the medieval period than any other city in the area.

Even in the broader sphere of ancient and medieval cities elsewhere in the Black Sea and Mediterranean regions, Chersonese is unique. Very few of those cities saw the same degree of continuous occupation: many of them ended with Late Antiquity, or began only well into the medieval period. Those cities that were continuously occupied, like Athens or Corinth, abandoned their original orthogonal urban planning in the medieval period, transforming themselves into dense, irregular environments that paid little or no attention to older grids. Chersonese, on the other hand, rigidly adhered to its original plan, and even the medieval defensive walls were invariably built atop their Greek and Roman predecessors. At the same time, the circumstances of its destruction preserved an exceptionally vivid snapshot of daily life, commerce, and industry in a Middle and late Byzantine provincial town.

Most unusually, the preservation of the urban grid is reflected in the preservation of the grid used for the division of the *chora* in the 4th and early 3rd centuries BC. The intensive viticulture that characterized the near *chora* of Chersonese in the Greek period was abandoned when the territory became subject to increasing Scythian incursions in the 3rd and 2nd centuries BC, but subsequent use of the land in the Roman and Byzantine periods neither added to nor removed the stone walls that delineated the roads, fields, and planting structures of the Greek landscape. As a result, the original features of the colonial Greek *chora* have survived up to the present, together with the remains of the urban center. Although traces of other divided *chorai* are preserved elsewhere in the colonial Greek world, Chersonese is simply the only place in the world where a colonial Greek divided agricultural landscape can still be seen in all its original detail, with its division lines, farmhouses, field boundaries, and vineyard planting walls. It is also the only place in the world where a visitor can walk through the streets of an ancient city that preserves its Greek grid plan, look at remains of urban houses and fortifications from the Hellenistic period, and then, within a few minutes, stand at a farmhouse in a rural landscape and look out over Greek fields and roads in their original state.

The preservation of the *chora* of Chersonese and its close association with the urban center make it a unique monument of ancient Greek colonization and agricultural economy. The division of the agricultural territory clearly reflects the political structure of the city and the organization of its citizens, aspects of which

are revealed by the Oath of Chersonese, a civic oath inscribed around the time of the *chora* division. The *chora* of Chersonese is thus also a unique reflection of ancient Greek democracy as it was imprinted on the landscape.

### **3d. Integrity/authenticity of the property:**

#### ***Integrity of the property***

The Heracleian Peninsula stayed largely uninhabited and unexploited from the mid-15th century all through the 19th century. In the 20th century, it was used almost exclusively as military training grounds. All this helped to preserve vast areas in the urban centre and *chora* of Chersonese intact. In the city of Chersonese itself 90 percent of archaeological layers are still there. As for the Chersonese *chora*, even though intensive urban and economic development have done some tangible damage to its territories over the past few decades, nearly 50 percent of the *chora* have been spared redevelopment and is still free of modern housing.

Taking into consideration that in ancient times the *chora* was divided into over 400 plots identical in size and in structure, the primary preservation task is to have protected status granted to those of its parts that contain the most important and representative elements of ancient Chersonese's agricultural hinterland.

Having that in mind, *chora* plots have been selected for this nomination in such a way that taken together they could exhibit all the different types of ancient structures related to the *chora*'s life in the past (entire land plots, remains of ancient farmsteads, division walls, vineyard planting walls and ancient roads as well as traces of agricultural activities of its ancient and medieval population) and thus reveal a full range of activities performed here in antiquity and during the Middle Ages. As has already been mentioned, different *chora* parts of the nominated property contain different types of structures that performed different functions, namely:

- the Streletskaya and Yukharina Gullies (component parts No. 002 and 005) contain complete or fragmented plots with adjacent roads, internal division walls, vineyard planting walls, farmsteads and other elements of archaeological structures;

- Berman's Gully, the Bezymyannaya Height and the isthmus of the Mayachny Peninsula (component parts No. 003, 004 and 006) contain, along with demarcation structures, partly explored and conserved remains of fortified settlements as well as some important elements of the ancient cultural landscape relief;

- Cape Vinogradny (component part No. 007) has an extant medieval monastery complex with sophisticated economic infrastructure, which emerged here on the basis of the ancient structures surrounded by exceptionally spectacular natural landscape.

As for the ruins of the ancient city of Chersonese (component part No. 001), they constitute an almost complete architectural and archaeological ensemble with



all the structural urban development elements (street and quarter layouts, ruins of houses, remains of religious constructions, utility structures, fortifications etc) still extant.

It should be noted that rather than being tiny local plots, each of the component parts of the nominated property covers an extensive area ranging between 8 and 146 ha, with the total area amounting to 262 ha, quite sufficient to fully represent all the features of the nominated property in terms of both the structure of the ancient settlements and their land use system and various historic and cultural processes associated with the Chersonese polis.

As has already been mentioned, out of the 40 hectares of the ancient city area (component part No. 001), only one-tenth is occupied by modern constructions whereas the area under archaeological explorations and conserved sites amounts to nearly 12 ha. Therefore this part of the property practically coincides with the original area of the ancient city surrounded by its remaining ancient and medieval defensive walls.

Since all the component parts of the nominated property have protected status, practically no intensive economic or industrial activities are being conducted within their boundaries. The area of the ancient city of Chersonese (component part No. 001) is displayed as a tourist site, with archaeological excavations, conservation and restoration works going on. All the chora plots are undergoing intensive archaeological research, with conservation works under way and projects for their interpretation under preparation. It is therefore safe to say that none of the component parts of the nominated property is being affected by any intensive construction or economic activities.

The only mentionable threat to the integrity of some plots, namely component parts No. 001, 006 and 007, is intensive shore erosion, which is gradually destroying the coastline and the archaeological structures that lie within its boundaries. To a certain extent, the integrity and accessibility of the ancient city of Chersonese (component part No. 001) is also compromised by a few enclosures, which total around 1 ha. These include St. Vladimir's Cathedral, which is used by the religious community, a yacht club area used by its members and a private estate.

### ***Authenticity of the property***

The authenticity of the property and all of its component parts is expressed through a number of its attributes:

a) form and design: The nominated property is a complex piece of heritage, which developed over a period of 2000 years during Antiquity and Middle Ages. The ancient and medieval structures lying within the boundaries of the property have remained practically unchanged, with no redevelopment and no reconstruction, since the 15th century, as have the layouts of the ancient city and nominated chora plots;

b) materials and substance: The nominated property contains a number of ruins of ancient stone structures with a variety of mortars used. Wherever possible, authentic materials and bonding mortars similar to those that were applied in ancient times are used during conservation and restoration in all parts of the property. In some (exceptional) cases, the anastylosis method is applied to restore the ancient masonries;

c) use and function: Since the nominated property represents a cultural tradition which has disappeared, its use nowadays is confined to research, documenting, interpretation and display of its remaining sites and structures, mostly in their authentic state in situ. Any other use of the archaeological heritage lying within the boundaries of the property which could result in any changes of its original condition is prohibited;

d) location and setting: The component parts of the property (No. 001 – 007) are practically free of modern housing and are basically archaeological landscapes, mostly steppe ones. While all the unearthed and interpreted structures organically fit into these landscapes, the location of the property within the boundaries of a modern city in some of its parts does essentially detract from the visual value of the setting. Specifically, the urban housing in the buffer zones of subproperties No. 001 and 006 has a certain negative visual impact on the landscape. The sparse low-rise summer cottages in the buffer zones of subproperties No. 002, 003, 004, 005 and 007, on the other hand, are organically fitted into the landscape and do not detract from its value.

Thus, the authenticity of the property ‘Ancient city of Tauric Chersonese and its chora’ expressed through a number of its attributes is ensured by explorations and preservation of its archaeological remains as part of the archaeological landscape which has remained almost unchanged across the centuries.

## **4. STATE OF CONSERVATION AND FACTORS AFFECTING THE PROPERTY**

### **4a. Present state of conservation:**

#### ***Component part No. 001***

Ancient city of Tauric Chersonese is a piece of archaeological landscape with the ruins of the ancient city unearthed and interpreted for tourists in some places and unexplored and still covered by earth in the others. The overall state of conservation of this part of the nominated property is quite satisfactory, its territory having been partially improved and equipped for use.

Most of the ancient city area is free of any modern structures, save a few permanent fortifications as well as religious, administrative and utility buildings that appeared here in the 19<sup>th</sup> and 20<sup>th</sup> centuries. The developed area totals around 1.5 ha, of which 1 ha are the buildings with well-developed underground

structures. These include the 12<sup>th</sup> Coastal Artillery Battery in the southern part of the ancient city, the Mine Depot in Quarantinnaya Bay, St. Vladimir's Cathedral, the Church of Seven Martyrs as well as the museum buildings in the central part of the city. The rest are non-foundation constructions erected on the ruins of the ancient city quarters. They were all part of the monastery that functioned here at the turn of the 19<sup>th</sup> and 20<sup>th</sup> centuries and are now used as utility structures by the administration of Tauric Chersonese National Preserve.

At the moment, the ancient city area has around 10 ha of excavated urban constructions on display, mostly ruins of stone structures preserved to a height of 1 to 10 m. Since the excavations carried out here in the 19<sup>th</sup> and 20<sup>th</sup> centuries were largely chaotic, the explored sites are now scattered at random all over the unexplored ancient city area. The most significant Chersonese sites on display are the remains of the northern and northeastern city quarters (7 ha) and the ruins of the citadel and the southeastern line of defense (2 ha). Since a comprehensive archaeological research programme aiming to create one single display area was started here in 2010, all the archaeological explorations carried out in the ancient city area in 2010 and 2011 were conducted in line with the programme requirements.

Although all the constructions excavated in the ancient city have been subject to some conservation, the ruins located around the western and southeastern lines of defense as well as those in the northeastern part of the ancient city were conserved as far back as the 1970s and, since the conservation methods applied then are now outdated, the mentioned ruins are presently in need of reconsevation. Some of the ancient city structures (the 19<sup>th</sup> curtain, the underground church, thermae in the citadel and the Church on the Vaults) are in need of emergency conservation works. Such works have already started on the most problematic sites within the framework of a comprehensive conservation and restoration programme implemented in the ancient city area since 2010.

The ancient city coastline is heavily exposed to waves, which are gradually wearing away the cliffs and threatening to destroy the monuments along the seafront. Another challenge posed by the sea are the soaking foundations of the ancient structures in the low-lying parts of the city (particularly around Quarantinnaya Bay). A shore protection project covering the whole coastline of the ancient city has been under development since 2011.

Some sites in the ancient city suffer from visitor overload during the high tourist summer season. A similar challenge comes from the local population that tend to use the seafront area of the ancient city as a beach, creating rather tangible additional pressures on the archaeological sites and monuments that lie on their way to the sea. A number of activities have been scheduled for 2012 and 2013 to improve visitor flow management as well as develop and implement a comprehensive monument presentation programme in the ancient city area.

Another challenge for the preservation and presentability of the ancient city is wild vegetation. Specifically, there are some shrubs and trees on the excavated

sites that are precipitating the deterioration of the ancient stone walls. Besides, every now and then in the dry period, the steppe grass covering the ancient city area becomes a hotbed of small-scale local fires. In order to settle the problem, systemic improvement activities have been going on in the ancient city since 2011, with a number of land improvements made in its central part during 2009 – 2011.

Apart from the administration of Tauric Chersonese National Preserve, the ancient city area is home to some other organizations, which are posing some problems to proper preservation and display of the Chersonese monuments. Particularly troublesome are the services of the revived Orthodox monastery engaged in intensive activities at St. Vladimir's Cathedral Mansion. The enclosures being installed around the Cathedral Mansion area are to be put an end to as posing a threat to the integrity of the ancient city.

A number of dissonant temporary structures related to the city yacht club can be seen on the shore of Quarantinnaya Bay in the ancient port area. Apart from the fact that they occupy the area with ancient ruins, the yacht club structures spoil the architectural and landscape look of the ancient city. The yacht club visitors' cars passing through and parked in the ancient city area as well as modern boats anchored in Chersonese berths right over a submerged ancient defensive wall are creating excessive pressures on the ancient monuments, polluting the area and preventing the Preserve from receiving tourists arriving to Chersonese by sea. Removal of the yacht club from the protected territory is now being arranged. Removed from the ancient city area should also be all the lightweight seasonal retail constructions striking a discordant note amidst the archaeological landscape.

Last but not least, lying amidst the early 20<sup>th</sup> century coastal battery fortifications in the southern part of the protected Chersonese city is a 0.25 ha plot that belongs to a private owner. The plot has several temporary constructions and fruit trees. Fenced and inaccessible to visitors, the site is completely out of the Preserve administration's control. Since the current situation threatens the very existence of the ancient ruins, in the future the plot should be bought out from its present owner and transferred to Tauric Chersonese National Preserve to become an integral part of the protected territory.

The ancient city of Tauric Chersonese lies in a central district of the present-day city of Sevastopol surrounded by modern urban housing. Adjacent to the protected area in the south are some military units. These lie in the gully bed and have only sparse low housing. 250 m away from the protected territory are some quarters with dense urban housing up to 17 m high, with a few higher buildings that have sprung up over the past few years. Although it does not affect the preservation of the ancient monuments per se, such housing visually damages the Chersonese landscape as observed from the sea and should therefore be regulated. Such regulations have already been approved by the Ministry of Culture of Ukraine and are to be urgently incorporated in all the urban planning activities in the city of Sevastopol.

### ***Component part No. 002***

Chora plot in the Yukharina Gully is a large 150 ha piece of archaeological landscape covering the bed and slopes of the gully and containing remains of several unearthened ancient farmsteads with adjoining sections of Hellenistic roads, division walls and vineyard planting walls as well as unexplored ruins of some ancient and medieval agricultural structures covered by earth and steppe vegetation. The area is free of modern housing and, for the most part, does not contain any planted trees.

Two of the farmsteads unearthened in the area (Site 193 and Site 226) have been subject to full-scale conservation and can be displayed to visitors as soon as the monument interpretation and land improvement works are finalized and the weed vegetation is removed from the site. Two farmsteads have also been excavated at Site 227. Although almost completely unearthened, these have been conserved only partially and are in need of further conservation and full-scale interpretation.

The rest of the ancient monuments in the protected chora area under consideration, namely the farmsteads, the roads, the division walls and the vineyard planting walls, remain unexplored and can be traced only by some fragments of their masonries visible on the surface. Since this part of the property is projected by the administration of Tauric Chersonese National Preserve as the core of a future archaeological park, a set of research, conservation, monument presentation and land improvement activities have been envisaged for this area for the next few years.

Surrounded by summer cottages and individual houses, this part of the nominated property is actively used by the locals as a pasture for cattle and a passageway for motor vehicles, causing local damage to some of the ancient structures and littering the ancient ruins. Besides, the site is subject to sporadic small-scale illegal excavations, which threaten the integrity of the archaeological cultural layer. The problem will be tackled in 2012 and 2013 by arranging 24-hour security and restricting free access to this part of the property. Among the issues to be settled are also the removal of the high voltage power transmission line as a structure discordant with the surrounding landscape, arranging proper access ways to the site and creation of a small visitor centre to accommodate the security guards and service the visitors to the site.

The part of the property located in the Yukharina Gully is surrounded by private summer cottages. Being rather sparse and low, the cottages do not have any direct impact on the protected monuments. Still, taking into consideration the importance of the landscape component here, any modern development falling within the boundaries of the buffer zone is subject to strict regulations with binding restrictions as to the types and parameters of any new construction.

### ***Component part No. 003***

Chora plot in Berman's Gully is a large piece of archaeological landscape measuring around 20 ha. It covers the bed and slopes of the gully and contains remains of an unearthened ancient fortification with adjoining sections of Hellenistic division and defensive walls as well as unexplored ruins of some ancient and medieval agricultural structures covered by earth and steppe vegetation. The area is free of modern housing and, for the most part, does not contain any planted trees.

The ruins of the fortification on the western slope of Berman's Gully have almost completely been excavated and partially conserved. Exceptionally well preserved, these ruins can make an excellent tourist attraction as soon as the excavations as well as conservation and interpretation activities are finalized and appropriate improvements are made in the surrounding area.

Long-term development plans for this part of the property as a display area also envisage clearing and consolidation of the man-made caves lying under the fortified settlement. Presently out of use, these caves are staying covered with litter and lack convenient access ways. In addition to that, renovation of the ancient water supply line and the nearby spring as well as arrangement of a recreation area within the boundaries of the grove lying in the thalweg of the gully are envisaged.

Surrounded by summer cottages and individual houses, this part of the property is actively used by the locals as a pasture for cattle and a passageway for motor vehicles, causing local damage to some of the ancient structures and littering the area. Besides, the site is subject to small-scale illegal excavations, which threaten the integrity of the archaeological cultural layer. The plans are to settle the problem by arranging 24-hour security and restricting free access to the property.

A potential threat to the ruins is also the existing modern surface water main, with any leak threatening to wash away the ancient masonries and cultural layers. Besides, the look of the modern pipes is discordant with the surrounding landscape. The water main is therefore projected to be removed from the protected area, as is the dissonant high voltage power transmission line.

The subproperty located in Berman's Gully is surrounded by summer cottages. Being rather sparse and low, the cottages do not have any direct impact on the protected monuments. Still, taking into consideration the importance of the landscape component here, any modern development falling within the boundaries of the buffer zone is subject to strict regulations with binding restrictions as to the types and parameters of any new construction.

#### ***Component part No. 004***

Chora plot on the Bezmyannaya Height is a large 15 ha piece of archaeological landscape. It covers the top and slopes of the height and contains remains of an unearthened ancient fortification with adjoining ruins of some ancient and medieval agricultural structures covered by earth and steppe vegetation. The area is free of modern housing and forest plantations.

The excavated ruins of the fortified settlement have undergone partial conservation. In spring however they become overgrown with grass. The unearthened

remains are not enough to give a complete picture of the site, which is why their systematic investigation will be continued, along with conservation of the ancient masonries and land improvement activities. Specifically, grass vegetation will be controlled, convenient footpaths will be laid and observation points will be arranged on the northern and eastern edges of the height, which give the best panoramic views of the surrounding valleys and the Heracleian Peninsula.

Lying in the immediate vicinity to a summer cottage area, this part of the property is actively used by the locals as a pasture for cattle. Besides, a magnificent panoramic view that the Bezymyannaya Height commands attracts a lot of people from the city, who like to go up by car and arrange picnics on the top. All this results in damaging some parts of the ancient structures and littering the area. In addition, the site is subject to intensive illegal excavations, which threaten the integrity of the archaeological cultural layer and the ancient structures. The plans are to settle the problem by arranging 24-hour security and restricting free access to this part of the property.

In the west and north, the property on the Bezymyannaya Height is bordered by summer cottage cooperatives, which have sparse low housing. The foothills of the height are surrounded by farmland (mostly vineyards) in the east and south and high spurs of the Karansky Mountains in the southwest. The surrounding constructions do not have any immediate impact on the protected area or its monuments, and the modern agricultural landscape is in harmony with the archaeological landscape of the Bezymyannaya Height. Any modern development in the buffer zone is therefore subject to strict regulations with binding restrictions as to the types and parameters of any new construction, which should be allowed only within the boundaries of the existing cottage settlements.

#### ***Component part No. 005***

Chora plot in the Streletskaya Gully is a large piece of archaeological landscape measuring over 15 ha. It covers a gentle slope of the gully and contains remains of some unexplored farmsteads and a number of very well preserved but rather underexplored chora agricultural structures (roads, division walls and vineyard planting walls). Although covered by earth and steppe vegetation, these structures are still distinctly traceable on the surface. The area is free of modern housing and, for the most part, does not contain any planted trees.

The state of preservation of the chora structures in this area is almost perfect. The plans are therefore to leave the archaeological landscape here as it is, keeping any research and conservation to a minimum. What is needed in this area is mostly some land improvements. Specifically, the outer perimeter of the unexplored farmstead in the southern part of the site should be cleared, an observation point with a view of the protected area should be arranged and an access road should be built between the site and the highway that connects the 5<sup>th</sup> Kilometre Microdistrict

and Kamyshovaya Bay. Improvements should also include clearance of the wild shrubland next to the site as blocking the view of the northeastern part of the area as well as removal of the piles of construction waste along the northern border of the site.

Lying in the immediate vicinity to a summer cottage settlement under development, the protected area is actively used by the locals as a dumping ground for construction waste. Besides, the site is subject to intensive illegal excavations, which threaten the integrity of the archaeological cultural layer. The problem is projected to be settled by restricting free access to this part of the property.

The protected area in the Streletskaya Gully neighbours upon a summer cottage cooperative under construction. Having sparse low housing, this does not have any immediate impact on the monuments in the protected area. Still, the area under the cottage settlement contains a number of archaeological structures in an excellent state of preservation. In the future therefore it is advisable to expand the protected area to incorporate some adjacent small plots that contain any Chersonese chora roads and division walls clearly visible in aerial photos. In any case, considering the importance of the landscape component here, any modern development falling within the boundaries of the buffer zone is subject to strict regulations with binding restrictions as to the types and parameters of any new construction.

#### ***Component part No. 006***

Chora plot on the isthmus of the Mayachny Peninsula is a large piece of archaeological landscape measuring around 15 ha. It covers a gentle slope of the watershed between Golubaya Bay and Kazachya Bay and contains remains of a partially explored fortified settlement, which in ancient times used to block the access to the Mayachny Peninsula from the Heracleian Plain. Besides, the area includes a small island in Kazachya Bay. The protected territory is free of modern housing and forest plantations and is covered with grass.

Regrettably, the western part of the fortified ancient settlement was almost completely destroyed by the 35<sup>th</sup> Coastal Artillery Battery structures which appeared here in the early 20<sup>th</sup> century. At present, this part of the site is occupied by a memorial commemorating those who defended Sevastopol during World War II. Remains of some defensive installations (fragments of walls and a few towers) have been partly unearthed along the northern and southern boundaries of the protected area. The remains need conservation and interpretation. In need of conservation are also the unearthed agricultural chora structures (division walls and vineyard planting walls) that became part of the fortified settlement back in the Hellenistic period. Since only some fragmentary excavations have been conducted here, it is still difficult for present-day researchers to interpret the area with the structures, which is why further research and conservation are needed. These are projected to be implemented in the next few years.



The terraced slope of Kazachya Bay in the eastern part of the settlement features a vast area with unearthed ruins of densely built ancient structures. The ruins have been only partially conserved and are in need of additional conservation and interpretation. Besides, further research is needed in this part of the settlement in order to unite several excavated sites into a single display area as well as identify the boundaries of the ancient settlement.

The island in Kazachya Bay is remarkable for a complex of ancient and Byzantine structures discovered here back in the 19<sup>th</sup> century. They have all been conserved and now lie under a thick layer of earth with a small grove planted over. In the future it is planned to re-excavate, conserve and interpret the structures as well as settle the issue of drainage and damproofing of the ancient foundations, now almost level with the sea.

Lying in the immediate vicinity to summer cottage settlements under development, the protected area is actively used by the locals as a dumping ground construction waste. The problem is planned to be settled by restricting free access to the property.

In addition to that, this part of the property is now used by motor vehicles as a passageway to the Mayachny Peninsula, which compromises the integrity and protected status of the area. Since the highway crossing the property is the only connection between the settlement of Mayachny and the rest of the city, blocking access through the site is out of the question. To counter the situation, a temporary enclosed overpass is projected to be constructed a few metres above the protected site. In the future a bridge could be built between the Mayachny Peninsula and Cape Mongonari, which would make it possible to close the existing highway.

As has already been mentioned, adjacent to the protected area in the west is the 35<sup>th</sup> Battery Memorial. Already a popular tourist attraction, it will certainly help to bring more visitors to the protected area provided that its exhibits are properly arranged and presented. In the east, along Kazachya Bay, this part of the property is bounded by a narrow undeveloped strip of land under control by a military unit. The immediate plans are to have the plot presently controlled by the military transferred to Tauric Chersonese National Preserve for exploration and interpretation of the ancient remains as well as arranging access ways to the subproperty located on the island in Kazachya Bay.

The protected area on the isthmus of the Mayachny Peninsula is surrounded by modern villages. Having low- and medium-rise housing of varying density, these do not have any immediate impact on the monuments in the protected area. Still, any higher buildings in the vicinity are bound to destroy the visual harmony of the unbuilt archaeological landscape. Therefore the density and parameters of any modern constructions falling within the boundaries of the buffer zone are subject to appropriate restrictions.

### ***Component part No. 007***

Chora plot on Cape Vinogradny is a small piece of archaeological landscape measuring around 10 ha. It includes a coastal rock cliff with remains of partially explored medieval man-made caves, a broad coastal terrace with traces of unexplored ancient structures and the cape plateau with ruins of an unearthed Christian church complex. The area is free of modern housing. The coastal terrace is covered with rather thick wild trees and bushes typical of the Mediterranean climate.

The most difficult site in the area is the rock cliff 25 to 40 m high which reveals some structural elements of the ancient chora and contains a number of medieval man-made caves. Made of erosion-prone limestone and marl, the cliff is subject to intensive destruction in the form of collapses and landslides. Under the threat of erosion caused collapse are now one of the ancient farmsteads perched on the edge of the cliff as well as a number of badly weathered cave constructions at the bottom. A comprehensive rock consolidation programme is therefore planned to be developed here during 2012 – 2013 which will help to preserve the caves and ensure visitor safety.

Only a few of the man-made caves found in the area have been explored so far. Most of the caves need some interventions. Specifically, the caves are to be cleared of the collapsed rock, debris and inwashed deposits, the most eroded parts of the rock surface are to be conserved and appropriate protection measures are to be taken to prevent further weathering of their walls and moisture penetration through the clefts in their ceilings.

The surface of the coastal terrace exhibiting traces of numerous unexplored structures (most probably, dating from the medieval period), is presently densely covered with collapsed rock and debris. A threat to the preservation of the ruins comes from both rock and debris collapsing from the cliff and the roots of trees and bushes that cover the area. Considering the importance of the local vegetation for the landscape, some probe excavations are first to be conducted to find out how many of the ancient structures need to be cleared from shrubs and trees, after which appropriate local sanitation measures should be taken. In the future however the whole complex of the ancient structures in the area should be subject to large-scale excavations with subsequent conservation and interpretation.

In need of reconsevation are the unearthed ruins of the church complex on the cape plateau since the mortar used during their initial conservation has lost its protective properties and the masonries are now undergoing rapid deterioration.

Having a number of attractive recreational features such as a spectacular Mediterranean landscape, a terraced slope, thick vegetation, fresh water springs, wild shingle beaches and the sea nearby, this part of the property is actively used by the locals for short-term recreation (picnicking, camping etc). This results in littering the area and, in some places, precipitates the deterioration of the valuable archaeological structures and layers. Besides, the site is subject to small-scale illegal excavations, which threaten the integrity of the archaeological cultural layer.

The problem will be settled by arranging 24-hour security and restricting free access to the property.

Considering that at present one can only climb down from the edge of the rock by one of the few steep wild tourist paths, in order to ensure proper protection and visitor safety in this part of the property, footpaths and flights of stairs are to be laid to the displayed archeological structures (man-made caves and ruins of ground-based constructions on the terrace) and the beaches that can be put to order and used for recreation.

The protected area on Cape Vinogradny neighbours upon a summer cottage village at the top of the rock. Although the cottages do not have any immediate impact on the monuments in the protected territory, they do create additional pressures on the rock, precipitating its erosion. Therefore any modern development in the buffer zone is to be strictly regulated with binding restrictions as to the types and parameters of any new construction and landslide protection measures required.

#### **4b. Factors affecting the property:**

##### *i. Development pressures*

Development pressures affecting the nominated property include those exerted by modern housing and municipal communications located in the immediate vicinity of the component parts of the property as well as economic activities conducted by the local population, particularly the ones altering the environment. No encroachments, mineral deposit development activities or any other threats of this kind have been recorded so far.

Modern development and municipal communications. Falling within the boundaries of the city of Sevastopol, the protected areas of the ancient city of Chersonese and its chora are surrounded by modern housing, namely rather dense urban housing around site No. 001 and sparser suburban housing around the other component parts of the property. The protected areas themselves do not contain any modern housing, except for a few buildings within the boundaries of component part No. 001. However, both urban and suburban development does present a serious threat to those chora sites that have not obtained protected status as yet. Specifically, municipal development plans envisage development of residential areas with varying housing density in some of the areas where the ancient planning system is still extant, namely on the Mayachny Peninsula, on Cape Mongonari and on Cape Peschany as well as in the Streletskaya and Berman's Gullies. In order to prevent any large-scale development on these sites, protected status is projected to be obtained for them in 2012.

It should be noted that prior to 2011 modern development in the immediate vicinity of the protected areas was going on regardless of the landscape value of the Chersonese chora sites. As a result, a number of dissonant bulky structures sprang up in some places, e.g. on Devichya Hill near the ancient city and on the Mayachny Peninsula. Nowadays, carried into effect have been new development

restrictions for the buffer zones of the protected sites. The buffer zones have been made as extensive as it was only possible, 4 to 8 times the size of the sites themselves (even 35 times larger at component part No. 004).

In addition to the buffer zones, restricted development zones with regulatory regimes of varying strictness have been defined for the purpose of preserving the ancient layout of the peninsula as a whole. In the future, as new protected areas are defined and legally established, the whole area of the Heracleian Peninsula could be substantiated as a buffer zone with strict restrictions on any new development.

It should also be mentioned that in the future any dissonant structures that are now located within the boundaries of component part No. 001, namely those occupied by the administration of Tauric Chersonese National Preserve, the monastery, the yacht club and the private estate, are to be removed from the protected area. All the necessary documents to this effect were prepared in 2011 and have already been approved by the Ministry of Culture of Ukraine and submitted to the local authorities for consideration.

Last but not least, some of the component parts of the nominated property have municipal communications going through such as a highway on site No. 006, power lines on sites No. 002 and 003 and a water pipeline on No. 003. In the future these communications will have to be removed from the protected sites as structures discordant with the surrounding landscape or even, as is the case with the water pipeline, posing a threat to the preservation of certain ancient constructions. As for the highway, which compromises the integrity of the protected area on the isthmus of the Mayachny Peninsula, it is proposed to erect a low enclosed overpass that would keep the traffic away from the protected site

Economic activities. No economic activities as such are being conducted in the protected areas in the city of Tauric Chersonese or its chora. However, some of the sites are being uncontrollably used by the locals for cattle grazing, causing some damage to the remains of the ancient structures, particularly those located on the sites designated as component parts No. 002, 003, 004 and 005. The problem is to be settled by way of peripheral fencing and arranging 24-hour security on each of the protected sites.

At the same time, some other sites of the Heracleian Peninsula with extant ancient layouts are now under intensive agriculture, such as cattle grazing, tillage and forestation. Any such activities, especially deep plowing, lead to the irretrievable loss of valuable archaeological monuments. Solutions to the problem are envisaged in the approved land use regimes for different monument protection zones (including the buffer zones), which ban any deep plowing and other agricultural works. In the protected areas, any agricultural activities are strictly prohibited. All the necessary documents are now being prepared to define and legally establish the boundaries of all the protected chora areas on the Heracleian Peninsula.

## *ii. Environmental pressures*

Environmental pressures exerted on the nominated property include the sea level rise caused by climate change, shore erosion, landslides and damage done by roots of shrubs and trees. No other environmental pressures (pollution, desertification etc) have been identified as having any impact on the nominated property so far.

Sea level rise. The rise of sea level, which, according to specialists, has been going on for around one thousand years, has led to the submersion of vast sections of the ancient chora along the northern coastline of the Heracleean Peninsula. More specifically, it is known that under water are now a series of Chersonese city harbour installations (component part No. 001), the eastern edge of the fortified settlement on the isthmus of the Mayachny Peninsula (component part No. 006) and a number of ancient farmsteads with adjacent division walls on the Mayachny Peninsula, Cape Mongonari and Cape Peschany as well as in Streletskaya Bay and Kruglaya Bay.

At the same time, the rise in the sea level has waterlogged some coastal parts of the ancient city and its chora. In particular, subject to waterlogging are the foundations of the wall ruins in the port area and the citadel of the city (component part No. 001) as well as the ruins of the medieval island monastery in Kazachya Bay, which is part of the protected chora site on the isthmus of the Mayachny Peninsula (component part No. 006). As they are, the soaking foundations of the ancient masonries are posing a threat to the state of preservation of the structures themselves since through the joints in the masonries moisture is sucked into the upper sections of the walls, precipitating their decay.

The comprehensive conservation and restoration programme for the ancient city of Tauric Chersonese, envisages, among the emergency and top priority measures, development of effective projects to dampproof the waterlogged ruins.

At a later period, a series of works will also have to be done to drain and dewater the waterlogged areas in the city of Chersonese and in its chora. Besides, the state of the submerged ancient ruins will have to be diagnosed and relevant measures will have to be taken to ensure their preservation.

Shore erosion. As has already been mentioned, some of the protected areas in the city of Tauric Chersonese and in its chora are adjacent to the Black Sea. An extremely damaging factor in these areas are the waves, which are rapidly eroding the coastline. According to researchers, over the past thousand years more than 25 m of the coastal strip have been washed away or submerged by the sea.

The problem is particularly severe at component part No. 001, i.e. in the ancient city of Chersonese itself, whose northern coastline is being rapidly eroded by waves: over the past hundred years shore erosion has already partly destroyed valuable remains of several constructions such as the ruins of Uvarov's Basilica, the Sixpillar Church etc. The same factor also brings about the destruction of the coastal boundaries of the sites adjacent to the Black Sea bays (Quarantinnaya Bay at component part No. 001 and in Kazachya Bay at component part No. 003), though to a lesser extent.

In the mentioned parts of the property, comprehensive shore protection activities are projected to be done and antiwave barriers are planned to be installed all along the coastline of the protected areas. One shore protection project has already been developed for the coastal area of site No. 001. For lack of funding the project is still waiting to be implemented.

Landslides. The protected area on Cape Vinogradny (component part No. 007) lies in an active landslide zone, which has led over the past few centuries to the loss of a number of cave constructions in the front part of the rock cliff. Such landslides and collapses have been an aggregate result of precipitation, ground waters, daily and seasonal atmospheric temperature fluctuations as well as strong winds bringing about gradual chipping of large rock masses and their sliding down towards the sea. Under threat are not only the monuments located in the rock itself but also the ruins of the ancient buildings lying along the upper edge of the rock cliff and on the terrace at its foot.

To neutralize the landslide factor, a comprehensive project for generalized deviation of ground waters and runoff is to be developed and implemented, retaining walls along the foot of the rock are to be erected and the local sections of the rock most likely to collapse are to be consolidated.

Roots of shrubs and trees. A rather noticeable factor affecting the ancient ruins of Chersonese and its chora is damage done to their ancient and medieval masonries by the roots of shrubs and trees. The problem is quite pressing both in the ancient city and in the Heracleian chora.

In the city of Chersonese (component part No. 001), roots of shrubs and trees growing into the ancient masonries are particularly aggressive in the northern part, in the quarters lying between the Basilica within a Basilica and the 1935 Basilica, as well as in the southwestern part of the citadel. On the face of it, the problem would have to be solved as quickly as possible by way of removing the existing vegetation. It must however be born in mind that the shrubs covering the ancient ruins in these parts of the city have a well developed and complicated root system, which is why their mechanical removal is likely only to bring additional damage to the ancient masonries. In order to find the best vegetation control solutions, a special study will have to be conducted with professional botanists involved.

Apart from that, the central part of site No. 001 has a small park area covered mostly by garden and ornamental trees, which were planted by the monastery fraternity in the early 20<sup>th</sup> century. Despite the fact that ancient masonries lie underneath the trees, the vegetation, which was planted in the additional thick topsoil layer and has predominantly horizontal roots, is not doing any damage to any of the ancient or medieval remains, an illustrative example of this being the recently unearthed premises of the 'mint'. Therefore, the park area in question can be left where it is and used as a recreation area.

A similar situation can be seen at the protected Chersonese chora sites. Specifically, certain trees and shrubs that are destroying the masonries of the

ancient farmsteads and farming structures at component parts No. 002, 003 and 006 have to be removed as soon as possible. As for removing any clumps of shrubs or trees on larger areas (on the eastern slope of the Yukharina Gully at component part No. 002, in the bed of Berman's Gully at component part No. 003, on the island in Kazachya Bay at component part No. 006, on the coastal terrace on Cape Vinogradny at component part No. 007 etc), any decisions to that effect can only be made after careful research with professional botanists involved.

### *iii. Natural disasters and risk preparedness*

Natural disaster risks threatening the nominated property include seismic threat and steppe fires.

Seismic threat. All the protected areas of Tauric Chersonese and its chora lie in a high activity seismic zone, where, according to specialists, rare earthquakes up to 8 on the Richter scale are possible. A major earthquake (measuring 6 on the Richter scale) was registered last in 1927 (its epicentrum was on the shelf of the Black Sea near Yalta). Although the past few decades have been characterized by decreasing seismic activity in the Black Sea shelf fracture zones, this factor still presents a threat to the monuments in the ancient city of Chersonese and in its chora.

The seismicity of the area is to be taken into consideration when developing any ancient ruin conservation projects as well as any contingency trainings for the staff of Tauric Chersonese National Preserve and the local emergency services.

At the moment Sevastopol does not have any comprehensive seismic safety and security programme for its protected historic and cultural areas. Such a programme is to be developed as soon as possible.

Steppe fires. The problem with steppe fires, which break out quite regularly on the protected sites of the city of Chersonese and its chora, is also related to vegetation, particularly to the grass that covers most of the unexpored area.

The problem in question has a purely seasonal character, with grass fires taking place predominantly in the driest period of the year, i.e. between July and September. Besides, this factor is not entirely a natural one. It has a lot to do with human activities, among the most common causes of fires being unauthorized bonfires, careless smoking and even intentional arsons.

Although damage occasionally done by steppe fires to the ancient structures is negligible, it becomes quite perceptible when it comes to landscape formations, which is why a special fire control programme is needed. Among the top priority measures to prevent steppe fires on the protected sites should be site access control (peripheral fencing and 24-hour security posts).

However, experience accumulated by the administration of Tauric Chersonese National Preserve shows that even within the fenced and guarded boundaries of the ancient city of Chersonese (component part No. 001) steppe fires still occur quite regularly in the areas rather distant from the entrance (mostly in

the western part of the city). That means that sufficient security staff should be provided to be able to control not only the perimeter but also the internal areas of the city.

It is therefore proposed to recruit additional security guards and wardens making each observation post responsible for a particular local sector of the protected area (maximum 10 ha for each post) as well as install video monitoring systems, indispensable for meeting some other challenges facing the property, including violations of the visitation regime, vandalism and illegal excavations.

It should be noted that, unless it is done everywhere, grass mowing on the vast unexplored areas will have little effect and, even more importantly, it is bound to disfigure the visual features of the existing landscape. Still, within the boundaries of the already explored and conserved sites, any grass must be removed without fail (and is normally removed as far as the ancient city area is concerned) since any grass fires in a confined space of ancient ruins are likely to result in masonry burns.

Grass mowing and weeding being quite labour consuming procedures, the problem can be removed in a different way, namely by adding various humus-free soils and thus preventing any vegetation. In the future, this method should certainly be preferred and prescribed in the comprehensive programme for presentation and interpretation of archaeological sites at Tauric Chersonese National Preserve.

#### *iv. Visitor/tourism pressures*

Anthropogenic factors affecting the preservation of the property include visitor (tourism) pressures as well as vandalism and illegal excavations.

Property visitation. As of today, of all the sites of Tauric Chersonese and its chora, regular visitation has been arranged only to the ancient city area (component part No. 001).

The largest category of visitors to the property are organized tourist groups and individual tourists (over 350,000 people a year). A considerable percentage of visitors is constituted by pilgrims (around 50,000 people a year), with about as many visitors represented by the citizens of Sevastopol, who enjoy certain visitation privileges. Another 50,000 visitors are those getting into the ancient city during the free access hours (in the morning and in the evening) for recreation, members and guests of the yacht club, parishioners visiting St. Vladimir's Cathedral, theatre goers as well as members of archaeological expeditions. This amounts to approximately 500,000 people a year.

The most popular visitor destinations within the ancient city (component part No. 001) are its central and northern parts. These are subject to tourism overloads, though without any adverse effects. Given that the most visited places constitute no more than 1/3 of all the expositional area of the city, it can be assumed that, in the present circumstances, the carrying capacity of the property



could be more than 1 million people a year. It should also be noted that most of the visitors (around 80 percent) come in summer (from June to August).

In the future the number of visitors can be increased to 1.5 million people a year. This can be achieved by arranging some additional entrances to the property, creating alternative visitation routes and introducing a management model providing for equal distribution of visitors to the property throughout the year rather than only during the high tourist season (in summer). More detailed analysis and proposed solutions to meet the increased visitation challenges are provided in the relevant section of the management plan.

It should be noted that various visitor pressures that can precipitate deterioration of the monuments (such as walking on ancient masonry structures, picnicking and littering) can be kept to a minimum if, as has already been mentioned, additional security posts are arranged, more security guards and wardens are recruited, and, last but not least, a video system is introduced to monitor the property. Besides, the tourist infrastructure system should be improved, particularly as far as public and waste management facilities are concerned, which should stop the visitors from leaving litter in the protected area.

As for the protected chora sites, there is hardly any organized tourism there. This is largely due to the fact that the general public is unaware of the value of the sites. Besides, the sites themselves can hardly receive any tourists for lack of visitor facilities. The management plan envisages creation of an archaeological park in the protected chora areas, with the concept of such a park already developed by the staff of the National Preserve in tandem with the experts from the Institute of Classical Archaeology at the University of Texas in Austin. The archaeological park project proposals involve not only fencing and arranging a security system on the protected sites but also developing relevant infrastructure – visitor centres, footpaths, access ways etc.

By tentative estimates, protection and interpretation of the chora sites as well as providing them with minimum facilities and public awareness raising campaign can help to bring around 100,000 visitors a year to each of these sites in the next few years already (estimates have been made for component parts No. 002 and 004). Some urgent activities to this effect have been envisaged in the property development plans for 2012 – 2015 in the context of preparing Tauric Chersonese and its chora for the World Heritage List nomination.

Some of the protected areas of the Chersonese chora (component parts No. 003, 004 and 007), are now uncontrollably used by the local population as places for recreation. When implementing the archaeological park project, the recreation function of these sites should be partially retained, although any uncontrolled visitor activities, sometimes rather damaging to the ancient ruins and landscape, should be reorganized in accordance with the regulations set by the administration of Tauric Chersonese National Preserve.

Vandalism and illegal excavations. An extremely dangerous factor threatening the integrity of the ancient structures in the city of Chersonese and its

chora are various vandalic acts and illegal excavations on the protected sites. The acts of vandalism registered in the last few years on the ancient ruins were all of local and sporadic nature. Still, the very fact that they occurred within the boundaries of the ancient city (component part No. 001) is enough to understand that the existing security system is far from efficient.

As noted above, this requires a package of relevant measures, including recruitment of additional security guards and wardens with each observation post responsible for a particular local sector of the protected area, implementation of a video monitoring system etc.

The top priorities for the protected areas in the chora are fencing and 24-hour security posts, especially considering the fact that it is the chora sites that are most vulnerable to illegal excavations with their irreparable damage to the integrity of archaeological layers.

Ongoing vandalism and illegal excavations should also prompt to continue working on improvement of the national archaeological heritage protection legislation. This requires not only severer legal punishment for illegal excavations but also regulations prohibiting any private collecting and traffic in valuable archaeological items. The Ministry of Culture of Ukraine is already working on the necessary amendments to relevant legal acts. Expected to come into effect by 2013, these will help to crack down on illegal excavations not only within the boundaries of the protected properties but also on all the unprotected sites of the Chersonese chora containing any extant ancient structures.

**v. *Number of inhabitants within the property and its buffer zones***

The number of inhabitants within the property has been calculated on the basis of the data provided by the administration of Tauric Chersonese National Preserve. The buffer zone inhabitant numbers presented here are average figures estimated by the number of households located within the boundaries of these zones. Approximate numbers of permanent and temporary inhabitants, the latter including hospital personnel and patients, hotel staff and guests, military personnel as well as summer cottage tenants, are provided in the table below:

<i><b>Id. No.</b></i>	<i><b>Number of permanent inhabitants</b></i>	<i><b>Number of temporary inhabitants</b></i>	<i><b>Number of resident inhabitants</b></i>	<i><b>Number of temporary inhabitants</b></i>	<i><b>Total (pers.)</b></i>	<i><b>Year</b></i>
	<i><b>Nominated property</b></i>		<i><b>Buffer zone</b></i>			
001	10	180	4100	580	4870	2011
002	-	-	210	7550	7760	2011

003	-	20	60	820	900	2011
004	-	-	870	4310	5180	2011
005	-	-	see No.002	see No.002	see No.002	2011
006	-	-	3050	1190	4240	2011
007	-	20	80	860	960	2011
<b>Total</b>	<b>10</b>	<b>220</b>	<b>8370</b>	<b>15310</b>	<b>23910</b>	

***Comments:***

Component part No. 001. Permanent inhabitants of this part of the property are the family living in the private estate located within its boundaries. Its temporary inhabitants include the church staff, yacht club members and members of seasonal archaeological expeditions. Temporary inhabitants of the buffer zone include military personnel, hospital patients and hotel guests.

Component part No. 003. Temporary inhabitants of this part of the property are the members of an annual archaeological expedition.

Component part No. 007. Temporary inhabitants of this part of the property are the tourists dwelling at unauthorized campsites in the recreation area.

Component parts No. 002 - 007. Temporary inhabitants of the buffer zone are mostly owners and tenants of summer cottages as well as hospital patients (component parts No.002 and 005) and military personnel (component part No. 006).

***vi. Depreciation of conserved archaeological sites***

Among essential problems related to the preservation of the already unearthed and conserved archeological sites in the city of Chersonese and its chora is the depreciation of ancient structures due to various natural and anthropogenic factors.

It should be taken into consideration that conservation measures were taken on the sites at different times and were based on different techniques, not always the best reasonable. In fact, even with the most up-to-date high quality conservation, gradual deformation of conservation mortars does occur, bringing about gradual deterioration of ancient masonry structures. Deteriorating sections were detected and marked as those in most urgent need of conservation on many of the sites of property component part No. 001 when preparing comprehensive conservation programmes.

It should also be noted that some of the ancient ruins unearthed in the city as well as in its chora (some monuments at the citadel and in the port area at site No. 001 as well as some farmsteads on the chora sites in the Yukharina Gully, in

Berman's Gully and on the isthmus of the Mayachny Peninsula – component parts No. 002, 003 and 006) still remain unconserved. The already mentioned comprehensive monument conservation programmes of the Preserve lists masonry consolidation activities on the previously excavated sites among the emergency and top priority measures.

## **5. PROTECTION AND MANAGEMENT OF THE PROPERTY**

### **5a. Ownership:**

All the protected areas of the ancient city of Tauric Chersonese and its chora (component parts No. 001-007) are owned by the state.

The authority responsible for management of the property is the Minister of Culture of Ukraine, with Tauric Chersonese National Preserve as an institution authorized by the Ministry to manage its sites and monuments on a day-to-day basis.

### **5b. Protective designation:**

The protected properties in the city of Tauric Chersonese and in its chora enjoy the highest degree of legal protection as protected areas, with their lands classified as historical and cultural lands.

The status of historical and cultural preserves and protected areas is regulated by Articles 33, 33-1, 33-2, 33-3 of the Law of Ukraine on Cultural Heritage Protection (version No. 2518-VI of 9 September 2010) stating that “any activities are prohibited within the boundaries of historical and cultural preserves and/or protected historical and cultural areas that have or may have any negative impact on the state of preservation, protection or use of any cultural heritage sites or monuments” (Art. 33, Cl. 6 of the Law of Ukraine on Cultural Heritage Protection). The observance of the status of historical and cultural preserves and protected areas is entrusted under Article 33-2, Clause 3 of the Law of Ukraine on Cultural Heritage Protection to the managers of such historical and cultural preserves and protected areas.

The protected areas of Tauric Chersonese and its chora have been transferred to the administration of Tauric Chersonese National Preserve for use in perpetuity on the basis of the following legislative acts:

- component part No. 001 – the ancient city of Tauric Chersonese – Regulation No. 55-p of the Sevastopol City State Administration of 13 January 1999;
- component part No.002 – the chora site in the Yukharina Gully – Resolutions No. 475 and No. 10804 of the Sevastopol City Council of 5 July 2006 and 13 July 2010, respectively;
- component part No.003 – the chora site in Berman’s Gully – Resolution No. 4126 of the Sevastopol City Council of 8 April 2008;
- component part No.004 – the chora site on the Bezymyannaya Height – Regulation No. 55-p of the Sevastopol City State Administration of 13 January 1999;
- component part No.005 – the chora site in the Streletskaya Gully – Resolution No. 4127 of the Sevastopol City Council of 8 April 2008;

- component part No.006 – the chora site on the isthmus of the Mayachny Peninsula – Resolution No. 7982 of the Sevastopol City Council of 8 September 2009; and
- component part No.007 – the chora site on Cape Vinogradny – Resolution No. 4802 of the Sevastopol City Council of 8 July 2008.

Apart from that, Order No. 220/0/16-11 of the Ministry of Culture and Tourism of Ukraine of 6 April 2011 establishes the following land use regimes for the monuments (protected areas) of Tauric Chersonese National Preserve:

“The regime that the property is subject to prohibits any construction activities that are not related to conservation or exploitation of its heritage.

Allowed on the said sites are archaeological and other monument protection and preservation related research, restoration, conservation, monument interpretation, property improvement and other engineering activities aimed to preserve the heritage.

Permissible (on the basis of individually approved projects) are reconstruction of any existing structures that are considered as background as well as construction of individual structures designed to accommodate displayed archaeological items or house the Preserve services (though those cannot be higher than 8 m).

Any land and/or construction activities in the said areas can only be allowed after thorough archaeological exploration of the designated sites”.

Additionally, the Order establishes the following special regime for the city of Chersonese (component part No. 001): “The isolated structures of the yacht club on the shore of Quarantinnaya Bay, the private housing within the boundaries of the 12th Coastal Battery, the isolated archaeological expedition structures (outside the Archaeological Base of the Preserve) and the former monastery inn building should be considered as dissonant and are therefore to be demolished in the future.”

