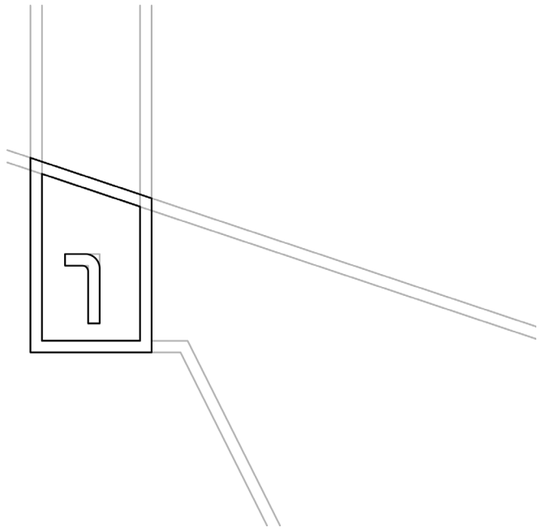
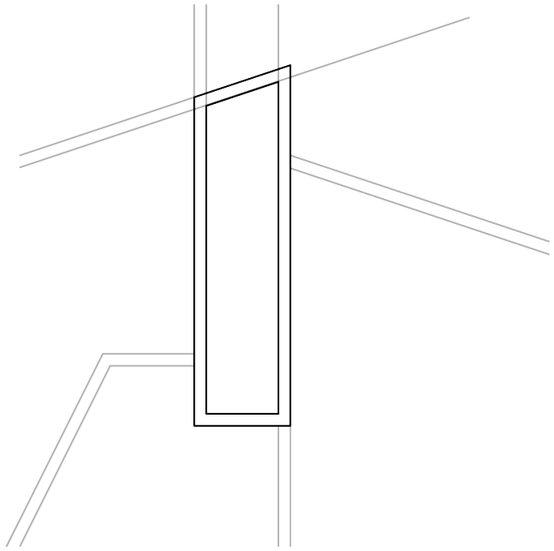
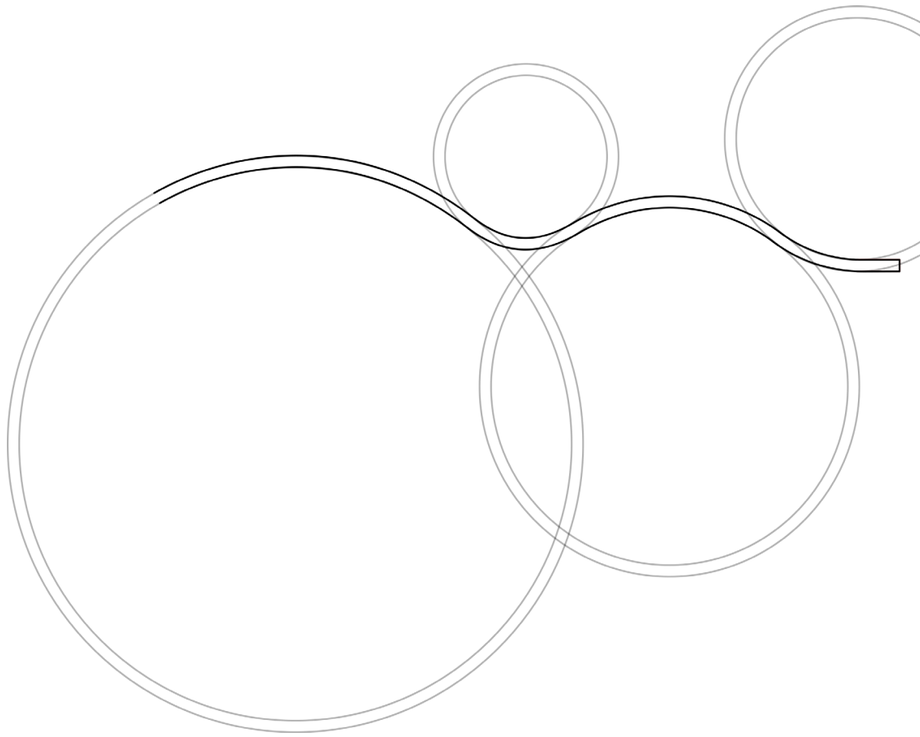
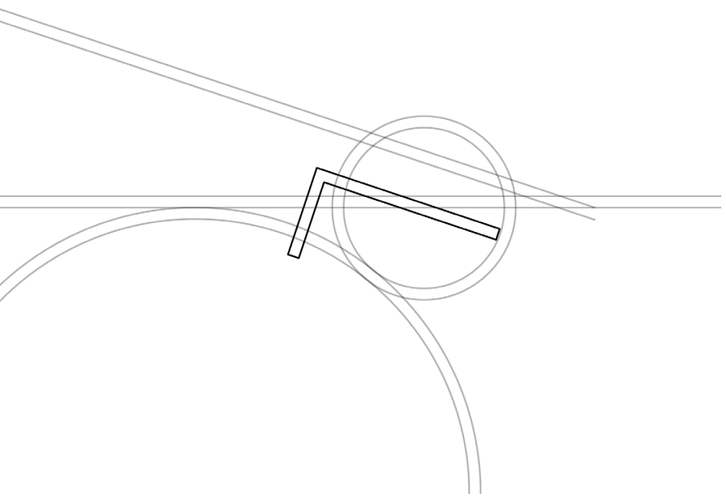
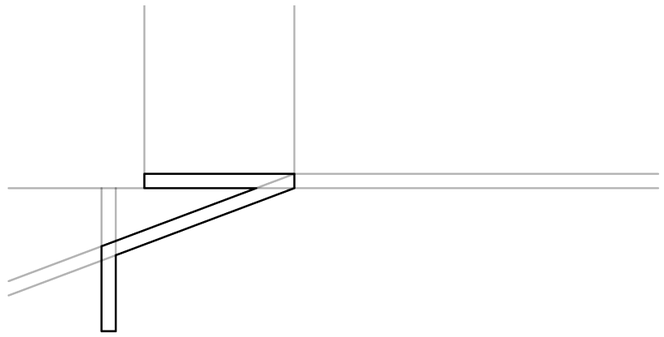