An additional means of protection of the property ‘Ancient city of Tauric Chersonese and its chora’ are the buffer (protection) zones around the protected areas as such, with their specific land use regimes. Specifically, Order No. 220/0/16-11 of the Ministry of Culture of Ukraine of 6 April 2011 prescribes for the buffer (protection) zone of the sites administered by Tauric Chersonese National Preserve a land use regime with strict restrictions on any construction activities apart from those related to exploration, preservation and exploitation of cultural heritage or development of the tourist infrastructure:

“Allowed in the said zones are archaeological and other monument protection and preservation related research, restoration, conservation, monument interpretation, property improvement, shore protection and other engineering activities aimed to preserve the heritage and arrange access ways to the heritage.

Permissible (on the basis of individually approved projects) are reconstruction of any existing residential buildings that are considered as background as well as construction of any new structures designed to

accommodate and display museum collections of the Preserve, organize pilgrim or monastery centres, expand the archaeological base of the Preserve and/or create visitor service facilities for tourists and pilgrims alike.

Any land and/or construction activities in any such zones can only be allowed after thorough archaeological exploration of the designated sites, with compulsory interpretation of any newly discovered valuable archaeological monuments and items.

The Black Sea bottom area falling within the boundaries of the monument protection zone of the Preserve shall be kept intact as containing old shipwrecks (on the shelf) and submerged ancient buildings (in the coastal area). Construction of any above-water structures (except for engineering structures) and/or landing stages in the said area is prohibited. Any land works at the bottom of the sea can only be allowed under supervision of professional archaeologists and in places containing any cultural heritage items – only after thorough archaeological explorations.”

### **5c. Means of implementing protective measures:**

The land use regimes specified in cl. 5b are fully observed within the boundaries of the protected areas in the city of Tauric Chersonese and in its chora. Fulfillment of the regime requirements is the responsibility of Tauric Chersonese National Preserve as the only institution authorized by the Ministry of Culture of Ukraine to manage the said protected sites.

The regime requirement regarding demolition of the dissonant structures in the ancient city (component part No. 001) can only be fulfilled after the municipal authorities pass a decision to allocate alternative sites outside the property onto which such structures could be transferred (proposals to this effect have already been submitted to the Sevastopol City Council for consideration).

In accordance with the property land use regime, the administration of Tauric Chersonese National Preserve conducts comprehensive archaeological research, conservation and interpretation of archaeological heritage in all of its protected areas, monitors its current state, displays it and conducts land improvement activities. At the moment, full-scale protection and preservation measures are only being implemented in the ancient city (component part No. 001), the only part of the property whose area has been fenced and is under 24-hour surveillance. The Management Plan envisages ensuring similar physical protection of all the other sites (property components 002 – 007) during 2012 – 2013.

Full compliance with the regime requirements in the buffer zones of the property will only be possible after the municipal authorities pass a decision on introducing amendments into the relevant city planning documents, namely the Master Development Plan for the City of Sevastopol (an order to this effect issued by the Ministry of Culture of Ukraine was submitted to the Sevastopol City Council for consideration in 2011).

**5d. Existing plans related to the municipality and region in which the proposed property is located:**

Development prospects of the city of Sevastopol and related issues regarding its cultural heritage and environment protection as well as local regional tourism development plans are specified in the Master Development Plan for the City of Sevastopol until 2025 adopted by Resolution No. 4114 of the Sevastopol City Council on 13 December 2005 (Plan 22).

Cultural and natural heritage protection issues in the city of Sevastopol are considered in the relevant section of the Master Plan and indicated on the Historical and Architectural Plan of the City with designated cultural heritage property areas and buffer zones, including the protected sites of the city of Tauric Chersonese and its chora (Plan 23).

Modifications of the boundaries and land use regimes of Tauric Chersonese National Preserve properties and their buffer zones established by the said documents have been proposed by the Territory Organization Plan for Tauric Chersonese National Preserve: Boundaries and Land Use Regimes of the National Archaeological Heritage Property and adopted by Order No. 220/0/16-11 of the Ministry of Culture and Tourism of Ukraine on 6 April 2011 (Plan 24).

Correspondent amendments to the Master Development Plan for the City of Sevastopol are now under preparation, as indicated in Section 5c of this dossier, and are expected to be adopted by the municipal authorities in 2012.

**5e. Property management plan or other management systems:**

The Management Plan for the Property ‘Ancient City of Tauric Chersonese and its Chora’ which is an integral part of this dossier and is annexed to it has been developed as a provisional document. According to Article 33, Clause 6 of the Law of Ukraine on Cultural Heritage Protection, “Boundaries, protection zones as well as scopes and timeframes of any cultural heritage conservation, restoration, rehabilitation, interpretation, renovation and adaptation activities, land improvements and beatification activities within the boundaries of historical and cultural preserves, as well as any activities related to protection and exploitation of cultural heritage and preservation and restoration of traditional environments shall be established in the preserves’ territory organization plans”. Thus, the final version of the Management Plan for the nominated property can only be drawn up and adopted on the basis of an approved Territory Organization Plan for Tauric Chersonese National Preserve.

The said Plan has been under preparation since 2010, with only some of its sections drawn up so far. It is on the basis of these sections that the protected areas of the Preserve (including all the component parts of the nominated property) are managed at the moment:



- Schemes of Zoning, Access Ways and Visitation Routes for Tauric Chersonese National Preserve;
- Comprehensive Programme for Archaeological Investigation of the Preserve's heritage;
- Comprehensive Programme for Conservation and Restoration of the Preserve's heritage;
- Project of Boundaries and Land Use Regimes for the Buffer Zones of the Cultural Property 'Ancient City of Tauric Chersonese and its Chora'.

The aforementioned sections of the Plan were adopted by Orders No. 90/0/16-10 and 220/0/16-11 of the Ministry of Culture of Ukraine on 26 February 2010 and 6 April 2011, respectively.

In addition to that, management of the protected areas is governed by the Regulations for Tauric Chersonese National Preserve adopted by the Ministry of Culture of Ukraine on 7 December 1994 and the Statute of Tauric Chersonese National Preserve adopted by Order No. 917/0/16-08 of the Ministry of Culture of Ukraine on 18 August 2008.

All the aforementioned documents were taken into consideration when preparing the latest version of the Management Plan, which highlights the following aspects related to the protection, preservation and exploitation of the nominated property:

- current state of the property and factors affecting its preservation and accessibility;
- suggested solutions to the challenges related to the protection and exploitation of the protected areas of Tauric Chersonese National Preserve;
- guarantees of legal protection and integration of the property into state and municipal development programmes;
- property management structure,
- property security;
- monitoring of cultural heritage of the Preserve;
- general principles of conservation and restoration of the Preserve's heritage;
- property research prospects;
- principles of interpretation and presentation of the property and its component parts;
- scientific and support staff development;
- financial management of the nominated property; and
- timeframes and procedures for periodic review and update of the Management Plan.

The latest version of the Management Plan mostly outlines general principles related to the protection, preservation and exploitation of the protected areas. It does not give details on any strategic programmes, measures or activities that are to be implemented in each component part of the property. These issues are being elaborated now in the framework of the Territory Organization Plan for Tauric Chersonese National Preserve.

The general strategy for protection, preservation and exploitation of the property ‘Ancient city of Tauric Chersonese and its chora’ is set out in the Management Plan. The strategy is built on the following basic principles:

- the property ‘Ancient city of Tauric Chersonese and its chora’ is a complex (serial) piece of heritage whose further exploration should result in expansion of its boundaries through annexing the other chora plots;
- all the component parts of the property need protection from adverse factors listed in Section 4b, based on correspondent comprehensive programmes and projects, which should be consistent with each other and the Territory Organization Plan for Tauric Chersonese National Preserve as the umbrella document;
- all the component parts of the property should be covered by a programme for archaeological investigation with subsequent research based interpretation, condition monitoring and display of the heritage in accordance with the principles set out in the Territory Organization Plan for Tauric Chersonese National Preserve;
- any principles and provisions set out in the Territory Organization Plan for Tauric Chersonese National Preserve should be consistent with the requirements of Ukrainian and international legislation related to cultural (specifically, archaeological) heritage protection as well as, wherever possible, respond to the real needs of the local population;
- any points of fundamental importance set in the Territory Organization Plan for Tauric Chersonese National Preserve should be incorporated in relevant state regulations and local city planning documents and taken into consideration in any new strategic development projects for monument protection and preservation, regional tourism and urban development;
- the Territory Organization Plan for Tauric Chersonese National Preserve, when it is finalized and adopted, should become a basis for updating the existing property Management Plan, with further updates of the both plans to be made every 10 years to reflect any property related changes and new challenges.

It should be noted that further efforts at the property will be channeled in two interrelated directions: further development of the museum component of the Preserve (collections, permanent and temporary exhibitions etc) and creation of a full-fledged archaeological park on the basis of the ancient ruins that have been unearthed and interpreted for tourists, with appropriate infrastructure in all the component parts of the property.

## 5f. Sources and levels of finance:

Tauric Chersonese National Preserve is funded from a general fund and a special fund, with the *general fund* made up of the allocations from the State Budget of Ukraine and the *special fund* formed by:

- proceeds from excursions, preserve entrance fees and admission fees for special exhibitions;
- proceeds from charges for photography, video filming, telephotography and film shooting within the boundaries of the Preserve;
- proceeds from rented public property;
- proceeds from cultural and educational activities conducted on a contractual basis for various public, private and community enterprises, organizations and institutions as well as private individuals;
- proceeds from the sale of souvenirs and other creativity products; and
- revenues from other fee-based services.

The general and special funds are used in accordance with the budget programme passports adopted by the Ministry of Culture and Tourism and the Ministry of Finance of Ukraine, namely 1802030 “Historic and Cultural Heritage Conservation in Preserves” and 1802040 “Cultural Heritage Protection Measures, Passportization, Inventorization and Restoration”.

The use of the funds is based on general and special fund budgets approved by the Ministry of Culture of Ukraine, including such economic classification expenditure codes as:

- salaries and wages;
- pay-roll charges;
- purchase of supplies and materials, communication and transportation services, maintenance of transport vehicles, equipment, stock and buildings, other services and expenses;
- energy and utilities;
- purchase of equipment (incl. computers and photocopiers), and durables;
- overhaul of buildings and structures;
- reconstruction;
- restoration of cultural, historic and architectural heritage;
- passportization of cultural heritage;
- elaboration of the sections of the Master Development Plan of the Preserve.

The Preserve has been receiving *sponsor assistance* from the Chersonesos Support Charitable Foundation (on the basis of the Cooperation Agreement between the Preserve and the Institute of Classical Archaeology at the University of Texas in Austin (USA) with the support of the Packard Humanities Institute) and from the A. G. Leventis Foundation (on the basis of the Memorandum between

the Preserve and the A. G. Leventis Foundation signed on 26 April 2010). The Chersonesos Support Foundation has been providing charitable assistance consisting in covering the costs of overhauling a building (Packard Laboratory) and purchasing computers, materials, stationery etc, with no funds transferred by the Chersonesos Support Foundation directly to the Preserve's account. The A. G. Leventis Foundation has been transferring funds to the Preserve's account to overhaul the premises and design a new exhibit of antiquities.

*Financial and economic performance* of Tauric Chersonese National Preserve during 2006 – 2010 is summarized in the table below (UAH thousand):

<i>Indicator</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>Total</i>
<i>1. General fund</i>						
Allocations received	4404.6	4663.4	6369.5	7503.2	8562.8	31503.5
Incl.: - operation and maintenance of the preserve	345.3	355.4	139.4	-	-	840.1
- security	318.5	378.1	383.9	25.3	472.4	1578.2
- monument restoration	920.0	403.7	890.8	-	-	2214.5
- monument passportization	-	-	175.0	79.0	200.0	454.0
- elaboration of the sections of the master development plan	-	-	-	331.8	-	331.8
- overhauling	-	154.5	-	-	-	154.5
<i>2. Special fund</i>						
Revenues	2745.9	3328.0	4749.5	6400.3	7027.2	24250.9
Expenditures	2134.7	1742.9	5898.5	4935.5	6654.5	21366.1
Incl.: - operation and maintenance of the preserve	465.5	278.2	692.8	264.7	1011.5	2712.7
- security	71.0	87.8	98.1	511.7	184.5	953.1
- monument restoration	125.0	-	1916.9	377.8	811.7	3231.4
- overhauling	250.0	-	240.0	-	970.0	1460.0
- area improvement	102.0	79.3	955.0	1158.0	-	2294.3
- state land certificates	-	458.0	-	-	193.0	651.0
- project design for the ancient exhibit	-	-	-	-	198.0	198.0
- VAT and other compulsory payments	458.5	574.8	791.7	1067.1	1668.1	4560.2
- professional training for the staff	-	8.2	1.7	-	8.2	18.1

The table below shows the expenditure breakdown of Tauric Chersonese National Preserve during 2006 – 2010:

<i>Nº.Nº</i>	<i>Types of expenditure</i>	<i>general fund</i>	<i>special fund</i>
1.	Monument restoration	2214.5	3231.4
2.	Overhauling	154.5	1460.0
3.	Area improvement	-	2294.3
4.	Security	1578.2	953.1
5.	Operation and maintenance of the preserve	840.1	2712.7
	<b>Total:</b>	<b>4787.3</b>	<b>10651.5</b>

### **5g. Sources of expertise and training in conservation and management techniques:**

The staff of Tauric Chersonese National Preserve consists of a group of *qualified specialists* in various fields related to archaeological heritage research, conservation and exploitation, including:

- scientific staff involved in archaeological explorations;
- other scientific staff – archivists, collections managers;
- conservators;
- exhibitionists; and
- managers.

These include eight Doctors of Philosophy (Candidates of History, according to the national classification) and five Honoured Culture Workers of Ukraine.

The human resources training and development for Tauric Chersonese National Preserve is based on the National Programme for Conservation and Exploitation of Cultural Heritage 2004 – 2010 adopted by the Law of Ukraine No. 1692-IV of 20 April 2004.

Among educational institutions providing professional training and development to the staff of the Preserve are:

- Taurida National Vernadsky University,
- Black Sea Branch of Moscow State University, and
- Crimean University of Humanities.

*Further professional development* of the staff is provided within such programmes as:

- MATRA/International Project for Development of Museums and Museum Networking;
- International Training Internship in Archaeological Conservation;
- International “Nesvizska Academy” Postgraduate Summer School;

- International Workshop on Standards and Methods of Cultural Heritage Interpretation;
- Gaude Polonia Scholarship Programme under the aegis of the Minister of Culture of the Republic of Poland;

In addition to that, the Preserve has been receiving regular *advisory, research and instructional support* from the key national cultural heritage protection institutions such as:

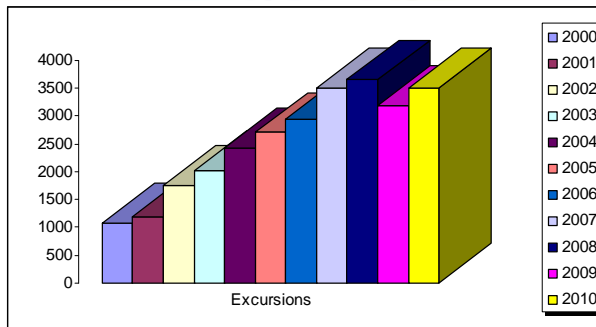
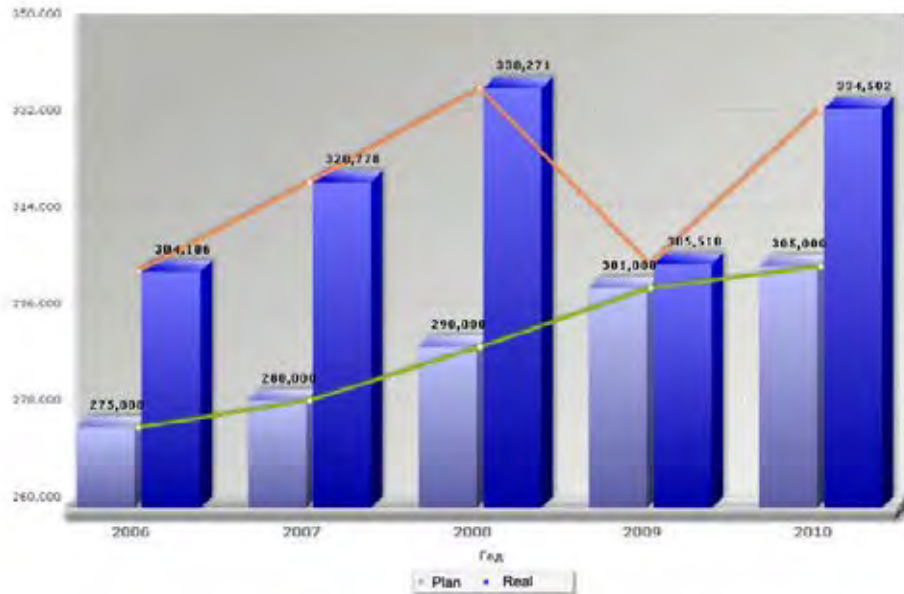
- Institute of Archaeology of the National Academy of Ukraine and its Crimean Branch,
- Institute of Monument Protection Research of the Ministry of Culture of Ukraine,
- Crimean Branch of the Institute of Oriental Studies of the National Academy of Sciences of Ukraine,
- Ukrprojectrestoration Corporation,
- Konrest State Research and Production Centre,
- National Research Centre of Ukraine for Restoration, and
- National Academy of Fine Arts and Architecture.

#### **5h. Visitor facilities and statistics:**

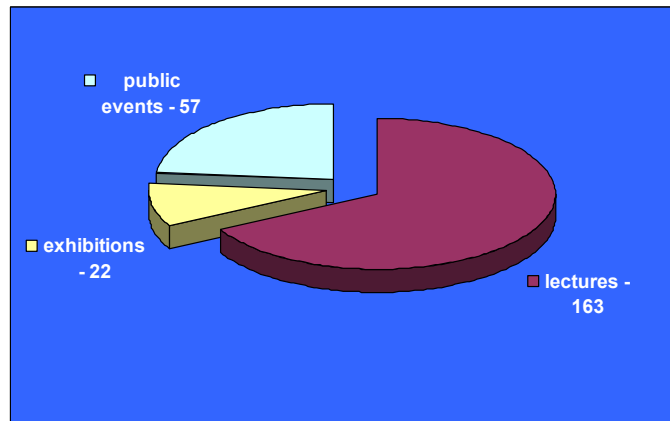
The property is visited by organized groups as well as individual visitors. Apart from receiving visitors and organizing excursions, the Preserve provides such services as:

- outdoor guided tours of the sites in Ukrainian, Russian and English;
- indoor tours of the museum galleries featuring items found during excavations in the city of Chersonese and in its chora (Ancient Chersonese, Medieval Cherson, Tombstones of Ancient Chersonese) as well as permanent exhibitions of mosaic floors found in the Byzantine churches of Chersonese and holographic images of outstanding archaeological findings of Ukraine;
- selling books on the history of Chersonese, booklets, postcards and souvenirs with emblems of the place;
- cafeterias and soft drink booths;
- public facilities;
- park recreation area;
- arranging performances and concerts within the boundaries of the Preserve, e.g. at the ancient theatre;
- providing accommodation for archaeological expeditions.

Upward trends in visitor numbers and excursions delivered at Tauric Chersonese National Preserve are shown in the charts below:



#### Scientific Educational Activities



A number of activities aiming to improve visitor service at the Preserve are envisaged in the relevant section of the Territory Organization Plan expected to be finalized in 2012.

### **5i. Policies and programmes related to the presentation and promotion of the property:**

The programme for the presentation of the heritage of Tauric Chersonese and its chora is currently under preparation and shall be presented in separate sections of the Territory Organization Plan for Tauric Chersonese National Preserve and the Management Plan for the Property ‘Ancient City of Tauric Chersonese and its Chora’.

At the moment, the Preserve is underrepresented and underpromoted both locally and nationally, although the approaches to the city do have a few Chersonese billboards and in 2009 the property won the all-Ukrainian contest “Seven Wonders of Ukraine”, the latter accompanied by a massive publicity campaign.

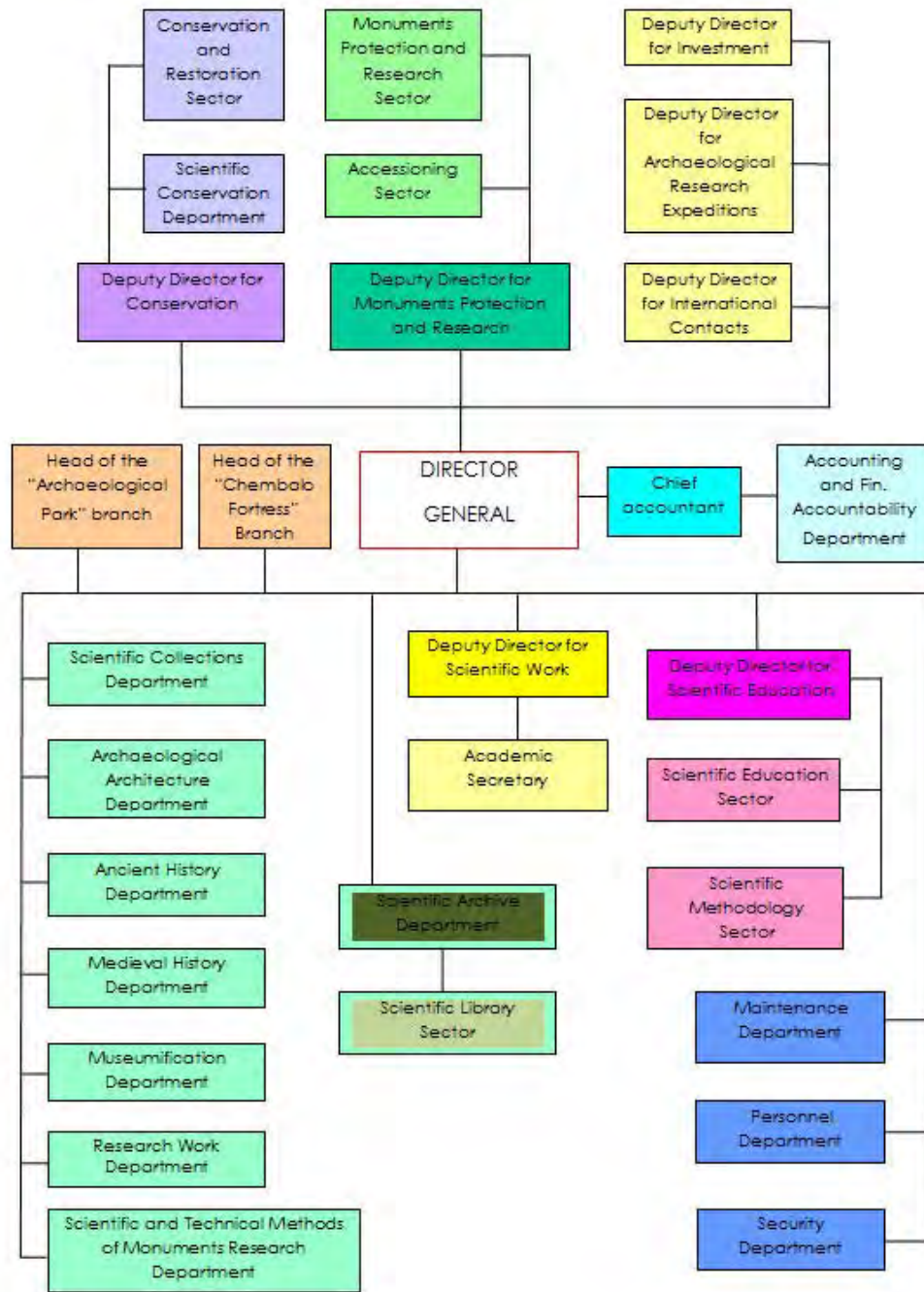
Extensive information is provided in three languages (Ukrainian, Russian and English) on the website of Tauric Chersonese National Preserve (<http://www.chersonesos.org/>).

In addition to that, a number of materials were prepared in 2011 for a presentation and exhibition dedicated to the nomination of the property ‘Ancient City of Tauric Chersonese and its Chora’ for inclusion on the World Heritage List. The exhibition will be held at the beginning of 2012 at a number of premises of governmental institutions and non-governmental organizations in Kiev and Sevastopol. A presentation booklet highlighting the nominated property has been published for the event.

### **5j. Staffing levels:**

The property is administered by the staff of Tauric Chersonese National Preserve currently consisting of 180 people and having the following structure:





The existing staff organization structure needs improvement, particularly if the mentioned archaeological park project is to become a reality. All the relevant estimates, calculations and proposals will be provided in a separate section of the Territory Organization Plan for Tauric Chersonese National Preserve in 2012.

## 6. MONITORING

### 6a. Key indicators for measuring the state of conservation:

<i>Indicator</i>	<i>Periodicity</i>	<i>Location, where records are kept</i>
<p>Monitoring of the state of preservation of the ancient land demarcation and archaeological heritage as well as the state of its conservation within the protected areas:</p> <ul style="list-style-type: none"> <li>- archaeological excavations,</li> <li>- emergency measures,</li> <li>- top priority measures,</li> <li>- planned restoration and conservation works</li> </ul>	On an annual basis	Archive of Tauric Chersonese National Preserve
<p>Monitoring of scientific research methodology observation within in the protected property areas and their buffer zones:</p> <ul style="list-style-type: none"> <li>- archaeological investigation,</li> <li>- restoration and conservation works,</li> <li>- interpretation of archaeological heritage</li> </ul>	On an annual basis	Ibid.
<p>Monitoring of natural and anthropogenic factors destroying or threatening to destroy archaeological heritage within the protected areas:</p> <ul style="list-style-type: none"> <li>- seismic activity,</li> <li>- shore erosion and landslides,</li> <li>- ground waters,</li> <li>- vegetation,</li> <li>- vandalism,</li> <li>- illegal excavations,</li> <li>- visitor pressures</li> </ul>	On an annual basis	Ibid.
<p>Monitoring of effectiveness of protected area protection, security and improvement measures:</p> <ul style="list-style-type: none"> <li>- fencing,</li> <li>- 24-hour security,</li> <li>- footpaths,</li> <li>- visitor centres,</li> <li>- public facility,</li> <li>- waste removal,</li> </ul>	On an annual basis	Ibid.

- access ways.		
Monitoring of modern development and the state of preservation of archaeological landscapes within the buffer zones of the protected properties: - state of preservation of the ancient demarcation, - observance of buffer zone regimes, - identification and registration of archaeological heritage items	On an annual basis	Ibid.

**6b. Administrative arrangements for property monitoring:**

On the basis of Order No. 19 issued by the Director General of Tauric Chersonese National Preserve on 17 September 2011 a working group has been created to monitor the condition of the heritage in the protected areas.

**6c. Results of previous reporting exercises:**

Heritage condition surveys and monitoring is a necessary step towards developing a proper plan for conservation, since no such plan can be effectively created without clear understanding of the current condition of the heritage and the extent of its deterioration. Surveys of this kind are a challenging task since archaeological monuments tend to occupy extensive areas. In order to collect all the necessary information, process it and make correct conclusions, qualified staff and relevant equipment are needed.

In 2003, due to the support of the Institute of Classical Archaeology at the University of Texas in Austin, a geographical information system (GIS) was introduced in Chersonese and has been used since then as an excellent information gathering tool. As is shown in a sample form below, it reflects the degree of deterioration of each monument and defines the necessary extent of intervention in its structure, the information absolutely necessary for developing any future conservation plans:

## Conservation Condition Survey

Grid Reference (Axx.xx,yy.yy):

Area Description:

Materials (circle as appropriate)

Marble    Brickwork    Rubble    Ashlar    Other (specify):

### Conservation

Has any previous conservation been undertaken?    **Y**    **N**

Wall Tops                      Worst    **0**    **1**    **2**    **3**    **4**    **5**    **6**    **7**    **8**    **9**    **10** Best

Elevations                      Worst    **0**    **1**    **2**    **3**    **4**    **5**    **6**    **7**    **8**    **9**    **10** Best

Foundations                      Worst    **0**    **1**    **2**    **3**    **4**    **5**    **6**    **7**    **8**    **9**    **10** Best

Floors                              Worst    **0**    **1**    **2**    **3**    **4**    **5**    **6**    **7**    **8**    **9**    **10** Best

Aesthetics                      Worst    **0**    **1**    **2**    **3**    **4**    **5** Best

### Contamination

Trees       Bushes       Weeds       Percentage of coverage:

Rubbish                              Worst **0**    **1**    **2**    **3**    **4**    **5** Best

Graffiti                              Worst **0**    **1**    **2**    **3**    **4**    **5** Best

Documentation (circle as appropriate)

Photographed?                      **Y**                      **N**

Mapped?                              **Y**                      **N**

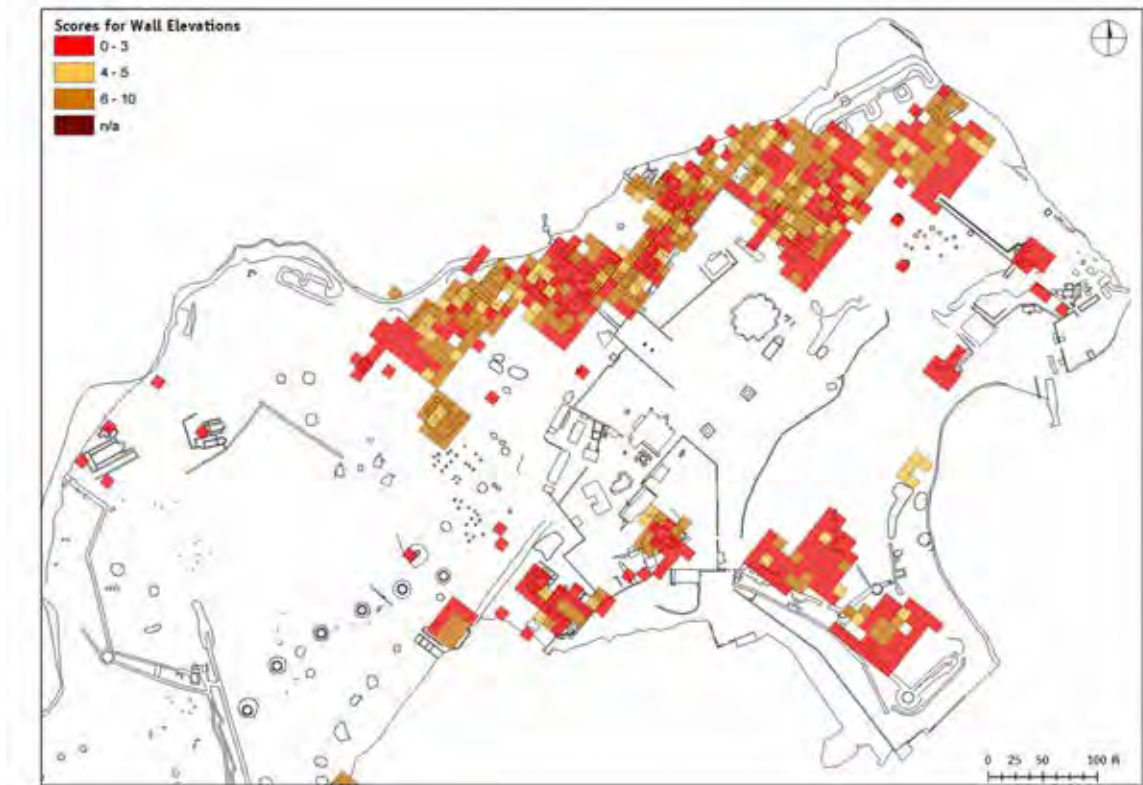
Date Surveyed:

Surveyed by (initials):

The surveys are based on a comprehensive approach. First, a general plan of the property is drawn where all the structures are indicated. For the purpose of heritage condition monitoring, the territory of the Preserve has been divided into squares 10x10 m each with the help of ArcMAP software and its tailor-made application. After that the condition of the elements is described in detail for each square. All the data are entered into the programme that makes it possible to

automatically identify critical sections that are in most urgent need of conservation. The created database is also used to make and keep records as to the history of monument explorations and conservation measures taken.

A sample monitoring report on the state of preservation of the ancient masonries in the city of Chersonese is presented in the scheme below:



The existing programme needs to be improved by including among the key indicators some additional points related to the risk factors identified in the Management Plan.

It should also be mentioned that today the monitoring programme is used for component part No.001 only. In the near future (during 2012 – 2013) it is therefore necessary to expand the use of the programme to cover the other component parts of the property.

## 7. DOCUMENTATION

### 7a. Photographs, slides, image inventory:

#### *Plans and outlines:*

<i><b>Id. No</b></i>	<i><b>Format</b></i>	<i><b>Captions</b></i>	<i><b>Date (year)</b></i>	<i><b>Author / Drawer</b></i>	<i><b>Copyright owner (if different than the author of the drawing)</b></i>	<i><b>Contact details of copyright owner (Name, address, tel/fax, and e-mail)</b></i>	<i><b>Non exclusive cession of rights</b></i>
1	Print / electronic format *.jpg	<b>Plan of the Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	2004	<i>J. Lane</i>	The Institute of Classical Archaeology — The University of Texas at Austin (USA)	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
2	Print / electronic format *.jpg	<b>Outline of the Southeastern Defensive Line of the Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	2004	<i>J. Lane</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu,	YES
3	Print / electronic format *.jpg	<b>Outline of Zeno's Tower. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	1898	<i>K. Kostsyushko-Valyuzhinich</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
4	Print / electronic format *.jpg	<b>Outline of the Ancient Theater and the Reliquary Church. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	2004	<i>O. Dombrovsky. Image processing by J. Lane</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
5	Print / electronic format *.jpg	<b>Plan of the City Water Reservoir. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	2005	<i>Max Limoncelli, Allyson McDavid</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES

6	Print / electronic format *.jpg	<b>Outline of the Christian Cave Church in the Main Street. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	2004	<i>J. Lane</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu,	YES
7	Print / electronic format *.jpg	<b>Plan of the Four-apse Church. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	1979	<i>V. Kutaisov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
8	Print / electronic format *.jpg	<b>Outline of Kruze's Basilica. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	2004	<i>J. Lane</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu,	YES
9	Print / electronic format *.jpg	<b>Outline of Uvarov's Basilica with designated periods. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	2004	<i>J. Lane</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
10	Print / electronic format *.jpg	<b>Outline of the Basilica within Basilica. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	2004	<i>J. Lane</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
11	Print / electronic format *.jpg	<b>Layout of the Crimean Peninsula with designated ancient Chora of the Chersonese State</b> (turn of the 4th and 3rd centuries BC)	1984	<i>A. Shcheglov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
12	Print / electronic format *.jpg	<b>Layout of the Heracleian Peninsula</b> with demarcation	2001	<i>G. Nikolaenko</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES

13	Print / electronic format *.jpg	<b>Layout of the Heracleian Peninsula with present-day zoning:</b> 1 – protected areas, 2 – areas with extant ancient chora layout, 3 – parks and cemeteries, 4 – forest plantations, 5 – farmland, 6 – suburban settlements, 7 – city centre, 8 – residential areas, 9 – pits and quarries, 10 – industrial areas	2002	<i>Alma Maldonado, Carl Holiday</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
14	Print / electronic format *.jpg	<b>Outline of the Farmstead on Site № 193 of the Chora plot in the Yukharina Gully.</b> <i>(Component Part No. 002)</i>	2001	<i>N. Andrushchenko, T. Bazhanova</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
15	Print / electronic format *.jpg	<b>Outline of the Farmstead on Site № 226 of the Chora plot in the Yukharina Gully.</b> <i>(Component Part No. 002)</i>	1997	<i>N. Andrushchenko, T. Bazhanova</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
16	Print / electronic format *.jpg	<b>Outline of the southern farmstead at Site 227 on the Chora plot in the Yukharina Gully.</b> (the so-called Basilides' Farmstead). <i>(Component Part No. 002)</i>	1998	<i>V. Kuzishchin</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
17	Print / electronic format *.jpg	<b>Plan of the unearthed “Grinevich’s Farmstead” on Site No. 347 of the Chora plot in Berman’s Gully.</b> <i>(Component Part No. 003)</i>	2010	<i>A. Arzhanov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES



18	Print / electronic format *.jpg	<b>Outline of the unearthed section of the fortification on the Bezymyannaya Height with designated Hellenistic, Roman and Byzantine periods and Crimean War fortifications.</b> <i>(Component Part No. 004)</i>	2004	<i>J. Lane</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
19	Print / electronic format *.jpg	<b>Layouts of the fortification on the isthmus of the Mayachny Peninsula with fortress walls, remains of ancient towers and traces of demarcation</b> <i>(Component Part No. 006)</i>	1994	<i>A. Shcheglov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
20	Print / electronic format *.jpg	<b>Layout of the sites in the northeastern part of the fortified settlement on the isthmus of the Mayachny Peninsula</b> <i>(Component Part No. 006)</i>	2006	<i>N. Andrushchenko, T. Bazhanova</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
21	Print / electronic format *.jpg	<b>Plan of the excavated site on the island in Kazachya Bay</b> (Archives of the Chersonese Preserve) <i>(Component Part No. 006)</i>	1905	<i>M. Skubetov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
22	Print / electronic format *.jpg	<b>Master Plan for the City of Sevastopol.</b> Principal Drawing.	2004	<i>Crimea NIO Project Co.</i>	Sevastopol City Council	3 Lenina St., Sevastopol, Ukraine, 99011 Phone: +38(0692) 54-05-38 fax: +38(0692) 54-03-53 public@sevsovet.com.ua	YES
23	Print / electronic format *.jpg	<b>Master Plan for the City of Sevastopol, Historical and Architectural Plan and Protection Zone Project.</b>	2004	<i>Crimea NIO Project Co.</i>	Sevastopol City Council	3 Lenina St., Sevastopol, Ukraine, 99011 Phone: +38(0692) 54-05-38 fax: +38(0692) 54-03-53 public@sevsovet.com.ua	YES

24	Print / electronic format *.jpg	<b>Protection Zones of the Tauric Chersonese National Preserve Property</b> (Urban Area).	2010	<i>T. Bobrovskiy</i>	Institute of Monument Protection Research	15 Petropavlovskaya St., Kyev 04086, Ukraine Tel/fax: +380442885443 ndipod@topnet.ua	YES
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**Photos:**

<i><b>Id. No</b></i>	<i><b>Format</b></i>	<i><b>Captions</b></i>	<i><b>Date of Photo (mo/yr)</b></i>	<i><b>Photographer</b></i>	<i><b>Copyright owner (if different than photographer/director of video)</b></i>	<i><b>Contact details of copyright owner (Name, address, tel/fax, and e-mail)</b></i>	<i><b>Non exclusive cession of rights</b></i>
1	Print / electronic format *.jpg	<b>The Heracleon Peninsula with the component parts of the nominated property.</b> Satellite image ( <i>Component Parts No. 001 – 007</i> )	October / 2010	<i>Image processing by T. Bobrovskiy</i>	Google Maps service - ©Google, 2011 - Terms of Use	c/o Google Inc. 1600 Amphitheatre Parkway Mountain View, California, 94043 USA Phone: +1 650-253-0000 Fax: +1 650-253-0001 e-mail via <a href="http://www.google.com/intl/en/contact/">http://www.google.com/intl/en/contact/</a>	YES
2	Print / electronic format *.jpg	<b>Ancient City of Chersonese.</b> Aerial photo ( <i>Component Part No. 001</i> )	August / 2005	<i>V. Filippov</i>		Filippov Vadim Anatolievich 50 let Octjabrya ul., 26-46 Tyumen 625006 Russian Federation, Phone +79044900157 e-mail: filippov- vadim@yandex.ru	YES
3	Print / electronic format *.jpg	<b>Southeastern Line of Defense. The Ancient city of Tauric Chersonese.</b> Airview. ( <i>Component Part No. 001</i> )	May / 2003	<i>A. Sobotkova</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES

4	Print / electronic format *.jpg	<b>Southeastern Line of Defense. Peribolus. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	August / 2011	<i>K. Zykova</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
5	Print / electronic format *.jpg	<b>City Gate. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	August / 2011	<i>R. Smirnov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
6	Print / electronic format *.jpg	<b>Zeno's Tower. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	May / 2003	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
7	Print / electronic format *.jpg	<b>Stele of Leschanoridas, son of Eukles.</b> Limestone. Early Hellenistic period (Component Part No. 001)	April /2003	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
8	Print / electronic format *.jpg	<b>Tombstone with the Portrait of a Youth.</b> Fragment. Encaustic Painting. Late 4th century BC (Component Part No. 001)	September / 2004	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
9	Print / electronic format *.jpg	<b>Main Street. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	May / 2003	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
10	Print / electronic format *.jpg	<b>The Agora. The Ancient city of Tauric Chersonese.</b> Aerial photo. (Component Part No. 001)	August / 2004	<i>V. Filippov</i>		Filippov Vadim Anatolievich 50 let Octjabrya ul., 26-46 Tyumen 625006 Russian Federation, Phone +79044900157 filippov-vadim@yandex.ru	YES

11	Print / electronic format *.jpg	<b>Ancient Theater. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	May / 2003	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
12	Print / electronic format *.jpg	<b>Reliquary Church. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	August / 2004	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
13	Print / electronic format *.jpg	<b>Mint. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	December/ 2011	<i>R. Smirnov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
14	Print / electronic format *.jpg	<b>Water Reservoir. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	May / 2003	<i>G. Mack</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
15	Print / electronic format *.jpg	<b>Graffito from a wall of the Vaulted Cistern</b> (Component Part No. 001)	October / 2002	<i>G. Mack</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
16	Print / electronic format *.jpg	<b>Temenos. The Ancient city of Tauric Chersonese.</b> Aerial photo (Component Part No. 001)	August / 2005	<i>V. Filippov</i>	-	Filippov Vadim Anatolievich 50 let Octjabrya ul., 26-46 Tyumen 625006 Russian Federation, Phone +79044900157 filippov-vadim@yandex.ru	YES

17	Print / electronic format *.jpg	<b>Head of a caryatid. Fragment of an ancient temple.</b> Marble. Early Hellenistic period ( <i>Component Part No. 001</i> )	September / 2004	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
18	Print / electronic format *.jpg	<b>Stele with the Civic Oath of the Citizens of Chersonese.</b> Marble. Early 3rd century BC ( <i>Component Part No. 001</i> )	September / 2004	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
19	Print / electronic format *.jpg	<b>Cave Church. The Ancient city of Tauric Chersonese.</b> ( <i>Component Part No. 001</i> )	May / 2003	<i>G. Mack</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
20	Print / electronic format *.jpg	<b>Four-apse Church. The Ancient city of Tauric Chersonese.</b> ( <i>Component Part No. 001</i> )	December / 2011	<i>R. Smirnov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
21	Print / electronic format *.jpg	<b>Kruze's Basilica. The Ancient city of Tauric Chersonese.</b> ( <i>Component Part No. 001</i> )	July / 2006	<i>S. Ushakov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
22	Print / electronic format *.jpg	<b>Uvarov's Basilica. The Ancient city of Tauric Chersonese.</b> ( <i>Component Part No. 001</i> )	December / 2011	<i>R. Smirnov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
23	Print / electronic format *.jpg	<b>Basilica within Basilica. The Ancient city of Tauric Chersonese.</b> ( <i>Component Part No. 001</i> )	October / 2007	<i>R. Smirnov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES

24	Print / electronic format *.jpg	<b>Detail of the mosaic floor from the Basilica within Basilica</b> (Component Part No. 001)	August /2003	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
25	Print / electronic format *.jpg	<b>1935 Basilica. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	December / 2011	<i>R. Smirnov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
26	Print / electronic format *.jpg	<b>Chapel. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	October / 2010	<i>S. Ryzhov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
27	Print / electronic format *.jpg	<b>Hellenistic house. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	May / 2003	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
28	Print / electronic format *.jpg	<b>Mosaic floor of a Hellenistic house</b> (Component Part No. 001)	May / 2006	<i>K. Zykova</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
29	Print / electronic format *.jpg	<b>House with a Winery. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	May / 2003	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES
30	Print / electronic format *.jpg	<b>Fish-salting cistern in a residential quarter. The Ancient city of Tauric Chersonese.</b> (Component Part No. 001)	August / 2009	<i>S. Ryzhov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES

31	Print / electronic format *.jpg	<b>Traces of Chora demarcation in the mouth of the Chora plot in the Yukharina Gully.</b> Satellite image (Component Part No. 002)	November / 2010		Google Maps service - ©Google, 2011 - Terms of Use	c/o Google Inc. 1600 Amphitheatre Parkway Mountain View, California, 94043 USA Phone: +1 650-253-0000 Fax: +1 650-253-0001 e-mail via <a href="http://www.google.com/intl/en/contact/">http://www.google.com/intl/en/contact/</a>	YES
32	Print / electronic format *.jpg	<b>The Chora plot in the Yukharina Gully.</b> Satellite image (Component Part No. 002)	November / 2010		Google Maps service - ©Google, 2011 - Terms of Use	c/o Google Inc. 1600 Amphitheatre Parkway Mountain View, California, 94043 USA Phone: +1 650-253-0000 Fax: +1 650-253-0001 e-mail via <a href="http://www.google.com/intl/en/contact/">http://www.google.com/intl/en/contact/</a>	YES
33	Print / electronic format *.jpg	<b>Farmstead on the Chora plot in the Yukharina Gully.</b> (Component Part No. 002)	July / 2001	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 <a href="mailto:icainfo@uts.cc.utexas.edu">icainfo@uts.cc.utexas.edu</a>	YES
34	Print / electronic format *.jpg	<b>Farmstead on Site No. 226 on the Chora plot in the Yukharina Gully</b> (Component Part No. 002)	July / 2001	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 <a href="mailto:icainfo@uts.cc.utexas.edu">icainfo@uts.cc.utexas.edu</a>	YES
35	Print / electronic format *.jpg	<b>Northern Farmstead on Site No. 227 on the Chora plot in the Yukharina Gully</b> (Component Part No. 002)	July / 2001	<i>C. Williams</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 <a href="mailto:icainfo@uts.cc.utexas.edu">icainfo@uts.cc.utexas.edu</a>	YES

36	Print / electronic format *.jpg	<b>Southern Farmstead on Site No. 227 on the Chora plot in the Yukharina Gully.</b> (Component Part No. 002)	February / 2011	<i>N. Beskorovaynaya</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
37	Print / electronic format *.jpg	<b>Farmstead on Site No. 268 and crypts on the Chora plot in the Yukharina Gully</b> (Component Part No. 002)	February / 2011	<i>N. Beskorovaynaya</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
38	Print / electronic format *.jpg	<b>Unexplored division walls and vineyard planting walls on Site No. 226 on the Chora plot in the Yukharina Gully.</b> (Component Part No. 002)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
39	Print / electronic format *.jpg	<b>The Chora plot in Berman's Gully with a farmstead.</b> Aerial photo. (Component Part No. 003)	August / 2010	<i>A. Arzhanov</i>		Arzhanov Aleksey Yurievich Stalevarov St., 12-2, app. 495 Moscow 111555 Russian Federation Sat.phone: +7-910-459-92-79 e-mail: alexar71@mail.ru	YES
40	Print / electronic format *.jpg	<b>Unexplored farmstead on Site No. 346 on the Chora plot in Berman's Gully</b> (Component Part No. 003)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
41	Print / electronic format *.jpg	<b>Defensive Tower of the Northwestern Farmstead on Site No. 347 on the Chora plot in Berman's Gully</b> (Component Part No. 003)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES



42	Print / electronic format *.jpg	<b>“Grinevich’s Farmstead” on Site No. 347 on the Chora plot in Berman’s Gully.</b> Aerial photo. (Component Part No. 003)	August / 2010	<i>A. Arzhanov</i>		Arzhanov Aleksey Yurievich Stalevarov St., 12-2, app. 495 Moscow 111555 Russian Federation Sat.phone: +7-910-459-92-79 e-mail: alexar71@mail.ru	YES
43	Print / electronic format *.jpg	<b>Fragment of a defensive wall with loopholes at “Grinevich’s Farmstead” on Site No. 347 on the Chora plot in Berman’s Gully.</b> (Component Part No. 003)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
44	Print / electronic format *.jpg	<b>Cave constructions on Site No. 347 on the Chora plot in Berman’s Gully.</b> (Component Part No. 003)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
45	Print / electronic format *.jpg	<b>Defensive tower in the Fortified Settlement on the Chora plot in Berman’s Gully.</b> (Component Part No. 003)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
46	Print / electronic format *.jpg	<b>Airview of the Balaklava Valley from the Bezymyannaya Height.</b> (Component Part No. 004)	July / 2011	<i>T. Bobrovsky</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
47	Print / electronic format *.jpg	<b>Airview of the Chersonese Chora from the Chora plot on the Bezymyannaya Height.</b> (Component Part No. 004)	July / 2011	<i>T. Bobrovsky</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES

48	Print / electronic format *.jpg	<b>The Chora plot on the Bezmyannaya Height.</b> Satellite image (Component Part No. 004)	October / 2010		Google Maps service - ©Google, 2011 - Terms of Use	c/o Google Inc. 1600 Amphitheatre Parkway Mountain View, California, 94043 USA Phone: +1 650-253-0000 Fax: +1 650-253-0001 e-mail via <a href="http://www.google.com/intl/en/contact/">http://www.google.com/intl/en/contact/</a>	YES
49	Print / electronic format *.jpg	<b>Fortification on the Chora plot on the Bezmyannaya Height</b> (Component Part No. 004)	September / 2009	<i>G. Nikolaenko</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
50	Print / electronic format *.jpg	<b>Ruins of agricultural structures on the northern slope of the Bezmyannaya Height.</b> (Component Part No. 004)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
51	Print / electronic format *.jpg	<b>The Chora plot in the Streletskaya Gully.</b> Satellite image (Component Part No. 005)	October / 2010		Google Maps service - ©Google, 2011 - Terms of Use	c/o Google Inc. 1600 Amphitheatre Parkway Mountain View, California, 94043 USA Phone: +1 650-253-0000 Fax: +1 650-253-0001 e-mail via <a href="http://www.google.com/intl/en/contact/">http://www.google.com/intl/en/contact/</a>	YES
52	Print / electronic format *.jpg	<b>Remains of vineyard planting walls on Site No. 151 on the Chora plot in the Streletskaya Gully.</b> (Component Part No. 005)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES

53	Print / electronic format *.jpg	<b>Unexplored farmstead on Site No. 175 on the Chora plot in the Streletsкая Gully.</b> (Component Part No. 005)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
54	Print / electronic format *.jpg	<b>Unexplored structure on the Chora plot in the Streletsкая Gully.</b> (Component Part No. 005)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
55	Print / electronic format *.jpg	<b>The Chora plot on the isthmus of the Mayachny Peninsula.</b> Satellite image (Component Part No. 006)	October/ 2010		Google Maps service - ©Google, 2011 - Terms of Use	c/o Google Inc. 1600 Amphitheatre Parkway Mountain View, California, 94043 USA Phone: +1 650-253-0000 Fax: +1 650-253-0001 e-mail via <a href="http://www.google.com/intl/en/contact/">http://www.google.com/intl/en/contact/</a>	YES
56	Print / electronic format *.jpg	<b>Fragment of the Southeastern Defensive Wall on the Chora plot on the isthmus of the Mayachny Peninsula.</b> (Component Part No. 006)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
57	Print / electronic format *.jpg	<b>Remains of division walls and vineyard planting walls in the northwestern part of the Chora plot on the isthmus of the Mayachny Peninsula.</b> (Component Part No. 006)	July / 2011	<i>T. Bobrovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
58	Print / electronic format *.jpg	<b>Terrace housing on the isthmus on the Chora plot on the isthmus of the Mayachny Peninsula.</b> (Component Part No. 006)	July / 2011	<i>A. Petrokovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES

59	Print / electronic format *.jpg	<b>Hellenistic religious worship complex and winery on the Chora plot on the isthmus of the Mayachny Peninsula.</b> (Component Part No. 006)	August / 2010	<i>A. Petrokovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
60	Print / electronic format *.jpg	<b>Islet in Kazachya Bay.</b> (Component Part No. 006)	August / 2004	<i>A. Petrokovskiy</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
61	Print / electronic format *.jpg	<b>Medieval Cave Monastery on the Chora plot on Cape Vinogradny</b> (Component Part No. 007)	August / 2010	<i>T. Yashaeva</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
62	Print / electronic format *.jpg	<b>Cave Church of the Monastery on the Chora plot on Cape Vinogradny</b> (Component Part No. 007)	August / 2009	<i>T. Yashaeva</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
63	Print / electronic format *.jpg	<b>Utility structures of the Monastery on the Chora plot on Cape Vinogradny</b> (Component Part No. 007)	September / 2010	<i>T. Yashaeva</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
64	Print / electronic format *.jpg	<b>Ground-based Church on the Chora plot on Cape Vinogradny</b> (Component Part No. 007)	July / 2011	<i>R. Smirnov</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
65	Print / electronic format *.jpg	<b>Countryside church in the Southern Necropolis near the the Ancient city of Tauric Chersonese</b>	May / 2003	<i>G. Mack</i>	The Institute of Classical Archaeology — The University of Texas at Austin	ICA 3925 West Braker Lane, Austin, Texas 78759 p: 1-512-232-9321 22 f: 1-512-232-9324 icainfo@uts.cc.utexas.edu	YES

66	Print / electronic format *.jpg	<b>Southern Necropolis near the Ancient city of Tauric Chersonese.</b> Airview.	August / 2004	<i>V. Filippov</i>	-	Filippov Vadim Anatolievich 50 let Octjabrya ul., 26-46 Tyumen 625006 Russian Federation, Phone +79044900157 e-mail: filippov- vadim@yandex.ru	YES
67	Print / electronic format *.jpg	<b>View of St. Vladimir's Monastery in Chersonese</b> <i>(Component Part No. 001)</i>	Early 20th century.	<i>From the Archival Glass Plate Negative Collection</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES
68	Print / electronic format *.jpg	<b>The house of old Chersonese museum - "Warehous of Local Antiquities"</b> <i>(Component Part No. 001)</i>	Early 20th century.	<i>From the Archival Glass Plate Negative Collection</i>	Tauric Chersonese National Preserve	1 Drevnyaya St., Sevastopol, Ukraine, 99045 p./f. +38 (0692)55-02-78 info@chersonesos.org	YES

### **7b. Texts related to protective designation:**

i) Comprehensive Programme for Archeological Investigation of the Complex National Archeological Heritage Property ‘Ancient City of Tauric Chersonese’ adopted by Order No. 90/0/16-10 of the Ministry of Culture of 26 February 2010.

ii) Comprehensive Programme for Conservation and Restoration at the Complex National Archeological Heritage Property ‘Ancient City of Tauric Chersonese’ adopted by Order No. 90/0/16-10 of the Ministry of Culture of 26 February 2010.

iii) Territory Organization Plan for Tauric Chersonese National Preserve: Boundaries and Land Use Regimes of the National Archaeological Heritage Property ‘Ancient City of Tauric Chersonese’ adopted by Order No. 220/0/16-11 of the Ministry of Culture of 6 April 2011.

iv) Contract No. 11-5846/09 of 6 February 2009 with the Department of the State Security Service under the Ministry of the Interior of Ukraine in Sevastopol for Ensuring Security and Protection of Tauric Chersonese National Preserve Properties on the Basis of Physical Security Posts.

v) Contract No. 12- 3669/09 of 20 March 2009 with the Department of the State Security Service under the Ministry of the Interior of Ukraine in Sevastopol for Surveillance and Urgent Responding to Security Alarm Calls.