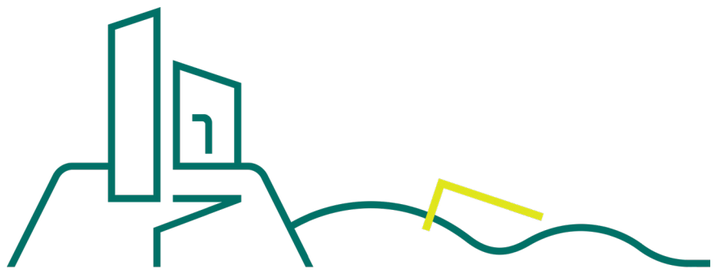












THE CULTURAL LANDSCAPE OF CIVITA DI BAGNOREGIO

REGIONE LAZIO

Comune di BAGNOREGIO

Nomination format of

THE CULTURAL LANDSCAPE OF CIVITA DI BAGNOREGIO

for Inscription on the UNESCO World Heritage List

DECEMBER **2020**

2020 was a difficult year. A dark year. It has forced everyone to live an unusual everyday routine, of semi-isolation, mostly indoor. With almost no being able to confront with each others. This work is instead the result of a collective effort, started many years ago, and whose closure is made possible by the stubborn will of the numerous stakeholders - protagonist to the Cultural Landscape of Civita di Bagnoregio world heritage list nomination -, which did not give up and did not want to bow to contingent adversities, which have worked in spite of everything, with constancy, with determination. Resilient, a bit like the Civita itself is. All to reiterate, also, the stubborn desire to complete this project, aware of the importance to overcome adversities in the name of the relevance of the final aspiration. On behalf and in the name of the whole Community of Civita di Bagnoregio and its Cultural Landscape.

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for Inscription on the UNESCO World Heritage List

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IDENTIFICATION OF THE PROPERTY

1 IDENTIFICATION OF THE PROPERTY

1.a Country

1.b State, Province or Region

1.c Name of property

1.d Geographical coordinates to the nearest second

1.e Maps showing the boundaries of the nominated property and buffer zone

1.e.1 Localization and identification of the property in the Country

1.e.2 Localization and identification of the property in the Region

1.e.3 Boundaries of the Nominated Property and buffer zone
(Base map: CTR Lazio Region)

1.e.4 Boundaries of the Nominated Property and buffer zone
(Base map: ESRI World Imagery)

1.e.5 Boundaries of the Nominated Property and buffer zone
(Base map: World Topographic Map ESRI)



1. IDENTIFICATION OF THE PROPERTY

1.a COUNTRY

Nominated property is in Italy

1.b STATE, PROVINCE OR REGION

Nominated property is located in the Municipality of Bagnoregio
(Province of Viterbo, Lazio Region)

1.c NAME OF PROPERTY

The Cultural Landscape of Civita di Bagnoregio

1.d GEOGRAPHY COORDINATES TO THE NEAREST SECOND

The area of the Nominated component is 992,64 ha
The area of the Buffer zone is 5.204,98 ha
Total surface of the site is 6.197,62 ha
Coordinates of the central point of the whole Nominated component are:
East 12°8’28” - North 42°37’32”

1.e MAPS SHOWING THE BOUNDARIES OF THE NOMINATED PROPERTY AND BUFFER ZONE

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(Base map: CTR Lazio Region)
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(Base map: ESRI World Imagery)
Map 1.e.5. shows the boundaries of the Nominated Property and buffer zone
(Base map: World Topographic Map ESRI)