### **7c. Form and date of most recent records of the property:**

i) Nomination Dossier for the Property ‘Ancient City of Tauric Chersonese and its Chora (5th century BC – 14th century AD)’, January 2012.

ii) Management Plan for the Property ‘Ancient City of Tauric Chersonese and its Chora (5th century BC – 14th century AD)’ (provisional), January 2012.

### **7d. Addresses where inventory, records and archives are held:**

i) Academic Archive of Tauric Chersonese National Preserve, Sevastopol, Ukraine;

ii) Academic Archive of the Institute of Archaeology under the National Academy of Sciences of Ukraine, Kiev, Ukraine;

- iii) Academic Archive of the Crimean Branch of the Institute of Archaeology under the National Academy of Sciences of Ukraine, Simferopol, Ukraine;
- iv) State Archive of the City of Sevastopol, Sevastopol, Ukraine;
- v) State Archive of the Odessa Region, Odessa, Ukraine;
- vi) Academic Archive of the Institute of Archaeology under the Russian Academy of Sciences, Moscow, Russian Federation;
- vii) Academic Archive of the Institute of Material Culture under the Russian Academy of Sciences, St. Petersburg, Russian Federation;
- viii) State Hermitage, St. Petersburg, Russian Federation;
- ix) State Historical Museum, Moscow, Russian Federation;
- x) Military Historical Museum of Artillery, Engineers and Signal Corps, St. Petersburg, Russian Federation.

### **7e. Bibliography:**

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**Ascherson N.** CHERSONESOS: PUBLIC ARCHAEOLOGY ON THE BLACK SEA COAST // Archaeology International. – London: Institute of Archaeology, 2002. – P. 54- 56

**Bujkisch A.** DIE ANTIKEN ARCHITEKTURFORMEN IM NÖRDLICHEN SCHWARZMEERGEBIET // ARCHÄOLOGISCHE FORSCHUNGEN. Band 26: Herkunft und Entwicklung / Deutsches Archäologisches Institut. - Wiesbaden: Dr. Ludwig Reichert Verlag, 2010. - 160 S.+ tafeln (1-170), farbtafeln (1-4)

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## **8. CONTACT INFORMATION OF RESPONSIBLE AUTHORITIES:**

Director of the Tauric Chersonese National Preserve:

Tel/fax: +3 8 0692 55 02 78, e-mail: [director@chersonesos.org](mailto:director@chersonesos.org)

### **8a. Preparer:**

*Larysa Sedikova*, Tauric Chersonese National Preserve, Deputy Director, PhD

Tel/fax: +3 8 0692 55 02 78, e-mail: [sedikova7@yahoo.com](mailto:sedikova7@yahoo.com)

*Timur Bobrovsky*, Institute of Monument Protection Research, Deputy Director, PhD

Tel/fax: +380442885443, e-mail: [bobrovskij@ukr.net](mailto:bobrovskij@ukr.net)

### **8b. Official local institution:**

Tauric Chersonese National Preserve:

1 Drevnyaya St., 99045 Sevastopol, Ukraine

tel/fax: +380692550278, e-mail: [info@chersonesos.org](mailto:info@chersonesos.org)

### **8c. Other local institutions:**

Cultural Heritage Protection Section of the Culture Department of the Sevastopol City State Administration

58 Sovetskaya St., Sevastopol 99011, Ukraine

### **8d. Official web address:**

<http://chersonesos.org>

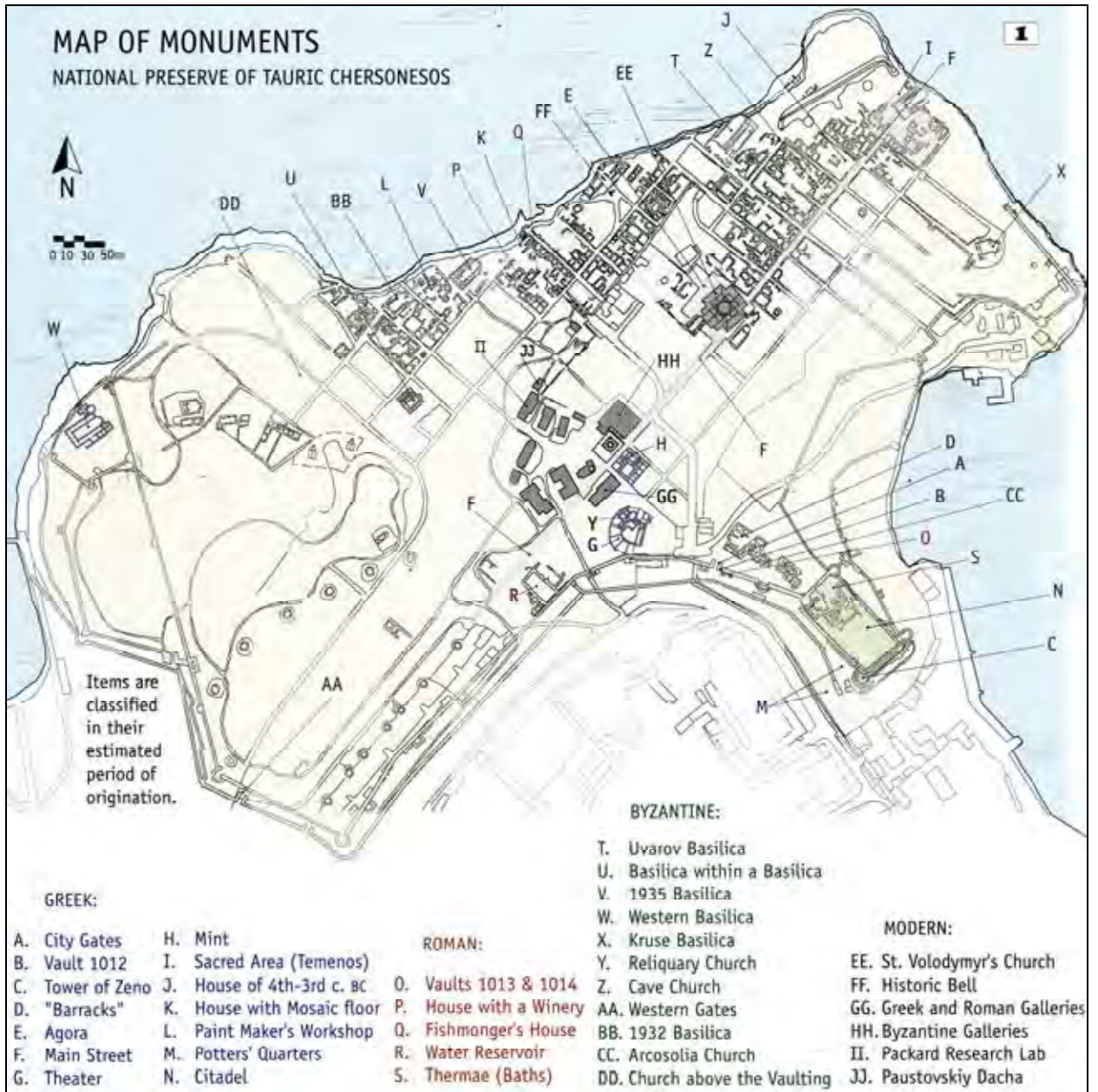
## **9. SIGNATURE OF BEHALF OF THE STATE PARTY TO THE CONVENTION:**

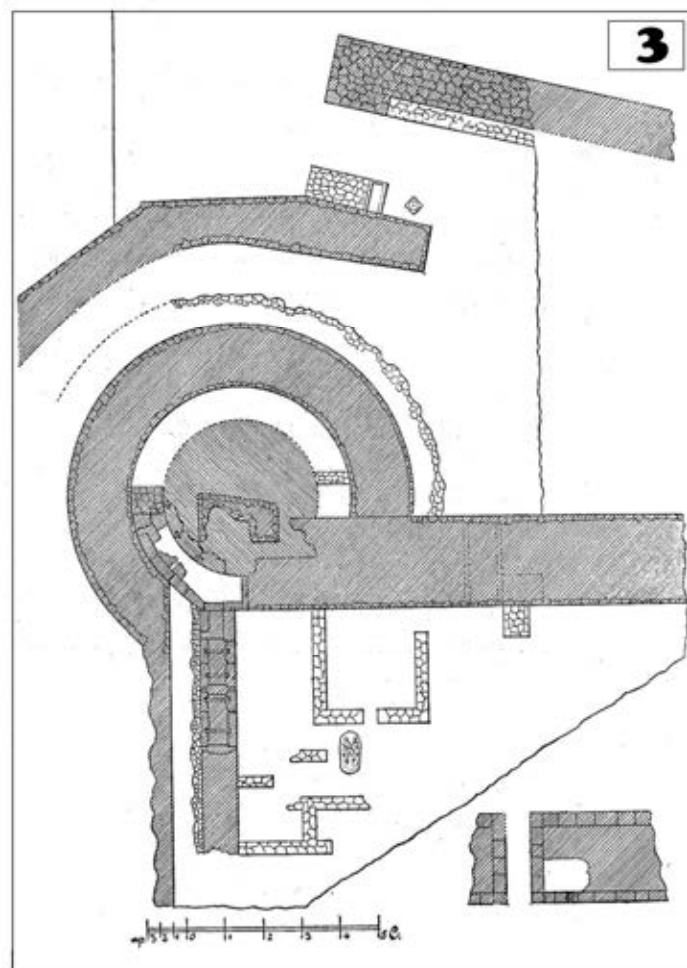
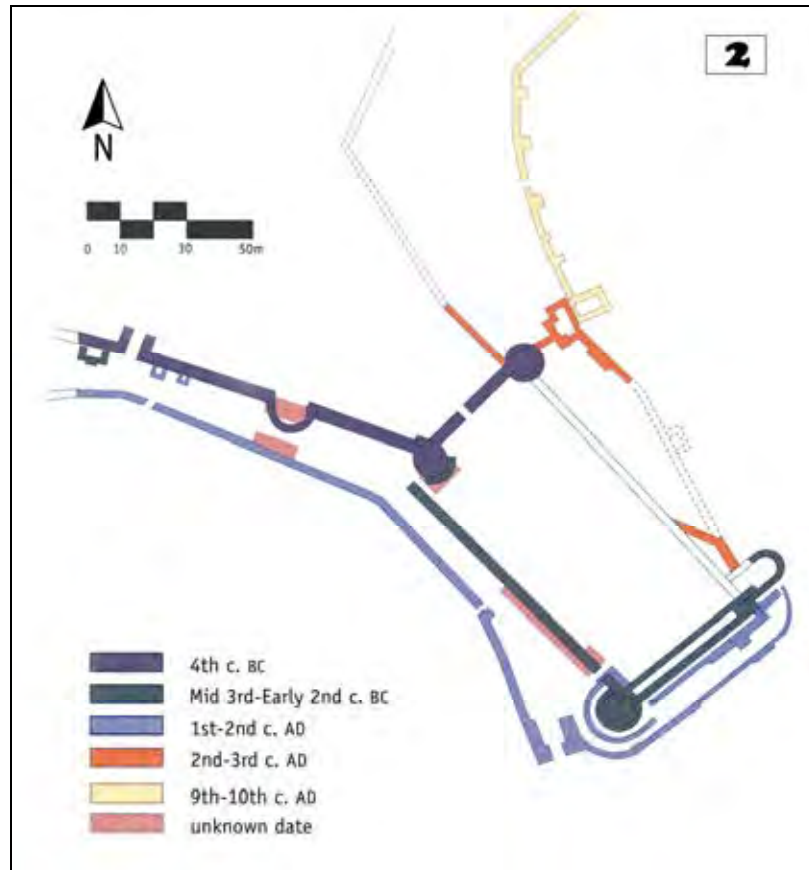
Minister of Culture of Ukraine

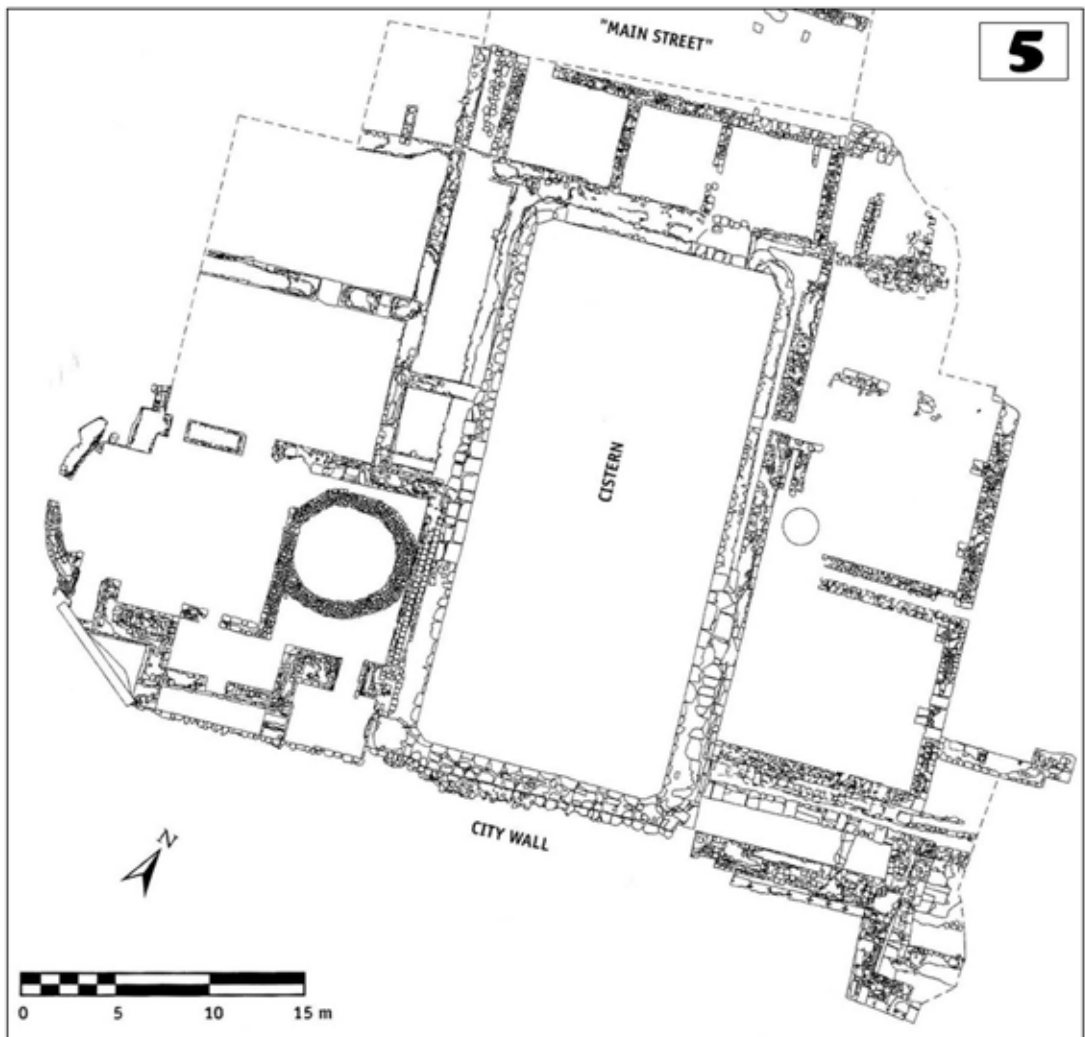
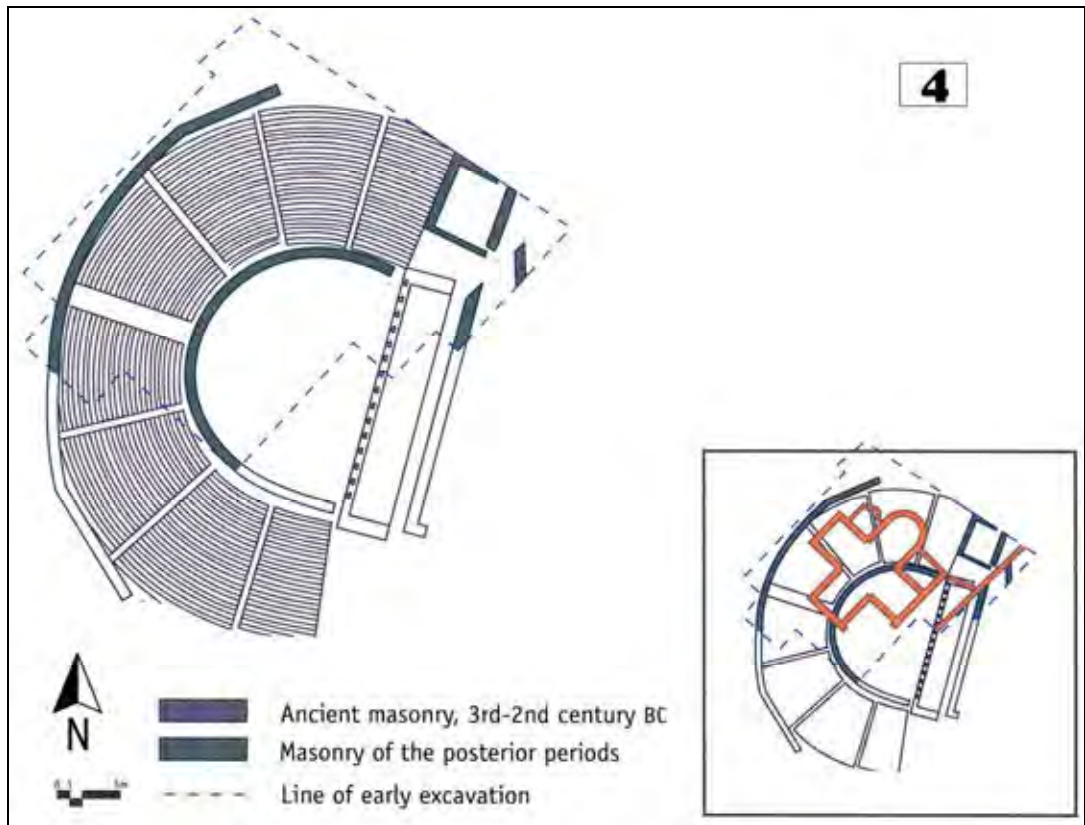
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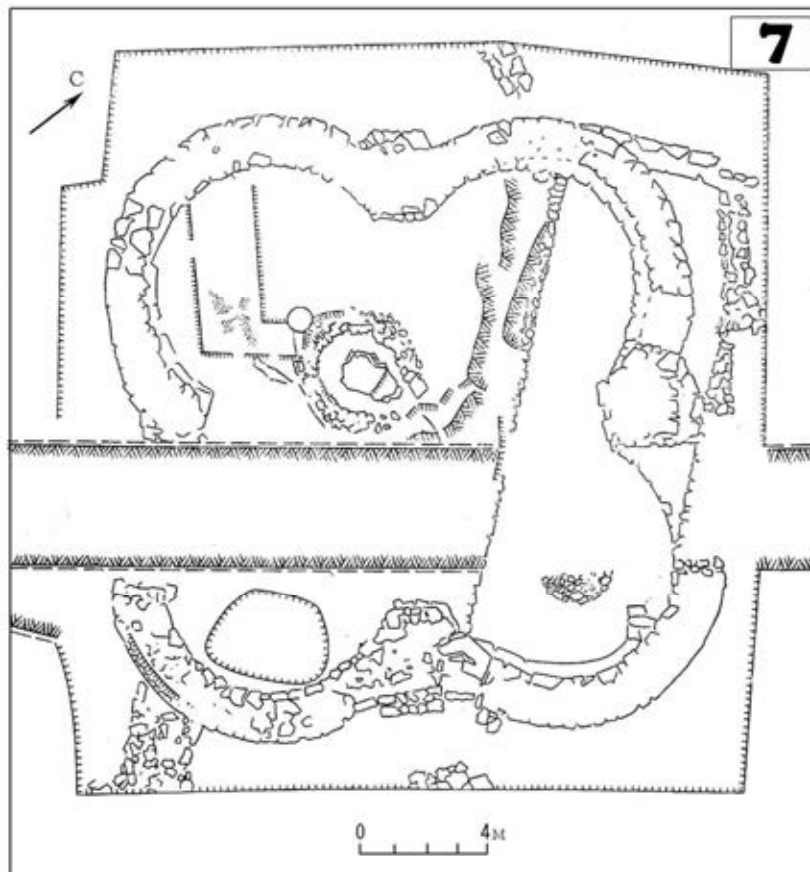
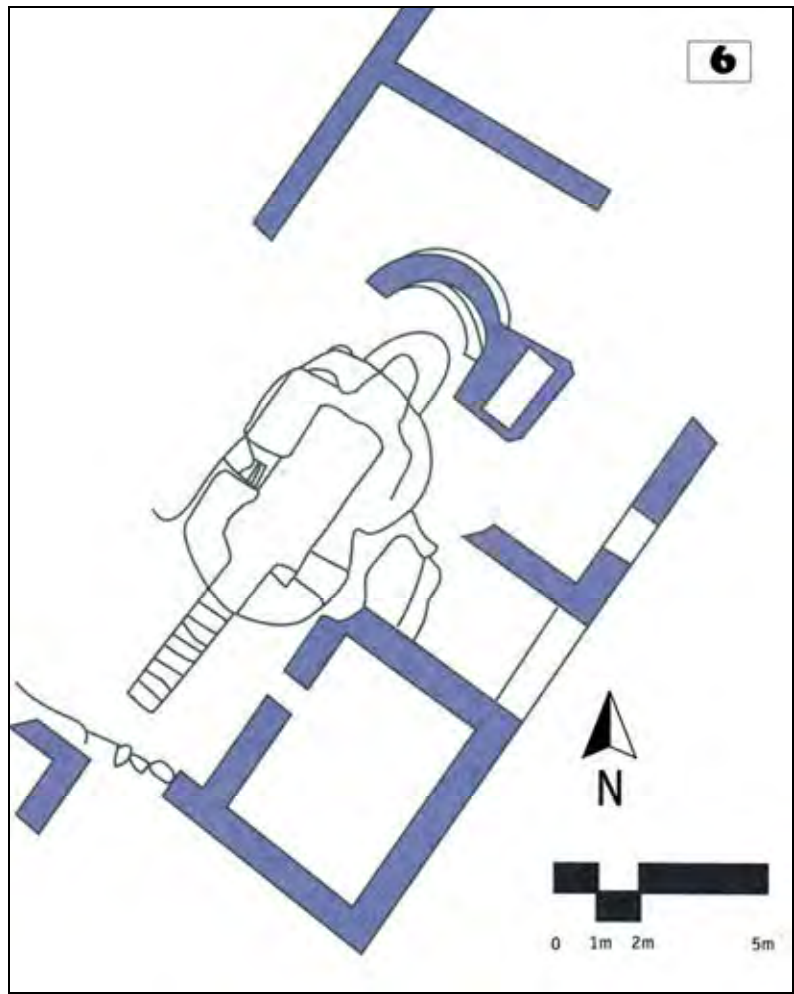
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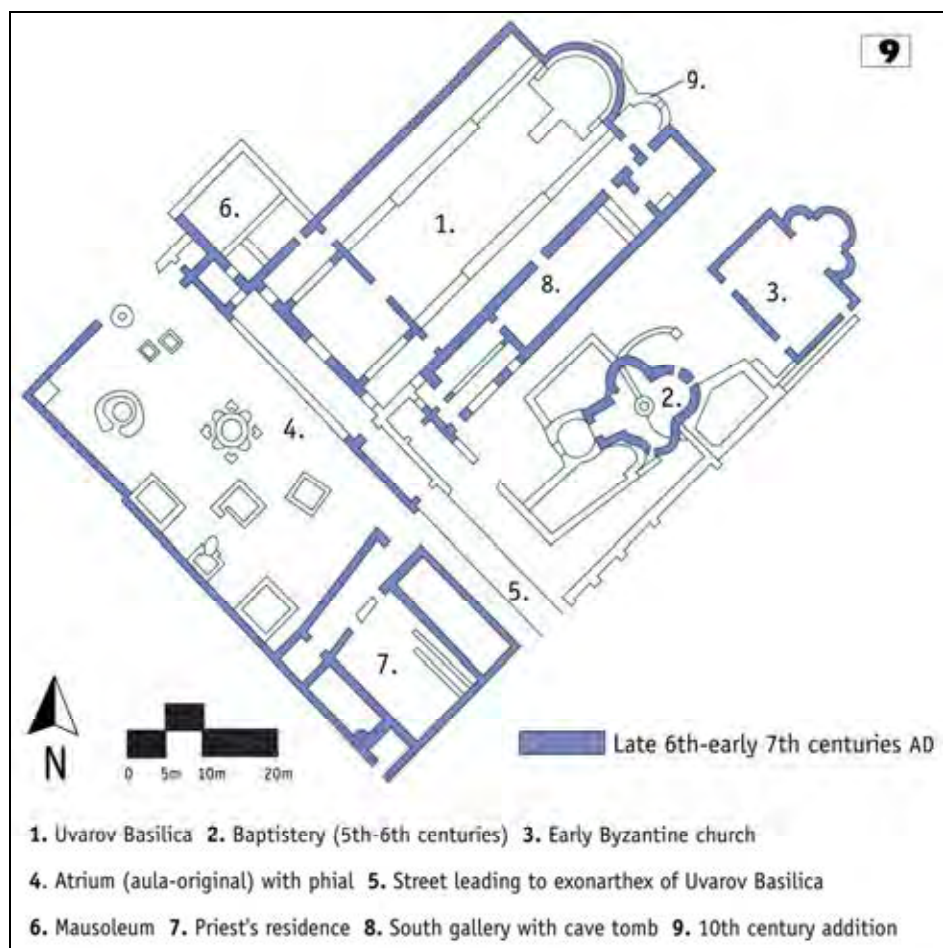
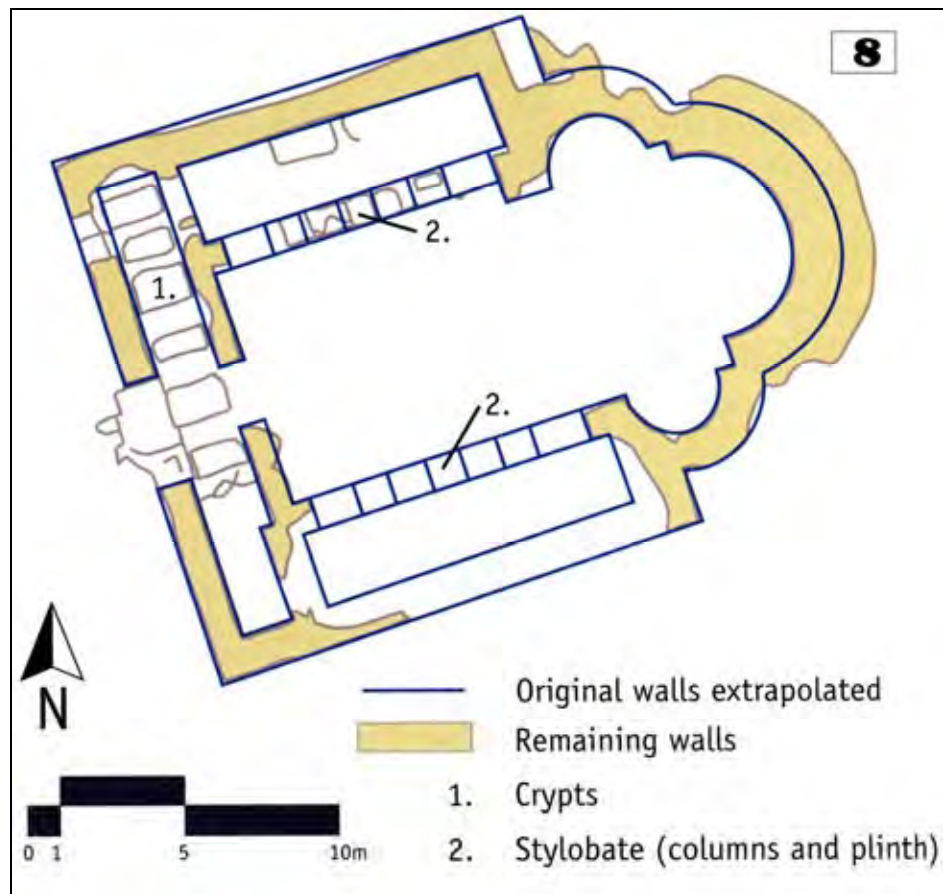
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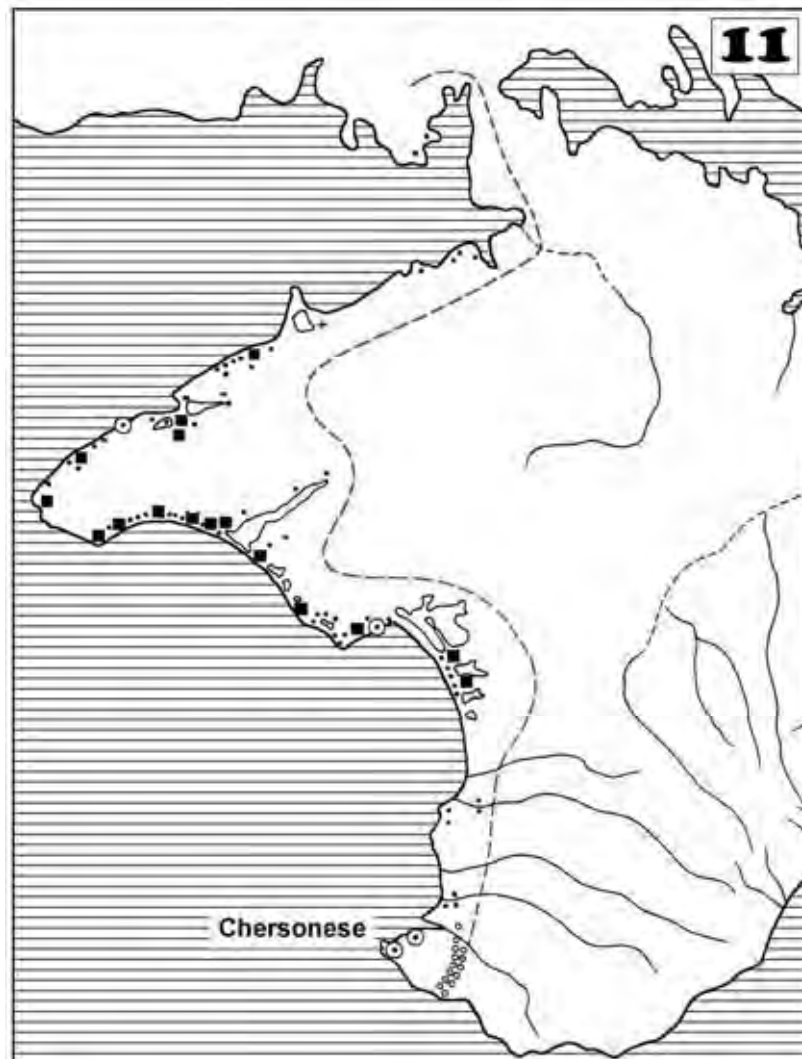
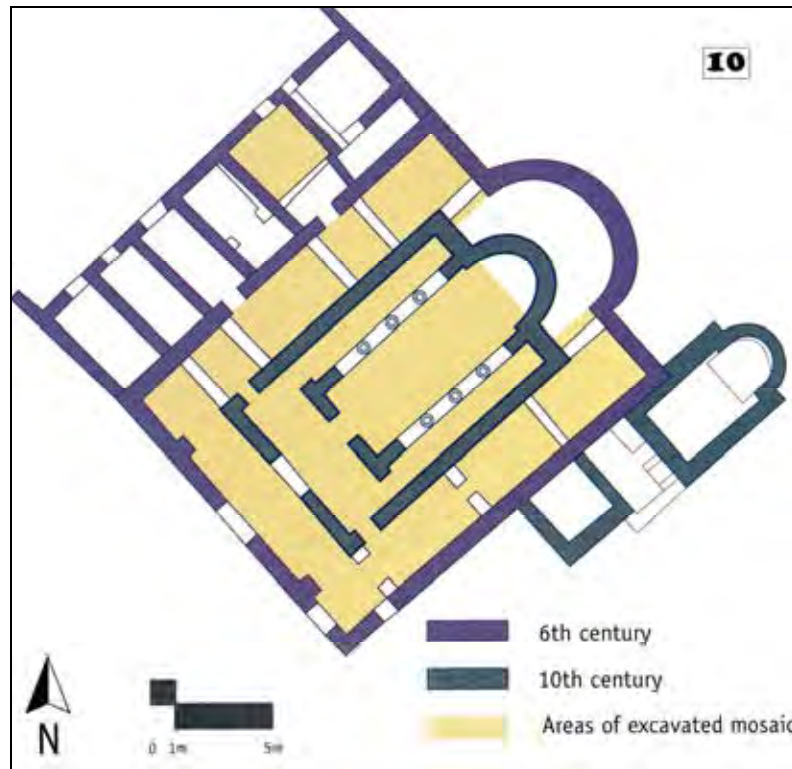








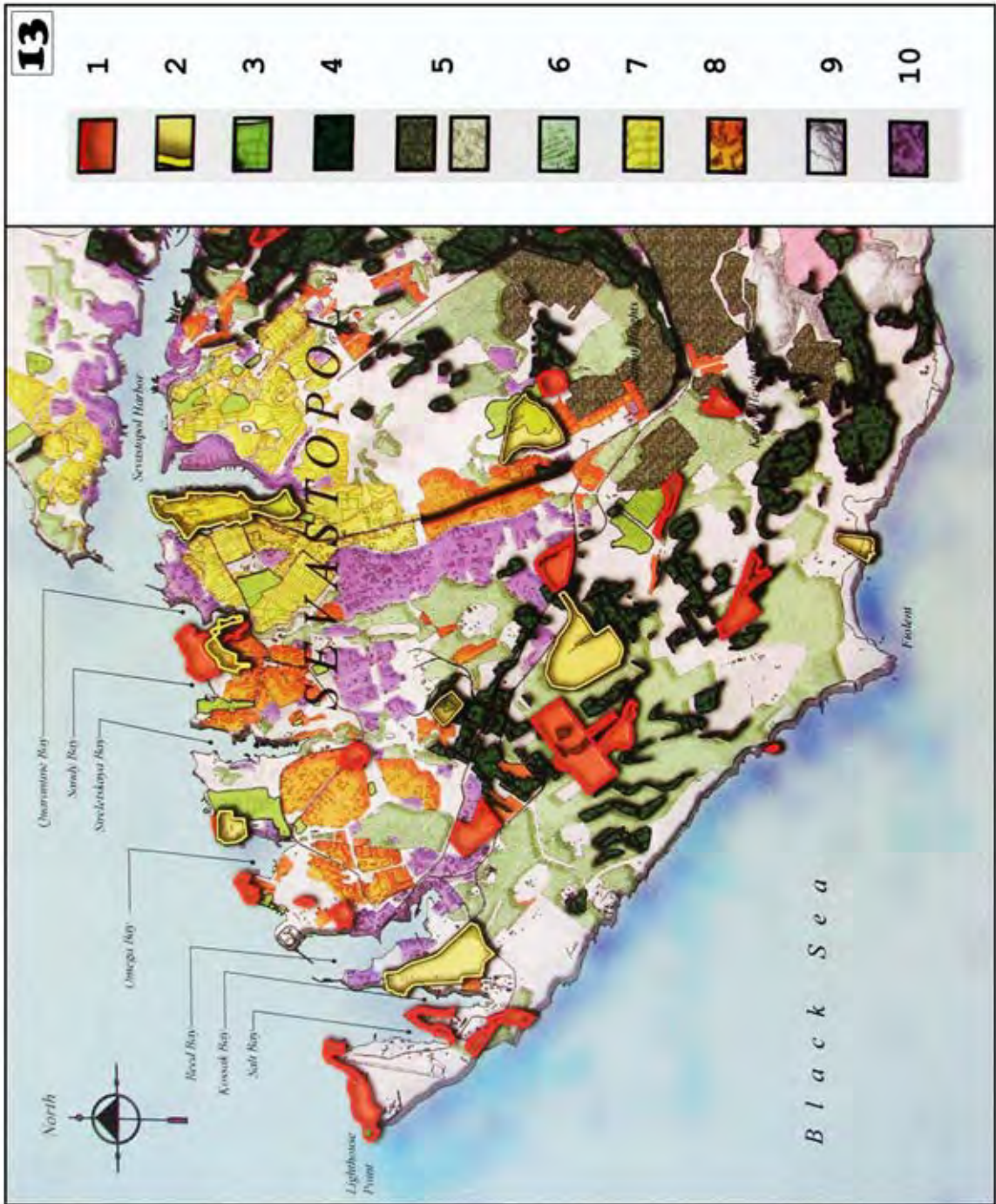


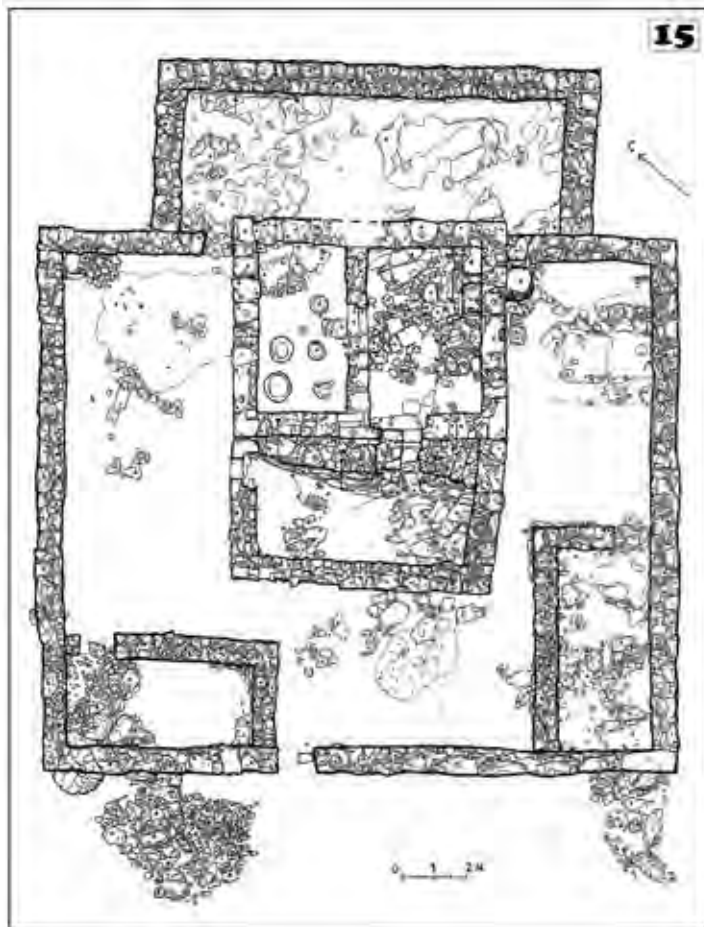
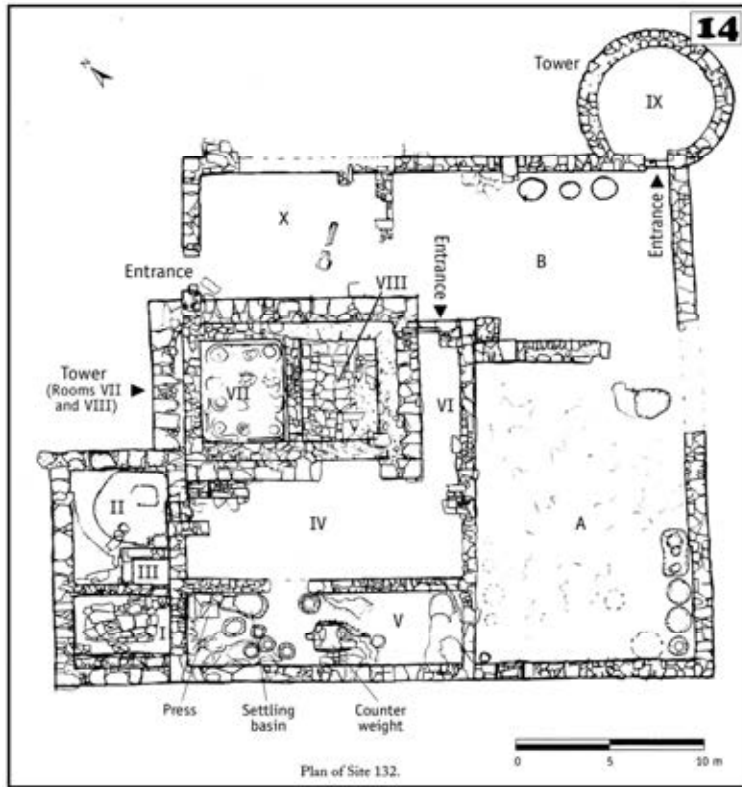


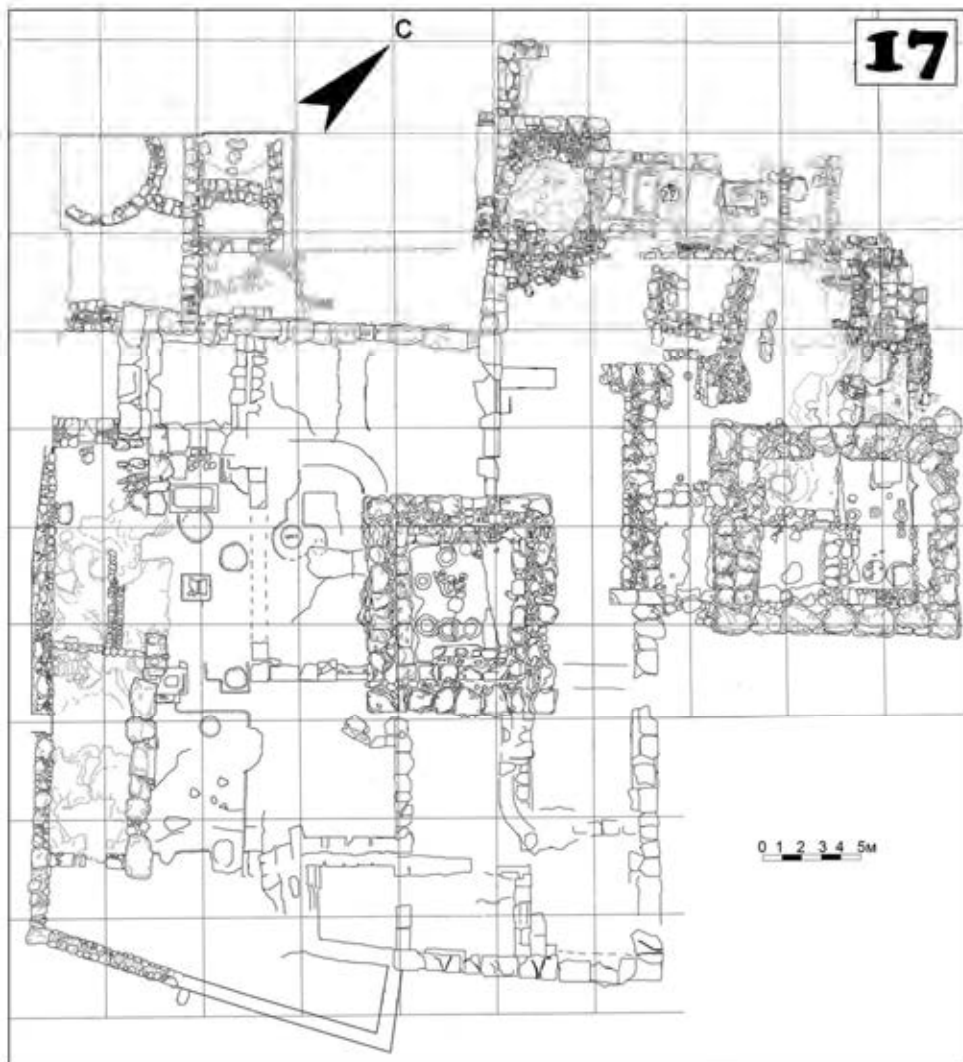
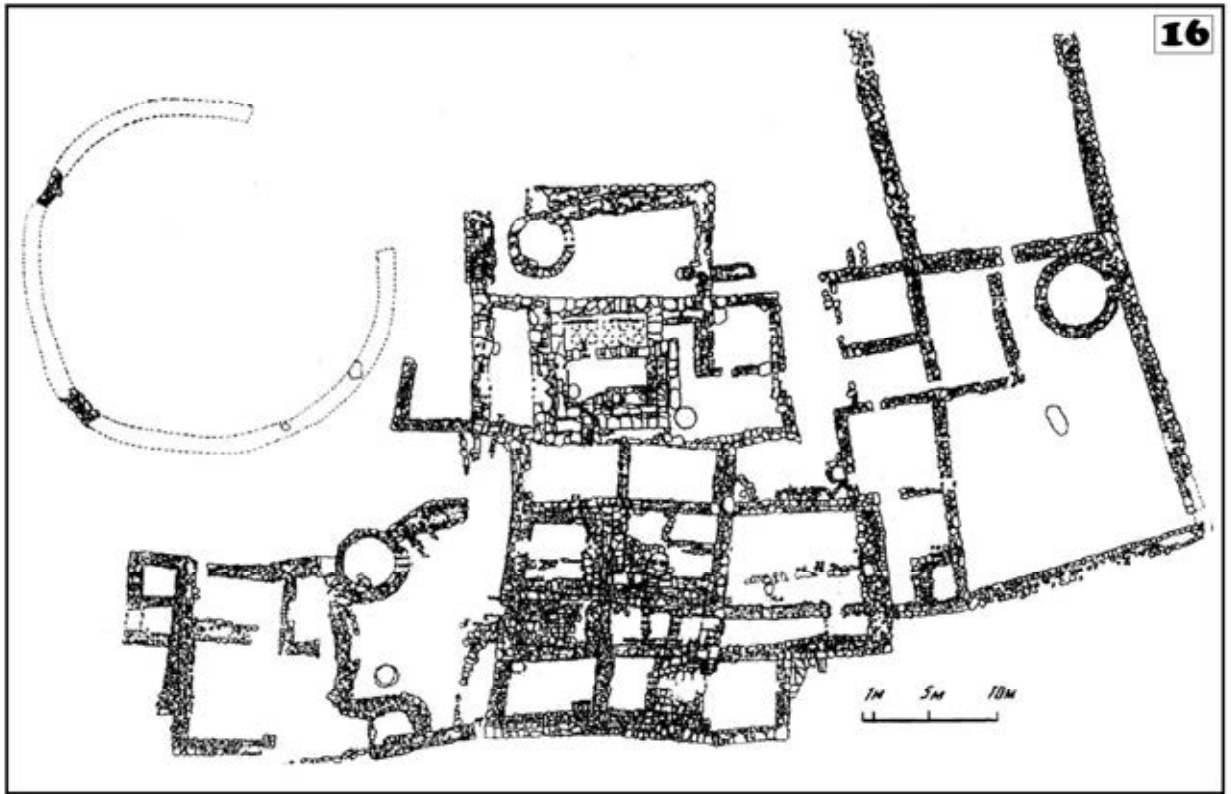
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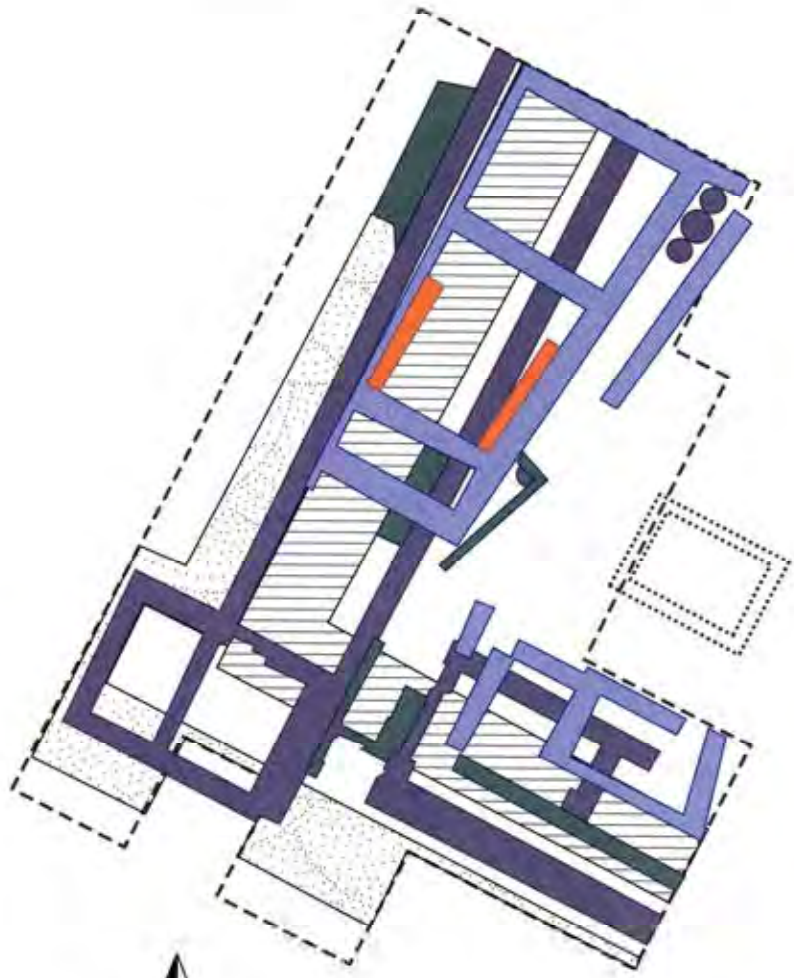




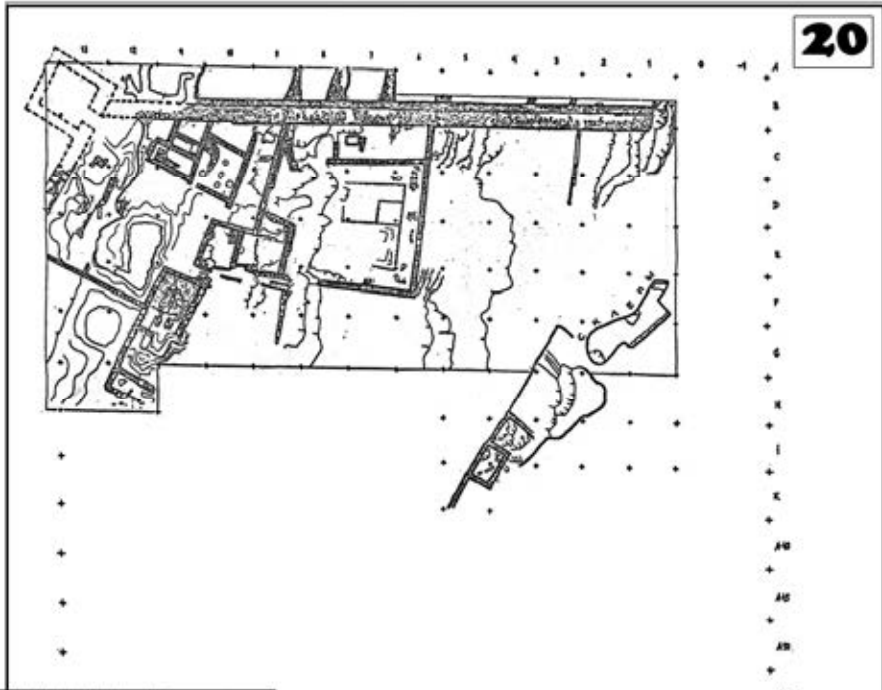




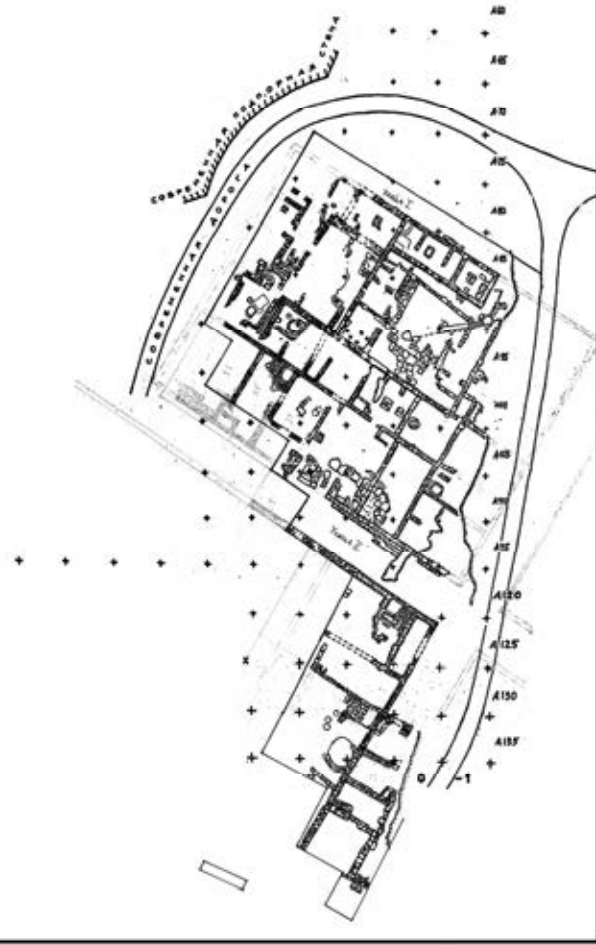
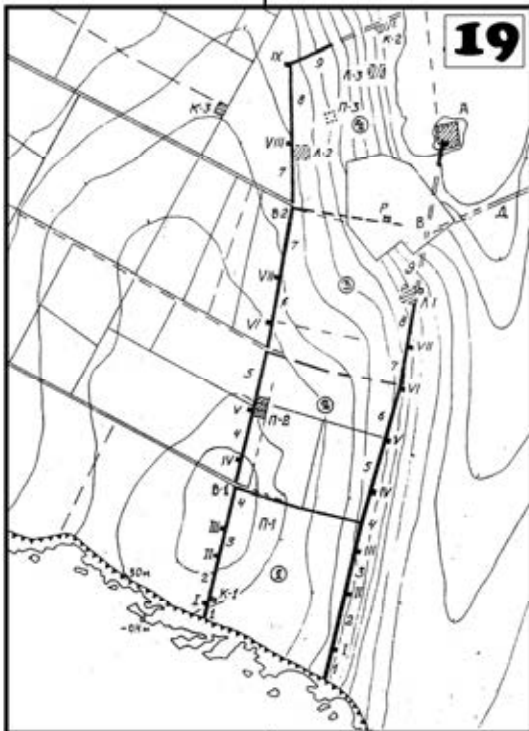
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-  Crimean War Berm
-  Hellenistic period
-  Roman period
-  Late Roman/Byzantine
-  Byzantine
-  Excavation area (2000)
-  unknown period



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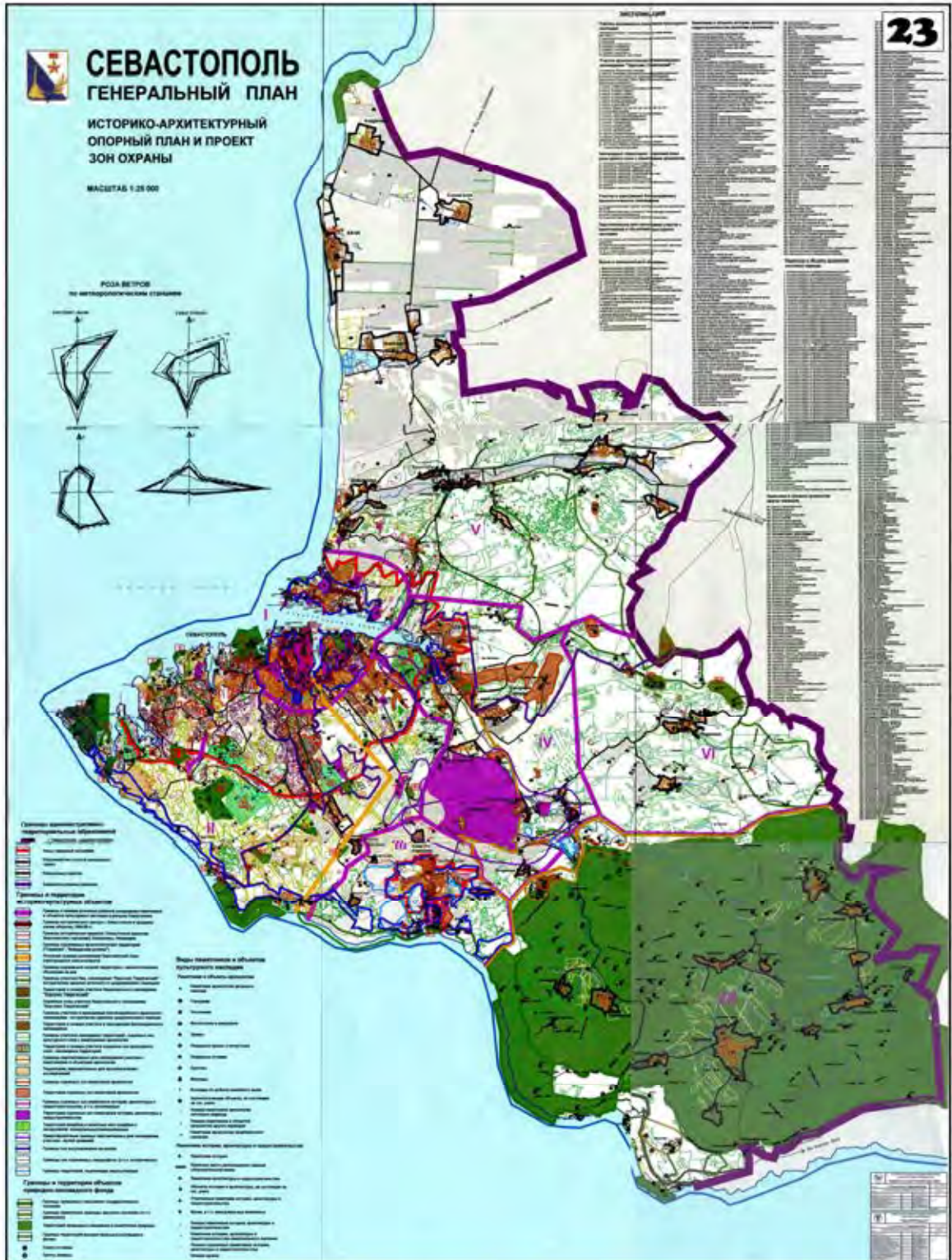


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*Photos:*









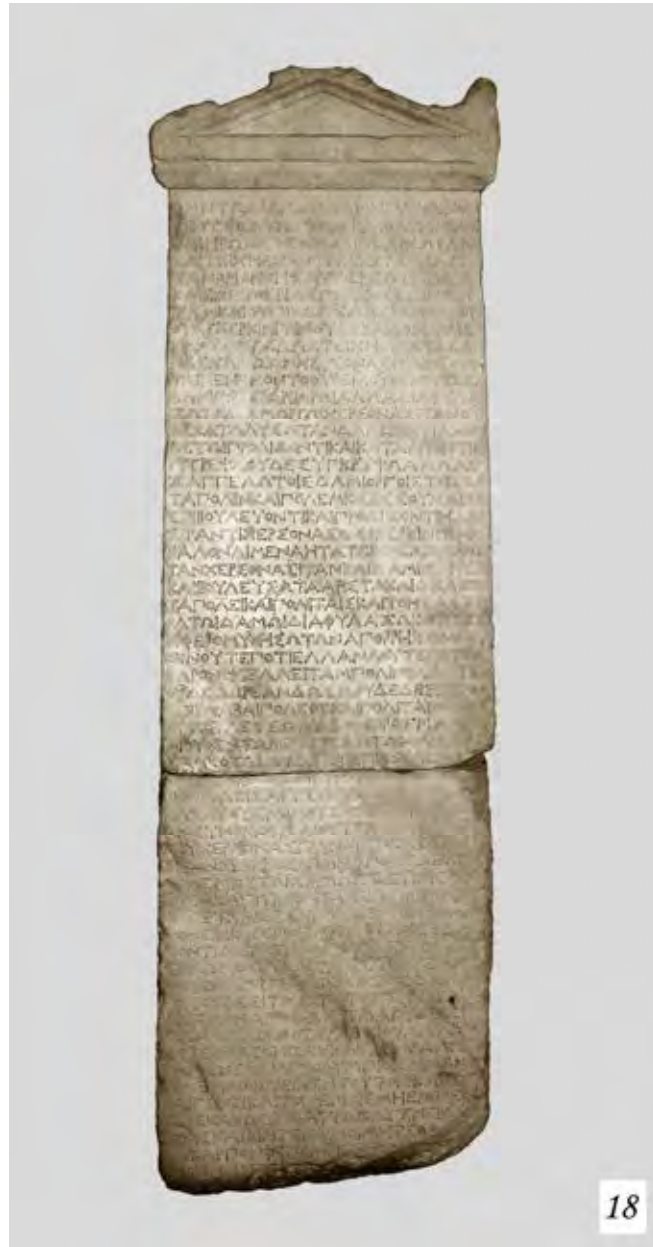






































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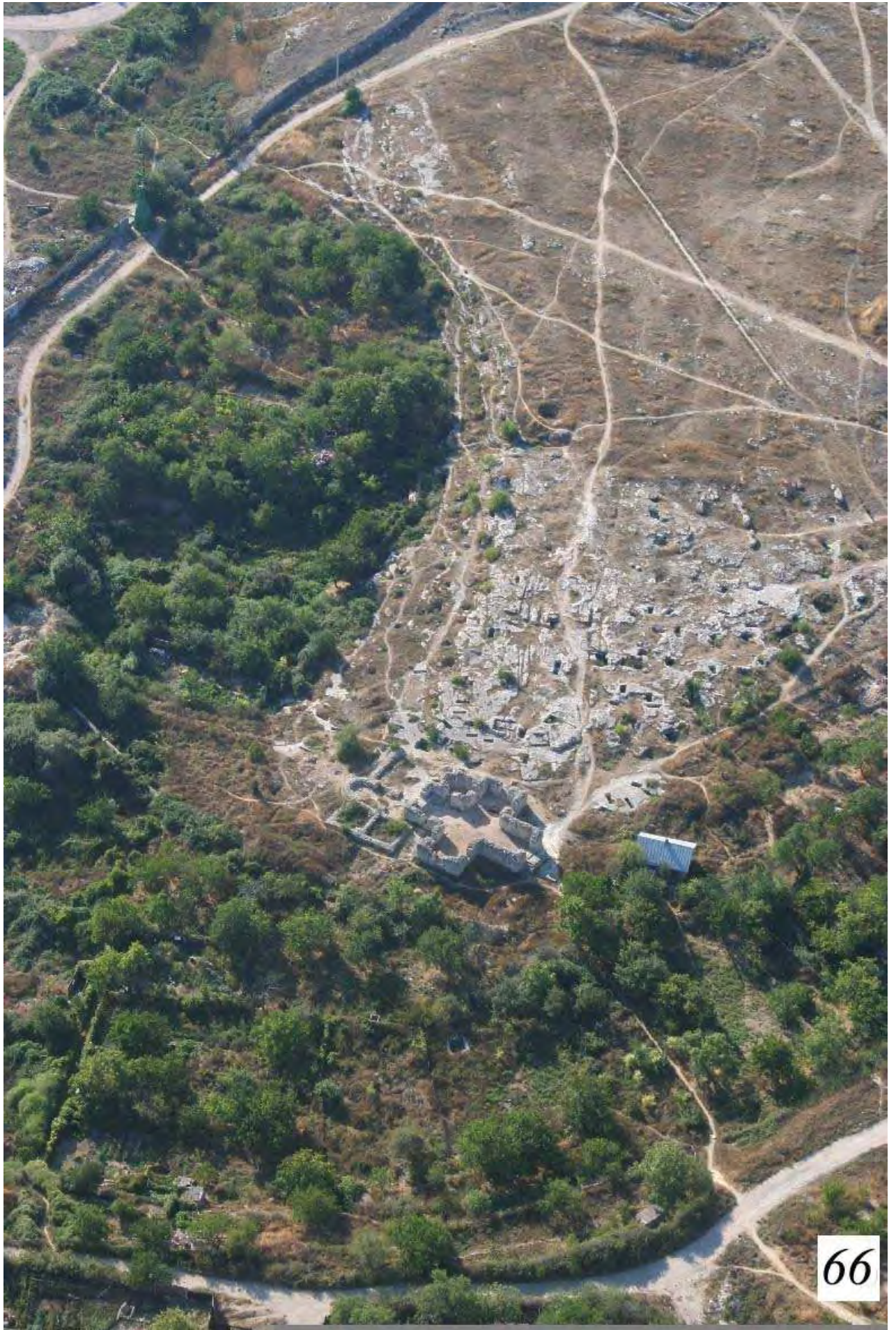












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**Ministry of Culture of Ukraine  
National Commission of Ukraine for UNESCO  
Tauric Chersonese National Preserve  
Institute of Monument Protection Research**

**Management Plan  
for the Cultural Property**

**Ancient City of Tauric Chersonese and its Chora  
(5<sup>th</sup> century BC – 14<sup>th</sup> century AD)**



Sevastopol – 2011

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## 1. INTRODUCTION

This Management Plan for the property 'Ancient city of Tauric Chersonese and its Chora' is a provisional document only. A more comprehensive document, the Territory Organization Plan for the Tauric Chersonese National Preserve, has been under development since 2010, as required by Article 33 of the Law of Ukraine on Cultural Heritage Protection. In accordance with the said article, historical and cultural preserves' territory organization plans are to contain projects related to research, protection, preservation, maintenance and exploitation of the cultural heritage managed by the administrations of these preserves.

Accordingly, the Territory Organization Plan for the Tauric Chersonese National Preserve will include a number of measures for legal and factual protection of the monuments and protected areas administered by the Preserve (some of such measures have already been approved and implemented), action programmes aimed at effective research, conservation, monitoring and display of the ancient structures of the city of Chersonese and its chora as well as functional zoning of the areas administered by the Preserve with appropriate account taken of the steadily growing number of visitors (both tourists and pilgrims) to the Preserve.

The Territory Organization Plan for the Tauric Chersonese National Preserve is expected to be finalized and adopted between 2012 and early 2013. All the relevant amendments will then be introduced into this Management Plan, which has been developed for the property 'Ancient city of Tauric Chersonese and its Chora' as a potential World Heritage site and covers only some of all the sites and monuments administered by the Tauric Chersonese National Preserve.

### 1.1. General description of the property

The ancient city of Tauric Chersonese and its chora lie on the Heracleian Peninsula (southwestern extremity of the Crimean Peninsula) within the boundaries of the present-day city of Sevastopol (Ukraine) (Fig. 1).

The property is basically the remains of the ancient complex of urban and agricultural structures which emerged in the 5<sup>th</sup> and 6<sup>th</sup> centuries BC as a result of ancient Greek colonization of the Northern Black Sea region and existed up till the 14<sup>th</sup> century AD. Since there was no development in the city of Chersonese and in most of its agricultural chora in later epochs, their ancient monuments covering a period from Hellenism to late Middle Ages show a high degree of preservation.

At the moment, the property consists of 7 component parts, totalling 267,4848 ha, with extant buildings and demarcation structures dated to the ancient and medieval periods, namely (Fig. 2):

- Component part № 001 of the city of Tauric Chersonese,
- Component part № 002 in the Yukharina Gully,
- Component part № 003 in Berman's Gully,
- Component part № 004 on the Bezymyannaya Height,
- Component part № 005 in the Streletskaya Gully,

- Component part № 006 on the isthmus of the Mayachny Peninsula,
- Component part № 007 on Cape Vinogradny.

All the areas listed above, together with the monuments lying within their boundaries, are managed centrally by the Tauric Chersonese National Preserve, which reports to the Ministry of Culture of Ukraine.

In the future, the property the Ancient City of Tauric Chersonese and its Chora is projected to be expanded by obtaining protected status for some other sites in the Chersonese chora and having them placed under the control of the National Preserve to be subsequently developed as an archaeological park, the first of its kind in Ukraine.

## **1.2. Sources and foundations**

In 1996 the property the Ancient City of Tauric Chersonese and its Chora, then under the name of the 'Ruins of the Ancient City of Tauric Chersonese', was inscribed on the World Heritage Tentative List in accordance with Paragraph 62 of the 1972 UNESCO World Heritage Convention. However, as in the process of preparing the property nomination the Chersonese chora (agricultural hinterland of the ancient city) was rediscovered as a highly valuable subproperty, the nominated property was redefined.

The present management plan is appended to the nomination dossier for the property as its indispensable part. The plan has been developed in accordance with the requirements specified in the *Operational Guidelines for the Implementation of the World Heritage Convention* (Section II.F Protection and Management) substantiating the necessity for efficient management of all kinds of World Heritage properties and takes into account the principles set out in the *Management Guidelines for World Cultural Heritage Sites* by B. M. Feilden and J. Jokilehto published in 2008 by ICCROM on behalf of UNESCO and ICOMOS. The plan complies with the relevant Ukrainian legislative regulations as well as the principal provisions of all the national and international regulations regarding protection and exploitation of cultural heritage sites.

This management plan is based on an earlier document drawn up in 2006 by Prof. H. Cleere and T. Bushnell on the initiative of the Institute of Classical Archaeology at the University of Texas in Austin (USA) and a number of recommendations made by independent experts such as Prof. B. von Droste, Dr R. Schmidt, Dr A. Rabinovitz etc, who were really helpful in providing assistance in identifying challenges facing the property and suggesting appropriate solutions.

Currently, management of the cultural heritage at the Tauric Chersonese National Preserve is regulated by the following state and ministerial acts:

- Decree No. 587/94 of the President of Ukraine on National Cultural Institutions (dated 11 October 1994);
- Statutes of the Tauric Chersonese National Preserve (adopted by the Order No. 917/0/16-08 of the Ministry of Culture and Tourism of Ukraine of 18 August 2008);

- Comprehensive Programme for Archeological Investigation of the Complex National Archeological Heritage Property ‘Ancient City of Tauric Chersonese’ (adopted by Order No. 90/0/16-10 of the Ministry of Culture dated 26 February 2010);

- Comprehensive Programme for Conservation and Restoration at the Complex National Archeological Heritage Property ‘Ancient City of Tauric Chersonese’ (adopted by Order No. 90/0/16-10 of the Ministry of Culture dated 26 February 2010);

- Territory Organization Plan for the Tauric Chersonese National Preserve: Boundaries and Land Use Regimes of the National Archaeological Heritage Property ‘Ancient City of Tauric Chersonese’ (adopted by Order No. 220/0/16-11 of the Ministry of Culture dated 6 April 2011).

In addition to that, a number of projects, programmes and proposals have been developed and are currently under consideration for adoption by the Ministry of Culture of Ukraine. These include:

- Territory Organization Plan for the Tauric Chersonese National Preserve: Schemes of Zoning, Access Ways and Visitation Routes;

- Project of Boundaries and Land Use Regimes for the Buffer Zones of the Cultural Property ‘Ancient City of Tauric Chersonese and its Chora’;

- Concept State Development Programme for the Tauric Chersonese National Preserve until 2015;

- Comprehensive Programme for Archeological Investigation, Restoration and Conservation on the Chora Plots on the Heracleian Peninsula in Sevastopol;

- Concept for Creation of an Archaeological Park in the City of Sevastopol on the Sites Located within the Tauric Chersonese National Preserve Sites.

Final versions of all the sections of the Territory Organization Plan for the Tauric Chersonese National Preserve with detailed solutions to the challenges set out in this management plan should be developed in 2012 – 2013.

### **1.3. Goals and objectives of the management plan**

Management and planning of a cultural heritage property should be valued. In other words, management is to ensure preservation and interpretation of those aspects of cultural heritage – archaeological, historic, architectural, cultural, aesthetic, patriotic etc – which make up its value and for which the property is protected and made accessible, both physically and intellectually, to national and foreign visitors.

In terms of practical management, the basic objectives of the management plan are (according to B.M. Feilden and J. Jokilehto):

- a. Ensuring *statutory protection* of the sites at national, regional and municipal levels as well as integration of their interests into state and municipal development programmes, tourism programmes etc;

- b. Creating and ensuring the operability of an overall integrated *management structure* from national down to individual site level;
- c. *Coordinating the activities* of all the stakeholders;
- d. Establishing an *advisory body* for further research, conservation and popularization of cultural heritage sites, using international expertise where appropriate;
- e. Making full use of the cultural heritage sites for *education and recreation*;
- f. Identifying sources and amounts of financing and establishing an accounting procedure;
- g. Ensuring monument protection and making provisions to resist and counteract any clandestine excavations, illicit construction, improper use of the sites etc;
- h. Regular review and updating of the management plan.

In addition to that, the objectives of the management plan include development of mechanisms for effective integration and coordination of the principal provisions and regulations of all the aforementioned state and ministerial acts concerning the protection and exploitation of the nominated property with maximum account taken of all the general and specific challenges facing the property.

To achieve the aforementioned objectives, the current state of the property is to be thoroughly analyzed, and all the risks, challenges and key factors relevant to strategic planning and subsequent monitoring are to be identified. The current state of the property, challenges related to its protection, management and exploitation as well as solutions proposed to overcome these challenges are described in the following sections of this management plan.

## **2. CURRENT STATE OF THE PROPERTY AND FACTORS AFFECTING ITS PRESERVATION AND ACCESSIBILITY**

### **2.1. Current state of the property**

The property the Ancient City of Tauric Chersonese and its Chora consists of 7 protected areas located on the Heracleian Peninsula in the present-day city of Sevastopol and totaling over 10 000 ha (Fig. 3). All these land plots contain remains of ancient structures and intact archeological landscape and are free of any modern construction. The plots are managed by the Tauric Chersonese National Preserve responsible for their physical protection and proper exploitation with due respect for their value as protected areas.

#### **2.1.1. Component part № 001. Ancient city of Tauric Chersonese (Fig. 4)**

The area lies on a cape between Quarantinnaya and Pesochneya Bays and is surrounded by modern urban constructions. The site measures around 42 ha.

The ancient city is basically the remains of the Tauric Chersonese, which existed uninterruptedly for over 2000 years – from the 5<sup>th</sup> century BC until the 14<sup>th</sup> century AD. After the decline and desolation of the city its area was for many

centuries out of use. It was only in the 19<sup>th</sup> and early 20<sup>th</sup> centuries that part of it was placed under the control of the military, who arranged a quarantine cemetery and several coastal artillery batteries on the outskirts and an Orthodox monastery in the central part of the ancient city, where St. Vladimir's Cathedral and some other monastic constructions were erected. Most of the Chersonese city area has however remained free of any development or economic activities, which has helped to preserve the integrity of the ruins of the ancient and medieval city.

Since the mid-19<sup>th</sup> century, systematic archaeological excavations have been in progress in the ancient city and an archaeological museum has been functioning. The latter has recently been transformed into a national archaeological preserve (Tauric Chersonese National Preserve). For more than 150 years of archaeological research, around 10 ha of the area has been explored, with numerous archeological sites dating from the ancient and medieval periods excavated and interpreted for visitors and certain improvements made in some parts of the ancient city (mainly in the centre and in the east).

Still unexplored is an eminence overgrown with steppe grass in the coastal part of the ancient city. The ancient city is secured with full fencing and 24 hour guard.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, providing for archaeological investigation, restoration, conservation, interpretation and presentation of archaeological sites. Apart from that, the ancient city is home to some outside organizations such as the Ukrainian Orthodox Church, a city yacht club and a private household.

#### 2.1.2. Component part № 002. Chora plot in the Yukharina Gully (Fig. 5)

The area lies in the bed and on the slopes of a deep gully and is surrounded by rural housing and summer cottages. The site measures around 150 ha.

The area is one of the Chersonese chora plots demarcated in the 4<sup>th</sup> century BC. It contains remains of 11 ancient chora land plots (5 presented entirely and 6 as fragments) with ruins of ancient and medieval farmsteads, division walls, vineyard planting walls as well as traces of ancient roads and burial grounds.

For 2000 years, between the 4<sup>th</sup> and 14<sup>th</sup> centuries AD (with small breaks) the area was intensively used for farming, after which it was abandoned. In the second half of the 20<sup>th</sup> century, the territory was placed under the control of the military, who used it as a training ground.

In the late 20<sup>th</sup> and early 21<sup>st</sup> centuries, the area was subject to local archaeological explorations with ruins of 4 ancient farmsteads as well as adjacent agrotechnical structures partly unearthed and conserved. The ancient structures remain uninterpreted for visitors. No improvements have been made on the site.

The plot is free of any modern constructions. It has several local forest plantations with remains of military earthwork structures as well as a high-voltage transmission line route.

Most of the area has intact landscape covered with steppe grass. Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

#### 2.1.3. Component part № 003. Chora plot in Berman's Gully (Fig. 6)

The area lies in the bed and on the slopes of a deep gully and is surrounded by rural housing and summer cottages. The site measures around 20 ha.

The area is one of the Chersonese chora plots demarcated in the 4<sup>th</sup> century BC. It contains remains of 2 ancient chora land plots with ruins of ancient and medieval farmsteads, division walls, vineyard planting walls as well as traces of ancient roads, burial grounds and a medieval cave complex.

For 2000 years, between the 4<sup>th</sup> and 14<sup>th</sup> centuries AD (with small breaks) the area was intensively used for farming, after which it was abandoned. In 19<sup>th</sup> and early 20<sup>th</sup> centuries, the eastern slope of the Gully featured a farmstead of a local landlord, who used the adjacent area as a pasture for cattle. The farmstead has not survived.

In the late 20<sup>th</sup> and early 21<sup>st</sup> centuries, the area was subject to local archaeological explorations with ruins of a fortified farmstead with massive defensive installations partly unearthed and conserved. The ancient structures remain uninterpreted for visitors. No improvements have been made on the site.

The plot is free of any modern constructions. It has a local forest plantation as well as aerial high-voltage transmission and water supply lines.

Most of the area has intact landscape covered with steppe grass. Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

#### 2.1.4. Component part № 004. Chora plot on the Bezymyannaya Height (Fig. 7)

The area lies at the top and on the slopes of an eminence and is surrounded by farmsteads, summer cottages and extensive vineyard grounds. The site measures around 17 ha.

The area is one of the Chersonese chora plots demarcated in the 4<sup>th</sup> century BC. It contains remains of a massive defensive complex with adjacent ruins of a rural settlement as well as traces of division walls and vineyard planting walls.

For 2000 years, between the 4<sup>th</sup> and 14<sup>th</sup> centuries AD (with small breaks), the area was intensively used for farming, after which it was abandoned. In the mid-19<sup>th</sup> and the first half of the 20<sup>th</sup> centuries, the height was used as a defence point and a number of earthwork fortifications were constructed there.

In the early 21<sup>st</sup> century, the site was subject to local archaeological explorations, with ruins of a fortification with massive defensive installations partly unearthed and conserved. The ancient structures remain uninterpreted for visitors. No improvements have been made on the site.

The plot is free of any modern constructions. It has intact landscape covered with steppe grass. Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

#### 2.1.5. Component part № 005. Chora plot in the Streletskaya Gully (Fig. 8)

The area lies in the bed and on a slope of a gully and is surrounded by summer cottages and extensive forest plantations. The site measures over 15 ha.

The area is one of the Chersonese chora plots demarcated in the 4<sup>th</sup> century BC. It contains remains of 2 land plots with ruins of farmsteads, division walls, vineyard planting walls as well as traces of ancient roads.

For 2000 years, between the 4<sup>th</sup> and 14<sup>th</sup> centuries AD (with small breaks), the area was intensively used for farming, after which it was abandoned and stayed out of use.

In the early 21<sup>st</sup> century, the site was subject to minor archaeological surveys, which revealed a small fragment of an ancient system of vineyard planting walls. The ancient structures remain unconserved and uninterpreted for visitors. No improvements have been made on the site. Although explored less than the others, this protected site is one of the best in terms of the state of preservation of its ancient constructions still hidden in the earth but clearly visible on the surface as shaping a specific archaeological landscape of the Chersonese chora.

Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

#### 2.1.6. Component part № 006. Chora plot on the isthmus of the Mayachny Peninsula (Fig. 9)

The area lies on the isthmus of a peninsula lying between Kazachya and Golubaya Bays and is surrounded by rural housing, summer cottages and a memorial complex commemorating the defenders of the 35<sup>th</sup> Coastal Battery. The site measures around 14 ha.

The area is one of the Chersonese chora plots demarcated in the 4<sup>th</sup> century BC and subsequently built up as a fortified settlement. The plot contains remains of some ancient defensive walls with towers and ruins of housing inside.

For 2000 years, between the 4<sup>th</sup> and 14<sup>th</sup> centuries AD (with small breaks), the area was intensively used for farming, after which it was abandoned.

In the late 19<sup>th</sup> century a paved road connecting the isolated farmsteads was laid across the area, and the plot itself was used as a pasture for cattle.

Between the 19<sup>th</sup> and early 21<sup>st</sup> centuries the site was subject to archaeological excavations with ruins of some fortifications and living quarters as well as traces of earlier ancient land demarcations partly unearthed and conserved.

Some interpretation of the ancient buildings and some improvements have been made, but only on a small area in the eastern part of the plot.

The plot is free of any modern constructions (except for a temporary boat repair shed on the shore of Kazachya Bay). It has a local forest plantation (on the inlet in Kazachya Bay). In addition to that, there is a modern highway dividing the area into sections and thereby breaking its integrity.

Most of the area remains unexplored and has intact landscape covered with steppe grass. Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

#### 2.1.7. Component part № 007. Chora plot on Cape Vinogradny (Fig. 10)

The area lies on a coastal terrace and cape on the western coast of the Heracleean Peninsula and is surrounded by rural housing and summer cottages. The site measures over 8 ha.

The area is one of the Chersonese chora plots demarcated in the 4<sup>th</sup> century BC and subsequently rather badly damaged by shore erosion. It contains some remains of ancient constructions (on the coastal terrace) and a large medieval cave monastic complex (carved in the coastal rock cliffs).

For 2000 years, between the 4<sup>th</sup> and 14<sup>th</sup> centuries AD (with small breaks), the area was intensively used for farming, after which it was abandoned.

In the 19<sup>th</sup> and early 20<sup>th</sup> centuries, part of the coastal terrace was used for cultivating orchard crops.

Between the 20<sup>th</sup> and early 21<sup>st</sup> centuries, the area was subject to archaeological excavations with ruins of a ground-based church as well as some premises of a cave monastery partly unearthed and conserved. The ancient structures remain uninterpreted for visitors. No improvements have been made on the site.

The plot is free of any modern constructions. There is a forest plantation on the coastal terrace and the area itself is basically a coastal Mediterranean landscape covered with trees and shrubs. Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

## **2.2. Factors affecting preservation of the property**

At the moment, there are a number of natural and anthropogenic factors affecting, to a varying degree, the constituent parts of the property the Ancient City of Tauric Chersonese and its Chora.



### 2.2.1. Seismic threat

All the protected areas of the Tauric Chersonese and its chora lie in a high activity seismic zone, where rare earthquakes up to 8 on the Richter scale are possible. There is a hypothesis that the so-called 'antiram barriers' on the ancient defensive towers in the chora farmsteads were in fact antiseismic strengthening constructions (Fig. 11). A major earthquake (measuring 6 on the Richter scale) was registered last in 1926 (its epicentrum was on the shelf of the Black Sea near Yalta).

Although the past few decades have been characterized by decreasing seismic activity in the Black Sea shelf fracture zones, this factor still presents a threat to the monuments in the city of Chersonese and in its chora.

### 2.2.2. Shore erosion

Some of the protected areas in the city of Tauric Chersonese and in its chora are bordered by the Black Sea. An extremely damaging factor in these areas are the waves, which are rapidly eroding the coastline. According to researchers, over the past thousand years more than 25 m of the coastal strip have been washed away or submerged by the sea.

The problem is particularly severe in the city of Chersonese itself, whose northern coastline is being rapidly eroded by waves: over the past hundred years shore erosion has already partly destroyed valuable remains of several constructions, including Uvarov's Basilica, the Sixpillar Church etc (Fig. 12). The same factor also brings about the destruction of the coastal boundaries of the sites adjacent to the Black Sea bays (Quarantinnaya Bay in the city of Chersonese and Kazachya Bay in the so-called Strabo's Chersonese), though to a lesser extent.

### 2.2.3. Landslides

The protected area on Cape Vinogradny lies in an active landslide zone, which has led over the past few centuries to the loss of a number of cave constructions in the front part of the rock cliff (Fig. 13). Such landslides and collapses have been an aggregate result of precipitation, ground waters, daily and seasonal atmospheric temperature fluctuations as well as strong winds bringing about gradual chipping of large rock masses and their sliding down towards the sea. Under threat are not only the monuments located in the rock itself but also the ruins of ancient buildings lying along the upper edge of the rock cliff and on a terrace at its foot.

### 2.2.4. Rise of sea level

The already mentioned rise of sea level, which, according to specialists, has been going on for around one thousand years, has led to the submersion of vast sections of the ancient chora along the northern coastline of the Heracleian Peninsula. More specifically, it is known that under water are now a series of Chersonese city harbour installations (in Quarantinnaya Bay), the eastern edge of the fortified settlement on the isthmus of the Mayachny Peninsula (in Kazachya Bay) and a number of ancient farmsteads with adjacent division walls on the

Mayachny Peninsula, Cape Mongonari and Cape Peschany as well as in Streletskaya Bay and Kruglaya Bay. At the same time, the rise in the sea level has waterlogged some coastal parts of the city and its chora. In particular, subject to waterlogging are the foundations of the wall ruins in the port area and the citadel of the city as well as the ruins of the Byzantine island monastery in Kazachya Bay, which is part of the protected chora site on the isthmus of the Mayachny Peninsula (Fig. 14). As they are, the soaking foundations of the ancient masonry are posing a threat to the state of preservation of the structures themselves since through the joints in the masonry moisture is sucked into the upper sections of the walls, precipitating their decay.

#### 2.2.5. Roots of shrubs and trees

A rather noticeable factor affecting the ancient ruins of Chersonese and its chora is the damage done to their ancient and medieval masonries by the roots of shrubs and trees. The problem is quite pressing both in the ancient city and in the Heracleian chora.

In the city of Chersonese, roots of shrubs and trees growing into the ancient masonries are particularly aggressive in the northern part, in the quarters between the Basilica within a Basilica and the 1935 Basilica, as well as in the southwestern part of the citadel (Fig. 15).

A similar situation can be seen on the protected Chersonese chora sites. Specifically, masonries of some ancient farmsteads and farming structures are being destroyed by isolated trees and shrubs in the Yukharina Gully, in Berman's Gully and on the isthmus of the Mayachny Peninsula and by clumps of shrubs and trees on the eastern slope of Yukharina Gully, in the bed of Berman's Gully, on the island in Kazachya Bay and on the coastal terrace of Cape Vinogradny.

#### 2.2.6. Steppe fires

The problem with steppe fires, which break out quite regularly on the protected sites of the city of Chersonese and its chora, is also related to vegetation, particularly to grass that covers most of the unexplored area.

The problem in question has a purely seasonal character, with grass fires taking place predominantly in the driest period of the year, i.e. between July and September. Besides, this factor is not entirely a natural one. It has a lot to do with human activities, among the most common causes of fires being unauthorized bonfires, careless smoking and even intentional arsons (Fig. 16).

Although damage occasionally done by steppe fires to the ancient structures is negligible, it becomes quite perceptible when it comes to landscape formations, which is why a special fire control programme is needed.

#### 2.2.7. Modern development and municipal communications

Falling within the boundaries of the city of Sevastopol, the protected areas of the ancient city of Chersonese and its chora are surrounded by modern housing, namely rather dense urban housing around the city of Chersonese and sparser suburban housing around the protected chora sites. The protected areas themselves

do not have any modern housing, except for a few buildings within the boundaries of the city. However, both urban and suburban development does present a serious threat to those chora sites that have not obtained protected status as yet. Specifically, municipal development plans envisage development of residential areas with varying housing density in some of the areas where the ancient planning system is still extant (on the Mayachny Peninsula, on Cape Mongonari and on Cape Peschany as well as in the Streletskaya and Berman's Gullies).

It should be noted that prior to 2011 modern development in the immediate vicinity of the protected areas was going on regardless of the landscape value of the Chersonese chora sites. As a result, a number of dissonant bulky structures sprang up in some places, e.g. on Devichya Hill near the ancient city and on the Mayachny Peninsula (Fig. 17).

Last but not least, some of the protected sites have municipal communications going through, such as a highway on the site on the isthmus of the Mayachny Peninsula, power transmission lines on the sites in the Yukharina Gully and Berman's Gully and a water pipeline on the site in Berman's Gully (Fig. 18). All those structures are discordant with the surrounding landscape. More than that, in the event of an emergency some of them, e.g. the water pipeline, will pose a threat to the preservation of certain ancient constructions.

#### 2.2.8. Economic activities

No economic activities as such are being conducted in the protected areas in the city of Tauric Chersonese or its chora. However, some of the sites are being uncontrollably used by the locals for cattle grazing, causing some damage to the remains of the ancient structures in the Yukharina Gully, in Berman's Gully and on the Bezmyannaya Height (Fig. 19).

At the same time, some other sites of the Heracleian Peninsula with extant ancient layouts are now under intensive agriculture, such as cattle grazing, tillage and forestation. Any such activities, especially deep plowing, lead to the irretrievable loss of valuable archaeological monuments.

Apart from that, some protected areas on the Chersonese chora are being uncontrollably exploited by various industrial enterprises and developers for piling waste, as is the case with the sites in the Yukharina Gully, in the Streletskaya Gully, on the isthmus of the Mayachny Peninsula and on the Bezmyannaya Height (Fig. 20).

#### 2.2.9. Property visitation

As of today, of all the sites of the Tauric Chersonese and its chora, regular visitation has been arranged only to the ancient city area.

The largest category of visitors to the property are organized tourist groups and individual tourists (over 350,000 people a year). A considerable percentage of visitors is constituted by pilgrims (around 50,000 people a year), with about as many visitors represented by the citizens of Sevastopol, who enjoy certain visitation privileges. Another 50,000 visitors are those getting into the ancient city during the free access hours (in the morning and in the evening) for recreation,

members and guests of the yacht club, parishioners visiting St. Vladimir's Cathedral, theatre goers as well as members of archaeological expeditions. This amounts to approximately 500,000 people a year.

The most popular visitor destinations within the ancient city are its central and northern parts. These have maximum tourism loads without any adverse effects (Fig. 21). Given that the most visited places constitute no more than 1/3 of the all expository area of the city, it can be predicted that the carrying capacity of the property can be more than 1 million people a year. It should also be noted that most of the visitors (around 80 percent) come in summer (between June and August).

As for the protected chora sites, there is hardly any organized tourism there. This is largely due to the fact that the general public is unaware of the value of the sites. Besides, the sites themselves can hardly receive any tourists for lack of visitor facilities.

Some of the protected areas of the Chersonese chora, namely the ones in Berman's Gully, on the Bezymyannaya Height and on Cape Vinogradny, are now uncontrollably used by the local population as places for recreation (Fig. 22).

#### 2.2.10. Vandalism and illegal excavations

An extremely dangerous factor threatening the integrity of the ancient structures of the city of Chersonese and its chora are various vandalic acts and illegal excavations on the protected sites. The acts of vandalism registered in the last few years on the ancient ruins were all of local and sporadic nature. Still, the very fact that they occurred within the boundaries of the ancient city is enough to understand that the existing security system is far from efficient (Fig. 23).

#### 2.2.11. Depreciation of conserved archaeological sites

Among essential problems related to the preservation of the already unearthed and conserved archeological sites of the city of Chersonese and its chora is the depreciation of ancient structures due to various natural and anthropogenic factors, with unearthed ancient masonries lying exposed to weather and visitor pressures (Fig. 24).

Conservation measures were taken on such sites at different times and were based on different techniques, not always the best reasonable. In fact, even with the most up-to-date high quality conservation, gradual deformation of conservation mortars does occur, bringing about gradual deterioration of ancient masonry structures (Fig. 25).

It should also be noted that some of the ancient ruins unearthed in the city as well as in the chora (some monuments at the citadel and in the port area of Chersonese as well as some farmsteads on the chora sites in the Yukharina Gully, in Berman's Gully and on the isthmus of the Mayachny Peninsula) still remain unconserved (Fig. 26).

## **2.3. Factors affecting accessibility of the property**

At the moment, accessibility of the property the Ancient City of Tauric Chersonese and its Chora to tourists is not without limitations. Only the city of Chersonese has some minimum infrastructure necessary for receiving tourists and delivering guided tours, but this, taking into consideration increasing visitor numbers, cannot be considered as adequate and reflecting modern standards. In this respect, the key factors that characterize the accessibility of the property and its constituent parts should be highlighted.

### 2.3.1. Access ways and parking areas

The hardest-to-reach are the protected areas in the Chersonese chora. The situation is less acute on the sites in Berman's Gully, on the Bezymyannaya Height, on the isthmus of the Mayachny Peninsula and on Cape Vinogradny, where city highways are either adjacent to or lie in close vicinity of the protected areas. This is not the case with the sites in the Yukharina and Streletskaya Gullies. For example, the protected area in the Yukharina Gully lies as far as about one kilometer away from the highway, connected to it with an unsurfaced poor quality road (Fig. 27).

The access ways to the city of Chersonese are also not quite sufficient, with frequent traffic congestions in the narrow streets connecting the protected area with the main city highways. Rather awkward are also the approaches to the site on Cape Vinogradny, where the protected area is adjacent from land to densely built summer cottages (Fig. 28).

The parking area near the central entrance to the city of Chersonese is extremely small and can accommodate only very few vehicles that bring visitors to the Preserve. As for the protected Chersonese chora areas, they do not have any equipped parking lots at all.

### 2.3.2. Visitor facilities

At the moment, the Chersonese chora areas do not have any visitor facilities.

As for the city of Chersonese itself, its two entrances have a few little constructions serving as ticket offices, a roofed structure and benches for tourists waiting for guided tours. Any information panels are absent. There are a number of cafés, souvenir stalls and toilet facilities, but all of them lie outside and are not controlled by the Preserve (Fig. 29).

Tourist infrastructure facilities (toilets, souvenir stalls and refreshment stands) within the boundaries of the ancient city are very few in number. To make things worse, they are scattered about the place in a chaotic way with no account taken of visitor needs, most of them looking rather out of place amid the archeological landscape. It should also be noted that there is only one public toilet in the city of Chersonese, located quite far from the main expositional parts of the site.

Last but not least, there are no visitor safety provisions in place on the coastal edges of the ancient city that are used as beaches.

### 2.3.3. Footpaths and rest facilities

At the moment, the Chersonese chora sites have neither surfaced footpaths nor rest facilities for visitors.

As for the city of Chersonese itself, it has some clinker and slabbed footpaths (Fig. 30), but those are only in the central part of the protected area whereas most of the ruins can be reached only through the cleared streets of the ancient city, unpaved, stony, potholed and therefore hardly accessible to aged and disabled visitors (Fig. 31).

The same is true for rest facilities, which are in place only in the central part of the protected area, where a green space with shady alleys and benches is located. The rest of the area has only a few benches scattered around in a chaotic way and unshaded (an obvious shortcoming in the hot climate of the place).

### 2.3.4. Information panels and principles of monument interpretation

At the moment, the Chersonese chora sites do not have any panels informing visitors about the monuments (save a makeshift panel in an excavated part of the fortified settlement on the isthmus of the Mayachny Peninsula).

There are some information panels in the city of Chersonese itself, but these are rather primitively designed, few in number and scattered around in a chaotic way. Most of them provide information in Russian only (save a few panels in the southern part of the city, on the sites explored by international expeditions).

Apart from that, the city has almost no signage that could guide visitors and facilitate their access to the most important sites at the Preserve.

Finally, there is a pressing need for signage on the approaches to the protected areas both within the city of Sevastopol and outside.

Equally important in terms of making the property more accessible is the introduction of the unified principles for interpretation of its archaeological structures. What should be noted in this respect is that only the suggestions made by the Ukrainian-American expedition and partially implemented on a small plot in the southwestern part of the main street of the ancient city can be regarded as scientifically grounded and therefore recommended for implementation in the city of Chersonese as a whole (Fig. 32). A uniform approach to interpretation and presentation is absolutely crucial for facilitating visitors' perception of the archeological monuments.

### 2.3.5. Site accessibility challenges

Quite an important challenge in the city of Chersonese is limited access to some of its key sites.