1.e.1 Localization and identification of the property in the Country



Localization of the site

Nominated component

0 100 200 Km

Print Scale: 1:7.000.000
Projected coordinate system: UTM-WGS84
Base map: World Imagery - ESRI
Date: December 2020

1.e.2 Localization and identification of the property in the Region



Localization of the Property

Regional borders

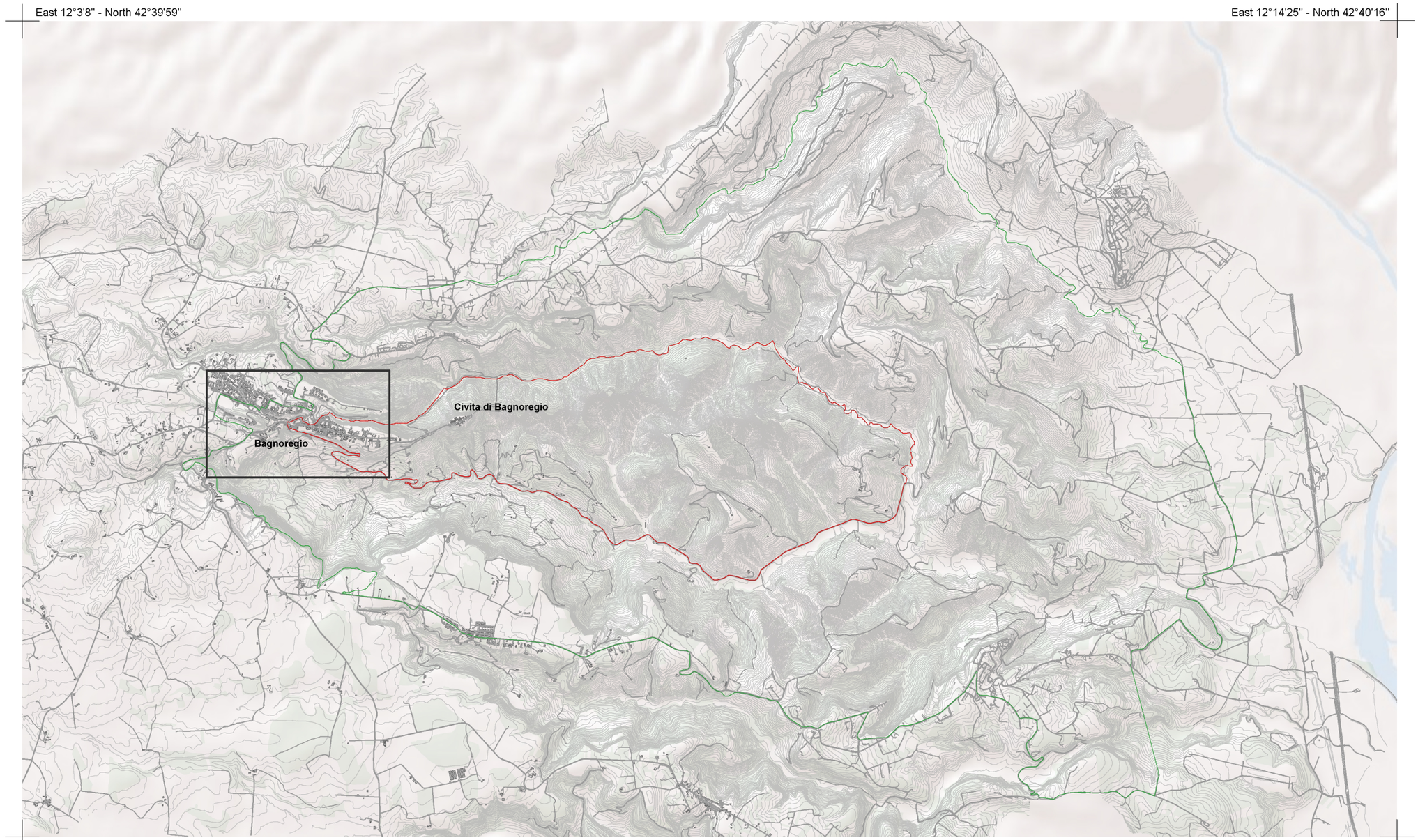
Nominated property

0 25 50 Km

Print Scale: 1:1.500.000
Projected coordinate system: UTM-WGS84
Base map: World Imagery - ESRI
Date: December 2020

1.e.3 Boundaries of the Nominated Property and buffer zone

(Base map: CTR Lazio Region) For zoom on "Quadrant A" see the annex
Cartographic Atlas of the Cultural Landscape of Civita di Bagnoregio



Boundaries of the Nominated property and buffer zone

Legend

- Buffer Zone (5204,98 ha)
- Nominated property (992,64 ha)
- Quadrant A (detail on the urban area of Bagnoregio, see cartographic atlas)

Print scale: 1:38.000
Projected coordinate system: UTM-WGS84
Base map: CTR Lazio Region
Municipality of Bagnoregio (nominated site)
Date: December 2020