Specifically, the presence of the yacht club which controls the berths in Quarantinnaya Bay in the ancient city impedes access to the Preserve by sea and makes organization of any specialized sea and land tours quite complicated (Fig. 33).

Another challenge is an enclosed plot around St. Vladimir's Cathedral, which not only impairs visual perception of the agora of Chersonese but also blocks the passage through the main street of the ancient city (Fig. 34).

Inaccessible not only to the visitors but also to the explorers is the territory of the private estate in the southern part of the city of Chersonese.

There are no inaccessible sites among the protected chora areas, except for the island in Kazachya Bay the approaches to which are blocked by a military unit.

#### 2.3.6. Archaeological research and conservation

Archaeological research and conservation works going on in the protected areas of the Tauric Chersonese National Preserve generate a need for new expositional areas (Fig. 35). Along with carrying out their specific scientific tasks, most of the expeditions working in the city of Chersonese and on some of the chora sites over the past few years have been conducting their excavations and subsequent conservation with a view to further interpreting the ancient remains and thus making them accessible to visitors.

This gives rise to the problem of prioritizing research activities on various sites within the protected areas. A glaring example is the situation in the city of Chersonese itself, where excavations of the ancient quarters have been going on for as long as one and a half centuries. The result is a patchwork of explored and conserved sites scattered amidst the unexplored area. This suggests that explorations conducted in the ancient city need a more systematic approach.

More consistent have been archaeological excavations carried out in the last few decades on the protected chora sites. Specifically, the fortified settlements in Berman's Gully and on the isthmus of the Mayachny Peninsula are being explored as whole entities. At the same time, excavations on the site in the Yukharina Gully have been confined to farmsteads and some small fragments of adjoining ancient demarcation structures. As a result, a complete picture of the ancient land plot with all of its constituent parts (farmsteads, division walls, vineyard planting walls, surrounding roads etc) is missing.

Apart from that, some of the ancient ruins unearthed on many of the protected sites have never been subject to proper conservation. Among them are the remains of the quarters in the eastern part of the city, some individual farmsteads in the Yukharina Gully and Berman's Gully, vineyard planting walls on the isthmus of the Mayachny Peninsula as well as the remains of the fortification on the Bezymyannaya Height. All these remains are not only deteriorating but are also gradually getting covered with soil and overgrown with grass, which makes their visual perception by the visitors rather complicated (Fig. 36).

### 3. SUGGESTED SOLUTIONS TO THE CHALLENGES RELATED TO THE PROTECTION AND EXPLOTATION OF THE PROPERTY

#### 3.1. Suggested solutions to reduce risk factors

*Seismic threat* is to be taken into consideration when developing any ancient ruin conservation projects as well as any contingency trainings for the support staff of the Tauric Chersonese National Preserve and the local emergency services.

What is also needed is a comprehensive seismic safety and security programme for the protected areas of the city of Sevastopol. This has to be developed at the earliest possible date.

*Shore erosion* means that comprehensive shore protection activities are to be done and antiwave barriers are to be installed all along the coastline of the protected areas in the ancient city of Chersonese, on the isthmus of the Mayachny Peninsula and on Cape Vinogradny as soon as possible, together with a long-term shore protection programme for the coastal zone of the Heracleean Peninsula as a whole. The latter is to be developed in partnership with the municipality to prevent any unexplored archaeological structures in the Chersonese chora from being destroyed.

In addition to that, there is a need for urgent implementation (by 2013) of the already developed shore protection project for the coastline of the ancient city of Chersonese, suspended for lack of purpose-based government funds.

*Landslides* is a factor requiring that a comprehensive project for generalized deviation of ground waters and runoff on the site on Cape Vinogradny be developed and implemented, retaining walls along the foot of the rock be erected and the local sections of the rock most likely to collapse be consolidated.

As of today, Ukraine lacks expertise for such large-scale activities, which means that international experts will have to be involved. Preparation and implementation of such a project will require quite a lot of time and finance, comparable to the cost of shore protection works themselves. Lack of purpose-based funding may considerably delay the implementation of the works.

In order to preserve the already explored ancient structures, it is therefore proposed to start with top priority measures such as consolidating the monuments and the surrounding sections of the rock as well as arranging runoff deviation on the edge of the rock cliff, which have to be taken at the first stage (between 2012 and 2013).

In the future, a local level project is to be implemented to consolidate the western steep of the Heracleean Peninsula at all the points of the Chersonese chora where landslides or collapses threaten to destroy the monuments. Since landslides pose a threat not only to the ancient ruins but also to the modern constructions on Cape Phiolent, such works are to be envisaged in the Master Plan for the City of Sevastopol.



*The rise of sea level* is to be combated not only by means of emergency dampproofing of the southeastern curtain foundations, as is envisaged by the Comprehensive Programme for Conservation and Restoration in the City of Tauric Chersonese, but also by conducting such works on the other monuments at the citadel, in the port area and on the island in Kazachya Bay. The cost of these works is not so high and can be covered by the National Preserve itself within the restoration spending plan 2012-2013.

At a later period, a series of works will also have to be done to dewater the waterlogged areas in the city of Chersonese and in its chora. Besides, the state of the ancient ruins submerged by the sea will have to be diagnosed and relevant measures will have to be taken to preserve these. Development and implementation of this project will require purpose-based government funds.

*Aggressive vegetation* is to be neutralized by way of urgent eradication of trees and shrubs growing into the ancient ruins.

It should however be noted that in order to find the best vegetation control solutions for trees and shrubs covering extensive areas of ruins on the protected sites in the city of Chersonese, in the Yukharina Gully, in Berman's Gully, on the island in Kazachya Bay and on the coastal terrace on Cape Vinogradny, professional botanists should be involved.

*Steppe fires* require a package of preventive measures.

What has to be done in the first place is preventing any unauthorized access to the protected areas by way of installing peripheral fencing and arranging 24-hour security posts.

In addition to that, sufficient security staff should be hired to patrol not only the perimeter but also the internal parts of the protected areas.

It should be noted that grass mowing on the vast unexplored areas will have little effect and, even more importantly, it will transfigure the visual features of the existing landscape.

Grass removal is however a must on the already explored and conserved sites since any grass fires in a confined space of ancient ruins tend to cause masonry burns.

Grass mowing and weeding being quite labour consuming procedures, the problem can be removed in a different way, namely by adding various humus-free soils and thus preventing any vegetation. In the future, this method should be given preference to as the one that can be harmonized with the principles of archaeological interpretation.

*Urban development and engineering communications* is a factor whose impact on the landscape features of the protected areas can be significantly reduced by enforcing the land use regimes currently developed for different protection zones of the monuments in the city of Chersonese and in its chora. The work on the said regimes is expected to be finalized by the end of 2011.

Another urgent matter is having certain dissonant structures (such as the yacht club, the private estate etc) removed from the territory of the ancient city.

The same applies to the dissonant communications (power transmission and water supply lines) on the sites in the Yukharina Gully and in Berman's Gully, which should urgently be moved away from the protected territory.

As for the highway, which compromises the integrity of the protected area on the isthmus of the Mayachny Peninsula, it is proposed to erect a low enclosed overpass that would keep the traffic away from the protected site.

***Unauthorized economic activities*** in the protected areas should be stopped in the nearest future by way of peripheral fencing and arranging 24-hour security on each of the protected sites.

A solution to the problem is also envisaged in the land use regimes for different site protection zones (including the buffer zones), which ban any deep plowing and other agricultural works on some of the areas. As for the areas with protected status, any agricultural activities there are strictly prohibited.

***Growing visitor numbers*** should be taken into consideration in any research and projects related to the protection and exploitation of the Tauric Chersonese cultural heritage.

Adverse effects of visitor pressures on the property can be eliminated by arranging additional entrances and redistribution of visitor flows, creating alternative visitation routes and introducing a management model providing for equal distribution of visitors throughout the year rather than only during the high tourist summer season as well as by installing additional security posts, recruiting additional security guards and wardens and, last but not least, introducing a video system to monitor all the protected areas.

Such issues as development of additional visitation routes for the city of Chersonese as well as redistribution of visitor flows to the property are to be tackled in a special section of the Territory Organization Plan for the Tauric Chersonese National Preserve (scheduled for 2012).

Besides, the tourist infrastructure system should be improved, particularly as far as toilets and waste management facilities are concerned, which should stop the visitors from leaving litter in the protected area.

***Vandalism and illegal excavations*** is a risk factor that requires a package of relevant measures, including recruitment of additional security guards and wardens with each observation post responsible for a particular local sector of the protected area, implementation of a video monitoring system etc.

The top priorities for the protected areas in the chora are fencing and 24-hour security posts, especially considering the fact that the chora sites are particularly vulnerable to clandestine excavations with their irreparable damage to the integrity of archaeological layers.

Ongoing vandalism and illegal excavations should also prompt to continue working on improvement of the national archaeological heritage protection

legislation, whose current regulations are not strict enough, particularly as far as private collecting of archaeological items is concerned.

*Depreciation of conserved archaeological structures* requires introduction of a single system to monitor the state of the conserved remains both in the city of Chersonese and in the protected chora areas. Such a system could be based on a pilot GIS monitoring system model designed by the Institute of Classical Archaeology at the University of Texas in Austin. The system takes account of various factors related to the condition of the Chersonese city sites, including the state of conservation of the ancient masonries.

Regrettably, the system has not been put to use for lack of target funds. Such monitoring should therefore be introduced and financed as a special kind of activity at the Tauric Chersonese National Preserve to be introduced in the city of Chersonese and on the protected chora sites in 2012 and 2014, respectively.

### **3.2. Suggested solutions to overcome accessibility related challenges**

According to the Law of Ukraine on Cultural Heritage Protection, any solutions to property accessibility related challenges are to be put forward in the territory organization plan of a historical and cultural preserve. Such a plan is currently being developed for the Tauric Chersonese National Preserve with some sections of the plan (the ones concerning the protection zones of the ancient city of Chersonese as well as archaeological investigation and conservation programmes) already prepared and adopted.

Already finalized is the functional zoning project for the city of Chersonese. The project defines zones reserved for different purposes– expository areas, recreational areas, visitor service areas etc, thereby determining the future development prospects of the site (Fig. 37). Similar projects shall also be developed for all the protected areas in the Chersonese chora.

*Access ways and parking areas* as they are among the most pressing challenges on almost all of the protected areas of the property.

Reorganization of these is envisaged by the Master Development Plan for the City of Sevastopol until 2025 and by the correspondent section of the Territory Organization Plan for the Tauric Chersonese National Preserve and can be effectuated in the next few years by joint efforts of the stakeholders – the Preserve and the municipality (Fig. 38).

In order to arrange access ways and parking lots in the protected chora areas, the issue is to be tackled in the correspondent section of the Territory Organization Plan for the Tauric Chersonese National Preserve (scheduled for 2012). It should be noted that any parking lots can be arranged only in the areas adjacent to the protected sites, in their buffer zones, and only with the consent of the Sevastopol City Council.

The problem with access ways is particularly severe in the protected chora area in the Yukharina Gully, where an access route from Phiolent Highway is proposed to be arranged in the nearest future with sponsor support.

**Visitor facilities.** It is proposed that most of the protected chora sites should have small visit centres that could serve one tourist bus at a time. Every such centre should have a ticket office, a souvenir stall, public facilities (toilets and rest rooms) as well as premises for security and support staff.

The city of Chersonese and the protected chora site in the Yukharina Gully need larger visit centres with additional space for information stands, conference rooms and little cafés.

Proposals as to the locations of any such visit centres should be developed within respective protected area zoning projects and reflected in the Territory Organization Plan for the Tauric Chersonese National Preserve (scheduled for 2012).

In addition to that, several toilet facilities are to be constructed in the city of Chersonese and any dissonant retail outlets are to be removed either outside the boundaries of the protected area or inside the Preserve administration building.

**Footpaths and rest facilities.** Arranging footpaths and rest facilities is part of improvement activities on the protected sites and should be performed within special projects based on recommendations set out in the Territory Organization Plan for the Tauric Chersonese National Preserve (scheduled for 2012).

Any improvement projects should proceed from existing or visitation routes, along which the main footpaths should be laid. What is also essential is that the footpaths have a surface suitable for all age groups as well as disabled people, which means that special ramps and railings are to be provided. At the same time, care must be taken to ensure that such surfaces do not strike a discordant note among the exposed ancient structures.

It is recommended that footpaths be covered with different kinds of crushed stones or pebbles compatible with the materials applied at the ancient structures for interpretation purposes.

Rest facilities should be envisaged along the whole length of the visitation routes. They should be provided with weather and sun shades and fit with the ancient ruins around.

**Information panels and principles of monument interpretation.** Information panels in the protected areas of the city of Chersonese and its chora should present the most interesting and important archaeological sites in an exhaustive way. They should be made of durable materials, arranged at a height suitable for visitors of all ages and fit into the surroundings.

It is recommended that such panels have the same design all over the Preserve and provide information in more than one language (as a minimum in Ukrainian, Russian and English). Similarly designed should be various orientation signs, which are to be installed throughout the site within seeing distances from each other so that the visitor could move about more confidently.

In addition to that, more off-site signs have to be installed both in and along the main access routes to Sevastopol. Such signs should have a distinctive colour or logo to stand out among the rest of the traffic signs.

According to the Ukrainian legislation, any information panels and billboards can be installed on cultural heritage sites only on the basis of specially designed project documents that have been approved by the Ministry of Culture of Ukraine. Subject to unification and approval are also the principles of on-site archeological interpretation in the Tauric Chersonese. Experience of the joint Ukrainian-American expedition, which explored and interpreted the southern quarters of the city of Chersonese, has shown that interpretation of different kinds of premises can be done through differently coloured pebbles or stones.

In general, the described problem can be addressed in a special section of the Territory Organization Plan for the Tauric Chersonese National Preserve (scheduled for 2012).

***Site accessibility challenges*** present in some parts of the protected areas of the Tauric Chersonese are to be removed as soon as possible.

Specifically, the approved section of the Territory Organization Plan for the Tauric Chersonese National Preserve regarding the boundaries and land use regimes for the core and buffer zones of the city of Chersonese envisages that the existing private estate and yacht club buildings should be removed from the protected territory. The yacht club can be moved away after the expiration of the land lease contract in 2012 whereas the private estate will have to be bought out from the owner by the state of Ukraine, which would require special purpose funding.

As for the church services and the Preserve administration building, they can be transplanted onto the site near the central entrance to the Preserve only after relocation of its current occupant – the military unit. Preliminary negotiations are already under way between the Preserve, the municipality and the military.

Another essential thing is to dismantle the enclosure around St. Vladimir's Cathedral, thereby opening the way for new visitation routes along the main street of the ancient and medieval city. The project could be implemented after negotiations with the church community leaders and relevant changes in the monument protection contract.

Similar negotiations should be held with the commanders of the military unit stationed on the shore of Kazachya Bay so that free access could be opened to the islet containing remains of ancient chora structures and the medieval monastery.

***Archaeological research and conservation.*** In order to make any unearthed and conserved parts of the city of Chersonese and its chora as accessible as possible, comprehensive programmes for archeological investigation, conservation and restoration works are to be fully implemented in the protected areas.

Such programmes, aiming to ensure a systematic approach to and consistency in any excavations and conservation works that are to be conducted on the Chersonese city sites, have already been developed and adopted as sections of

the Territory Organization Plan for the Tauric Chersonese National Preserve (Fig. 39).

Inter alia, the programmes envisage prioritizing works that are to be conducted on various sites, which in the long run will help to considerably expand and, even more importantly, unite the expositional areas of the ancient city into meaningful entities. Some of the areas are proposed to be reserved for future generations of archaeologists, which means that any archaeological excavations in those areas will be banned (Fig. 40).

Similar programmes should be developed and implemented in the rest of the protected area and reflected in the site zoning schemes as part of the Territory Organization Plan for the Tauric Chersonese National Preserve.

## **4. GURANTEES OF LEGAL PROTECTION AND INTEGRATION OF THE PROPERTY INTO STATE AND MUNICIPAL DEVELOPMENT PROGRAMMES**

### **4.1. Existing legal protection**

#### 4.1.1. Legislative protection

Cultural heritage sites and monuments – remains of ancient buildings and demarcation structures in the city of Chersonese and its chora – are on the state register and protected by the state in accordance with the *Law of Ukraine on Cultural Heritage Protection* (No. 1805-III of 8 June 2000, with amendments as per the Law of Ukraine No. 2518-VI of 9 September 2010) and the *Law of Ukraine on Archaeological Heritage Protection* (No. 1626-IV of 18 March 2004). These sites and monuments are all an integral part of the areas whose protected status is provided for by Articles 33, 33-1, 33-2 and 33-3 of the Law of Ukraine on Cultural Heritage Protection.

Movable cultural heritage – archaeological artefacts found in the protected areas – are kept in museum collections of the Tauric Chersonese National Preserve and protected by the state in accordance with the *Law of Ukraine on Museums and Museum Activities* (No. 250/95-BP of 29 June 1995).

In addition to that, the protected status of the sites and monuments of the city of Chersonese and its chora is ensured by some international acts ratified by Ukraine such as:

- *1992 European Convention on the Protection of the Archaeological Heritage* (revised);
- *2001 Convention on the Protection of the Underwater Cultural Heritage*.

#### 4.1.2. By-laws

According to the *Resolution of the Cabinet of Minister of Ukraine on the State Register of Immovable Monuments of Ukraine* (No. 928 of 3 September

2009), the complex of ancient structures in the city of Chersonese is included into the State Register and enjoys national monument status.

As for the sites lying within the boundaries of the Chersonese chora, they have local archaeological monument status and are protected by the relevant *resolutions of the Executive Committee of the Sevastopol City Council* (No. 856 of 20 December 1975, No. 6/199 of 28 March 197, No. 19/876 of 17 November 1987 and No. 3/185 of 29 January 1991).

Under the *Resolution of the Cabinet of Ministers of Ukraine on Adoption of Provisions on the Museum Resource of Ukraine* (No. 1147 of 20 July 2000), the museum collections of the Tauric Chersonese National Preserve are part of the state Museum Resource of Ukraine and therefore enjoy the highest degree of legal protection.

#### 4.1.3. Ministerial acts

*Project documents defining the boundaries and land use regimes of the city of Chersonese* were adopted by Order No. 220/0/16-11 issued by the Ministry of Culture and Tourism of Ukraine on 6 April 2011 and have been submitted to the municipal cultural heritage protection bodies, which are responsible for introducing relevant changes in the local city planning documents.

In addition to that, under consideration for adoption is now the *Project of Boundaries and Land Use Regimes for the Buffer Protected Areas of the Tauric Chersonese National Preserve on the Heracleian Peninsula in Sevastopol*.

Conservation and restoration on the sites administered by the Tauric Chersonese National Preserve are conducted according to the requirements of the *State Building Standards of Ukraine: Reconstruction, Renovation and Restoration of Nonproduction Sites. Restoration, Conservation, and Renovation Works on Cultural Heritage Monuments* (DBN V.3.2-1-2004), which were adopted in 2004.

The *Comprehensive Programme for Conservation and Restoration on the Chersonese City Sites* developed on the basis of the DBN V.3.2-1-2004 Standards was adopted by Order No. 90/0/16-10 issued by the Ministry of Culture and Tourism of Ukraine on 26 February 2010. A similar conservation and restoration programme has been developed for the Chersonese chora and is now under consideration for adoption.

#### 4.1.4. Local city planning documents

The protected status of the Chersonese city and its chora on the Heracleian Peninsula is recognized in the Master Development Plan for the City of Sevastopol until 2025 adopted by Resolution No. 4114 of the Sevastopol City Council (dated 31 December 2005). Now that new boundaries and buffer zones have been approved by the Ministry of Culture of Ukraine for the Tauric Chersonese National Preserve sites (since 2011), correspondent alterations are to be introduced in the relevant local city planning documents.

Furthermore, correspondent *resolutions of the Sevastopol City Council and regulations of the Sevastopol City State Administration* have transferred a number

of protected areas for permanent use to the Tauric Chersonese National Preserve, who is now responsible for systematic measures for the preservation and exploitation of the cultural heritage sites. These include:

- the ancient city of Chersonese – Regulation No. 55-p of the Sevastopol City State Administration of 13 January 1999;
- the chora site in the Yukharina Gully – Resolutions No. 475 and No. 10804 of the Sevastopol City Council of 5 July 2006 and 13 July 2010, respectively;
- the chora site in Berman's Gully – Resolution No. 4126 of the Sevastopol City Council of 8 April 2008;
- the chora site on the Bezymyannaya Height – Regulation No. 55-p of the Sevastopol City State Administration of 13 January 1999;
- the chora site in the Streletskaya Gully – Resolution No. 4127 of the Sevastopol City Council of 8 April 2008;
- the chora site on the isthmus of the Mayachny Peninsula – Resolution No. 7982 of the Sevastopol City Council of 8 September 2009; and
- the chora site on Cape Vinogradny – Resolution No. 4802 of the Sevastopol City Council of 8 July 2008.

Apart from the aforementioned areas, the Tauric Chersonese National Preserve has at its disposal another 5 protected sites on the Heracleian Peninsula, namely on Cape Peschany, near Omega Bay, in the upper part of the Yukharina Gully, in the upper part of the Quarantinnaya Gully and in the Khomutovaya Gully, with all the necessary resolutions already passed and correspondent deeds already issued by the Sevastopol City Council. In the nearest future (until the end of 2011) the Preserve expects to receive another 5 sites on the Heracleian Peninsula.

#### **4.2. Suggested solutions and future prospects for legal protection of the property**

In 1988 Ukraine ratified the *Convention Concerning the Protection of the World Cultural and Natural Heritage* adopted by UNESCO in 1972. According to the Convention, the state party is to apply its provisions to any and all sites and areas nominated for inscription on the World Heritage List. If the property the Ancient City of Tauric Chersonese and its Chora is inscribed, additional protection and control measures shall be applied to it in accordance with the said document.

In this connection, certain state acts will have to be adopted to supplement the Law of Ukraine on Cultural Heritage Protection, particularly as far as world heritage protection and alignment of Ukrainian cultural heritage protection legal definitions with those set by international law are concerned. Relevant amendments to the Law are already being prepared by the authorized bodies of the Ministry of Culture of Ukraine. Among them are extending the existing list of site types (newly discovered, local and national ones) by adding a 'world heritage site' category, definitions of world heritage buffer zones in the context of the existing monument protection zoning etc.



In addition to that, some bylaws and ministerial acts will have to be passed to have the archaeological heritage sites lying within the boundaries of the protected Tauric Chersonese National Preserve areas included into the State Register of Immovable Monuments of Ukraine. The Preserve is now preparing all the necessary documents that will become a basis for the relevant acts to be issued by the Cabinet of Ministers and the Ministry of Culture of Ukraine.

Of crucial importance for conducting monument protection activities at the property is purpose-based government funding. To have it secured as soon as possible, a target governmental programme for the development of the Tauric Chersonese National Preserve for the next 10 years is to be adopted. The concept of such a programme with estimates of additional funds needed for the protection of the sites, creation of the archaeological park (the first one in Ukraine) and their integration into governmental programmes for local and international tourism development has already been prepared by the State Service for National Cultural Heritage Protection and is currently under consideration by the Cabinet of Ministers of Ukraine.

Furthermore, the Heracleian Peninsula has some rather large undeveloped chora land plots with extant ancient structures that need to be granted protected status and subsequently transferred for use to the Tauric Chersonese National Preserve. Relevant research and project documents are now under preparation and will be submitted for adoption to the Ministry of Culture of Ukraine and the local self-governance bodies in 2011 and 2012. It should be noted that if such areas obtain protected status, they could contribute to considerable expansion of the nominated property and thereby ensure security, protection and preservation of the Chersonese chora on an area considerably larger than the one it has at the moment.

In addition to that, in order to secure their legal status as protected areas, in the nearest future (2012 – 2013) all the relevant Chersonese chora sites and monuments will be provided with passports and included in the State Register of Immovable Monuments of Ukraine.

The final output of the said projects will be the changes introduced in the local city planning documentation, notably the Master Development Plan for the City of Sevastopol until 2025, which should set the boundaries and land use regimes for the cultural heritage sites and their buffer zones as defined by the mentioned projects. This was initiated in 2011 and is expected to be finalized by June 2013.

## **5. PROPERTY MANAGEMENT STRUCTURE**

### **5.1. General information**

The ancient city of Tauric Chersonese and its chora is a complex of archaeological monuments and is, according to the Ukrainian legislation, the property of the state of Ukraine.

General management of the property is the responsibility of the Ministry of Culture of Ukraine, the central national executive power body in the field of cultural heritage protection.

As per the Statutes adopted by the Ministry of Culture and Tourism of Ukraine (Order No. 917/0/16-08 of 18 August 2008), responsibility for day-to-day management of the property lies with the Tauric Chersonese National Preserve.

Apart from the city of Chersonese and the protected chora areas, the Preserve is also responsible for the ruins of two fortresses located in the area under the jurisdiction of the Sevastopol City Council: the Kalamita Fortress in the settlement of Inkerman and the Cembalo Fortress in the town of Balaclava.

## **5.2. Existing property management structure**

### 5.2.1. Executive structure

The executive structure of the Preserve administration is based on the staff list approved by the Ministry of Culture of Ukraine. In effect now is the staff list adopted on 27 May 2011, according to which the Preserve administration consists of 196 staff positions, of which 138 are paid from the state budget and 58 are paid from the special fund. These staff positions make up the following executive structure of the Preserve administration (Fig. 41):

At the head of the Preserve administration is the Director General, who is assisted by 7 Vice Directors and an Academic Secretary. These are responsible for the following fields of activity:

- research,
- education and outreach,
- archaeological research expeditions,
- protection of explored monuments,
- restoration,
- international contacts, and
- investment activities.

The Vice Directors are in charge of their respective Departments and Sections, as well as Support Services:

- Accounting Department,
- Personnel Department,
- Ancient History Department,
- Medieval History Department,
- Scientific Archive Department,
- Scientific Collections Department,
- Architecture and Archaeology Department,
- Scientific Conservation Department,
- Interpretation and Site Protection Department,
- Research Department,
- Security Department,

- Department of Scientific and Technical Methods of Monument Research,
- Maintenance Department,
- General Affairs Department,
- Conservation and Restoration Section,
- Education and Outreach Section,
- Scientific Methodology Section,
- Archeological Monument Passportization Section,
- Monuments Protection and Research Section,
- Archaeological Station for Archaeological Research Expeditions,
- Branch – Cembalo Fortress, and
- Branch – Archaeological Park.

The Preserve comprises two Branches, fourteen Departments, five Sections and an Archaeological Station. Their activities are based on the annual action plans subject to approval by the Ministry of Culture of Ukraine.

The divisions of the Preserve listed above are all headed by senior specialists, who manage scientific, technical and auxiliary staff. At the moment, the administration of the Preserve includes the following staff categories:

- administrative staff – 39;
- scientific staff – 44,
- technical staff – 37,
- auxiliary workers – 76.

#### 5.2.2. Advisory structure

In order to improve coordination between the structural divisions of the Preserve administration, address day-to-day multisectoral challenges, deal with emergency works and provide for collective decision making, the management structure of the Preserve has been supplemented with some advisory bodies. These include such standing bodies as the Academic Council, the Scientific Methodological Council, the Restoration Council as well as temporary Working Groups.

The *Academic Council* consists of reputable scientists, both working in the Preserve and representing relevant external research organizations, and acts as an advisory body to the Director General of the Preserve. The Academic Council performs the following functions:

- reviews scientific and research projects to be implemented in the Preserve and recommends them for approval;
- approves new research methodologies;
- does strategic planning of the scientific activities of the structural divisions of the Preserve;
- approves scientific work plans of the Preserve staff members;
- reviews and approves the Preserve's exhibit plans;

- reviews the Preserve's publishing plans and approves its publications for publishing;
- decides on arranging scientific and practical conferences, workshops etc;
- approves documents endorsed by the Scientific Methodological and Restoration Councils; and
- addresses any other research related issues.

The membership and duties of the Academic Council are subject to approval by the Director General of the Preserve. The Council meetings are called when necessary.

The *Scientific Methodological Council* consists of the leading museum specialists of the Preserve and acts as an advisory body to the Director General of the Preserve. The Scientific Methodological Council performs the following functions:

- reviews the texts of thematic guided tours submitted by scientific staff and guides of the Preserve and makes necessary recommendations as to their approval;
- reviews and approves methodological concepts of guided tours for museum and open-air exhibits;
- studies positive display and collection related practices of the Preserve departments and assists their ongoing progress;
- reviews and approves projects for the artistic design of the Preserve's exhibits;
- organizes and takes an active role in the preparation of conferences on the practicalities of museum activities.

The membership and duties of the Scientific Methodological Council are subject to approval by the Director General of the Preserve. The Council meetings are called when necessary.

The *Restoration Council* consists of the leading specialists of the Preserve dealing with conservation and restoration of immovable heritage and museum items and acts as an advisory body to the Director General of the Preserve. The Restoration Council performs the following functions

- reviews and recommends for approval heritage conservation and restoration programmes and projects of the Preserve;
- plans restoration and conservation works on the sites of the Preserve;
- introduces up-to-date practices of restoration and conservation of immovable heritage and museum items;
- assesses the qualifications of the Preserve restoration specialists.

The membership and duties of the Restoration Council are subject to approval by the Director General of the Preserve. The Council meetings are called when necessary.

*Temporary working groups* comprised of representatives of different divisions of the Preserve are set up by order of the Director General to coordinate their efforts and perform activities which require involvement of different specialists. Memberships, tasks and timeframes for any such groups are set by the Director General of the Preserve with the advice and consent of the heads of all the divisions involved.

### 5.2.3. External structures

General management of the Preserve administration, its property and its areas is the responsibility of the Ministry of Culture of Ukraine and, in exceptional cases, the Cabinet of Ministers of Ukraine. In order to practically perform such management, the said institutions have created two advisory bodies: the Cultural Heritage Protection Scientific Methodological Council under the Ministry of Culture of Ukraine and the Supervisory Board of Trustees of the Tauric Chersonese National Preserve.

The *Cultural Heritage Protection Scientific Methodological Council* under the Ministry of Culture of Ukraine has been created by order of the Ministry and is composed of leading specialists from relevant research and design institutions of Ukraine. The Council performs its functions as an expert body giving opinions and recommendations as to the approval of any projects related to the protection and exploitation of the cultural heritage of Ukraine, including the heritage administered by the Tauric Chersonese National Preserve. The said projects can only be approved by correspondent orders of the Ministry of Culture and Tourism of Ukraine on the basis of correspondent resolutions of the Council.

The *Supervisory Board of Trustees* of the Tauric Chersonese National Preserve has been created by order of the Cabinet of Ministers of Ukraine and is composed of distinguished scientists and public figures, representatives of non-governmental organizations and local self-governance bodies, the membership of the Council being subject to approval by the Cabinet of Ministers of Ukraine. The Council is to give advice and supervise the Preserve administration. The resolutions of the Council serve as recommendations for the governing bodies helping them to promptly respond to any arising problems related to the activities of the Preserve administration, preservation of its cultural heritage and any other issues pertaining to the Preserve.

## **5.3. Suggested solutions to develop the property management structure**

The *executive structure* of the Preserve needs radical transformation while the staff size of the Preserve administration should be kept as it is or even increased.

It is evident that the existing structure of the Preserve administration is much too cumbersome and not quite reasonable. At the moment, there is a lot of overlapping in the functions of different divisions. At the same time, different Vice Directors are responsible for supervising the activities of interrelated divisions. What's more, there is no such position as the Senior Collections Manager, which is, however, vital for ensuring the integrity of the Preserve's museum collections.

Consequently, there is a need for well thought out reorganization of whole the chain of command in the Preserve, which will, in turn, help to improve its cultural heritage management.

In need of reorganization is also the staff structure of the Preserve administration, presently showing lack of balance between administrative staff, which is excessive, and scientific and technical staff, which is deficient, i.e. there is a problem of administrative overstaffing and scientific/technical understaffing.

In order to remedy the situation, an urgent audit of the executive and staff structures of the Preserve administration is needed, and the result of such an audit should become a basis for introducing relevant changes to the staff list.

The *advisory structure* does not need any radical change, the functioning of the advisory bodies being fully justified and contributing to effective performance of the tasks faced by the Preserve administration.

Still, in the future it would make sense to define the functions of each of the aforementioned advisory bodies more clearly and make their activity schedules more precise. Furthermore, the Restoration and Scientific Methodological Councils of the Preserve should be subordinate to the Academic Council and coordinate their actions accordingly. The proposed changes should be reflected in the correspondent provisions regulating the duties of these bodies, and the meetings of the Councils should be held at least 4 times a year.

As for the Academic Council of the Preserve as a body involving not only internal but also external specialists, it can go on to function at two levels: day-to-day issues could be addressed at internal meetings of the Academic Council, held, whenever necessary, jointly with the Restoration and Scientific Methodological Councils whereas more complicated and larger scale problems could be tackled at enlarged meetings of the Academic Council involving its external members. Such enlarged meetings should be held at least 1 to 2 times a year.

The *external structures* of the Preserve are also in no need or reorganization, being well established implementation mechanisms for the state cultural heritage protection policies.

What is however recommended is to make up a work schedule for the Supervisory Board of Trustees in order to improve coordination as far as participation of its members from other cities and countries, organization of its meetings, decision making and informing the Ministry of Culture and the Cabinet of Ministers of Ukraine of its decisions are concerned. It is advisable to hold meetings of the Supervisory Board of Trustees at least 1 to 2 times a year.

## **6. PROPERTY SECURITY**

### **6.1. Protection against vandalism**

All the protected areas managed by the Tauric Chersonese National Preserve should be fenced and have 24-hour access control security.

General rules should be formulated and posted at the entrances to the protected areas to safeguard their archaeological remains. These should specify that digging or any other form of damage (including removal of stone, brick, plaster etc) to any structures in the Preserve is strictly forbidden. Stress will be laid on the legal ban on the removal of any form of archaeological material from protected sites and the penalties for transgression.

Sensitive elements such as mosaic floors should be protected by barriers preventing visitors from damaging them, whether intentionally or unintentionally. At points such as these there should be discreet notices requesting visitors not to cross the barriers. Also forbidden should be climbing on ancient masonries, with correspondent warning signs installed.

The security staff (guards or wardens) will be responsible for ensuring that these rules are observed by visitors during the opening times of the Preserve.

### **6.2. Visitor safety provisions**

In order to ensure security and personal safety of the visitors to the Preserve, more guards should be hired to patrol the protected areas while the sites are open to the public. Guards and wardens will be responsible for ensuring that visitors do not put themselves or other visitors at risk by their actions. These individuals should be easily recognizable and for this purpose it is desirable for them to wear some kind of uniform. Such uniform should not be in police or military style, but it should be easily recognizable from a distance.

The viability of CCTV (closed-circuit television) should be investigated as a means to monitor those areas of the Preserve that cannot be physically patrolled in a continuous manner.

### **6.3. Site security at night**

At night, when the sites are closed to visitors, guards will be responsible for ensuring that there are no unauthorized people within their boundaries. They will be charged in particular with preventing any illicit excavation and ensuring that the museum and its collections are not violated. It is recommended that nighttime security on the sites be provided in close collaboration with the local law enforcement services (police).

Unlike the guards operating during the periods when the sites are open to visitors, the guards responsible for security at night could wear more formal uniforms.

## **7. MONITORING OF CULTURAL HERITAGE AT THE TAURIC CHERSONESE NATIONAL PRESERVE**

### **7.1. General principles**

The traditional approach to conservation at the Preserve is based on reaction to deterioration events, i.e. an object is conserved only when it is discovered to be actively deteriorating. This *reactive* culture of conservation is good enough to only partially restore deteriorating structures and, in the long run, it results in a gradual loss of authenticity of ancient historic and archaeological buildings and structures, remains of ancient constructions and archaeological finds across the Preserve.

Therefore, in the future the reactive culture of conservation should be replaced with the one focusing on *preventive* conservation measures, wherein potential deterioration and its underlying root causes are identified and addressed before they start causing any irreversible damage that would require invasive remedial action.

Introduction of the preventive conservation approach at the Preserve requires development and implementation of a monitoring system based on repeatable overall condition assessment surveys, along with targeted condition assessments. These would provide a baseline dataset from which annual long-term and short-term monitoring action plans should be developed.

In addition to the aforementioned formal condition assessment programme, a less highly structured continuous public monitoring programme is proposed to be introduced which would encourage all stakeholders regularly accessing the areas, museums and historic buildings of the Preserve to highlight actual and perceived conservation problems to those responsible for conservation at the Preserve.

### **7.2. GIS monitoring of immovable heritage**

In 2003, the Conservation and Restoration Section of the Tauric Chersonese National Preserve, together with the Institute of Classical Archaeology at the University of Texas, developed an experimental site conservation condition survey and recording system based on a Geographic Information System (GIS). The survey system has been tried out on some of the pilot sites and monuments in the ancient city and, having delivered successful results, should now be extended to cover all the areas, sites, historic buildings and structures that comprise the Preserve (Fig. 42). The GIS will allow for overall comparative analysis of the condition of the cultural heritage across the Preserve as a whole, making it possible



to identify the objects that are in most urgent need of conservation, irrespective of their location within a specific area of the Preserve.

### **7.3. Monitoring of museum collections**

Since 2004 the artefacts, archive, and library collections of the Preserve have been systematically examined to establish their overall condition and identify types and prevalence of the destructive factors to which the material is exposed. The survey has also focused on the suitability of packaging materials and display constructions to determine the level of protection these afford to the collections. Besides, the condition and material makeup of the buildings and the overall environment parameters to which the items are exposed have been analyzed.

As a result of these undertakings, a number of projects focused on improving storage conditions through introduction of improved packaging methods, upgrading of existing storage facilities and construction of a new supplementary storage facility have been implemented. The dataset produced as a result of the survey should form a baseline of information, to which data collected in the future repeats of the collection condition survey will be compared.

By adopting a structured monitoring programme of the collections through continuous environmental monitoring and repeat condition surveys, optimum storage conditions will be created and a culture of preventive rather than reactive conservation will be achieved for the collections.

In addition to that, there is a pressing need for establishment of a programme for continuous biological (mycological) control of items on display in the galleries and located in the stores. This programme should be integrated with a programme of continuous monitoring of humidity and temperature in the stores and exhibition galleries of the Preserve using modern sensors and computer management.

### **7.4. Frequency of monitoring**

#### 7.4.1. Immovable cultural heritage

A programme of extending the practice of the surveys undertaken in 2003 and 2004 to cover all the areas of the Preserve is to be initiated in the nearest future.

Condition surveys will be carried out at regular intervals. Repetition of the 2004 survey should be undertaken in 2012, after the Preserve acquires the necessary software, and, depending on the result when compared with the 2004 data, the frequency of such monitoring will be increased or decreased as required.

Organized monitoring of the sites will initially be carried out by monthly or bimonthly site visits by the relevant Preserve staff. In the future, as the needs of specific sites are clarified, this frequency can be increased or decreased.

A system to allow the Preserve staff and stakeholders to participate in the informal monitoring of the sites will be established at the earliest date possible.

#### 7.4.2. Movable cultural heritage (archaeological collections and archival material)

The survey undertaken in 2004 will be repeated in the near future, at which point the frequency of future surveys will be established.

Monitoring and examination of the collections is at present undertaken in a traditional way. This will continue, with the procedure becoming more structured and data produced digitized and added to the conservation database.

A structured approach will also be used for updating storage and packaging methodologies.

## **8. CONSERVATION AND RESTORATION OF THE PROPERTY**

### **8.1. General considerations**

Archaeological investigations have been conducted in the protected areas of the Tauric Chersonese National Preserve for nearly two centuries. Excavation of a monument and its eventual display require measures to ensure its conservation and preservation. Moreover, it is important to remember that the character, age and state of preservation of monuments can be very different from one to the next. In addition, the approaches which were used over a period of many decades were not systematic; they changed progressively, and in many ways do not conform to today's monument preservation requirements.

Over the last few years a great deal of survey work has been undertaken in order to establish the extent and condition of both movable and immovable heritage for which the Preserve is responsible, with the aim of determining the extent and priorities of conservation work. Because the volume of the material is so vast, any conservation efforts required to ensure its survival into the future need to be carefully planned, coordinated and undertaken on the basis of a well designed conservation plan built on the most up-to-date methodologies of conservation and management.

The volume and diversity of the material present and the complexity of the required work dictate that such a conservation plan should be organized into prioritized stages of conservation and restoration works and made up of a number of smaller distinct plans developed to address the needs of specific collections, archaeological complexes and individual monuments.

In order to ensure the necessary level of quality and effectiveness of work on the monuments simultaneously and in a coordinated manner, it is necessary to develop a *Programme for Conservation and Restoration Research and Works at the Tauric Chersonese National Preserve*, which will ensure a systematic approach to monument preservation at the Preserve and affirm the conceptual approaches to conservation. Leading specialists from various fields of monument preservation should be invited to develop the programme. The programme should be approved by the Academic Council of the Preserve and adopted by the Ministry of Culture of Ukraine.

The programme in question is planned to include the following sections:

1. Conservation of archaeological complexes;
2. Conservation of architectural complexes and historic structures;
3. Conservation of archaeological artefacts;
4. Preservation of library and archival material;
5. Preservation of digital data; and
6. Preservation of museum records.

In addition to the sections listed above, some other aspects of monument preservation should be considered when developing any conservation projects within the framework of the programme:

- i Implementation of a preventive conservation philosophy;
- ii Implementation of a risk-preparedness culture;
- iii Creation of a disaster plan;
- iv Development and monitoring of stable and suitable museum display and storage environments;
- v Introduction of up-to-date storage methodologies and materials;
- vi Introduction of such strategies of site and monument conservation, historic reconstruction and preparation of areas adjacent to sites and monuments that will aid presentation, interpretation and visitor management.

## **8.2. Major focus areas of conservation and restoration**

### 8.2.1. Preservation and conservation of exposed archaeological complexes

The Preserve is currently conducting intensive scientific investigations in the conservation of archaeological complexes and selection of conservation materials and methodologies. On the basis of these investigations, general systematic approaches will be developed for the preservation and display of archaeological sites and monuments. These methodologies will form the basis of the general concept of archaeological monument preservation of the Preserve, thereby ensuring the quality of individual approaches to each monument, taking into account its idiosyncrasies, character, and historical and cultural values, according to the requirements of international standards and national regulations of Ukraine for the conservation and preservation of monuments.

In 2009 the Institute of Monument Protection Research developed a Comprehensive Programme for Conservation and Restoration at the Complex National Archeological Heritage Property 'Ancient City of Tauric Chersonese' envisaging step-by-step conservation activities in the ancient city of Chersonese (adopted by Order No. 90/0/16-10 of the Ministry of Culture dated 26 February 2010). A similar programme is now being developed for the chora. Specifically, the programme requires that:

- any conservation projects at the Preserve should be developed in accordance with the current national and international standards and regulations;

- any work on any monument should begin with comprehensive research on that monument, whose results should then form the basis for further project decisions;

- the research results should form the basis for a draft monument conservation project, which should include all the aspects of preservation, organization, and necessary financing for the works;

- the draft project is a document that should receive all necessary approvals; and so it must go through all the stages of discussion, approval, necessary expertise and adoption by the Ministry of Culture of Ukraine. In addition, the Academic and Restoration Councils have an opportunity to review and introduce relevant changes to the project documentation so that it conforms with the general principles, the approved concept for preservation and systematic approaches to preservation of the monuments of the Preserve. These steps are designed to prevent any undesirable results, loss of harmony and integrity of the ensembles and complexes etc.

It is also required that the Preserve staff should be competent and experienced in organization, implementation and management of large-scale restoration and conservation projects. The Preserve shall secure all the necessary legal licences authorizing it to undertake any of its conservation and restoration projects. Only those organizations that have special licences allowing them to project and conduct conservation and restoration works on national monuments can be accepted as conservation and restoration project developers and implementers for the Preserve. Such specialized licensed organizations will be involved where complicated work and comprehensive scientific investigations in conservation are necessary. Any such work will however still be performed under continuous supervision of the appropriate Preserve employees and under the control of the relevant state monument preservation services.

#### 8.2.2. Preservation and conservation of architectural complexes and historic buildings

In addition to archaeological monuments, the Preserve has a number of historic buildings. These are the remnants of the architectural ensemble of the monastery and the buildings dating from the Crimean War and World War II periods. They are currently being researched, classified and officially recorded (provided with passports).

To protect these historical and architectural monuments it is essential to take a comprehensive approach to research and a systematic approach to the preservation of these monuments and their territories (as these are elements of the architectural and archaeological complexes).

The principle of minimum intervention and maximum reversibility should be basic principles guiding conservation decisions for these monuments. The system of monument research and preservation will be updated and modernized regularly.

More attention will therefore be paid to the comprehensive research of the monuments and their architectural elements, their building materials and technologies. Any interventions will be minimal and carried out applying materials similar to those used in their original construction. If, having passed their natural

life, roofs, windows, floors and fittings are in need of renovation and only when this is impossible will they be replaced with materials that exactly match the original quality, materials and design. New elements will not have any negative impact on authentic elements.

As with the conservation of archaeological structures, renovation and maintenance of historic buildings will be controlled and managed by the Preserve.

Historic buildings will only be used for the purposes they were originally intended for (St. Vladimir's Cathedral and the Church of Seven Martyrs of Cherson) or as administrative, storage or display premises of the Preserve. However, any such adaptive reuse with its modern pressures should not have any negative impact on their authentic elements, but should make a positive contribution to their preservation. Any additions or modifications should be temporary in nature and reversible so that the buildings may, if required, revert to their original form without evidence of reuse being visible.

In order to establish the framework for such conservation and restoration works, an inventory of all the historic complexes and buildings in the ancient city and in the chora should be compiled and maintained.

### 8.2.3. Preservation and conservation of archaeological artefacts

Conservation of archaeological material at the Preserve will be based on the best practice principles, as determined by the international conservation community. It will be considered as part of the archaeological process and a requirement for obtaining excavation permits. Those responsible for excavations undertaken by non-Preserve-based archaeological institutions or any other bodies will be required to present their material to the Preserve in a condition and packaged in a way that will assure its survival.

Over the past few years advances in both conservation methodologies and archival packaging have been made by the Scientific Conservation Department of the Preserve. This work is to be developed into a conservation guidebook or manual, which should be adopted as a list of requirements for depositing material in the museum.

Visiting archaeological expeditions that elect to undertake conservation of their own material will be vetted by the Preserve's Scientific Conservation Department in order to ensure that those undertaking the work are competent, qualified and experienced in the disciplines required. Archaeological expeditions that rely on the Preserve's Conservation Department to undertake the required conservation of recovered archaeological material will have to cover the cost of this service.

Conservation of material recovered from any joint archaeological excavations undertaken by the Preserve in partnership any other organizations will be funded jointly by both parties or by one of the parties, if mutually agreed.

#### 8.2.4. Preservation and conservation of library and archival material

The Preserve houses a large quantity of library and archival material and these collections are continually increasing. Conservation of this material is considered as important as that of the museum collections.

Like the archaeological material, new material deposited in the library and the archive will be required to arrive in a form determined by the Library, the Archive and the Conservation Department. These requirements should be legitimized by a correspondent regulatory act and form part of the conditions for obtaining excavation and research permits. The requirements will specify form, size, packaging, labelling and material makeup of the substrate and be based on the principles of best practice as determined by the international conservation community.

#### 8.2.5. Preservation and conservation of digital data and museum records

The Preserve is now producing and accruing a large amount of digital data which require proper housing, preservation and substrate. The Preserve's Restoration, Library, and Archive Departments should give high priority to becoming familiar with this discipline so as to be able to implement a plan for the storage of this material based on the best practice principles as determined by the international conservation community.

Apart from that, all departments of the Museum keep records of their activities and specific responsibilities. In the future, a provision should be made for incorporating these records in the historical record. In this case these records will be governed by the same criteria of material makeup, form and preservation needs as the library and archival material. A plan of systems for collation of this material and its future preservation is to be prepared and implemented.

### **8.3. Basic principles of restoration and conservation**

#### 8.3.1. Implementation of a preventive conservation philosophy

As has already been mentioned, at present the vast majority of conservation in all disciplines and across all areas is reactive. The Preserve will change this operational practice through the use of condition surveys and by providing equipment, materials, improved storage facilities, working practices and staff education to allow for a culture of preventive conservation to become established.

#### 8.3.2. Implementation of a risk-preparedness culture and creation of a disaster plan

All museum collections, archaeological sites and ancient buildings are at risk from negative natural and manmade factors. Whilst the impact of such factors can be reduced, they can never be eliminated. It is therefore necessary for the Preserve to quantify the level of risk to the cultural heritage it is responsible for across all aspects of its sites and buildings and disseminate this information.

The staff should be made aware of possible problems and frameworks of reporting thereon. A survey will be undertaken and working practices modified if required. A risk assessment survey will be undertaken at the earliest possible date

and is to be repeated on a regular basis. Working practices, prioritization of maintenance and financial budgeting should all be influenced by the necessity to reduce the possibility of damage or loss of the cultural heritage the Preserve exists to protect.

Natural and anthropogenic disasters are a potential threat that is beyond man's control. Whilst most events of this kind cannot be predicted or prevented, experience has shown that by planning the reaction to the disaster and by training and practising how the staff should react to a disaster can considerably reduce the long-term impact of the event. The Preserve will therefore give the highest priority to obtaining the skills required to create and implement a comprehensive disaster plan as soon as possible. The plan should cover not only the Preserve and its staff, but also the emergency services, police and local government officials. These organizations are to be contacted on this matter and included in the development of the disaster plan from its initial conception.

#### 8.3.3. Development and monitoring of stable suitable museum display and storage environments

Preventive conservation is based on the principle of mitigation of the destructive forces working on an object, as opposed to manipulation of the material makeup of an object to render it stable in the range of conditions that it is to be stored or displayed in.

Preventive conservation has two main advantages. First of all, the object can remain in its original condition as excavated and therefore available for analysis in its original unmodified state. Second, treatment of the object can take place whenever required and not as an immediate response to excavation. This eliminates pressure on the Conservation and Restoration Section and frees up conservators' time to undertake work on a backlog of material in the collection.

A preventive conservation approach is now the norm worldwide, and this approach will be adopted by the Preserve in order to protect its collections and handle the vast amount of new material it is constantly acquiring.

The basis of preventive conservation is the creation of storage and display environments that actively protect the material contained therein. The Preserve staff will acquire the skills required to design systems and develop working practices that will allow them to undertake the work required in order to successfully upgrade the present storage and display environments to levels that meet international standards for storage and display.