0 0,5 1 2 Km

1.e.4 Boundaries of the Nominated Property and buffer zone

(Base map: ESRI World Imagery)

East 12°3'8" - North 42°39'59"

East 12°14'25" - North 42°40'16"



East 12°3'22" - North 42°35'3"

East 12°14'38" - North 42°35'20"

Boundaries of the Nominated property and buffer zone

Legend

- Buffer Zone
- Nominated property

Print scale: 1:38.000
Projected coordinate system: UTM-WGS84
Base map: ESRI World Imagery
Municipality of Bagnoregio (nominated site)
Date: December 2020

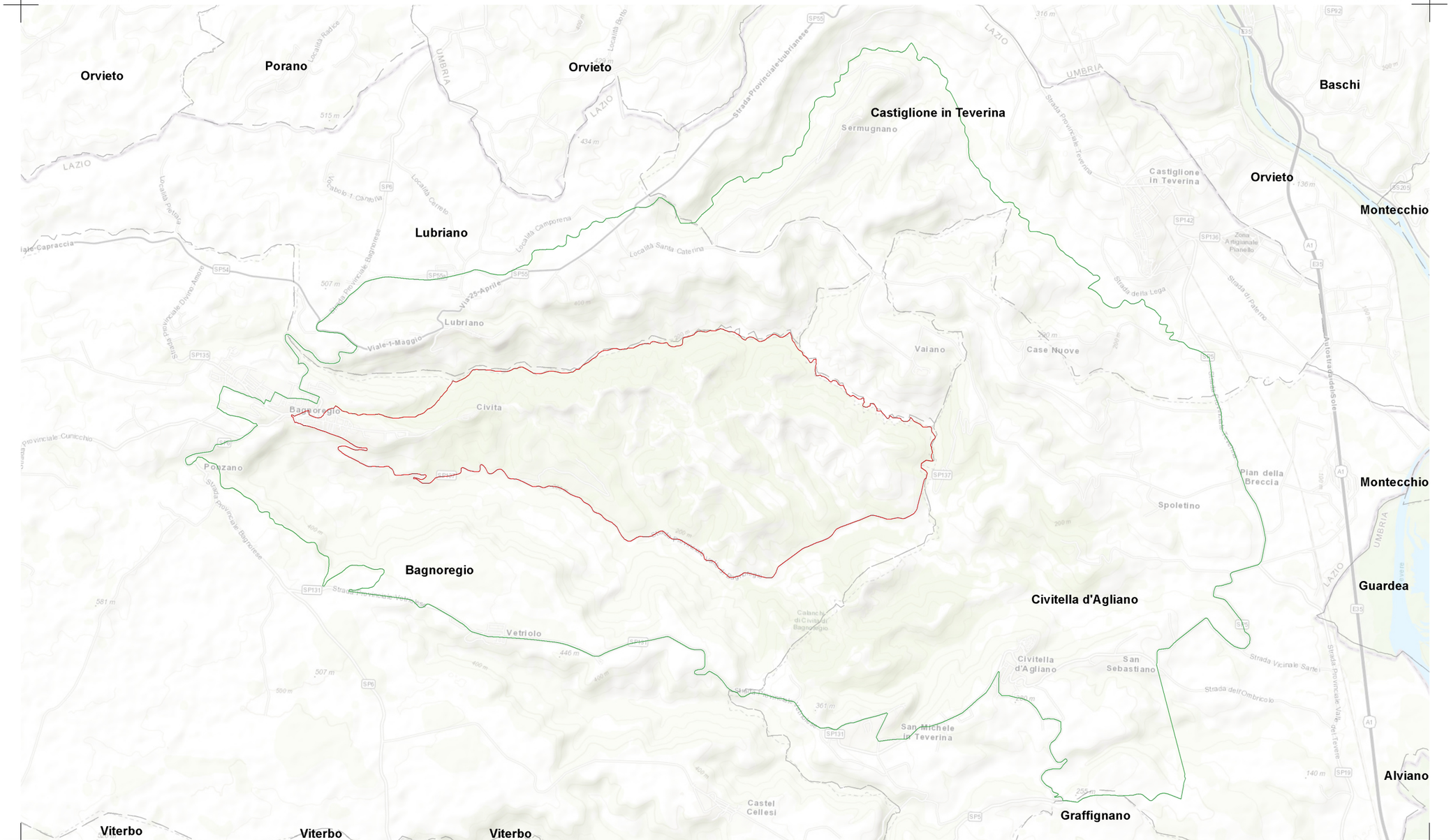
0 0,5 1 2 Km

1.e.5 Boundaries of the Nominated Property and buffer zone

(Base map: World Topographic Map ESRI)

East 12°3'7" - North 42°39'59"

East 12°14'26" - North 42°40'16"



East 12°3'21" - North 42°35'3"

East 12°14'39" - North 42°35'20"

Boundaries of the Nominated property and buffer zone

Legend

- Buffer Zone
- Nominated property
- Municipalities boundaries

Print scale: 1:38.000
Projected coordinate system: UTM-WGS84
Base map: World Topographic Map - ESRI
Municipality of Bagnoregio (nominated site)
Date: December 2020

0 0,5 1 2 Km

DESCRIPTION

2 DESCRIPTION

2.a Description of the property

2.a.1 The context in which the component is

2.a.2 Analysis of the natural component
- 2.a.2.1 *Geography*
- 2.a.2.2 *Geomorphology*
- 2.a.2.3 *Ecological System*

2.a.3 Analysis of the cultural-anthropic component
- 2.a.3.1 *Type of settlement*
- 2.a.3.2 *Urban-architectural features*
- 2.a.3.3 *The main important buildings of the area*
- 2.a.3.4 *Land use (Corine Land Cover)*

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2.b History and development

2.b.1 History of Civita and Bagnoregio

2.b.2 History of seismicity and landslides
- 2.b.2.1 *Seismicity*
- 2.b.2.2 *Recorded Landslides in the past*
- 2.b.2.3 *Inventory of major latter landslides*
- 2.b.2.4 *Evolution of the landscape landslides*

2. DESCRIPTION

The nominated site is proposed for inscription to the World Heritage List under the category of Cultural Landscapes. In fact, ***the Cultural Landscape of Civita di Bagnoregio*** represents a significant example of a typology of landscape widespread all over the world, but which here reaches levels of extreme exceptionality. It is a landscape designed by extremely impacting natural phenomena that man has always tried to counter and adapt, with tenacity and perseverance, in the desire to never leave these places. The image of Civita di Bagnoregio, as the city on a rocky cliff surrounded by badlands represents an internationally known and appreciated icon all over the world.

The description of the site follows the canonical presentation of the landscape in its three fundamental components: Natural, Cultural-Anthropic and Perceptive ones.
The natural factors examined are therefore the geography aspects and the strong geomorphological activity (made of geology and impacting phenomena). Besides these aspects, **the ecological system will be analyzed with respect** of the current configuration of the ***Valle dei Calanchi*** (Badlands Valley) included into the selected property zone. In the specific case of Civita di Bagnoregio, the fact that certain elements linked to the natural system have favored the birth and spreading of a very particular human settlement is of primary importance.

The cultural-anthropic component deals with aspects linked to man's presence/action on the territory and to the transformations that he has impressed on it. In this sense, it is important to note how the Italian landscape as a whole is extensively anthropised, even if it is not evident. Human activity is widespread and can be perceived almost all over the country, leaving a rather limited space to completely "natural" landscapes. In the Case of Civita di Bagnoregio, it is possible to define an **organically evolved continuing landscape**,



[1] Civita di Bagnoregio. Aerial view (©Renato Burla)

which retains an active social role in contemporary society and in which the evolutionary process is still in progress. In this chapter the first part of the analysis shall considerate the settlement's features. The urban-architectural section will focus on the stratification of the anthropic elements on the natural substratum. This will be followed by the analysis of how man resisted faced to the above mentioned impacting phenomena, thanks to several elements that express the capacity to absorb and react. This quality is commonly known as **resilience of community** and is typical for the living cultural landscapes and, at the same time, as **antifragility of the urban-architectural features.**

The last aspect regards **the perceptive component**, which links the visual data and the symbolic value of the nominated territory. During this phase, the emphasis is placed upon the visual process, on how the landscape appears to the observer and it has been interpreted in years: the landscape is therefore defined as what the human eye can embrace, as the combination of exterior, visible aspects and the sensitive composition of the territory. The perceptive component also regards reactions, feelings that a landscape with a high iconic value can inspire.

Antifragility is beyond resilience or robustness.
The resilient resists shocks and stays the same; the antifragile gets better.
We call an object, an organism, a system, an institution, antifragile when from time - from disturbances, volatility, stress, even catastrophes - they can also gain, strengthen, improve, evolve. How do objects, organisms, systems, institutions, events, respond - in short time - to disturbances, stress factors, volatility, disorder? If they are fragile, time can only be harmful to them, it can damage them and break them. If they are robust or resilient, they will be essentially indifferent to time, because most of the perturbations either do not accuse them in the case of robustness, or absorb them in the case of resilience.

The cities as a whole in this sense are antifragile systems, as are the living organisms as a whole. Not every city, not every part of the city, but the cities as a whole. Human and natural catastrophes, from wars to terrorism, from earthquakes to hurricanes, force cities to redesign themselves: it may be necessary to manage the emotional and social wounds of a conflict, or to physically rebuild a new urban plan. From the resilient city, capable of responding to the challenges, we go towards antifragility, the city that, after suffering painful wounds in its fabric, disasters, cataclysms and human violence, rethinks, which redefines urbanization policies and processes to service of new citizens.