#### 8.3.4. Introduction of up-to-date storage methodologies and materials

Along with correct storage and display environments, packaging and storage methodologies assist in the preventive conservation of museum items. The Preserve staff will obtain the skills required to implement and upgrade their storage and packaging methodologies by undertaking a programme of testing materials for their suitability for use in the museum context. Local manufacturers and suppliers will be located and the onward supply of the correct materials sourced.

As has been mentioned above, the success of any preventive conservation methods can only be determined by repeated survey of the condition of the material in the collections assessing the level and rate of deterioration as well as by monitoring of the levels and fluctuation of the destructive elements of the storage and display environments. A programme of environmental monitoring for the galleries and storage facilities is therefore to be initiated as soon as possible to produce a baseline dataset from which a plan for the future improvement of facilities could be developed.

#### 8.3.5. Introduction of site and monument conservation, restoration and reconstruction strategies that aid interpretation and visitor management

At present the Preserve is viewed as a set of individual sites, monuments, structures and buildings with conservation treatments being designed and implemented as “one off” projects on “one off” sites. This approach is recognized as directly leading to confusion and to accentuating the perception of the components of the Preserve as distinctly separate entities. Such an approach will be reversed, recognizing the essential fact that the strength of the Preserve territories lies in the fact that they are all linked.

To accentuate these links, conservation treatments and restoration will be standardized across all the sites, irrespective of their geographical location within the Preserve territories. The practice of reconstructing of missing elements of structures will be replaced by a policy whereby reconstruction is only undertaken when not to do so is judged to be likely to result in the loss of further original material, and then only as a last option and in accordance with the requirements set out in the international conventions and international restoration recommendations.

## **9. PROPERTY RESEARCH**

### **9.1. Archaeological surveys and excavations, geophysical, aerial and underwater surveys**

Only some of the excavations that have been carried out over the past 150 years in the ancient city of Chersonese and in its chora have been conceived as parts of specific research programmes. Most of the excavations have however been opportunistic or concentrated on a single site or monument to the exclusion of its surroundings or context. The same considerations applied to a considerable extent to many other aspects of research – archival, architectural, artefactual research, landscape analysis etc. It is difficult to understand the overall research policy when research is concentrated on elucidating specific problems. This kind of practice does not conform with currently accepted scientific methods and wholly contradicts all the accepted principles of heritage preservation.

There is therefore an urgent need to establish an overall problem-orientated research policy for Chersonese and its hinterland. This should be given the highest priority by the Academic Council of the Preserve when making any decisions. The



policy should be subject to a triennial evaluation and revision, but revisions will be possible annually should urgent grounds for doing so (e.g. new discoveries, changes in funding) be recognized.

Professionals who plan to conduct archaeological investigations on the Tauric Chersonese National Preserve territories must annually seek approval of their research plans from the Academic Council of the Preserve. Research plans of archaeological investigations must include, in addition to a rationale for the necessity of such work, the location of planned work, a detailed description of objectives and methods of research and conservation work, a list of estimated costs, sources of funding, services required from the Preserve and a precise timetable for publication of results.

It is necessary to introduce a practice according to which archaeologists will not be granted permission to conduct archaeological investigations or excavations in the Preserve from the central executive body in the field of cultural heritage protection unless their research plans are approved by the Preserve administration.

Grounds for rejection of archaeological research plans by the Preserve administration can include the incompatibility of planned work with the general research strategy of the Preserve, inappropriate methods of research and/or conservation standards and also the failure to produce research reports or publications on past work.

Data collected from archaeological investigations in the Preserve should be detailed in an extensive research report and submitted to the Preserve archive; archaeological finds should be appropriately processed and submitted to the Preserve's Collections Department according to the current collection requirements.

Researchers retain exclusive publication rights for the scientific information acquired by them in the process of work, as established by Section 1, Articles 15 and 28 in the Law of Ukraine on Copyright and Contiguous Rights. Data from excavations, surveys and other projects that are not published within five years of such excavations, surveys etc shall be considered to be in the public domain and available for other scholars and researchers.

These conditions apply equally to the staff of the Preserve, whose research project proposals (with the exception of emergency interventions) must also be submitted for approval to the Academic Council.

The requirements set out as relating to the submission of research proposals apply fully to excavation projects. Additionally, all estimates of excavation projects must include provision for obligatory post-excavation conservation of important archaeological remains and the disposal of spoil. No finds may be removed from the Preserve without special permission from the Preserve's administration, and all drawings, photographs and other graphic materials must be lodged in the Preserve's archives. Records must be prepared in the form laid down by the Preserve for integration into its database.

Applications similar to the ones submitted for archaeological excavations must be made for obtaining permission to carry out any forms of survey projects, including geophysical, aerial and underwater, in or around the areas of the

Preserve. Survey data must be submitted to the Preserve's archives so as to be made available for inclusion in the common database in a compatible format. Priority will be given to projects that conform to the overall research policy of the Preserve.

A geophysical map of the Heracleean Peninsula within the demarcated ancient chora of Tauric Chersonese and the unexcavated areas of the ancient city should also be created. Such a map will be an essential foundation for developing an effective programme for future archaeological investigations. This project is particularly important in the rescue excavation context, given the rapid pace of urbanization in and around Sevastopol. It is obvious that rescue archaeological investigations and excavations in the area should be carried out as soon as possible, before any construction works start.

Last but not least, in order to be able to conduct underwater surveys in the Black Sea and the bays adjacent to the Heracleean Peninsula, a special research division should be created within the structure of the Preserve administration with specialists qualified in relevant fields.

## **9.2. Archival and bibliographic research and publications**

There will be facilities for archival and historical research for Ukrainian and overseas scholars at the Preserve. The collection in the Library is an exceptional one and should be widely publicized both nationally and internationally. Facilities provided for study should be of a quality considerably higher than that currently available. This should be the subject of a comprehensive review and reform.

All the archives (manuscripts, reports, plans, maps, photographs etc) in the Archive of the Preserve and all the artefactual material in the Museum and the stores are available for consultation and study by scientists and students provided that these materials are not subject to researcher copyright. For access to any copyright reports prior consent of the authors must be obtained.

For access to the stores it is necessary for applicants to submit a written request from their institution substantiating the research necessity for obtaining access to the material and attesting to the identity and suitability of the applicant. Appointments should be made by letter, telephone, electronic mail etc with the Preserve managers.

According to current legislation, grounds for denial of access to archival materials or collections can only include the potential risk of damage to the materials in question during work owing to their fragile state or limitations accorded by authors' rights. The Preserve or the authors retain copyright over the archival materials and collections. Permission must be sought in writing for its reproduction in any form for publication. Reproduction and publication of these materials by persons other than the author requires special permission from the Preserve administration.

In the future, a study could be carried out on the possibilities for the use of the Preserve's archives by commercial organizations on a fee-paying basis. This will include an assessment of the implications in terms of staffing and finance.

At present the vast majority of written interpretive materials available to the visitor are in Russian. These include scholarly studies, guidebooks, brochures, pamphlets, postcards etc. They are available for purchase at souvenir stalls at the entrance to the Preserve and in both museum galleries. High-quality colour pamphlets about the museum's Byzantine steatite icons translated into Ukrainian, German and English are available for purchase in the museum galleries.

It is important that the Preserve should initiate a comprehensive publication programme. A more diversified selection of publications ranging in price, language and age-level is essential in making information about Chersonese more accessible to all visitors. The following are the main categories of publication that are needed:

- A series of general publications on the overall history and archaeology of Chersonese and specific aspects of the site aimed at a more general scientific readership will be prepared by Preserve staff or specialist scholars.
- A series of Chersonese monographs (in addition to the existing periodical, Chersonese Collections) should be initiated, published either independently or in association with other institutions. The copyright of all these publications will wherever possible be assigned to the Preserve.
- Guidebooks for general visitors (in Ukrainian initially, but extended to other languages – English, Russian, French, Japanese, German) should be prepared.
- Introductory workbooks and worksheets for schoolchildren covering different aspects of Chersonese and written by schoolteachers or educationalists in collaboration with Preserve staff are necessary.

In addition to these more formal publications, consideration will be given to the preparation of some form of souvenir entrance ticket with a plan of the site and brief details of any temporary exhibits and public events currently held or prepared by the Preserve.

## **10. INTERPRETATION AND PRESENTATION OF CULTURAL HERITAGE**

### **10.1. General principles of cultural heritage interpretation**

A plan of monument interpretation to be developed by the Preserve will build on the ICOMOS Ename Charter provisions. Any plan for the interpretation and presentation of Chersonese must be based on knowledge about the visitors who come to learn about the site.

Specifically, distinctions should be made between foreign and local visitors and their needs, small children, students and adults, those coming for a few hours and those wanting to spend the entire day at the Preserve. In order to provide quality experiences for all kinds of visitors, it is important to create an interpretation programme tailored to all visitors and catering for their individual intellectual, cultural and physical needs: these pertain to language, age, physical limitations and education level. All interpretation methods mentioned below

(printed material, guided and other types of tours etc) need to be available in more than one language, and preferably in Ukrainian, Russian, English and other languages.

In order to form an effective interpretation programme and provide high quality visitor services tailored to different kinds of visitors, a thorough visitor survey (through questionnaires and interviews) should be conducted by the Preserve; these data will demonstrate who in fact comes to Chersonese and why. Once a complete visitor profile and visitor expectations have been elucidated, decisions can be made about the type and amount of information that need to be provided.

Data collected from visitor surveys will help mould ideas for temporary exhibits in the museum galleries so that more dynamic displays will address the themes that interest visitors the most. Temporary exhibits, a regular schedule of thematic talks given by staff specialists as well as presentations of the latest finds and excavations will encourage repeat visits to the museum by those visitors who have seen the permanent exhibition.

## **10.2. Museum exhibits**

At present, the Preserve has a permanent exhibit highlighting the medieval history of Chersonese. This was established in 1982 and needs upgrading. In addition to that, an ancient exhibit is due to open in 2012. While its design is still under discussion, the display premises are already being renovated and necessary facilities are being purchased with financial and advisory support of the A. G. Leventis Foundation (Cyprus).

Planning for new exhibits should take into account contemporary museum approaches to display and presentation. Provisions should be made for consistency between the museum halls in their information panels (with a uniform approach to printed layout, font, amount and intellectual level of information) and diversity of interpretive materials (printed guidebooks, audio guides, activity panels for children). There should also be compatibility in presentation with the information panels on the exposed sites.

The hologram exhibit currently on display at the Preserve does not meet today's standards and should therefore be either replaced or redesigned.

## **10.3. Immovable property conservation and interpretation challenges**

Interpretation and education are related to conservation approaches and vice versa. Reconstruction of architectural elements in archaeological structures, building up walls to an arbitrary height and filling out a floor plan by adding elements are some of the conservation practices that were in the past employed at Chersonese to make archaeological sites more readily understood by the non-specialist visitor. As in situ reconstructions and even additions to the original fabric are forbidden except in specific circumstances by the international restoration

conventions and charters that have been ratified by Ukraine, alternatives to reconstruction must be found.

Insofar as interpretation is concerned, there are several methods to make indecipherable archaeological structures more comprehensible to the non-specialist – for example, through schematic reconstructions on panels, in guidebooks, or by means of facsimiles built off the site (and duly marked as such).

A major visitor attraction in this respect will be the exhibits at the Archaeological Park in the protected Chersonese chora areas, whose potential will be strengthened through thematic displays related to particular characteristics of individual sites, demonstrations of achievements in experimental archaeology, palaeobotany and palaeozoology, educational activities as well as models of ancient farmsteads and vineyard planting wall systems.

#### **10.4. On-site signage**

As has already been mentioned, at the present time the panels affixed to the more prominent archaeological features in the ancient city of Chersonese usually contain identifying information, a plan of the structure, its approximate date and, at best, schematic reconstructions. A handful of these signs provide a short description of the function of the structure.

Orientation signs are limited to location names in Russian (e.g. Theatre, Galleries, Toilets) and corresponding arrows painted on asphalt-covered surfaces. They are rarely prominent and are often obscured by parked cars or worn away.

A large outdoor panel with a schematic plan of the ancient city has recently been replaced by one depicting a mix of reconstructed buildings dating to various periods of the city's existence (ancient through modern). More modern signage has, however, been installed on a recently excavated area in the ancient city which provides information about the institution conducting the excavations, plans and a short description of the history of the site and what kind of structures it contains.

There is thus an urgent need to prepare and implement a coordinated policy for signage in the ancient city.

Much worse is the situation on the chora sites, where there is no signage at all.

It goes without saying that the format and information provision for all signage (including information panels and orientation signs), both outside and within the museum galleries and other visitor accessible buildings, should be wholly compatible in all parts of the Preserve. All signage should be consistent in colour scheme, overall layout, font, symbols etc, so that it is readily understood by visitors.

Direct links should be made between excavated finds on display in the galleries and the location in the ancient city where those finds were made; these mental connections can easily be made through consistency in signage and a written guide (by means of symbols and colours). This will impress upon the visitor that the significance of the artefacts is not primarily intrinsic, but lies within the context in which they were discovered. This emphasis on their archaeological

and historical significance will better explain archaeological methodology and will add more than what is at present an art-historical appreciation of most objects that are on display. It will demonstrate to the visitor that the aim of archaeology lies not in searching for objects, but in learning about past cultures.

Any signage should be helpful to visitors and visible enough to follow, but not so intrusive as to have an adverse impact on the overall appearance of the site.

### **10.5. Facilities for specialized groups**

The Preserve already provides many visitor services such as guided tours of the ancient city and museum galleries, theatre presentations, temporary exhibits created for themed festivals at the Preserve, specialized activities for primary school students (which include visits to the museum collection stores, conservation laboratories, library, archives) and off-site services such as educational visits to area schools.

Existing services should be supplemented by self-guided tours for the independent-minded visitor (equipped with a specially designed brochure that leads the visitor around the site along a specified and well marked route, or with an audio wand in the museum galleries); short question-and-answer sessions given by archaeologists and/or conservators at particular sites where demo excavations are just about to start; temporary exhibits on special themes such as ancient wine production, daily life, warfare etc which are advertised at the Preserve entrance. More diverse offerings will encourage repeat visits by those people, especially local Sevastopolians.

Facilitated access for disabled, elderly and infirm visitors to the museum galleries and ancient city should also be introduced. The physically impaired are a highly marginalized group in Ukraine in general, and even a limited amount of modifications to paths and entrance ways at the Preserve will open up opportunities to this type of visitor. Chersonese should become the first archaeological site in Ukraine which is accessible to the physically impaired. The following measures should be considered in making this happen:

- a wheelchair ramp to the ancient hall of the museum;
- more benches throughout the ancient city located where they would not detract from the appearance of the site; and
- better surfaced access paths devoid of stones and other obstacles in, for example, the eastern region of the ancient city along the ancient main street.

These are just some examples of easily made modifications which would open the door to the physically impaired. The facilitated access feature should be included in advertisements about Chersonese to attract this group's attendance.

### **10.6. Other visitor management challenges**

Visitor numbers have climbed steadily since 2000 after an abrupt decline following Ukrainian independence in 1991 (Fig. 43). If this phenomenon

continues, the exponential increase of visitors will have a direct impact on the sustainability of visitor services, conserved archaeological structures and the natural environment.

Furthermore, the Master Development Plan for the City of Sevastopol focuses on the growth of its tourism infrastructure as the backbone of its economy, a dramatic switch from its former identity as one of the key players of the Soviet military-industrial complex.

It is imperative for the management team of the Preserve to consider these concomitant changes and plan for contingencies. The study of visitor use patterns combined with the monitoring of visitor numbers against the site's carrying capacity are essential in planning a policy which will provide a quality visitor experience without impinging on the significance of the site.

#### 10.6.1. Challenges related to presentation of conserved heritage

The interpretation programme for Chersonese should be implemented in conjunction with the overall conservation policy outlined elsewhere in this plan, for example, in the issue of site accessibility and preservation efforts. Information about the hazards of climbing on walls both to the ancient structures and to visitors themselves, a pervasive problem throughout the Preserve, and reminders to treat the site with respect should be made available in a number of ways:

- through signage at the entrance and other areas,
- by guides, and
- in printed material designed for self-guided tours.

Up-to-date information about conservation efforts should be both posted on signage and described in guided tours to relay to visitors the need for heritage preservation, how it is done practically, how the visitor can help and also, and no less important, to demonstrate to visitors that the management team is taking care of the site. It has been shown at other heritage sites that visitors show better care at places that are well kept and looked after.

Well sited and more frequent orientation signs installed throughout the site will encourage visitors to use certain paths over others and discourage them from entering fragile areas which cannot support large numbers of people. Sign locations could periodically change to help regenerate worn circulation routes.

#### 10.6.2. On-site infrastructure

**Information.** Better orientation methods will be introduced at the Preserve entrance to provide information in several languages regarding suggested visitation routes, including those for the physically impaired, and the location of services, such as refreshment stands, toilet facilities, first-aid stations, souvenir stalls etc. It is advisable that this information take the form of a large orientation panel and a printed map on the entrance ticket itself.

A well marked visitor information desk/kiosk with trained and friendly personnel will be installed at a highly visible point at or near the entrance.

**Toilet facilities.** The extremely limited number and poor quality of toilet facilities available for the visiting public and the museum staff do not reflect

modern standards. Even with the recently built toilets located in the central part of the ancient city of Chersonese, the existing number of toilets is still inadequate to serve the needs of the hundreds of visitors who are present at the Preserve at any given day during the medium- and high-season periods. Until new toilet facilities are constructed in the Preserve, the option of portable toilets should be investigated from the financial point of view, at least for use during the peak season.

*Souvenirs.* In addition to guidebooks, visitors to heritage sites greatly appreciate the possibility to purchase souvenirs of their visit. It is important that the quality of the souvenirs available at the Preserve (both in the ancient city and in the archaeological park) should be high and compatible with the importance of ancient Chersonese. Most major European museums and certain heritage institutions have established high standards for the souvenirs that they sell (from copies of sculptures and ceramics to pencils and badges for schoolchildren).

A central installation for the sale of souvenirs and books will therefore be established in the ancient city and in the archaeological park. It would be preferable for this to be an integral part of the Preserve structure.

If, however, it is decided to grant a franchise, there should be strict control over the quality of the merchandise on sale. A working group will be set up consisting of senior Preserve staff and selected experts to supervise all goods on sale at the Preserve.

#### 10.6.3. Parking and off-site signage

The issue of parking is a well known problem which is addressed in some of the sections of the Territory Organization Plan for the Tauric Chersonese National Preserve. Under development now is a road interchange near the central entrance to the ancient city of Chersonese, as is envisaged by the Master Development Plan for the City of Sevastopol until 2025.

The option of park-and-ride shuttle buses and/or the limitation of car and bus traffic to the main Preserve parking lot will also be considered as possible solutions to the problem of congestion during the peak season.

Off-site signage directing visitors to the Preserve has partially improved in the past few years, and there are now road signs to the Preserve at a number of points along the main access routes entering Sevastopol. The Education and Outreach Department of the Preserve acknowledges that signs and information about Chersonese should be available at train stations and airports in Ukraine, but this kind of nationwide publicity is difficult because of budget constraints. Efforts are being made to reach an agreement with the Sevastopol and Crimean tourism authorities and government offices for culture for funding of a wider publicity campaign.

#### 10.6.4. Relations with travel and tourism companies

The Education and Outreach Department of the Preserve is in charge of maintaining relations with travel and tourism companies. The head of the Department represents Chersonese at tourism fairs throughout Ukraine. As of



today, 63 contracts have been signed between the Preserve and Ukrainian tourism operators.

It is vital to continue these links with tourism operators, not only to ensure the steady flow of tourists from near and far, but also to cooperate with them in terms of the trading of information about visitors, their expectations and the availability of visitor services and other opportunities at Chersonese. All too often cultural heritage managers and tourism operators view each other's motives with suspicion and their needs with ignorance. Having mutually beneficial relationships with tourist companies is however a valuable asset to the Preserve.

Special consideration should be given to the potential problems of handling large numbers of visitors coming from large cruise ships and arriving by bus. It is essential that the Preserve staff should be given adequate advance notice that as many as five or six hundred visitors may arrive at one time. Where possible, such large groups should be broken up into smaller components that are distributed between the ancient city and the archaeological park (and other tourist destinations in or around Sevastopol).

#### 10.6.5. Guided and other types of tours

To encourage repeat visits and a wider range of choices, guided tours on various themes should be offered and advertised at the entrances to the ancient city and the archaeological park (e.g. ancient wine production at Chersonese, religious worship in medieval Cherson, the Roman garrison and methods of warfare etc).

Measures to provide information to visitors not taking guided tours and not willing to buy brochures or other printed material should also be considered. Outdoor panels with detailed information in more than one language (as a minimum in Ukrainian, Russian, and English) should be placed at all the important archaeological structures. These panels, in addition to better and more orientation signs, should be installed throughout the site so that the visitor can move about more confidently.

A means of providing for managed accessibility and offering material for repeat visits is the introduction of self-guided tours. There is at present no provision for the independently guided visitor to the site. Methods to provide a quality self-guided tour include maps with corresponding information in printed brochures or audio tours.

#### 10.6.6. On-site visitor safety provisions

At present, there are almost no on-site safety provisions available to the visitor at the Preserve. There is no control over access to different parts of the Preserve and there are many hazardous places, where children and older people are at risk of falling into deep excavated holes. There is also no supervision exercised over potentially dangerous structures, such as the 1935 Basilica, where visitors regularly clamber on the ruined walls of the façade.

The risk of personal injury (and consequent compensation claims) is therefore great. The situation is exacerbated by the fact that there are no facilities for dealing with injuries at the Preserve. In terms of medical assistance, the

presence of at least one first-aid station is critical, especially during the peak summer season.

## **11. SCIENTIFIC AND SUPPORT STAFF DEVELOPMENT**

### **11.1. Staffing**

The Preserve has a number of highly qualified and competent professional researchers. Still, the institution should take care of a young generation of specialists, who should be properly trained to be able to conduct archaeological investigations and prepare research projects, reports and publications.

The Preserve staff includes well trained object conservators and collections managers. There are also individuals with a basic knowledge of site conservation, data management and the application of GIS. The monitoring and maintenance program will, however, need a broader knowledge base than the one currently available at the Preserve and individuals with the required skills will be identified and appointed to act on behalf of the Preserve.

The Preserve staff and the appointed consultants will as a group be proficient in the following skills:

- conducting excavations using up-to-date methods and producing publications;
- design, implementation and interpretation of condition surveys of sites and collections as well as making short- and long-term condition prognoses;
- use of storage techniques for archaeological material, archive and library collections as well as digital data;
- application, implementation and maintenance of computer-based geographic information systems (GIS) and other databases; and
- conservation and maintenance of immovable cultural property, collections etc.

Special consideration should be given to expanding the staff list to be able to recruit more programmers in order to develop and maintain the Preserve's information system.

### **11.2. Special survey, monitoring and maintenance training**

In order to maintain a high standard of survey, monitoring and maintenance of the sites and collections at the Preserve, all its relevant professionals will undertake professional development as part of an organized training and development programme.

A more informal training programme for all members of the Preserve staff and other interested stakeholders will be initiated to inform all staff of the survey, monitoring and maintenance process on the sites and collections. Many sites and buildings administered by the Preserve are rarely visited by the staff and so local

residents, history groups, school parties, tourist guides and government agencies will act as an important “first line of defence” to alert the Preserve administration to problems as they become evident.

### **11.3. In-house professional training**

There will be a comprehensive programme of in-house training courses for all grades of staff. The courses will vary in length, but should operate during working hours. They will take the following forms, depending on their nature (practical work or classroom format) and subject matter:

- whole-day sessions (one or several days a week over a period);
- half-day sessions (one or several days a week over a period);
- lectures and/or demonstration sessions (less than half a day).

Lecturers and demonstrators will be selected, according to level of instruction and subject matter, principally from Preserve staff. However, external lecturers and demonstrators will be used where opportunities arise.

In addition to these specialist sessions and courses, there will be regular one- or two-day courses for new staff members, to introduce them to the background, functions and working methods of the Preserve.

### **11.4. Open professional courses**

In view of the significant professional skills of the Preserve staff and their scientific and professional partners, a programme of courses for senior Preserve staff, professionals and experts from other heritage and scientific institutions and museum organizations within Ukraine will be developed.

Consideration will also be given to the organization and management of such courses in collaboration with other institutions, both national and international, such as the Institute of Archaeology (National Academy of Ukraine), the National Research Centre of Ukraine for Restoration, the National Academy of Fine Arts and Architecture, the Institute of Monument Protection Research (Ministry of Culture and Tourism of Ukraine), the National Commission of Ukraine for UNESCO, the ICOMOS National Committee for Ukraine as well as Ukrainian and foreign universities.

### **11.5. Orientation courses**

As part of educational and outreach activities of the Preserve at the school level, courses should be held, perhaps at weekends, providing orientation guidelines for schoolteachers and others accompanying groups of schoolchildren. These will be designed so that teachers may provide background information on Chersonese for their pupils in advance of their visits to the Preserve and distribute worksheets and introductory material.

## **11.6. Scientific and methodological conferences**

On an annual basis, the Tauric Chersonese National Preserve holds scientific conferences in relevant research fields. However, these are not enough.

The Preserve will develop an active policy for organizing conferences on topics relevant to its work, either on its own initiative or in association with other bodies. These will be aimed at national and international audiences and will operate on a semi-commercial basis, working with local transportation, tourism and hotel enterprises.

## **11.7. Training of guides**

With the anticipated increase in the number of visitors to Chersonese, it is inevitable that Sevastopol and Yalta will see an increase in the numbers of professional tourist guides, accompanying groups of visitors, both national and international, to spend varying lengths of time in the ancient city and the archaeological park. Experience in other countries has shown that a good deal of inaccurate information can be imparted by inexperienced or untrained tourist guides.

Consideration will therefore be given to the provision of short orientation and updating courses for guides, held at weekends in the off-season for tourism and providing them with accurate information and facts for passing on to their clients.

## **12. FINANCIAL MANAGEMENT**

### **12.1. Budget structure**

The Tauric Chersonese National Preserve is funded from a general budget fund and a special fund, with the general budget fund made up of the allocations from the State Budget of Ukraine and the special fund formed by:

- revenues from excursions, preserve entrance fees and admission fees for special exhibitions;
  - revenues from charges for photography, video filming, telephotography and film shooting within the boundaries of the Preserve;
  - revenues from rented public property;
  - revenues from cultural and educational activities conducted on a contractual basis for various public, private and community enterprises, organizations and institutions as well as private individuals;
  - revenues from selling souvenirs and other creativity products;
- and
- revenues from other fee-based services.

The general and special funds are used in accordance with the budget programme passports adopted by the Ministry of Culture and Tourism and the Ministry of Finance of Ukraine, namely:

1802030 Historic and Cultural Heritage Conservation in Preserves and

1802040 Cultural Heritage Protection Measures, Passportization, Inventorization and Restoration.

The use of the funds is based on general and special fund estimates approved by the Ministry of Culture of Ukraine, including such economic classification expenditure codes as:

- salaries and wages;
- pay-roll charges;
- purchase of supplies and materials, communication and transportation services, maintenance of transport vehicles, equipment, stock and buildings, other services and expenses;
- energy and utilities;
- purchase of equipment (incl. computers and photocopiers), and durables;
- overhaul of buildings and structures;
- reconstruction;
- restoration of cultural, historic and architectural monuments;
- passportization of cultural heritage monuments;
- elaboration of the sections of the Master Development Plan of the Preserve.

## **12.2. Financial control**

There is a set Financial and Budgetary Reporting Procedure developed for organizations and institutions of Ukraine on the basis of the Budgetary Code of Ukraine, the Law of Ukraine on Accounting and Financial Reporting in Ukraine and the Provisions on the State Treasury of Ukraine adopted by the Decree of the Cabinet of Ministers of Ukraine.

Financial and budget reports are drawn up and submitted by the staff members of the Preserve responsible for management of state-provided funds to the State Treasury of Ukraine, the Ministry of Culture of Ukraine, the Pension Fund of Ukraine as well as the tax authorities in the city of Sevastopol.

The state controls the use of provided funds through the State Treasury of Ukraine, the Ministry of Culture of Ukraine, the Control and Auditing Authority and the Chamber of Accounts of the Verkhovna Rada of Ukraine.

## **12.3. Financial planning and tendering**

The principal financial document of the Tauric Chersonese National Preserve as a state-financed institution is its Budget, which is subject to approval

by the Ministry of Finance of Ukraine. The Budget is drawn up on the basis of the long-term economic and social development plan and specific long-term plans covering the key activity areas of the Preserve. The Preserve has a general fund and a special fund. The Budget projects allocations and expenditures for the general fund as well as revenues and expenditures for the special fund.

The general fund is made up of the allocations from the State Budget of Ukraine.

The special fund consists of the revenues that the Preserve receives from excursions, entrance fees, admission fees for exhibitions, charges for photography, video filming and film shooting, cultural and educational activities, rent, souvenir sales and other fee-based services it provides.

The general and special funds are used in accordance with the economic classification codes and the budget programme passports adopted by the Ministry of Culture and the Ministry of Finance of Ukraine for such programmes as:

1802030 Historic and Cultural Heritage Conservation in Preserves

1802040 Cultural Heritage Protection Measures, Passportization, Inventorization and Restoration.

In accordance with the Law of Ukraine on Public Procurement, the Preserve makes an annual procurement plan and holds competitive tenders, thereby observing the economic and juridical principles of state-financed procurement of goods, works and services, encouraging fair competition and ensuring reasonable and efficient use of the state provided funds.

#### **12.4. Fund raising**

The Preserve has been receiving sponsor assistance from the Chersonesos Support Charitable Foundation (on the basis of the Cooperation Agreement between the Preserve and the Institute of Classical Archaeology at the University of Texas in Austin (USA) with the support of the Packard Humanities Institute) and from the A. G. Leventis Foundation (on the basis of the Memorandum between the Preserve and the A. G. Leventis Foundation signed on 26 April 2010). The Chersonesos Support Foundation has been providing charitable assistance consisting in covering the costs of overhauling a building (Packard Laboratory) and purchasing computers, materials, stationery etc, with no funds transferred by the Chersonesos Support Foundation directly to the account of the Preserve. The A. G. Leventis Foundation has been transferring funds to the account of the Preserve to overhaul the premises and design a new exhibit of antiquities.

### **13. PERIODIC REVIEW AND UPDATING OF THE MANAGEMENT PLAN**

The present management plan has been drawn up as a basic document and builds on existing standards adopted for historical and cultural preserves of

Ukraine in correspondent national regulations of Ukraine as well as on the practices of foreign museums and preserves that do not run counter to Ukraine's current cultural heritage protection legislation.

Apart from that, this management plan takes into consideration the provisions set out in those sections of the Territory Organization Plan for the Tauric Chersonese National Preserve that have already been approved by the Ministry of Culture of Ukraine. According to current Ukrainian legislation, a territory organization plan is a basic document for strategic planning of any historical and cultural preserve, which is why any provisions made in the preserve's territory organization plan should be fully reflected in its management plan.

Since the Territory Organization Plan for the Tauric Chersonese National Preserve with all of its sections in place is scheduled to be finalized in 2012, the present management plan is to be reviewed no later than 2013.

From then on, the management plan shall be reviewed once in 5 years, although changes can be made in it in between if corresponded amendments are introduced to the national regulations governing the Preserve.

## 14. ILLUSTRATIONS

Fig. 1. Map of the Crimean Peninsula with designated location of the Property the Ancient City of Tauric Chersonese and its Chora

Fig. 2. Map of Sevastopol with designated protected areas of the property the Ancient City of Tauric Chersonese and its Chora

Fig. 3. Layout of the protected areas of the city of Tauric Chersonese and its chora within the city of Sevastopol

Fig. 4. Layout of the protected area of the city of Chersonese and its buffer zone within the city of Sevastopol (Component part No. 001)

Fig. 5. Layout of the protected chora plot in the Yukharina Gully and its buffer zone within the city of Sevastopol (Component part No. 002)

Fig. 6. Layout of the protected chora plot in Berman's Gully and its buffer zone within the city of Sevastopol (Component part No. 003)

Fig. 7. Layout of the protected chora plot on the Bezymyannaya Height and its buffer zone within the city of Sevastopol (Component part No. 004)

Fig. 8. Layout of the protected chora plot in the Streletskaya Gully and its buffer zone within the city of Sevastopol (Component part No. 005)

Fig. 9. Layout of the protected chora plot on the isthmus of the Mayachny Peninsula and its buffer zone within the city of Sevastopol (Component part No. 006)

Fig. 10. Layout of the protected chora plot on Cape Vinogradny and its buffer zone within the city of Sevastopol (Component part No. 007)

Fig. 11. Ancient antiseismic strengthening constructions on an ancient farmstead in the chora of Chersonese

- Fig. 12. Ruins of the Sixpillar Church in the city of Chersonese damaged by shore erosion
- Fig. 13. Terrace and cave constructions on Cape Vinogradny damaged by a landslide
- Fig. 14. Island in Kazachya Bay with waterlogged remains of ancient structures
- Fig. 15. Shrubs among the ancient ruins around the 1935 Basilica in the city of Chersonese
- Fig. 16. Aftermath of steppe fire in the northern part of the ancient city of Chersonese
- Fig. 17. Dissonant modern housing bordering on the protected area on the isthmus of the Mayachny Peninsula
- Fig. 18. Dissonant power transmission tower on the protected site in the Yukharina Gully
- Fig. 19. Cattle grazing in the protected area on the Bezymyannaya Height
- Fig. 20. Construction waste on the protected site in the Streletskaya Gully
- Fig. 21. Visitors to the city of Chersonese at a performance in the ancient theatre
- Fig. 22. Protected area on Cape Vinogradny used as a beach
- Fig. 23. Evidence of black digging in the protected area in the Streletskaya Gully
- Fig. 24. Visitors on the ruins of defensive walls in the ancient city of Chersonese
- Fig. 25. Deteriorating ruins of a ground-based church on Cape Vinogradny 15 years after conservation
- Fig. 26. Unconserved remains of an explored ancient farmstead in the protected area in the Yukharina Gully
- Fig. 27. Access road to the protected site in the Yukharina Gully
- Fig. 28. Modern housing on the approaches to the protected area on Cape Vinogradny
- Fig. 29. Souvenir stalls at the entrance to the ancient city of Chersonese
- Fig. 30. Paved footpaths in the central part of the ancient city of Chersonese
- Fig. 31. Road surface in the main street of the city of Chersonese
- Fig. 32. Coloured powder used for interpreting the ruins of ancient premises in the southern part of the city of Chersonese
- Fig. 33. Yacht club structures in the port area of the ancient city of Chersonese
- Fig. 34. Enclosure around St. Vladimir's Cathedral isolating part of the ancient agora of Chersonese
- Fig. 35. Archaeological explorations at the citadel of the city of Chersonese in 2011
- Fig. 36. Unconserved remains of vineyard planting walls in the protected area on the isthmus of the Mayachny Peninsula
- Fig. 37. Zoning scheme for the city of Chersonese
- Fig. 38. Scheme of access ways, parking areas and proposed visitation routes around the city of Chersonese
- Fig. 39. Scheme of priorities for conservation works in the ancient city of Chersonese



Fig. 40. Scheme of priorities for archaeological investigations in the ancient city of Chersonese

Fig. 41. Existing management scheme of the Tauric Chersonese National Preserve

Fig. 42. Condition of the ancient ruins in the city of Chersonese based on 2004 GIS monitoring

Fig. 43. Preserve visitation chart for 2006 – 2010

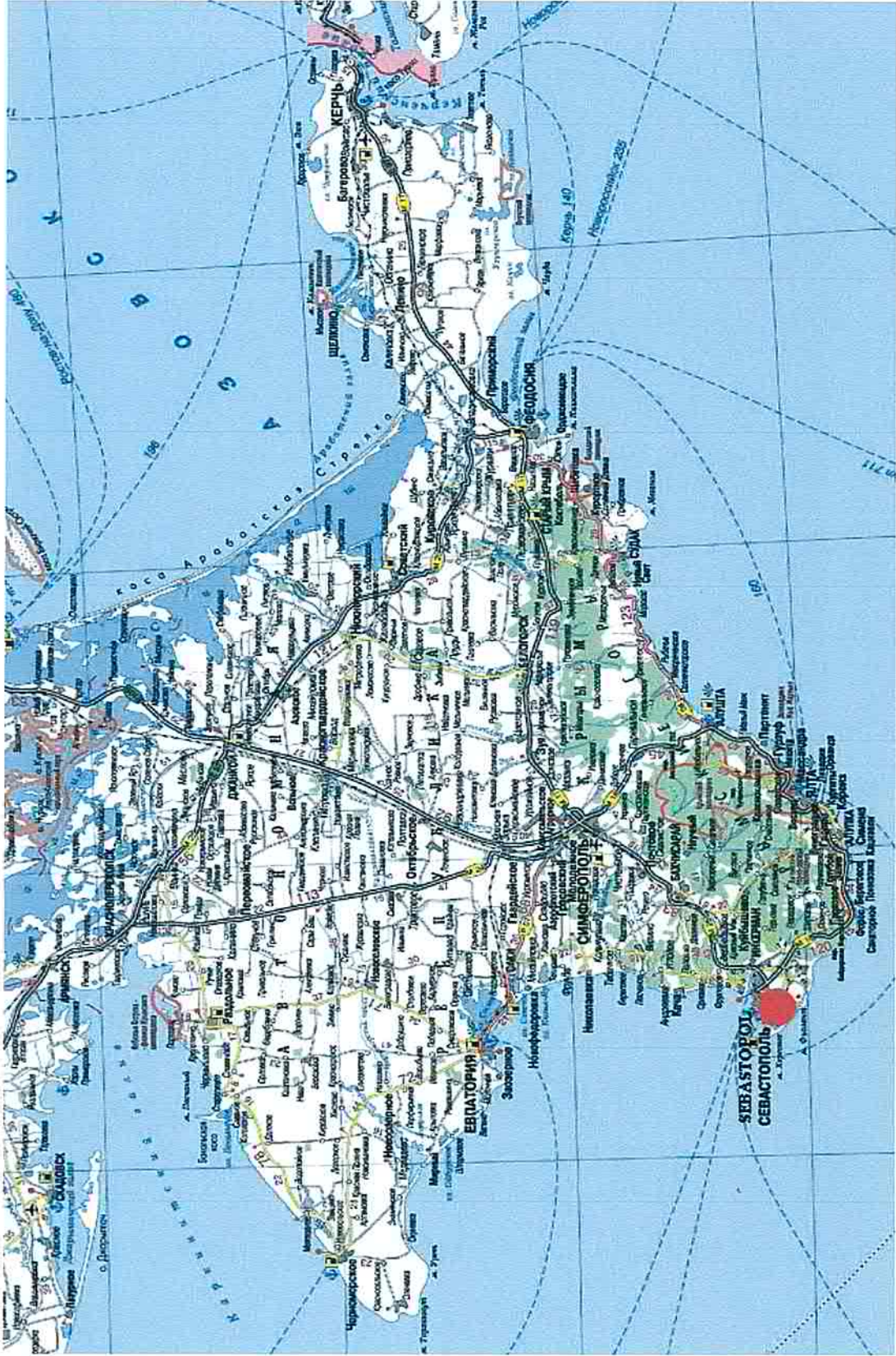


Fig. 1. Map of the Crimean Peninsula with designated location of the property the Ancient City of Tauric Chersonese and its Chora

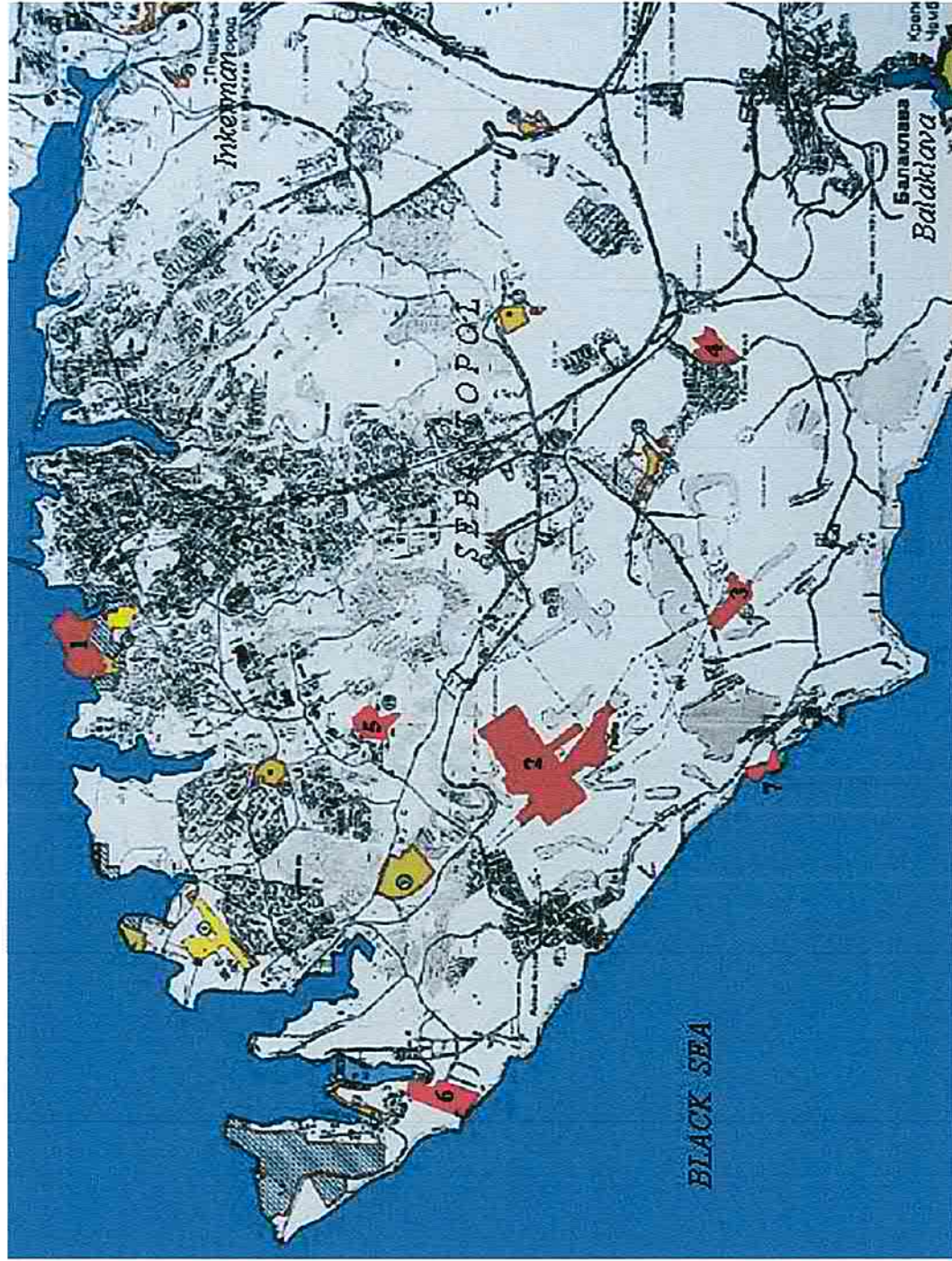


Fig. 2. Map of the city of Sevastopol with designated protected areas of the property the Ancient City of Tauric Chersonese and its Chora: 1 – the ancient city of Chersonese, 2 – Yukharina Gully, 3 – Berman’s Gully, 4 – Bezymyannaya Height, 5 – Streletskaya Gully, 6 – isthmus of the Mayachny Peninsula, 7 – Cape Vinogradny

3.1 Sevastopol city plan of the protected areas and Chersonesan chora and sites preserved on the Herakleian Peninsula

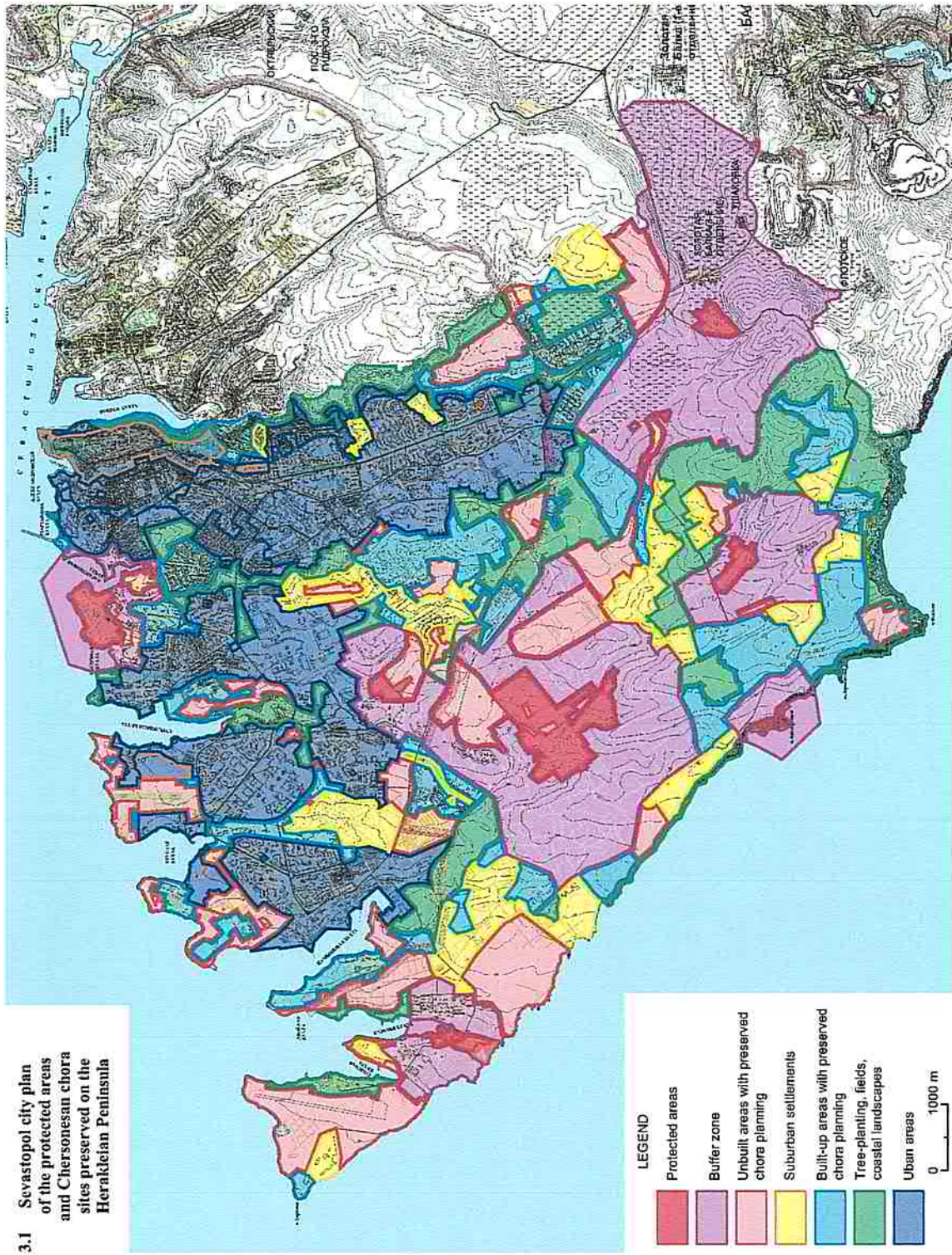


Fig. 3. Layout of the protected areas of the city of Tauric Chersonese and its chora within the city of Sevastopol

1.2 Chersonesos ancient city site plan of the protected areas and buffer zones

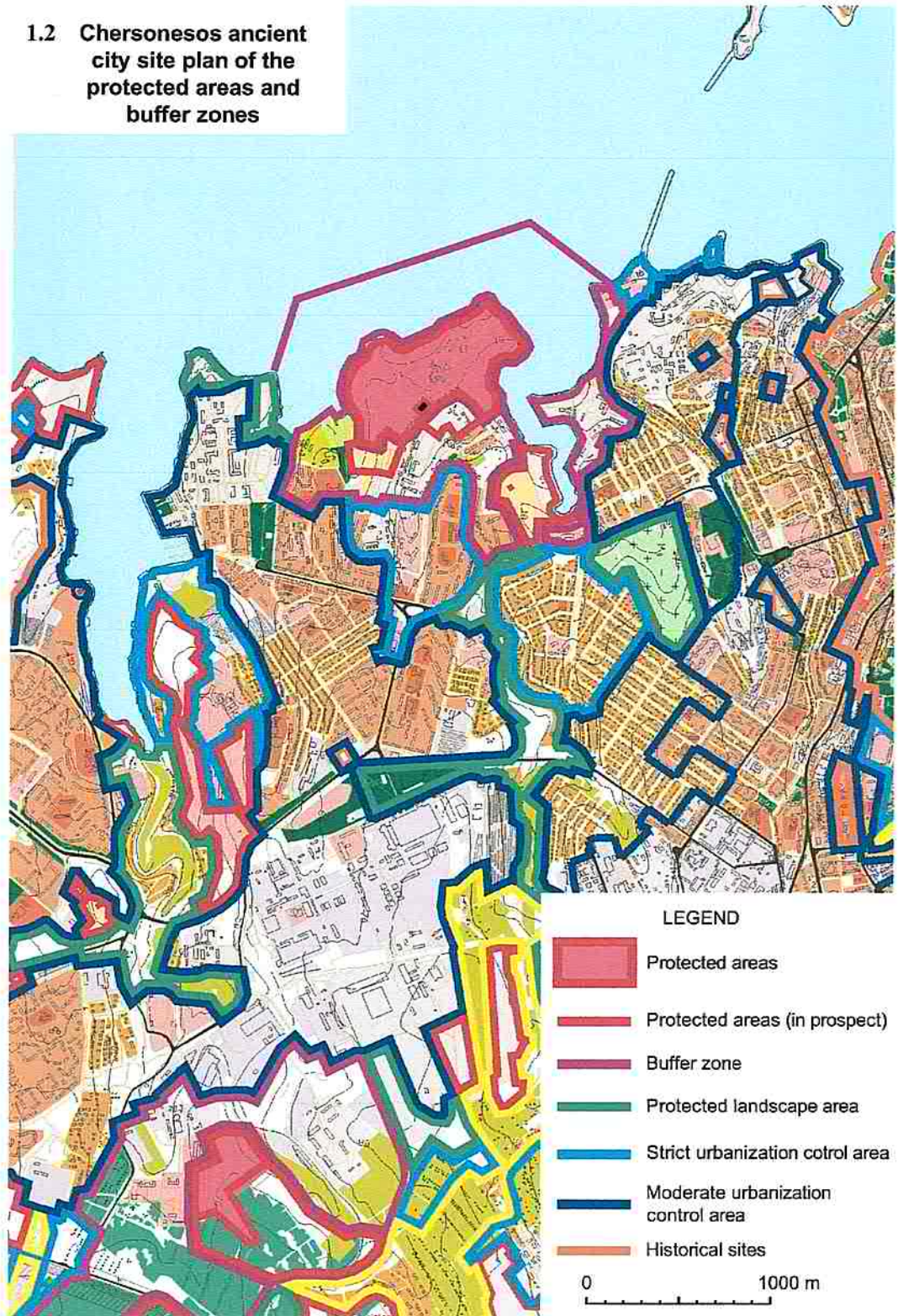


Fig. 4. Layout of the protected area of the city of Chersonese and its buffer zone within the city of Sevastopol (001)