This concept is present and is repeated within the text that follows and declined according to the topic under consideration. It is evident that the antifragility of this place concerns different aspects, from the territorial one (pages 46-47) to the anthropic one (pages 71-73), from the iconic one (pages 110-121) to the historical one (pages 146-147).

2.a DESCRIPTION OF THE PROPERTY

2.a.1 Localization and identification of the property in the Region

The Cultural Landscape of Civita di Bagnoregio is located in the northern part of Lazio on the border with Umbria, known for its peculiar appearence determined by the stratigraphic and geomorphological conditions that make this ancient town hill one of the most suggestive places in Italy. The ancient borgo is included in the ***Valle dei Calanchi*** (Badlands Valley) outcome of the action of rivers Rio Torbido and Fosso di Bagnoregio, both tributary of the river Tevere.

The Badlands are erosive formations typical of clays, characterized by valleys with steep slopes, without vegetation, separated by thin ridges. The high inclination and the impermeability of the clay slope reduce the infiltration of water and favour the fast surface outflow, resulting in the removal of the altered surface clay and the engraving of a dense drainage network. The rapid morphological evolution of the clay slopes is realized also with the occurrence of different types of landslides: solifluction (slow flow of the soil to the valley bottom, due to the water saturation), mud-flows and translational and rotational sliding.

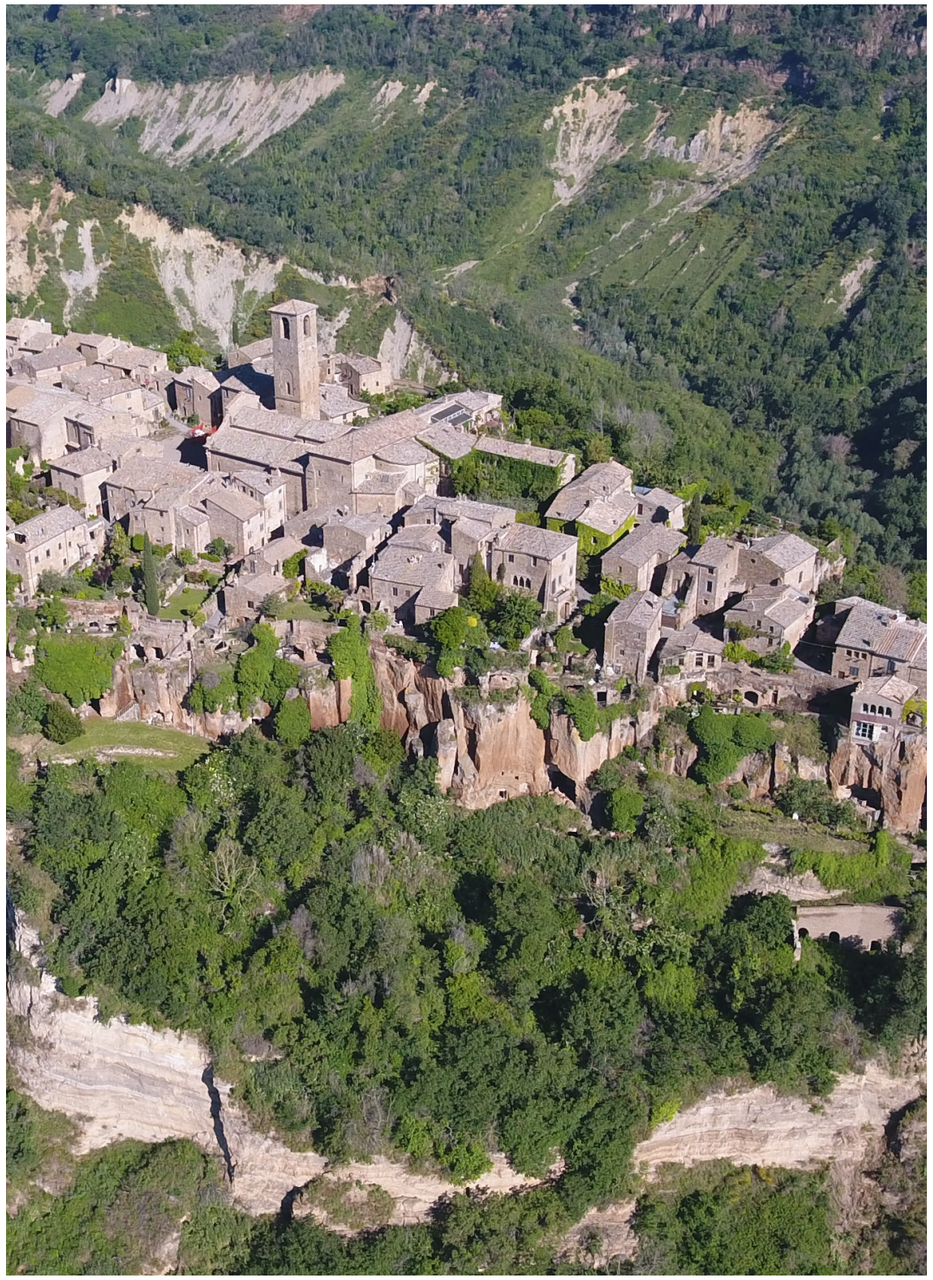
The hill town of Civita is strategically located on a tuff cliff dominating the valley, it once was a fluorishing city, now a small settlement at the top of a volcanic cone, accessible and passable only on foot and administratively and operationally dependent on nearby Bagnoregio. The hill rises from the deep valley, it is an island separated from the "mainland" as result of erosion and earthquakes and shows that man can interact with nature, even where it is more savage and relentless.

Bagnoregio is the most modern part of the city, built already in the fourteenth century. It acquired independence in the seventeenth century when the direct relationship with Civita failed, ceasing to be only a fraction of it.

Civita di Bagnoregio is at present a hamlet of the town of Bagnoregio and is reached by passing through a reinforced concrete pedestrian bridge built in 1965. The connection has always been maintained over time, creating a symbiotic relationship between the two inhabited areas facilitated in the past by other bridges, gradually abandoned and eliminated due to soil erosion. Actually today, of the five historic gates of the city, only the so-called gate of Santa Maria or Cava (which is the only access to the town) remains.

The urban structure of the entire inhabited area is of Etruscan origin, consisting of thistles and decumans according to Etruscan and then Roman use, while the entire architectural cladding is medieval and Renaissance. Many testimonies remain from the Etruscan period: of particular interest is the so-called "Bucaione", a deep tunnel that cuts into the lower part of the town, and which allows access, directly from the town to the Badlands Valley. A small Etruscan necropolis has been found in the cliff below the viewpoint of San Francesco Vecchio.

The town of Civita was founded on tufaceous materials resting on a substrate of clayey nature which were respectively originated by the volcanic complexes of Vulsino during different eruptive phases and by continental and marine deposits. The Civita's hilltop as well as the surrounding valley have been modelled by the erosion processes attributable at two different aspect of the interaction with water (rivers and rains): on one hand the chemical-physical alteration of the rocks, on the other hand the physical action of washout. The erosion caused the total or partial isolation of the ranges constituted by volcanic rocks so that tufa rocks often reached the point of standing out, bordered by subvertical walls. These parts suffer a progressive opening of fractures that leads to the landslides affecting for thousands of years, even if in varying degrees, all cliff sides.



[2] Civita di Bagnoregio. Aerial view (©Renato Burla)

Because of the rocks incessant dismantling, the inhabitants of Civita observed a gradual reduction of the inhabited center, to such an extent that the Bagnorese writer Bonaventura Tecchi (1896-1968) coined for Civita the definition "**the dying town**" by which it continues to be known. **The plateau on which Civita lies is rhomboid-shaped. The streets, remnants of a somewhat regular Etruscan/Roman grid plan, are narrow and lined with houses dating mostly from the Middle Ages.**

Gardens are planted in some of the ruins and on the edge of the plateau, in some cases terracing downs the cliffs. At the east end of the town the main street turns into a path which winds down to the fields in the valley. The valley is in part cultivated with vineyards and olive fields, dotted with small farm buildings. Part consists of barren, eroded ridges of clay. From the valley, or from the surrounding plain, it is possible to see Civita as a cluster of buildings crowing the hill, built with the same warm brown stone as the hill itself and this created the typical cultural landscape where artificial works and natural context are closely connected. The tall bell tower rises in the middle of the clustered buildings. The sheer cliffs drop to the green of the valley. A chestnut forest, dating from the Middle Ages, covers the North Slope below the town.

Antifragility of the territory

An important part of Italian territory (about 61%) is constituted by "Inner Areas", showing a strong demographic decline, correlated to the decrease of local employment and land abandonment and the inadequacy of distribution of infrastructural services (education, health, mobility). Arguing that several highly depopulated areas have an important historical-anthropological past, Cohesion Policy may counteract the process of anthropic and economic depletion through enhancing its own resilient territorial capital (Barca, Casavola, Lucatelli, 2014).

By this perspective, National Strategy Inner Areas has become a true "territorial development laboratory" at European level and the focus on small territorial realities like "inner areas" and "boroughs" have nowadays become part of current vocabulary of national development policy (to which also other European realities echo, like Spain). Furthermore, in Italy the national law on "small municipalities" with less than 5,000 inhabitants was implemented (6 October 2017, n. 158), providing for direct investments to protect the environment and cultural heritage, to face hydrogeological risk, to redevelop historic centers, to support socio-economic development, including incentives for the creation of new productive activities.

Civita di Bagnoregio is at the center of Inner Areas national narrative, inasmuch considering territories which have suffered a progressive population abandonment and decrease of public services, as consequence showing an increase of costs deriving from hydro-geological and environmental degradation, even if preserving an inherent cultural and landscape value.