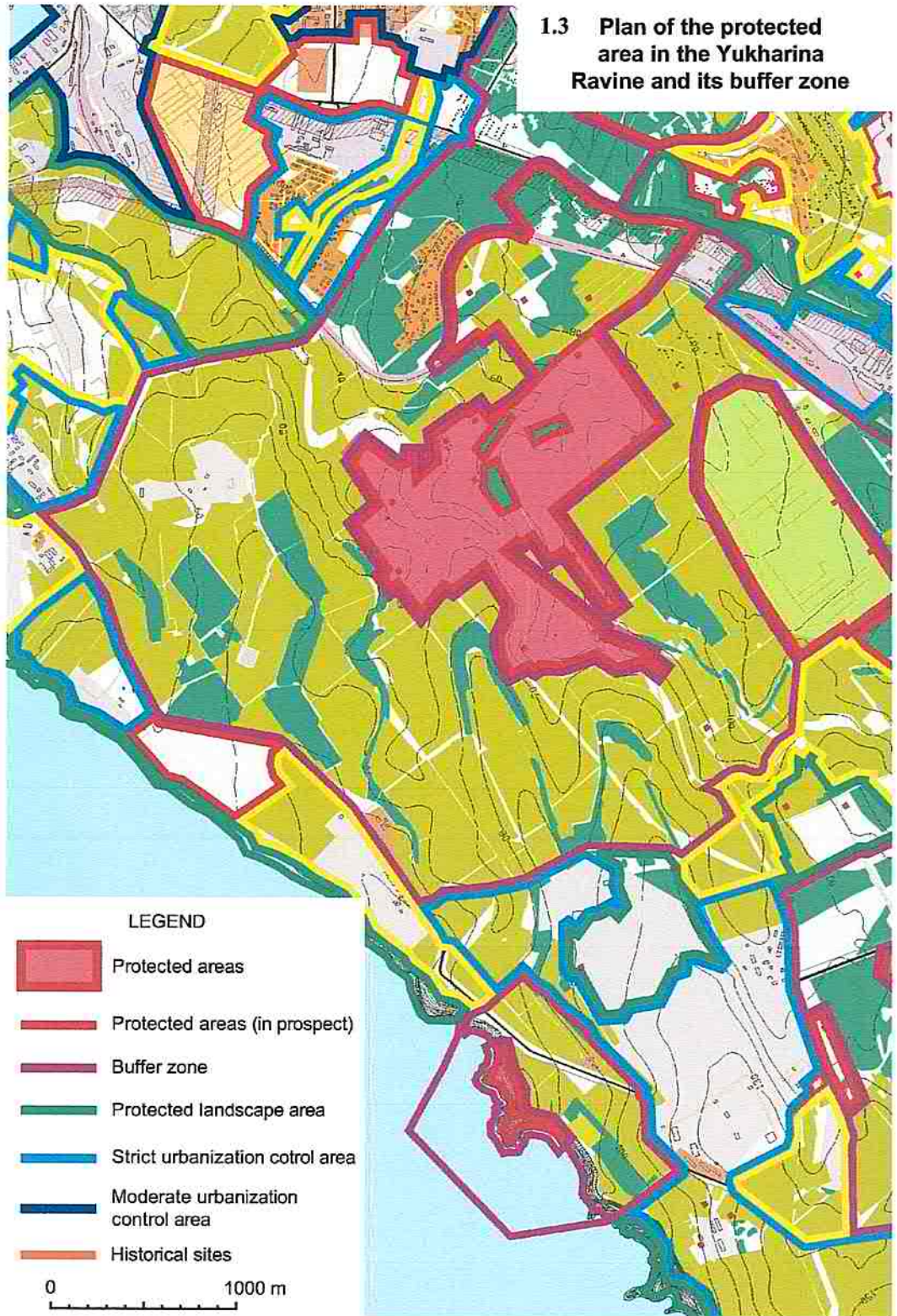


Fig. 5. Layout of the protected chora plot in the Yukharina Gully and its buffer zone within the city of Sevastopol (002)

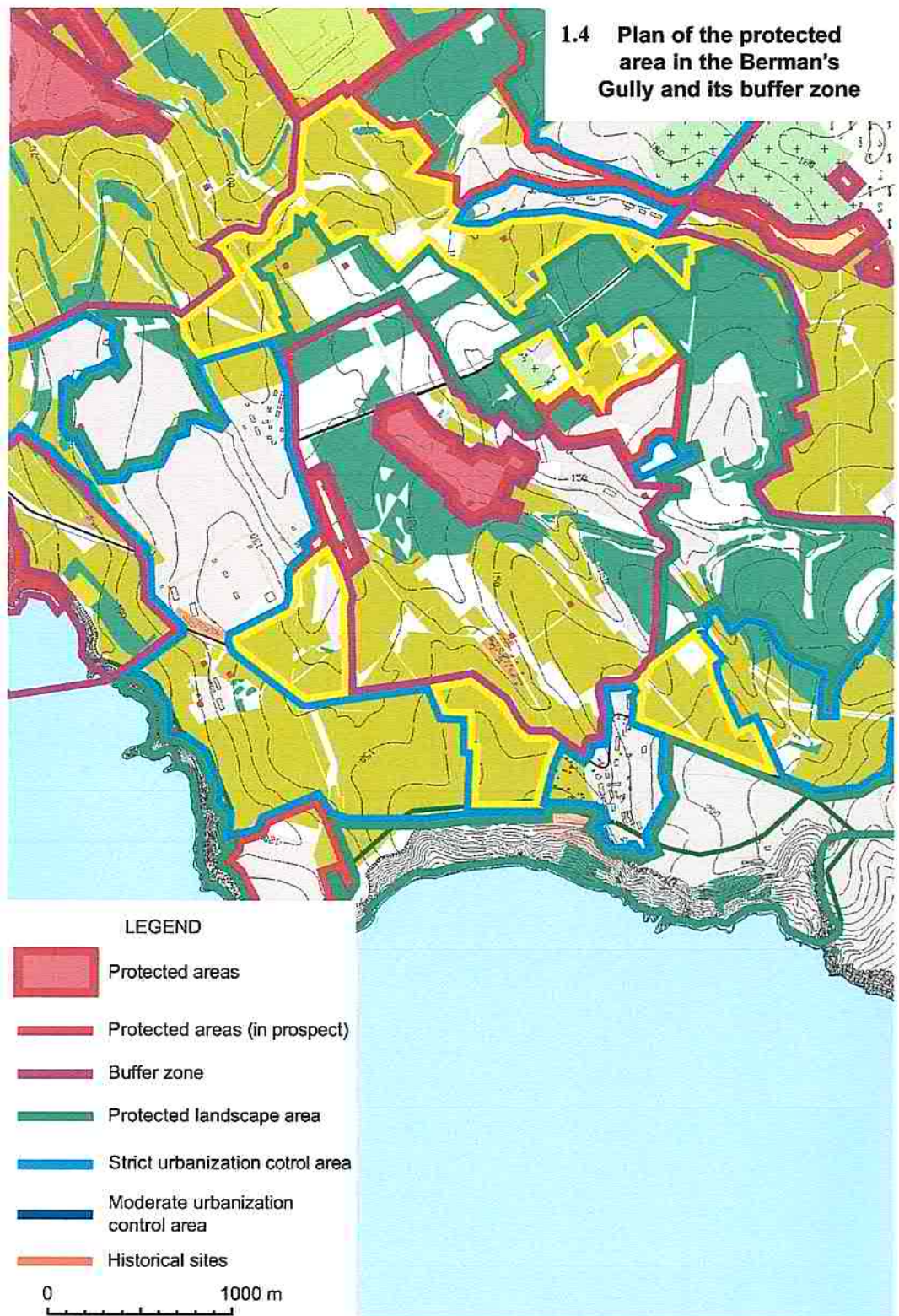


Fig. 6. Layout of the protected chora plot in Berman's Gully and its buffer zone within the city of Sevastopol (003)

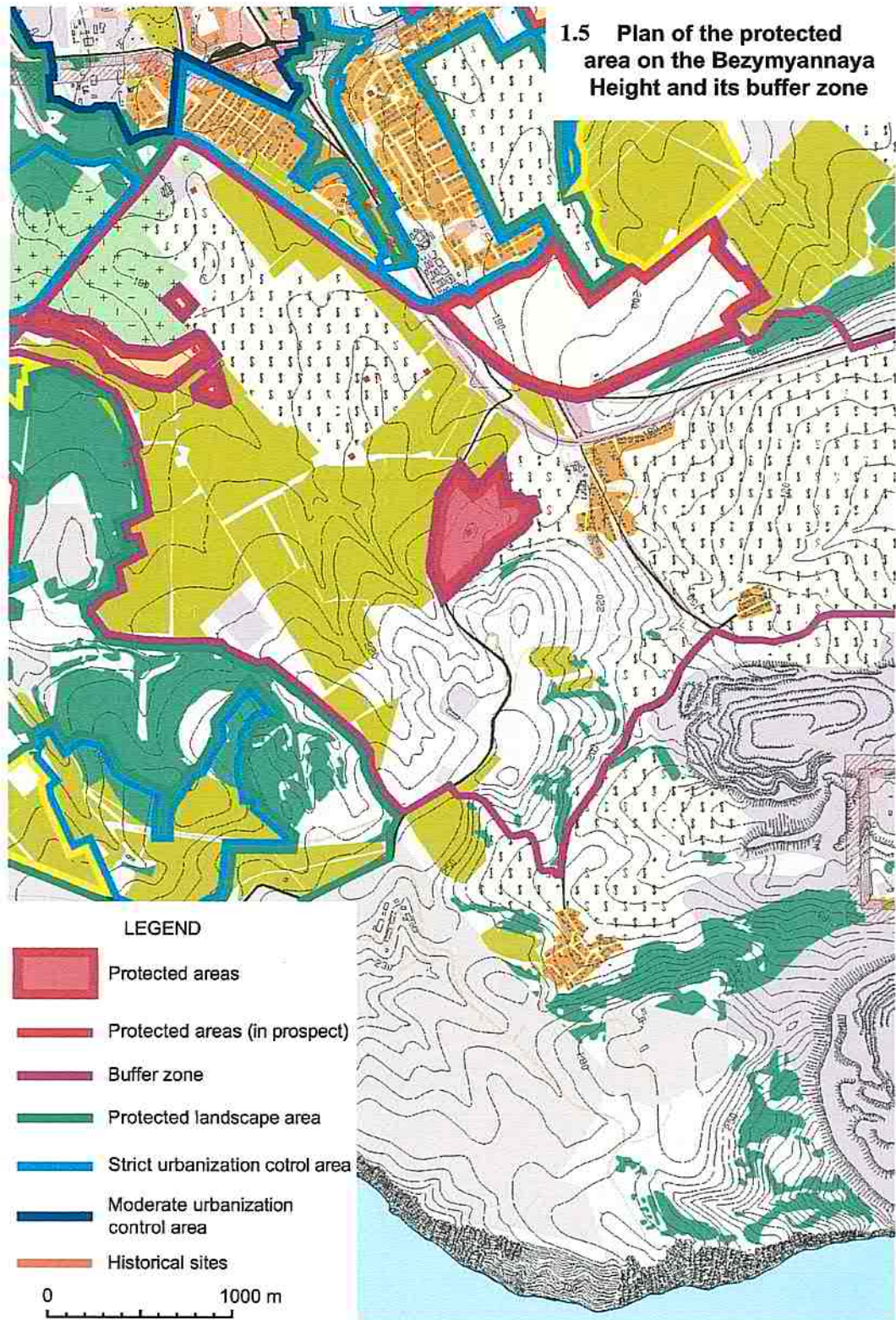


Fig. 7. Layout of the protected chora plot on the Bezmyannaya Height and its buffer zone within the city of Sevastopol (004)



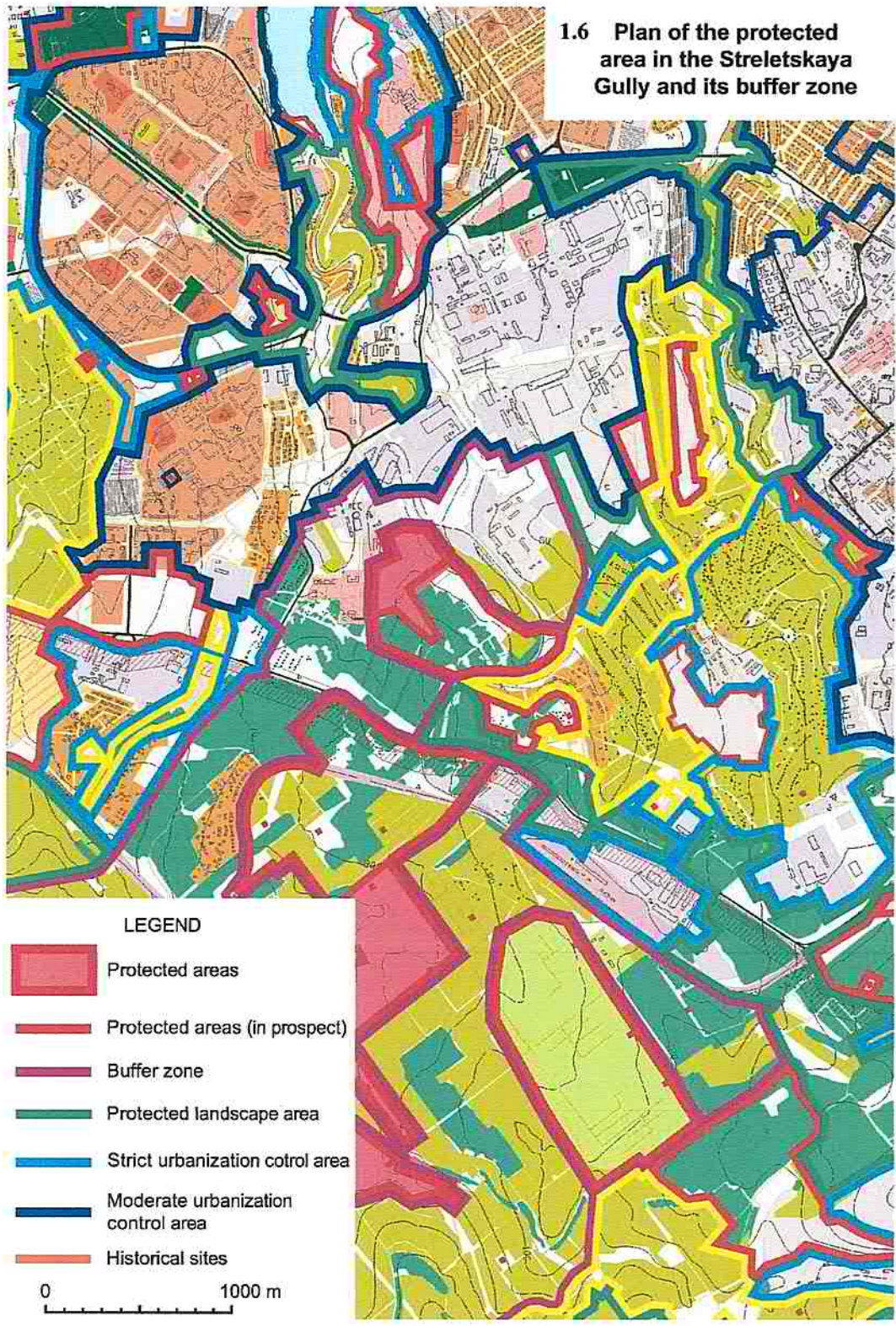


Fig. 8. Layout of the protected chora plot in the Streletskaya Gully and its buffer zone within the city of Sevastopol (005)

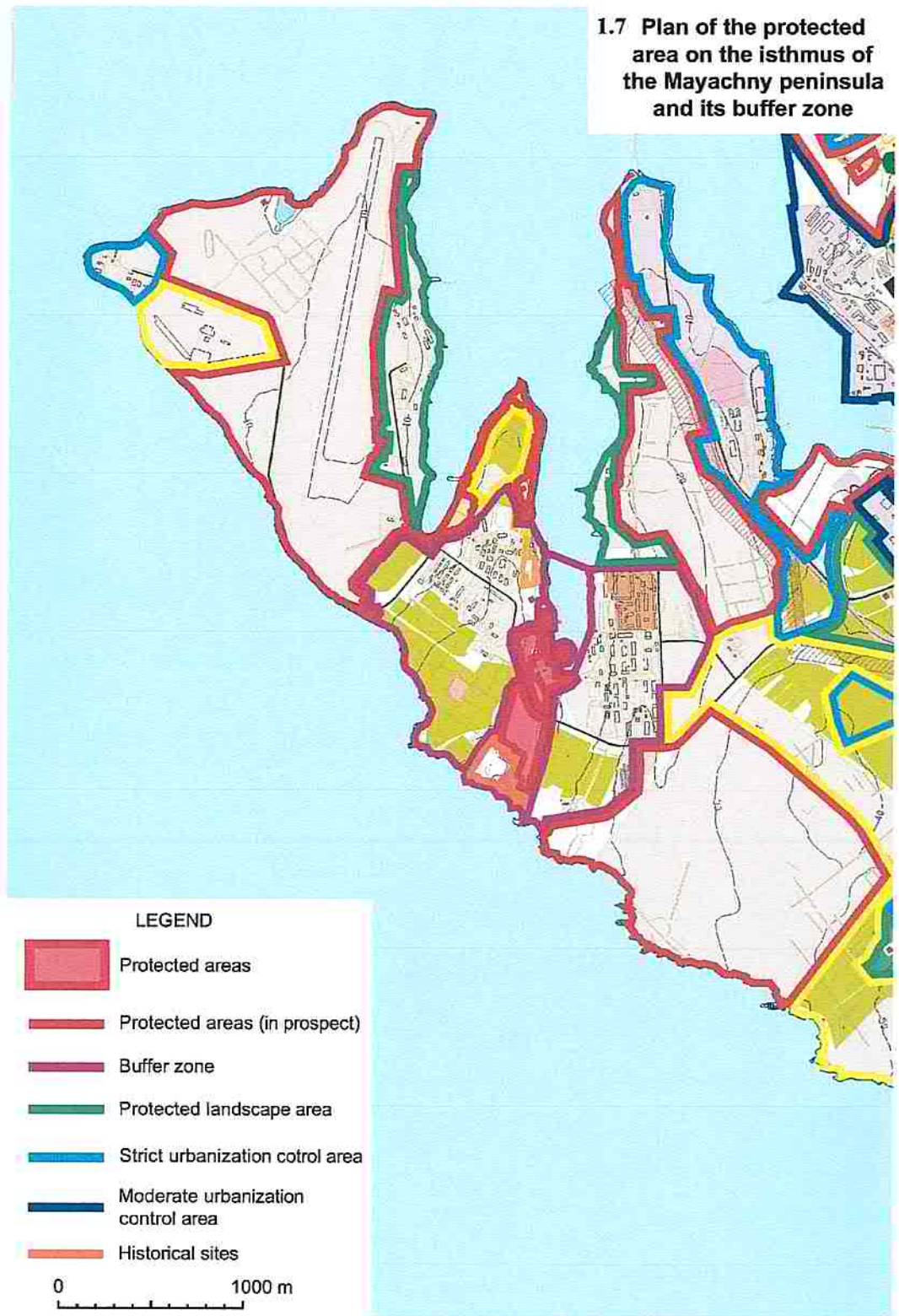


Fig. 9. Layout of the protected chora plot on the isthmus of the Mayachny Peninsula and its buffer zone within the city of Sevastopol (006)

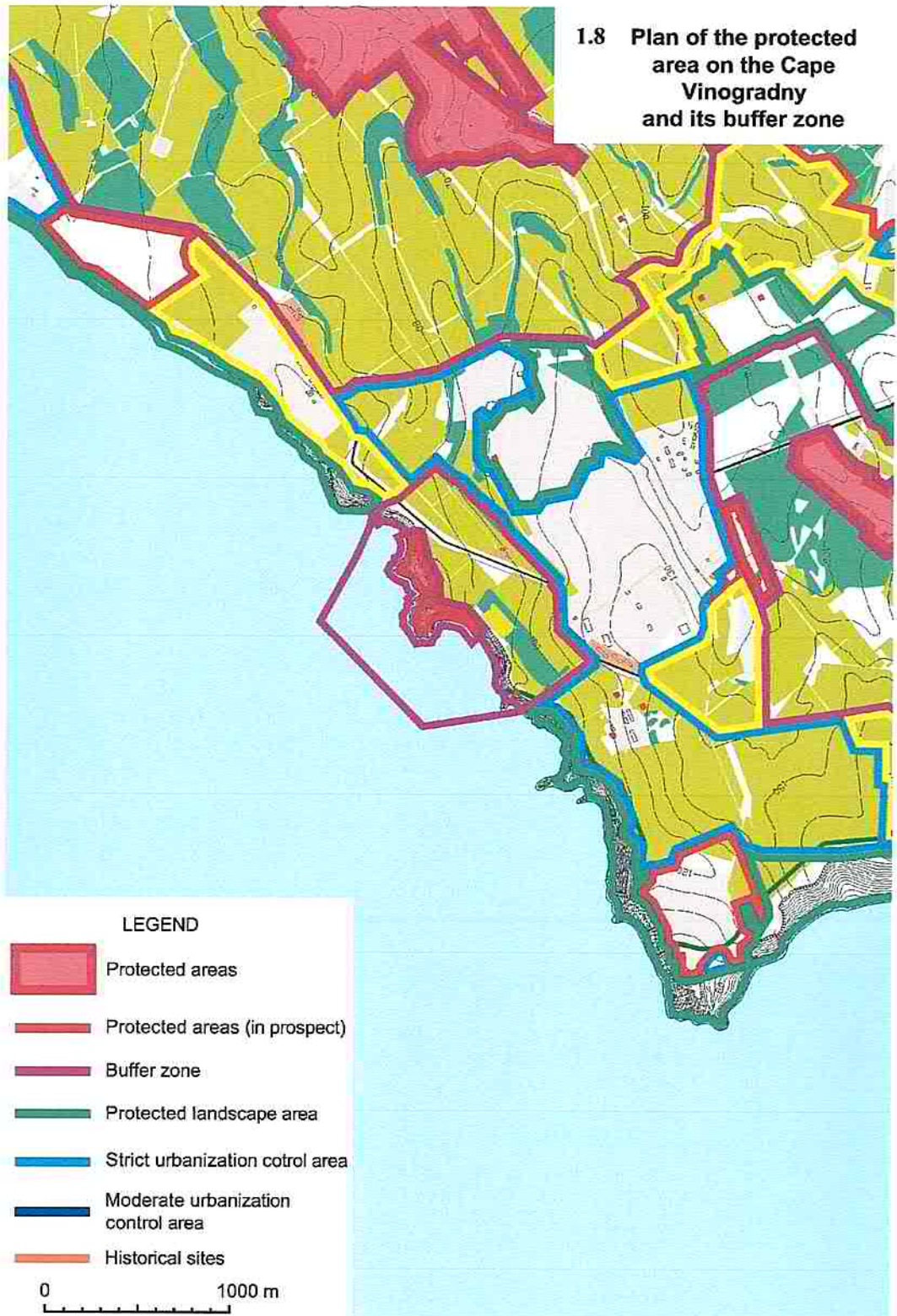


Fig. 10. Layout of the protected chora plot on Cape Vinogradny and its buffer zone within the city of Sevastopol (007)



Fig. 11. Ancient antiseismic wall strengthening constructions on an ancient farmstead in the Chersonese chora



Fig. 12. Ruins of the Sixpillar Church in the city of Chersonese damaged by shore erosion



Fig. 13. Terrace and cave constructions on Cape Vinogradny damaged by a landslide



Fig. 14. Island in Kazachya Bay with waterlogged remains of ancient structures



Fig. 15. Shrubs among the ancient ruins around the 1935 Basilica in the city of Chersonese



Fig. 16. Aftermath of steppe fire in the northern part of the ancient city of Chersonese



Fig. 17. Dissonant modern housing bordering on the protected area on the isthmus of the Mayachny Peninsula



Fig. 18. Dissonant power transmission tower on the protected site in the Yukharina Gully



Fig. 19. Cattle grazing in the protected area on the Bezmyannaya Height



Fig. 20. Construction waste on the protected site in the Streletskaya Gully





Fig. 21. Visitors to the city of Chersonese at a performance  
at the ancient theatre



Fig. 22. Protected area on Cape Vinogradny used as a beach



Fig. 23. Traces of black digging in the protected area in the Streletskaya Gully



Fig 24. Visitors on the ruins of defensive walls in the ancient city of Chersonese



Fig. 25. Deteriorating ruins of a ground-based church on Cape Vinogradny 15 years after conservation



Fig. 26. Unconserved remains of an explored ancient farmstead in the protected area in the Yukharina Gully



Fig. 27. Access road to the protected site in the Yukharina Gully



Fig. 28. Modern housing on the approaches to the protected area on Cape Vinogradny



Fig. 29. Souvenir stalls at the entrance to the ancient city of Chersonese



Fig. 30. Paved footpaths in the central part of the ancient city of Chersonese



Fig. 31. Road surface in the main street of the city of Chersonese



Fig. 32. Coloured powder used for interpreting the ruins of the ancient constructions in the southern part of the city of Chersonese



Fig. 33. Yacht club structures in the port area of the ancient city of Chersonese



Fig. 34. Enclosure around St. Vladimir's Cathedral isolating part of the ancient agora of Chersonese



Fig. 35. 2011 archaeological explorations at the ancient citadel in the Chersonese city



Fig. 36. Unconserved remains of vineyard planting walls in the protected area on the isthmus of the Mayachny Peninsula



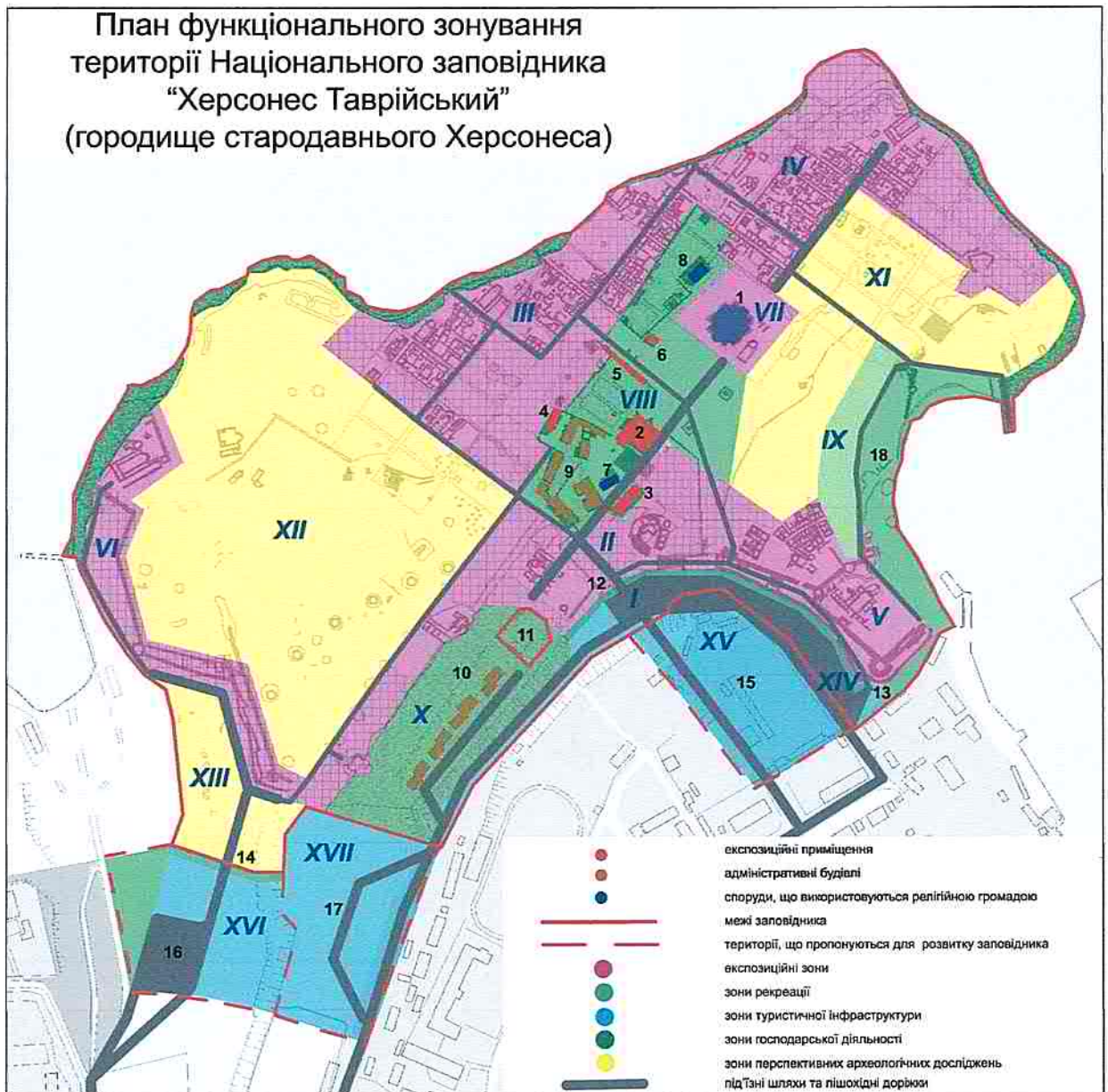


Fig. 37. Zoning scheme for the city of Chersonese with proposed expositional areas highlighted in violet, recreation areas in green, tourist infrastructure areas in blue and prospective archaeological investigation areas in yellow

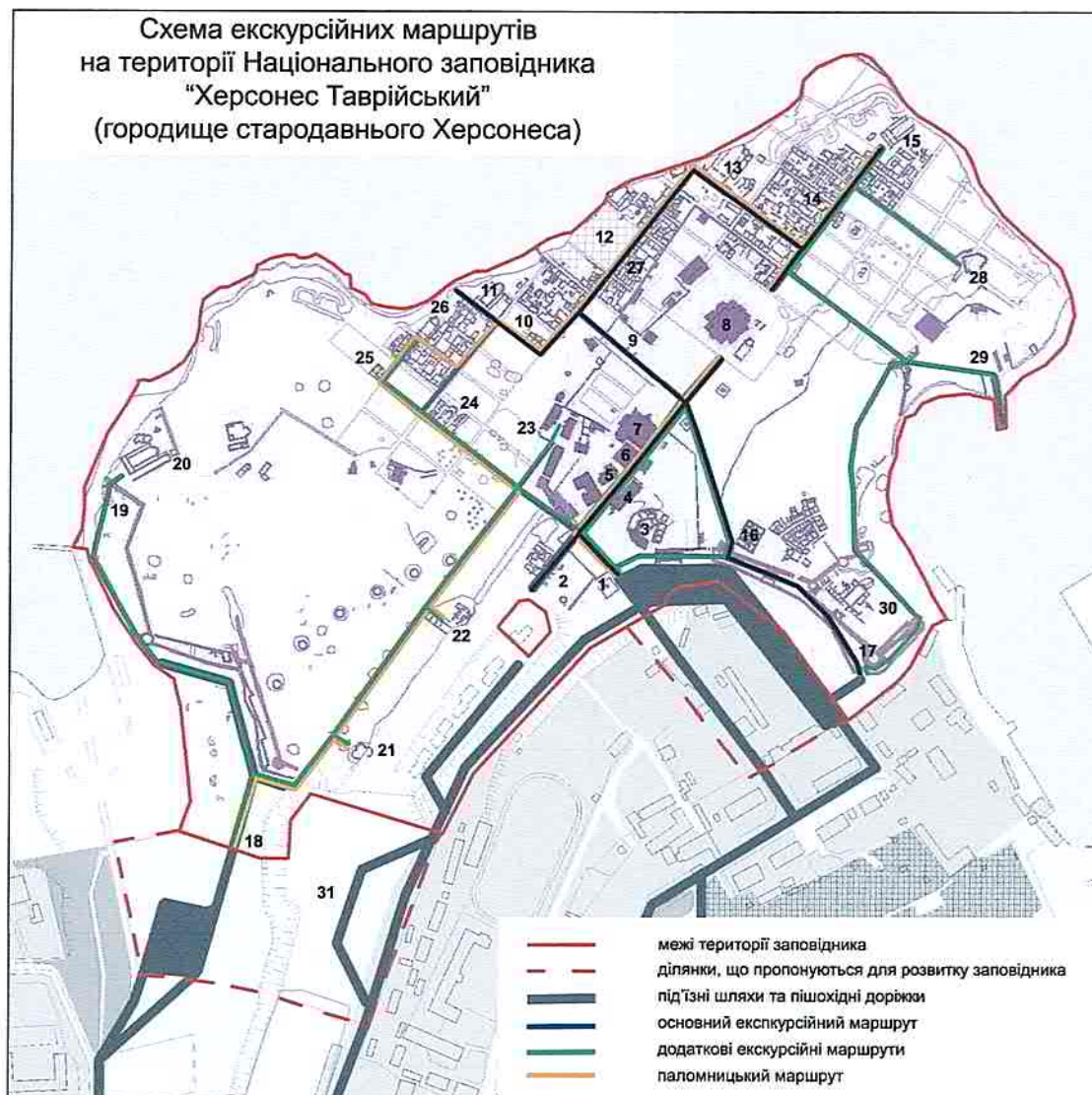


Fig. 38. Scheme of access ways, parking areas and proposed visitation routes within the city of Chersonese with access ways and parking areas highlighted in grey, the main visitation route in blue, additional and thematic visitation routes in green, and the pilgrim route in orange

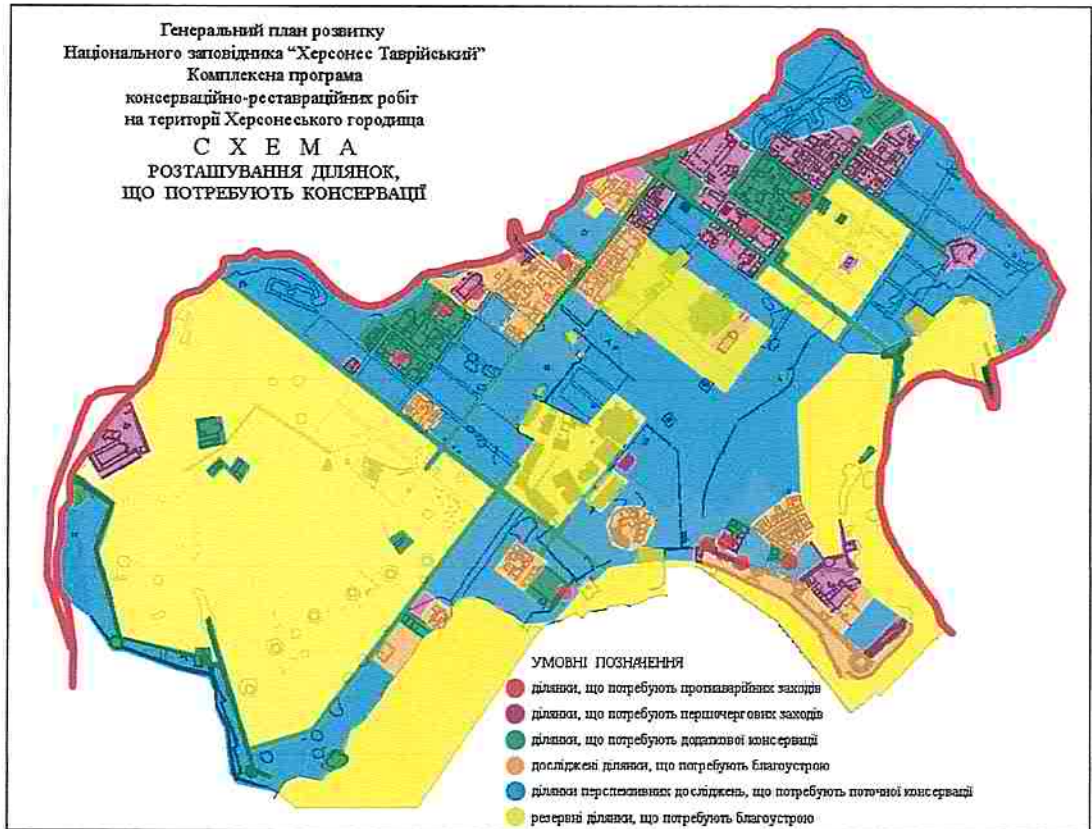


Fig. 39. Scheme of priorities for conservation works in the ancient city of Chersonese with the sites requiring top priority measures highlighted in red, those in need of emergency measures in violet, those in need of additional conservation in green, those in need of land improvements in orange and yellow, and those to be conserved during archaeological excavations in blue

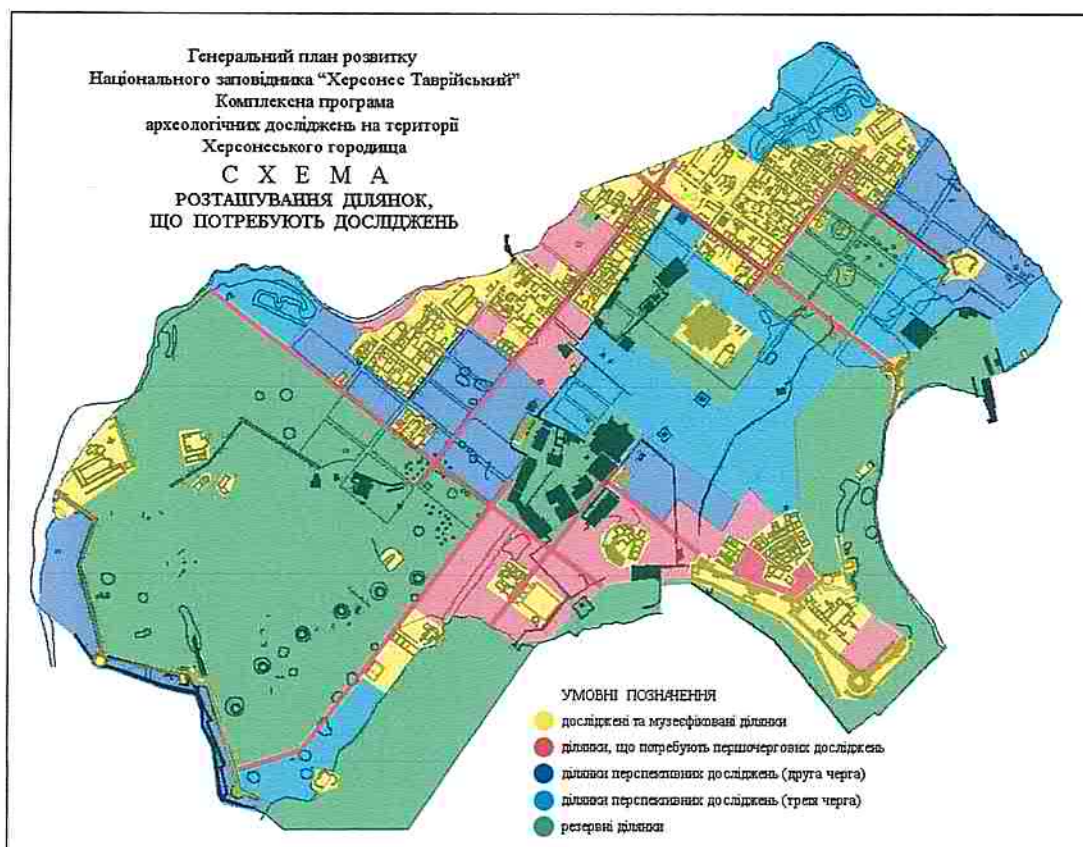


Fig. 40. Scheme of priorities for archaeological investigations in the ancient city of Chersonese with explored and interpreted sites highlighted in yellow, sites prioritized for explorations in red, prospective sites to be explored in the future in blue, and reserve sites where any archaeological explorations are temporarily banned in green

Management Structure of the National Preserve of Tauric Chersonesos

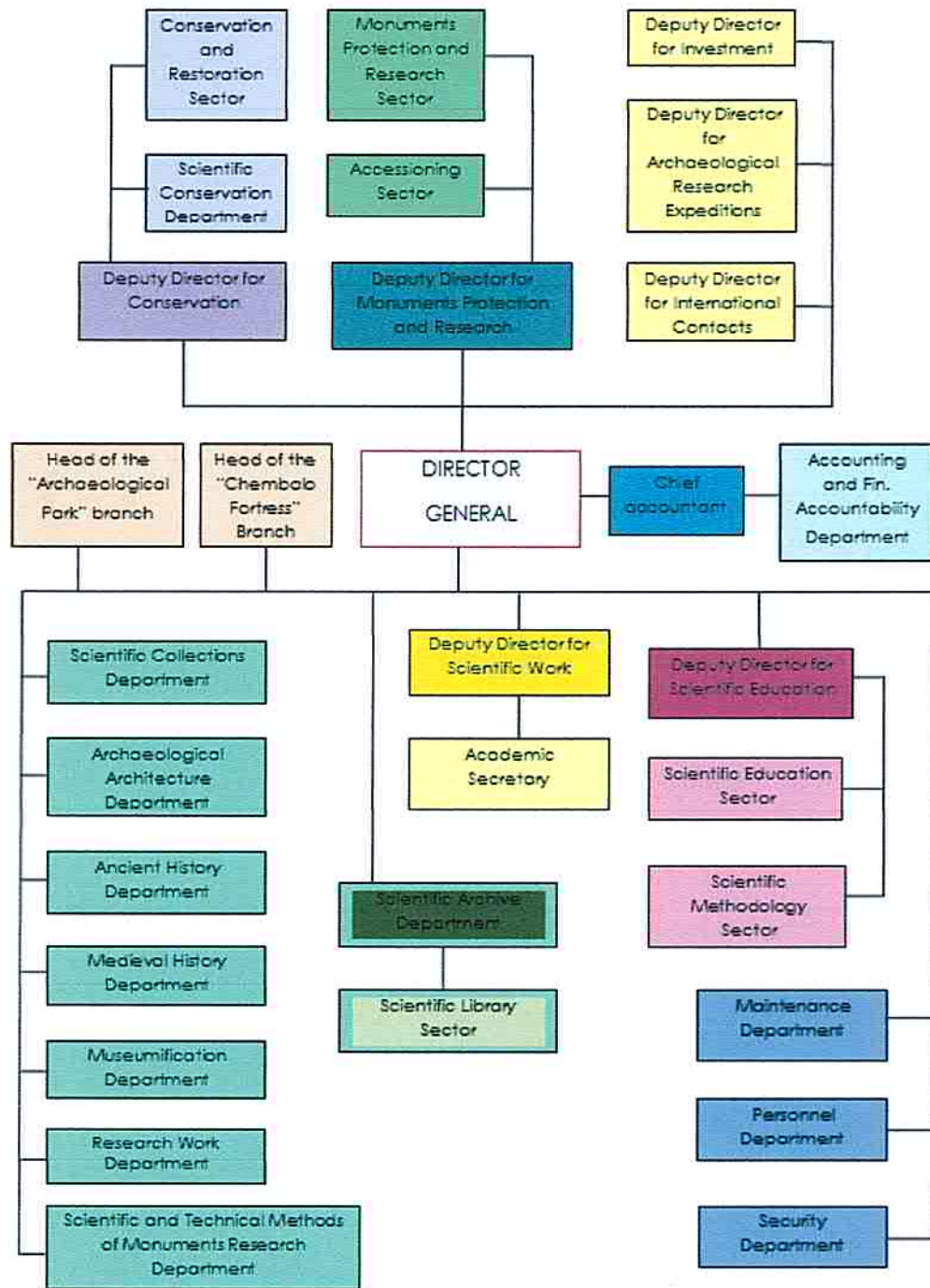


Fig. 41. Existing management scheme of the Tauric Chersonese National Preserve

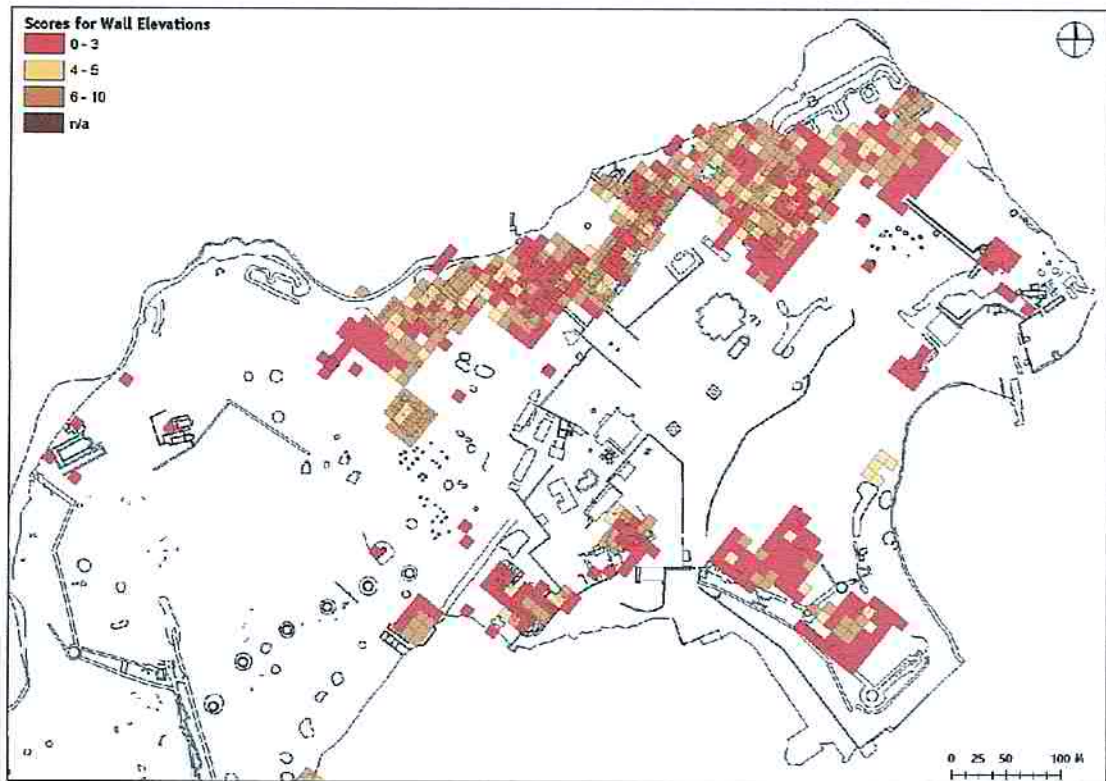


Fig. 42. Condition of the ancient ruins in the city of Chersonese based on 2004 GIS monitoring

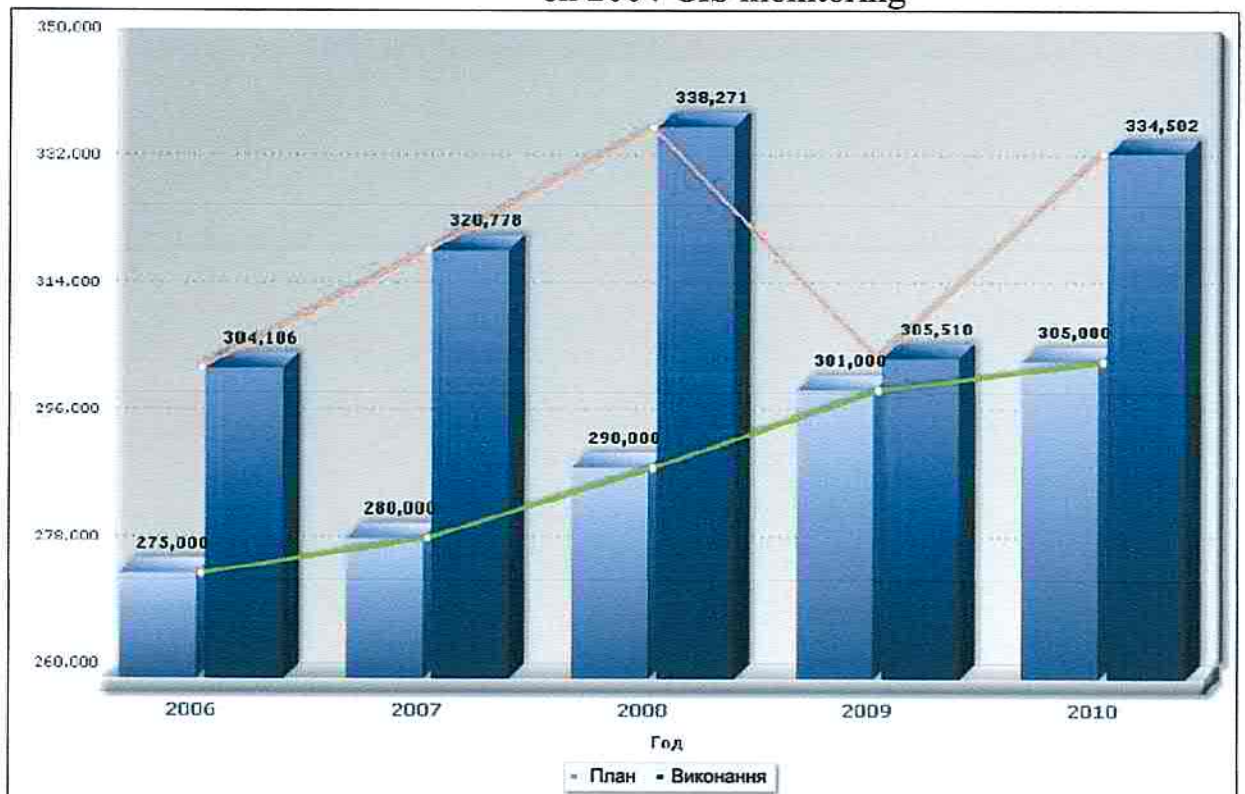


Fig. 43. 2006 – 2010 Tauric Chersonese National Preserve visitation chart with planned visitation growth in green and actual visitation in orange



*Постійне представництво  
України при ЮНЕСКО  
Délégation permanente de l'Ukraine  
auprès de l'UNESCO*

2031/29-194/087/5/1-10P

Ref.: CLT/WHC/PSM/12/AB/64

Paris, 4 May 2012

Dear Sir,

In response to your letter of 1 March 2012, requesting additional information with regard to nomination: "**Ancient City of Tauric Chersonese and its Chora (5<sup>th</sup> century BC – 14<sup>th</sup> century AD)**" submitted by Ukraine for possible inscription to the World Heritage List, I would like to inform you of the following.

According to National Preserve of Tauric Chersonesos, the overall surface of the component part on the isthmus of the Mayachny Peninsula constitutes 13,8240 hectares: the component part of the settlement on the bank of Kozachya Bay is 5,0513 hectares, of the fortifications – 8,5413 hectares and of the island with remnants of the monastery – 0,2314 hectares.

We would appreciate if this information could be taken note of during relevant ICOMOS evaluation.

Please accept, Dear Sir, the assurances of my high consideration.

Oleksandr Kupchyshyn  
Ambassador, Permanent Delegate

Mr. Kishore Rao  
Director  
World Heritage Centre

UNESCO

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→ PSM

Additional Information to the Nomination Dossier  
**The Ancient City of Tauric Chersonese  
and its Chora**  
**(5th century BC – 14th century AD)**

1. We received sporadic evidence of the flooded fortification structures and port facilities of Chersonese in Quarantinnaya Bay from the reports of previous researchers. No special survey of these remnants has been carried out yet; the remnants are covered with sea-floor sediments, therefore their exact location, nature and integrity are unknown. Mapping and inclusion of these objects into the nominated property is impossible without additional field study. Such a study is envisaged by the administration of the Preserve and will be carried out by the Underwater Archaeology Department in the coming years, whereupon, depending on the survey results, the boundaries of the nominated property will be corrected.

At the same time any archaeological remnants located in the waters of Quarantinnaya Bay and the nearshore of the ancient city of Chersonese are protected by the buffer zone regime, which provides for the following: “Within the boundaries of the protected (buffer) zone of the Black Sea water area the sea floor with the remnants of ancient wreckages (on the shelf) should be kept intact, as well as ancient flooded structures (in the nearshore). It is forbidden to build above-water (or floating) structures and to station quays. Any works at the sea floor will be possible only under supervision of professional archaeologists, while at the places where cultural heritage objects are located – only after their complete archaeological research.” This is set out in the Territory Organization Plan for the Tauric Chersonese National Preserve: Boundaries and Regimes of the Usage of the Territory and the Protected Areas of the National Archaeological Monument “The Ancient City of Tauric Chersonese and its Chora” on p. 11-12 (approved by the Order (No220/0/16-11) of the Ministry of Culture and Tourism of Ukraine of April 6, 2011, and by the decision of the City Council of Sevastopol No 3695 of September 12, 2012).



2. Currently inventories of the material remains of various degree of refinement have been prepared for all 7 nominated component parts. Generalized descriptions of the sites and their constituent objects are available in scientific monographs on archaeology of the ancient city of Chersonese and its chora. Particularly see: Borozdin I.N. THE NEWEST ARCHAEOLOGICAL DISCOVERIES IN CRIMEA (Excavations at the Heracleean Peninsula). – Moscow, 1925; Blavatskiy V.D. AGRICULTURE IN THE ANCIENT STATES OF THE BLACK SEA NORTH COAST. –Moscow, 1953; Strzheletskiy S.F. KLEROI OF TAURIC CHERSONESE // Chersonese Collected Articles, Issue 6. -Sevastopol, 1961; Shcheglov A.N. POLIS AND CHORA. -Simferopol, 1976; Saprykin S.Ju. HERACLEIA PONTICA AND TAURIC CHERSONESUS. Relationship between the Metropolis and the Colony in the 6<sup>th</sup>-1<sup>st</sup> centuries AD. –Moscow, 1986; Zubar V.M. TAURIC CHERSONESE IN CLASSICAL ANTIQUITY (Economy and Social Relations). –Kiev, 1993; Zubar V.M., Sorochan S.B. TAURIC CHERSONESE IN MIDDLE 1<sup>st</sup> CENTURY BC – 6<sup>th</sup> CENTURY AD. Essays on History and Culture. -Kharkiv, 2004; Saprykin S.Ju. ANTIENT FARMS AND LAND-PLOTS ON THE KHORA OF KHERSONESOS TAURIKE (Research in the Heracleean Peninsula in 1974-1990). -Amsterdam, 1994; Carter J.C. THE CHORA OF CHERSONESOS ON BLACK SEA AND METAPONTO IN SOUTHERN ITALY. -Austin, 1997; Nikolaenko Gh.M. CHORA OF THE TAURIC CHERSONESE. Land Cadastre of the 4<sup>th</sup>-2<sup>rd</sup> Centuries BC. Vol. 1, -Sevastopol, 1999, Vol. 2. -Sevastopol, 2001; Zubar V.M. CHORA OF THE TAURIC CHERSONESE AT THE HERACLEAN PENINSULA. History of Research and Some Results. -Kiev, 2007.

More detailed description of the sites is available in numerous archaeological reports kept at the Scientific Archives of the Tauric Chersonese National Preserve. Finally, detailed descriptions of the Preserve objects can be found in the Records of the Cultural Heritage Objects – registration papers currently compiled for 86 objects, including identified monuments within the nominated sites. As new archaeological research is carried out, recording and detailed

description is made of the newly discovered objects and their component parts. Registration papers for the Cultural Heritage objects are also kept at the Scientific Archives of the Tauric Chersonese National Preserve.

3. The numbering of the nominated sites suggested in the dossier does not correlate with their value; however, they are shown in the order of diminishing of the territory size. The only exclusion is the ancient city site of Chersonese, which has been assigned No 1 on the score of its importance as a city centre, around which the agricultural environs had formed and developed.

Nomination of all seven component parts to the World Heritage List stems from the fact that each site best represents different sides and aspects of life of ancient inhabitants of Chersonese.

Component part 1 represents the ruins of the city with its complex and many-sided material culture.

Component part 2 – the largest – gives a consistent idea of spatial organization of the chora, since remains of several ancient land plots with farmsteads, planting and other agricultural facilities are located within its boundaries, as well as such structural elements of the chora as division walls, roads, and ancient burial grounds.

Component part 3 represents the best preserved remains of a large multi-layer fortified settlement, which had developed from a farmstead. Remnants of a high-capacity wine-making complex are located at this site. It existed through several epochs and reflects one of the most important sides of economy of the chora of Chersonese.

Component part 4 represents remnants of a defensive point at the northeastern boundary of the chora, where it is adjacent to the Crimean piedmont valleys. This site is characterized by organized economic activity of the Chersonites in the place of their contacts with the barbarian population of the mountainous countryside, by protection of the access roads to the polis territory, and by

special forms of agricultural activity in the conditions of the terraced slopes of the Bezymyannaya Height. Furthermore, this site is located on the highest summit of the chora providing the best panoramic view of the whole Heracleean Peninsula, as well as of the adjacent (from beyond the site) picturesque valleys.

Component part 5 represents almost the best preserved *unexcavated* agricultural structures within the chora of Chersonese. This site is the most impressive example of the archaeological landscape at the chora of Chersonese, which requires protection in order to secure its integrity.

Component part 6 encloses the remains of a complicated system of defensive structures having protected the oldest part of the chora of Chersonese together with the settlement, known from the ancient authors as Strabo's Chersonese. The settlement occupying a considerable part of the fortification was densely built over by urban housing. Moreover, this site also encloses the ruins of a medieval monastery – on an islet in Kazachya Bay - associated by the researchers with the memorial church dedicated to St. Clemens Romanus.

Finally, Component part 7 represents a special area of the Chersonese chora, located along the shore of the Black Sea, which had been actively developed in the medieval period. The inaccessibility of the costal rocks preconditioned the emergence of a large monastery center with man-made cave- and surface structures in one of the most beautiful spots of the Southwestern Crimea.

4. We are chagrined to realize that we have not been as clear as we intended in our discussion of the city plan. We used the term "Hippodamian plan" repeatedly because it was a way to refer clearly and succinctly to a Greek orthogonal grid. We did not intend to imply, however, that the existence of a grid plan for the urban area *in the Greek period* is the main reason for the outstanding universal significance of the site. Although the grid plan in the urban area of Chersonese is unusual for the surrounding Northern Pontic cities, it is not in fact typologically different from the orthogonally-planned cities of the centre, nor is it at all exceptional. Not only was orthogonal planning already being deployed

in the Western Greek colonies by the 8th or 7th century BC, but the strict "Hippodamian" grid, based on either square or rectangular *insulae*, is visible at dozens of Greek cities around the Aegean and in Asia Minor (to cite only a few, in addition to Miletus and Piraeus there are Olynthus, Kassope, Halieis, Priene, etc.).

Therefore it is neither the typology nor any other aspect of the urban grid plan in the Greek period that we intended to propose as a unique characteristic. We intended instead to base the argument for universal significance under Criterion IV on the *longevity* and *continuity* of this urban plan. Chersonese was not abandoned in antiquity, but occupied continuously until the 14th century AD. During this entire time the basic original grid pattern was respected and even reasserted in areas that were abandoned and later reoccupied. As a result, a visitor to Chersonese in the 12th century AD would have encountered a city with the very same straight main avenues and perpendicular streets, with the very same residential areas arranged in tidy rectangular or square blocks, that had characterized the city 1500 years earlier.

This is true of *none* of the other Greek cities with original orthogonal plans in the Mediterranean region. All of the other urban areas with "Hippodamian" plans mentioned above, including Miletus and Piraeus, had been partly or entirely abandoned by Late Antiquity. Where Classical cities were continuously occupied, the Byzantine urban plans ignored the original Classical grids entirely. At Athens, Corinth, and Pergamon, original systems of urban planning disappeared beneath expedient and unplanned medieval constructions. At the most, an original main street and a few fragments of the grid might persist, especially in the colonial cities of the West: the Greek main streets of Syracuse and Naples can still be seen, but even in these cases little sense of the grid as a whole is preserved.

The way the Greek-period urban grid at Chersonese dictated the understanding of the urban fabric of successive generations for almost 2000 years -- to the point that even during moments of massive reconstruction or renovation in

empty areas of the city in the medieval period, the grid was rigorously respected -- is, we argue, a unique testimony to the interaction of human beings with their built environment at this site *across several stages of development*.

The urban plan at Chersonese is also unique in another respect, this one closely connected to the moment of its creation in the late 4th century BC. The grid that divided the city's agricultural territory into regular farm lots was a projection of the urban grid, along the same orientation. Both grids seem to have reflected the political reorganization of the city during this period. Together, the division of the urban fabric into lots and the division of the chora into lots projected onto the physical landscape the mental landscape of the citizens of Chersonese, a landscape characterized by order and fairness. The grids of city and chora together reflect, with unparalleled clarity, a significant stage in human history -- not only orthogonal planning, but the division of community land according to principles of political equality. Chersonese is the only Greek city with both a well preserved and visible urban grid and a well preserved and visible divided agricultural landscape. None of the cities with "Hippodamian" plans in Greece itself or in Asia Minor also has a preserved divided chora. Apart from Metaponto, there is nothing to compare it to.

5. The chora sites selected for this nomination are exemplary in terms of integrity, preservation and state of knowledge of various chora elements. The sites currently not selected for this nomination require additional archaeological research in order to clarify their values. We foresee proposing some of these sites for inclusion into this nomination in case the research reveals they possess attributes of OUV not featured by already proposed sites.

We hope that we have made it clearer that the two of the primary exceptional characteristics for Criterion IV are the continuity of use over 2000 years of the same urban plan, and the combination of the well preserved urban fabric and a well preserved divided chora. The serial properties in the nomination have been chosen to represent both the original layout and use of the Greek grid in the chora, and the changing occupation of the chora across time, from the Bronze

Age to World War II. The component parts included in the dossier have been chosen both for their integrity and degree of preservation, and for the degree to which they represent the outstanding universal value discussed in the dossier. This OUV includes both the elements of continuous occupation and integration with the urban plan discussed under Criterion IV, and the element of human interaction with the environment discussed under Criterion V.

The first criterion was preservation and integrity. The vast majority of the sites in the chora have been built over or damaged, and the division system, clearly visible in aerial photographs from the mid-20th century, can now be seen only in fragments. Therefore it was most important to include those properties that contained the best preserved, most integral, and most extensive evidence for the ancient countryside. Several of these are also currently threatened by development, and therefore it was considered especially important to protect them. Each of the serial properties included are especially well preserved, integral, and authentic. In addition to this, each of them is a particularly representative example of at least two of the criteria for outstanding universal value.

In terms of the most extensive and integral portions of the ancient countryside, Part 2 presents 150 contiguous hectares of largely undisturbed ancient landscape, including visible portions of the division grid and a number of Greek-period farmsteads, and is thus especially exemplary of the relation between city and countryside (Criterion IV). It also preserves extensive evidence for ancient viticulture, preserved intact, and is thus exemplary of the OUV expressed under Criterion V.

Part 6, although smaller, also presents clear, integral, and extensive evidence for the use of the landscape for ancient viticulture. It also represents the earliest stage of the division of the chora, and offers the best evidence for this moment in the city's history. It is the only part of the ancient chora that belongs to this phase. Furthermore, it includes one of the few preserved examples of Greek-period religious space at Chersonese, an important altar, which provides

additional evidence for the interaction between city and countryside on a religious level. Part 5 contains the best preserved remains in the entire chora of ancient plot-divisions and viticultural arrangements from the subsequent phase. Both properties are especially exemplary of the relation between the city and its chora, either because of the phase to which they belong (Part 6) or because of the extraordinary and complete preservation of the remains of the grid system (Part 5), under Criterion IV. Part 5 is also exemplary of the ancient exploitation of an agricultural landscape for large-scale winemaking, and therefore is the property best suited to reflect Criterion V.

Parts 3 and 4 present less evidence for winemaking, but best exemplify the long-term, continuous interaction between human beings and their landscape discussed under Criterion IV. The earliest evidence for pre-Greek activity in the chora is present at these two sites -- the Bronze Age at Part 3, and the Early Iron Age at Part 4 -- and both sites, because of their locations, were continuously occupied from antiquity to the Middle Ages. Part 4 also preserves extensive testimony for Crimean War and WWII activity directly atop remains from the Greek, Roman, and Byzantine periods, thus serving as the best example of a palimpsest of human activity across 3000 years in the chora. Part 3 includes a major Hellenistic settlement that continues to be an important secondary settlement center up through the Middle Byzantine period. Both Part 3 and Part 4 are also important under Criterion II, since they provide the best evidence available of all chora sites for the interchange between cultures. Both provide evidence of the Kizil Koba culture that immediately preceded (and perhaps initially coexisted with) Greek settlement, and both also seem to have served as military outposts in the Roman period, when relations with barbarian neighbors were tense.

Finally, Part 7 represents both the changing use of the agricultural territory over time (under Criterion IV), and the continuity in the exploitation of that landscape for viticulture (Criterion V). Although other sites in the chora, including the properties mentioned immediately above, provide substantial

evidence for occupation in the medieval period, this is the only site within the bounds of the territory of Chersonese that provides clear and extensive evidence for a cave monastery, one of the most important settlement types in the broader landscape of southern Crimea in the medieval period. On an environmental level, Cape Vinogradny represents a microclimate suitable for viticulture that is unusual in the area of the cliffs along the southern shore of the Heracleean Peninsula. Because of this microclimate, this monastery continued to be involved in wine production at a time when viticulture had been abandoned in the rest of the chora; this involvement can be seen not in planting walls, as in the Greek chora, but in pressing and wine-fermenting facilities incorporated into the monastic complex. It is therefore the best example in the chora of ongoing viticulture in the middle ages. Part 7 thus represents continuity not only of occupation, but of a particular traditional human land-use in the area of Chersonese under Criterion V.

6. There is only one private estate on the territory of the ancient city of Chersonese; it is located on the embankment of the 19<sup>th</sup> century coastal battery, and therefore does not interfere with the integrity of the ancient structures underneath. Nevertheless, at present the matter is being considered in terms of buying this private estate for the benefit of the State with subsequent transfer of the right of use to the administration of the Tauric Chersonese National Preserve.

Other irrelevant organizations located on the territory of the Preserve (religions community of the St. Vladimir's Cathedral and the yacht club) operate on the territories which are national property and are used by these organizations on a leasehold basis. The territory held on lease by the religions community of the St. Vladimir's Cathedral is a part of the agora of Chersonese and though surrounded with a low forged lattice, it is freely accessible in daylight hours. This territory also displays conserved ruins of several Byzantine churches, as well as marking of the medieval insulae layout in this district of the city. Currently we are seeking to establish additional accesses to this area from the



ancient streets of Chersonese in order to provide for its maximum integration with the displayed part of the ancient city site.

7. The territory currently occupied by the yacht club is also national property and is rented by a third-party organization from the administration of the Tauric Chersonese National Preserve on the basis of contract signed back in 2007. This area has high solid fencing and light surface structures built without basements and not intruding into the unexposed archaeological remains. The quays were built in the 1970s with the purpose of organizing sea tours of the site. The term of lease to the yacht club expires in 2014. The administration of the Preserve is determined not to extend it, following which the yacht club and its facilities shall be moved outside the protected territory. The administration of the yacht club has been notified, and by mid-2014 this territory will be vacated, the fencing and the existing structures will be dismantled and removed, while the quays will be used (in prospect) for their intended purpose – to serve the visitors of the Preserve.
8. Several sketches of the visitor information centre at Component part 2 have been developed. Please, find those attached to this document (Appendix 1-2). All of the sketches, as are the proposed locations, are of pilot nature and will be subject to discussion by professionals and concerned local communities.

The final draft of the project of the visitor centre will be submitted to the UNESCO World Heritage Centre for endorsement and to the Ministry of Culture of Ukraine for validation.

9. Construction of an overpass in place of the existing highway running across the protected site on the Mayachny Peninsula will enable joining now separate parts of this property together, as well as provide safe passage of visitors between these parts of the property. The overpass will be less than 3 meters high and less than 40-50 meters long, so that it is not discordant with the surrounding landscape. It will rest on rather light (and not massive) piers standing on areas unoccupied by the ancient structures. The construction of the overpass will only

become possible after the development of a special project, its endorsement by the UNESCO World Heritage Centre, and validation by the Cultural Heritage Protection State body. This proposal has been included into the Management Plan for this property as a long-run prospect, but it is not high on the priority list for the protection of the chora heritage of Chersonese.

10. All component parts of this nomination – Protected Sites 1 – 7 – possess the highest protection degree by their legal status. The corresponding acts of the law removed these lands from the municipal property and transferred them to the ownership of the State, at the disposal of the Ministry of Culture of Ukraine, which, in turn, granted operational control over them to the administration of the Tauric Chersonese National Preserve.

Besides the sites proposed for this nomination, the Preserve administration has also been given the right to permanent use of a number of analogous territories within the boundaries of the modern city of Sevastopol, these lands having been granted the highest protection status – reserved lands. For some of them the land deeds have been received in 2012, particularly the chora sites on Cape Peschany, in the vicinity of Pavla Korchagina Street – in the upper reaches of the Yukharina Gully, between the upper reaches of the Quarantinnaya and Verhne-Yukharina Gullies, in the Khomutovaya Gully, area between the Kamenolomenny Gorge and the Chertova Gully. To date four more sites are being prepared for the ownership transfer (in the vicinity of the city water treatment facilities, near the leading beacon, in the “Omega 2-A” microdistrict, Tash-Kule stow). For the site in “Pobedy” Park (Farmstead No197) the land deeds are to be obtained in 2012 – 2013.

11. In 2012 the Cultural Heritage and Cultural Values Department of the Ministry of Culture of Ukraine has developed and submitted for consideration to the Supreme Council of Ukraine amendments and additions to the Law of Ukraine on “Protection of Cultural Heritage”, which, in particular, defines on a legislative level such terms as “world heritage object”, “world heritage object buffer zone”, and general principles of recording and protecting such objects.

The above amendments and additions to the Law are expected to be adopted by the Supreme Council of Ukraine in the end of 2012 or beginning of 2013.

There's also a bill under development on private collecting of objects of virtue and relics, which will provide for tight restrictions (as far as prohibition) of private collecting of archeological objects, what should have a considerable effect on illegal excavations and circulation of archeological objects in Ukraine (approximate time of finalization of this bill – middle 2013).

12. The boundaries of and regimes within the buffer zones of all nominated sites are defined in the scientific-project documentation approved by the Order of the Ministry of Culture No 267 of March 27, 2012. The documentation has been submitted to the Sevastopol City State Administration for inclusion into the Master Plan of the city of Sevastopol in accordance with the procedure established by the law.
13. The development of the Territory Organization Plan for the Tauric Chersonese National Preserve as it pertains to the sites nominated to the World Heritage List is envisaged to be finalized by the end of 2012, and to be adopted by the Ministry of Culture of Ukraine in January-February of 2013. Thereafter it is envisaged to introduce the corresponding corrections into the Management Plan for the "Ancient City of Tauric Chersonese and its Chora" with its subsequent submission to the UNESCO World Heritage Centre (in March-April 2013).
14. Monitoring of the state of the archaeological monuments located on the territory of the ancient city of Chersonese was carried out in 2004 in accordance with the program developed by our colleagues from the Institute of Classical Archaeology of the University of Texas at Austin. In 2011 the Tauric Chersonese National Preserve purchased the Arc Map software, which enabled resumption of the work started in 2004. In 2012 we carried out monitoring of the state of the monuments according to criteria indicated in the table at p.92 of the Nomination dossier. The ten-point system implies visual examination of the

archaeological structures and is meant to evaluate their condition (10 points – ideal preservation, 1- worst preservation).

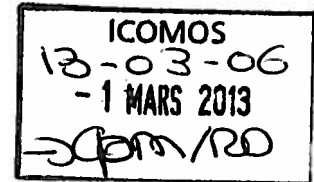
Monitoring of the chora monuments preservation condition carried out in 2012 followed the principles set out for the ancient city site, but the data obtained have not been entered into the electronic database yet.

It is intended to develop a similar electronic program for the chora monuments as soon as possible.

A handwritten mark in blue ink, consisting of a checkmark-like shape followed by a horizontal line.







*Постійне представництво  
України при ЮНЕСКО  
Délégation permanente de l'Ukraine  
auprès de l'UNESCO*

2031/29- 194/084/5/1-51

Paris, 27 February 2013

Ref.: GB/MA 1411

Dear Madam,

In response to your letter of 20 December 2012 regarding nomination: **“Ancient City of Tauric Chersonese and its Chora”** please find enclosed the additional information concerning the mechanism for the approval of developments in the buffer zone, conservation and stabilization measures for the short and medium term period, legal protection, management plan, name of the property as well as contribution of serial component 7 to the Outstanding Universal Value under criteria (ii) and (v).

We would appreciate if this information could be taken into consideration during relevant ICOMOS evaluation.

Please accept, Dear Madam, the assurances of my highest consideration.

Oleksandr Kupchyshyn  
Ambassador, Permanent Delegate

Ms. Regina Durighello  
Director  
World Heritage Programme  
ICOMOS

Copy: UNESCO World Heritage Centre

**Ancient City of Tauric Chersonese and its Chora (Ukraine)  
- Additional information (II) reply.**

**1. Protection of Buffer Zones.**

In 2012 the Institute of Monuments Protection Research developed scientifically based project documentation “Boundaries and Land Use Regimes for the Protected Areas of the Monuments of the Tauric Chersonese National Preserve Located on the Territory of the Heracleian Peninsula in the City of Sevastopol”, providing for holistic protection of the whole territory of the chora of Chersonese at the Heracleian Peninsula in the city of Sevastopol by means of various land use regimes depending on the state of preservation of ancient structures in place, and the archaeological landscape. This project has already been submitted for approval to the Ministry of Culture of Ukraine. The main statements of the project are represented in Supplement 1, and after official approval will be included into the Management Plan of the nominated property (approximately in February-March of 2013).

**2. Conservation and Stabilization.**

As it has already been reported in the draft version of the Management Plan, currently we are developing the Comprehensive Program for Conservation and Restoration of the property. To date the section of this program relating to monuments of the ancient city site of Chersonese has been completed and approved by the order of the Ministry of Culture of Ukraine. Likewise, the sections related to other parts of the Tauric Chersonese National Preserve, including nominated parts, have been completed and submitted for endorsement. Supplement 2 contains a contracted summary of this Comprehensive Program, which will be represented in the nominated property Management Plan after its approval by the Ministry of Culture of Ukraine (approximately in February-March of 2013).

**3. Legal Protection.**

Legally the boundaries of the majority of land plots of the Tauric Chersonese National Preserve shown in the Master Development Plan for the City of Sevastopol until 2025 are nonlegitimate, since at the time of its approval back in 2005 only two of the plots had land deeds confirming their status as the Preserved Areas – Chersonese ancient city site and the Bezymyannaya Height. As for the other sites called Preserved Areas in the Master Development Plan for the City of Sevastopol, in the time of its development and approval the Plan only declared the intention to transfer these lands to the Tauric Chersonese National Preserve in the future, but unfortunately this intention did not fit the real-life land use situation established in the city.

In the following years – 2006-2011 – the land plots were transferred to the Preserve, their boundaries revised in accordance with the State Land Cadastre and represented in the state land-use acts (land deeds) of the Tauric Chersonese National Preserve. The project “Boundaries and Land Use Regimes for the Protected Areas of the Monuments of the Tauric Chersonese National Preserve Located on the Territory of the Heracleian Peninsula in the City of Sevastopol” developed in 2012 represents the real-life situation regarding the preserved areas of the chora of Chersonese, as well as the corrected boundaries of the areas of the Preserve intended for future expansion with due consideration of the current data in the State Land Cadastre. After the project is approved by the Ministry of Culture of Ukraine these documents will be submitted to the local authorities in Sevastopol so that corresponding corrections are introduced into the Master Development Plan for the City of Sevastopol.

It should also be noted that altogether, the lands already transferred to the Tauric Chersonese National Preserve and the territories which the new Project proposes for transference



in the future, summarily exceed the territories specified in the Master Development Plan for the City of Sevastopol.

#### **4. Management Plan.**

At present the Management Plan for the property is being finalized in accordance with the already developed Territory Organization Plan for the Tauric Chersonese National Preserve, and it is planned to be completed by the end of February 2013. The corrected Management Plan will be previewed at the sitting of the Advisory Council of the Tauric Chersonese National Preserve in early March 2013, and its final approval will take place in late March 2013, whereupon the Management Plan will be submitted to the World Heritage Centre.

#### **5. Serial Component 7.**

*Criterion ii.* The Serial Component at Cape Vinogradny includes remains of cave and surface structures of the Byzantine monastery, the state of preservation of which is outstanding for the Heracleian Peninsula medieval sacral and utility complexes.

Along with the church monuments of the ancient city of Chersonese, this monastery reflects the most important stages in the formation of the Christian culture in the Northern Black Sea area; it is a convincing example of missionary work of the Byzantine clergy among the population of the Heracleian Peninsula and the adjacent territories over a period of a millennium – 6<sup>th</sup> through 15<sup>th</sup> centuries AD.

The 6<sup>th</sup> century archeological finds from the monastic necropolis date this monument as one of the earliest monasteries of the Byzantine Kherson-Chersonese and its environs, while the presence of several churches in the complex speaks in favor of its significance in the spiritual life of the local population.

Furthermore, it was found that at the decline of Kherson-Chersonese in the 13<sup>th</sup>–14<sup>th</sup> centuries the role of the spiritual centre of the Kherson's diocese was redistributed among roundabout monastic settlements, including the monastery on Cape Vinogradny, which ceased to exist only in the 15<sup>th</sup> century as a result of Ottoman conquests.

*Criterion v.* The latest archaeological research studied the remains of a high-capacity medieval wine-making industry within the cave-surface monastic complex at Cape Vinogradny. The ruins of the 9<sup>th</sup>–10<sup>th</sup> century winepresses and pithoi storages discovered here reflect continuity in the use of ancient winemaking technologies. There are good grounds to believe that the same continuity on this territory can be traced in land use, particularly wine-growing.

It should be noted that the monuments at Cape Vinogradny are located in the conditions which are unique for the Heracleian Peninsula – narrow coastal terraces with specific microclimate and landscape inimitable in its beauty. Being close to the demarcated plots of the chora of Chersonese, the terraces of Cape Vinogradny form an integral ensemble with them and retain numerous remains of yet unstudied ancient agricultural structures.

As we have already reported in October 2012 the suggestion to include 7 components of the property into the World Heritage List is not connected with serial nature of the property, but is conditioned by the fact that each of the nominated plots possesses its specific features and reflects various aspects of daily activity of ancient inhabitants of Chersonese and its chora. In particular, Component Part 1 represents the ruins of the city with its complicated and versatile material culture.

Component Part 2 – the largest – gives a consistent idea of spatial organization of the chora, since remains of several ancient land plots with farmsteads, planting and other agricultural facilities are located within its boundaries, as well as such structural elements of the chora as division walls, roads, and ancient burial grounds.

Component Part 3 represents the best preserved remains of a large multi-layer fortified settlement, which had developed from a farmstead. Also, remnants of a high-capacity wine-

making complex are located at this site. It existed through several epochs and reflects one of the most important sides of economy of the chora of Chersonese.

Component Part 4 represents remnants of a defensive point at the northeastern boundary of the chora, where it is adjacent to the Crimean piedmont valleys. This site is characterized by organized economic activity of the Chersonites in the place of their contacts with the barbarian population of the mountainous countryside, by protection of the access roads to the polis territory, and by special forms of agricultural activity in the conditions of the terraced slopes of the Bezmyannaya Height. Furthermore, this site is located on the highest summit of the chora providing the best panoramic view of the whole Heracleian Peninsula, as well as of the adjacent (from beyond the site) picturesque valleys.

Component Part 5 represents almost the best preserved unexcavated agricultural structures within the chora of Chersonese. This site is the most impressive example of the archaeological landscape at the chora of Chersonese, which requires protection in order to secure its integrity.

Component Part 6 encloses the remains of a complicated system of defensive structures having protected the oldest part of the chora of Chersonese together with the settlement, known from the ancient authors as the Old Chersonese. The settlement occupying a considerable part of the fortification represented dense urban housing. Moreover, this site also encloses the ruins of a medieval monastery – on an islet in Kazachya Bay - associated by the researchers with the memorial church dedicated to St. Clemens Romanus.

Finally, Component Part 7 represents a special area of the Chersonese chora, located along the shore of the Black Sea, which was actively developed in the medieval period. The inaccessibility of the coastal rocks preconditioned the emergence of a large monastery center with man-made cave- and surface structures in one of the most beautiful spots of the Southwestern Crimea.

#### **6. Name of Property.**

The State Party to the Convention consents with the ICOMOS suggestion to exclude the date of foundation of the property from its name and does not have objections to making corresponding changes in the title 'Ancient City of Tauric Chersonese and its Chora'. At the same time we believe that the historical and territorial component of the name - "Tauric" - should be preserved in the title in order to differentiate this property from other ancient settlements called Chersonese.

**Information on the development  
of boundaries and land use regimes for the protected areas  
of the Cultural Heritage site  
“The Ancient City of Tauric Chersonese and its Chora”  
(monuments within the Tauric Chersonese National Preserve)**

The Order of the Ministry of Culture of Ukraine No 267 of 27 March 2012 approved the boundaries and land use regimes for the buffer zones of the preserved areas of the property “The Ancient City of Tauric Chersonese and its Chora”. Under this Order the buffer zones and their land use regimes were established for seven preserved areas included into the Nomination to the UNESCO World Heritage List and managed by the Administration of the Tauric Chersonese National Preserve. Total area of the mentioned buffer zones is 3158 hectares (ha), while the overall area of the preserved areas is 267 ha. Boundaries and regimes for these buffer zones were represented in the Nomination Dossier and the Management Plan submitted for consideration to the UNESCO World Heritage Centre.

The said buffer zones only provided for protection of a part of the territory of the ancient chora of the Tauric Chersonese on the Heracleian Peninsula, wherefore in 2012 specialized work was carried out aimed at expansion of the protected areas for the purpose of unparted protection of the whole territory of the chora. This work resulted in the project “Boundaries and Land Use Regimes for the Protected Areas of the Monuments of the Tauric Chersonese National Preserve Located on the Territory of the Heracleian Peninsula in the City of Sevastopol”, which was recommended for approval by the Resolution of the Methodological Council of the Ministry of Culture of Ukraine No 59 of 26 November 2012.

In accordance with this project, monuments protection areas of the Preserve cover the whole near chora of the Tauric Chersonese demarcated in the Ancient

Period, over 13250 ha in area, thus providing for maximum protection to the archaeologically significant areas located in this territory, to its planning system and features of landscape. This kind of zoning, depending on the state of preservation of the archaeological sites and cultural landscape, suggests different regimes of use in different areas of the Heracleean Peninsula.

In conformity with the law of Ukraine on protection of the Cultural Heritage, the protected areas of the monuments of the Tauric Chersonese National Preserve, besides their territories proper - preserved areas, should include buffer zones, protected landscape areas, urbanization control areas and archaeological cultural layer protection area.

Following are brief descriptions of land use regimes applied to the protected areas of the Tauric Chersonese National Preserve:

**1. Territories of the Tauric Chersonese National Preserve (preserved areas):** *shown in red on the map (areas A01 – A16), including “hatched” parts – areas nominated to the UNESCO World Heritage List (areas A01 – A07).*

***Prohibited:***

construction and earth works (including farm operations) not connected with research, protection and museumification of the monuments,  
carrying out earth works without archaeological supervision.

***Allowed:***

archaeological prospecting and excavation, conservation, restoration and museumification of the monuments,

measures, non-destructive to archaeological objects - nature conservation activities, engineering protection and improvement of the territories, lying utility lines,

in exceptional cases, pin-point construction of display rooms (the max allowed tallness of the buildings - 6 m).

***With the concurrence of:***

Central Cultural Heritage Protection Authority.

***Overall area:***

296 ha.

**2. Buffer zones of the monuments and preserved areas of the Tauric Chersonese National Preserve:** *shown in pink on the map (areas A19, A20, A24, A30, B01 – B30, D05, D06).*

***Strictly controlled:***

construction and earth works not connected with research, protection and museumification of the monuments.

***Prohibited:***

placing industrial establishments,  
construction of mid-rise and many-storied buildings,  
transformation of the preserved landscape and established planning system,  
carrying out earth works (both on land and under water) without archaeological supervision,

within defined water area – erection of above-water structures and construction of landing stages.

***Allowed:***

archaeological prospecting and excavation (both on land and under water),  
conservation, restoration and museumification of the monuments,

measures, non-destructive to archaeological objects - nature conservation activities, engineering protection and improvement of the territories, laying utility lines and agricultural activity,

reconstruction of the existing housing, as well as singular construction of low-rise structures of recreational nature, under condition of preservation of landscape and planning peculiarities of the terrain (the max allowed tallness of structures – 6 m, for areas A19, A20, A24, A30, B02, B04, B17, B29),

reconstruction of existing buildings; in exceptional cases – construction of cottages and low-rise buildings (the max allowed tallness of 9 m – for areas B03, B05, B09, B11, B15, B19, B21, B23, D05, D06; 12 m – for areas B08, B13, B14, B16, B18, B20, B22, B24, B25; 15 m – for areas B01, B06, B10, B12, B26 – B28).

***With the concurrence of:***

Central Cultural Heritage Protection Authority.

***Overall area:***

3209 ha.

**3. Buffer zones for the historical and architectural monuments of Sevastopol:** *shown in orange on the map (areas C01 – C11).*

***Prohibited:***

construction and earth works (including farm operations) not connected with research, protection and museumification of the monuments,  
transformation of the preserved landscape and established planning system,  
carrying out earth works without archaeological supervision.

***Allowed:***

archaeological prospecting and excavation, conservation, restoration and museumification of the monuments,

measures, non-destructive to archaeological objects - nature conservation activities, engineering protection and improvement of the territories, lying utility lines,

in exceptional cases, pin-point construction of display rooms (the max allowed tallness of the buildings - 6 m);

within the buffer zone of the historic center of Sevastopol (area C01) - reconstruction of the existing buildings under condition of preservation of the established architectural aspects of the surrounding structures (the max allowed tallness – 15 m).

***With the concurrence of:***

Local Cultural Heritage Protection Authority.

***Overall area:***

182 ha.

**4. Protected landscape areas:** *shown in green on the map (areas D01 – D04, D07 – D30), including “hatched” parts – areas proposed for prospective inclusion to the preserved areas of the Tauric Chersonese National Preserve (areas A17, A18, A21 – A23, A25 – A29, A31 – A33).*

***Prohibited:***

construction and earth works not connected with research, protection and museumification of the monuments and cultural landscape, as well as recreational use of the natural objects,

transformation of the preserved landscape and established planning system, carrying out earth works without archaeological supervision.

***Allowed:***

archaeological prospecting and excavation, conservation, restoration and museumification of the monuments,

measures, non-destructive to archaeological objects - nature conservation activities, engineering protection and improvement of the territories, lying utility lines and agricultural activity,

reconstruction of the existing housing, as well as singular construction of low-rise structures of recreational nature, under condition of preservation of landscape and planning peculiarities of the terrain (the max allowed tallness of structures – 6 m).

***With the concurrence of:***

Local Cultural Heritage Protection Authority.

***Overall area:***

3752 ha.

**5. Strict urbanization control areas:** *shown in light blue on the map (areas E01 – E24).*

***Strictly controlled:***

nature, density and tallness of the structures.

***Prohibited:***

construction of mid-rise and many-storied buildings, transformation of the established planning system, carrying out earth works without archaeological supervision.

***Allowed:***

archaeological prospecting and excavation, conservation, restoration and museumification of the monuments,

measures, non-destructive to archaeological objects - nature conservation activities, engineering protection and improvement of the territories, lying utility lines and agricultural activity,

reconstruction of the existing buildings and construction of the new ones under condition of preservation of the established farmstead type of housing, existing planning and subdivision into plots (the max allowed tallness of structures 9 m – for areas E05, E17, E18, E20; 12 m – for areas E01 – E04, E08, E09, E13, E21 – E24; 15 m – for areas E06, E07, E10 – E12, E14 – E16, E19).

***With the concurrence of:***

Local Cultural Heritage Protection Authority.

***Overall area:***

2541 ha.

**6. Moderate urbanization control area:** *shown in dark blue on the map (areas F01 – F11).*

***Restricted:***

tallness of structures.

***Prohibited:***

carrying out earth works without archaeological supervision.

***Allowed:***

archaeological prospecting and excavation, conservation, restoration and museumification of the monuments,

measures, non-destructive to archaeological objects - nature conservation activities, engineering protection and improvement of the territories, lying utility lines,

reconstruction of the existing buildings and construction of the new ones under condition of observance of restrictions applied to the tallness of structures (the max allowed tallness 15 m – for areas F01, F03, F04, F11, F12; 21 m – for areas F05, F07 – F09; 27 m – for areas F02, F06, F10).



in exceptional cases (for area F10 only) – construction of buildings taller than 27 m under condition of their positioning within the existing blocks and arrangement in conformity with the surrounding buildings.

***With the concurrence of:***

Local Cultural Heritage Protection Authority.

***Overall area:***

2583 ha.

**7. The archaeological cultural layer protection area:** *shown by yellow outline on the map.*

***The archaeological cultural layer protection area regime*** is applicable to all territories of the monuments and their protected areas. This regime provides for mandatory preventive research in the areas of prospective construction works and other earth works by way of carrying out:

- archaeological excavation – on the territories of the monuments and preserved areas, in the buffer zones and protected landscape areas;
- archaeological prospection – in the urbanization control areas.

Besides that, archaeological cultural layer protection area regime also applies to the offshore strip surrounding the Heracleian Peninsula (250 m off the shoreline). At the same time, it is prohibited to carry out any construction or earth works in the aquatic part of this area without archaeological supervision.

***With the concurrence of:***

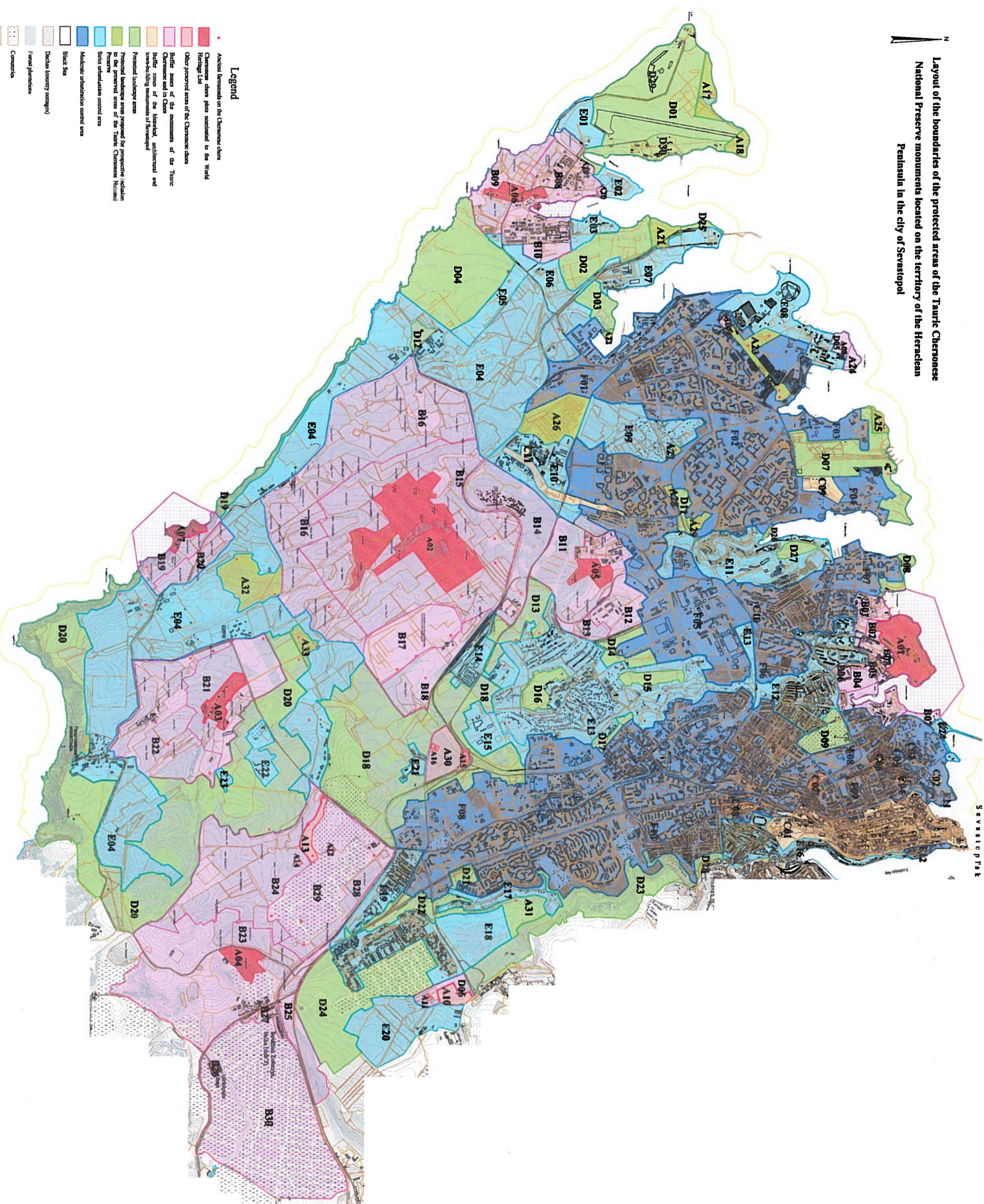
Central Cultural Heritage Protection Authority (for the territories of the monuments, preserved areas and buffer zones);

Local Cultural Heritage Protection Authority (for other protected areas).

***Overall area:***

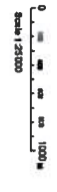
13263 ha (including 700 ha offshore strip).

**Layout of the boundaries of the protected areas of the Tauric Chersonese National Preserve monuments located on the territory of the Heracleian Peninsula in the city of Sevastopol**



**Legend**

- Ancient landmarks on the Chersonese chora
- Chersonese chora place nominated to the World Heritage List
- Other preserved areas of the Chersonese chora
- Buffer zones of the monuments of the Tauric Chersonese and its Chora
- Buffer zones of the historical, architectural and unorthodox monuments of Sevastopol
- Protected landscape areas
- Protected landscape areas proposed for prospective inclusion to the preserved areas of the Tauric Chersonese National Preserve
- Sites of urbanization control areas
- Moderate urbanization control areas
- Black Sea
- Dnieper (country crossings)
- Forest plantations
- Canals
- Industrial areas
- Vineyards



## **Essentials of the Comprehensive Program for Archaeological Research and Conservation of the Monuments Located on the Territory of the Tauric Chersonese National Preserve**

Comprehensive Program for Archaeological Research and Conservation of the Monuments Located on the Territory of the Tauric Chersonese National Preserve is in the final stage of its development, and will be attached to the Management Plan for the Property 'The Ancient City of Tauric Chersonese and its Chora' in March 2013. The program provides for bringing the existing research and conservation methods, programs and practices to one consistent system, what in due course will allow achieving the state of equilibrium between excavations and their conservation, preserving large archaeological territories for the future research, and avoiding losses of ancient structures studied by the archaeologies in the past.

### ***1. The Basic Principles of Archaeological Research at the Territory of the Ancient City of Chersonese and its Chora.***

1.1. Archaeological research at the territory of the ancient city of Chersonese should be aimed at repeated excavation of the sites already studied in the 19<sup>th</sup> – early 20<sup>th</sup> centuries for the purpose of their more detailed survey and reconsevation. Furthermore, it provides for excavation of the plots adjacent to already uncovered areas with a view of fighting the noncontiguous nature of museumified ruins of the ancient city.

1.2. Considerable parts of the territory of the ancient city and the preserved areas of the chora (almost half of their total territory) are designated as 'spare' or 'reserve'. A long-term moratorium on archeological excavations is declared for these sites, what will allow preserving the stratigraphic and archeological landscape integrity of these sites for the future generations of researchers. In order to preserve this etalon archaeological landscape of the chora open-ended moratorium is set on excavations at the nominated property in the Streletskaaya Gully, where unexcavated remains of ancient and medieval farmsteads are located, along with ancient division and planting walls, as well as main roads of the ancient period.

1.3. Archaeological research at the territory of the property should take into consideration its multi-layer nature and the value of all its constituent parts irrespective of their dating. For this reason excavation and demolition of medieval structures for the purpose of revealing the ancient ones is allowed only in exceptional cases - when the state of preservation of the newer structures is very poor.

1.4. On the 'spare' sites and those with complex stratigraphy (for the purpose of revealing and recording earlier structures while preserving later ruins) it

is intended to introduce only non-intrusive research methods allowing surveying the ancient structures without excavating them.

1.5. Within the buffer zones of the preserved areas where archaeological monuments can be built over by modern structures rescue excavation will be substituted by preventive excavation, what will allow saving the most valuable monuments from destruction and giving those territories the status of preserved areas in the future.

1.6. Archaeological research on the territory of the ancient city and the preserved areas of the chora must be carried out strictly observing all methodological requirements approved by the Institute of Archaeology of the National Academy of Sciences of Ukraine. Besides, and it is imperative that it is followed by conservation of the archaeological remains in situ and subsequent museumification of the most important monuments.

## ***2. The Basic Principles of Conservation of the Archaeological Monuments at the Territory of the Ancient City of Chersonese and its Chora.***

2.1. Comprehensive Program for Conservation of the Archeaeological Monuments Located on the Territory of the Ancient City Site of Chersonese and its Chora is founded on the basic statement of the UNESCO Venice Charter on the necessity of maximum preservation of the monuments' authenticity.

2.2. For more integral preservation of the archaeological remains of the ancient city site of Chersonese and its chora their conservation should be carried out directly in the course of excavation, or immediately after its completion. In this concern the teams of archaeologists should coordinate their research plans with the possibility of carrying out follow-up conservation activities.

2.3. In order to maintain integrated principles in conservation of the city and chora monuments these activities will be carried out only with participation or under methodological guidance of the conservators of the Tauric Chersonese National Preserve. With this object in view the personnel of the Conservation Department of the Preserve should be doubled (corresponding staff increase is planned for 2013).

2.4. Taking into consideration that there are poorly conserved areas on the territory of the ancient city of Chersonese excavated back in the 19<sup>th</sup>–early 20<sup>th</sup> centuries, the administration of the Preserve considers it one of the top priorities in the Comprehensive program to conserve or re-conserve them removing the inadmissible conservation additions – cement mortar, reinforced concrete structures, etc. (re-conservation of old excavations started in 2011 and should be completed by 2015).

2.5. When conserving the ancient walling its appearance should be preserved as it was recorded in the course of uncovering, without any additions. However, in case of unsatisfactory state of preservation of the masonry, it may be to a very little degree added to for the purpose of consolidation or waterproofing; at the same time all additions should be visually marked out from the original masonry.

2.6. Conservation of the remains of the structures belonging to different chronological periods should be carried out with due account for construction

techniques characteristic of the corresponding time periods: Classical, Hellenistic, Roman, and Byzantine (the Comprehensive Program considers the local peculiarities of the construction techniques in detail).

2.7. The conservation cycle for the masonry of the ancient city of Chersonese and its chora should include the following stages:

- Removal of destructive vegetation;
- Cleaning accessible parts of the walls off the destructured mortar;
- Cleaning the joints and seams between the blocks from foreign dirt and dust;
- Washing the masonry by pressurized water;
- Application of the mortar;
- Maintenance of the mortar after application.

2.8. The Comprehensive Program for Conservation gives the specifics of conservation of the planting walls at the chora, cyclopean masonry of the Hellenistic and Roman periods, as well as consolidation of the excavation trench walls. It also specifies composition of the mortars adapted to local environment and used for the joints of the masonry, water-proofing solutions for treating the stone surfaces, justifies the use of geotextile, considers other aspects of the conservation techniques.

2.9. The final choice of the conservation compounds should be made immediately at the monument, as adjusted for the peculiarities of the materials used in ancient masonry – their destruction degree, type of stone, type of masonry attributed to a specific period in history, environment to which the conserved masonry will be exposed, etc.

2.10. After conservation is complete, the state of the conserved ruins will be monitored within the framework of the general monitoring system for the monuments of the Tauric Chersonese National Preserve. At the same time it is noted that the main condition of quality preservation of the archaeological structures after conservation is their presentation and interpretation.