Although it is outside the perimeter of Italian "Inner Areas", the local politicians are aiming for the insertion of Civita in these areas so that economic support can be reached and used to support these areas which, despite the many difficulties, have always tried, succeeding, to survive.

2.a.2 Analysis of the natural component

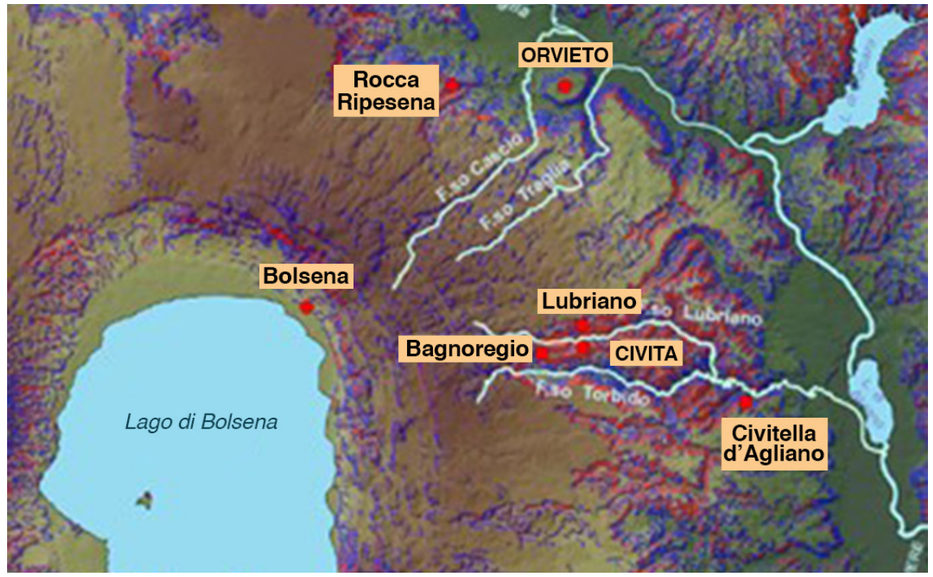
2.a.2.1 *Geography*

The ***Valle dei Calanchi*** (Badlands Valley) extends in an area of 6.197,62 ha including the territory of the municipality of Bagnoregio and part of the territories of the municipalities of Lubriano, Civitella D'Agliano, Castiglione in Teverina and Graffignano.
It presents a medium altitude of 230 meters above the medium sea level between the coordinate East 12°8'28" – North 42°37'32".

The area is located in the upper central Italy, about 120 kilometers from Rome, in the province of Viterbo, in north-east direction from the Bolsena Lake at the border between the Lazio region and the Umbria Region. It is bordered in the west side from the Vulsino's mountains, in the south side from the Cimino's mountains, both of volcanic origin and now almost inactive. The past intense volcanic activity is nowadays testified by the caldera lakes of Bolsena, the largest European volcanic lake, and Vico. The area falls within the boundaries between the Tiber river fluvial valley (east side), the Torbido river (south side), Lubriano river (north side) and the volcanic deposits from the over-mentioned volcanic complexes.

This location it is reflected by the complex and unique geology and geomorphology connotative of the area. The Badlands reflect this complexity as they are classified as particular geological structure due to an erosional form of clays, characterized by erosive valleys with steep slopes, without vegetation, separated by thin ridges. The high inclination and the impermeability of the clay slope reduce the infiltration of water and favour the fast surface outflow, resulting in the removal of the altered surface clay and the engraving of a dense drainage network.

Somewhere erosion has led to the isolation of the peripheral portions of the tabular reliefs made up of Vulsini volcanic deposits: tuff cliffs rise up from the landscape, bordered by sub-vertical scarps, on which many towns have been built (Civita di Bagnoregio, Lubriano, Orvieto, Orte, etc). The built-up area of Civita di Bagnoregio is located on a tuffaceus cliff at 443 m above the medium sea level, rising in the middle of the Badlands Valley. Due to the erosional phenomena, nowadays the ancient city of Civita is linked to the more modern city of Bagnoregio only with a bridge located on a tight saddle, subjected to widespread landslides phenomena. The area is bordered by the valley of the Torbido river (south side) and Lubriano river (north side).



[3] The area around the badlands valley



[4] The Badlands Valley

2.a.2.2 *Geomorphology*

GEOLOGY

The area between the towns of Bagnoregio, Civita and Lubriano is included in the sheet n. 137 (Viterbo) of the Italian geological map, scale 1:100000. From geological point of view the area is basically characterized by formations related to three different environments: continental sedimentary, marine sedimentary and volcanic. Related to these different environments, the geological formations which are found in the area are: plio-pleistocenic clays (marine sedimentary origin), debris and blankets of landslides (continental sedimentary environment), tuff ingninmbrities and lava to a lesser extension (volcanic origin). Where the erosion totally dismantled the volcanic covering, the plio-pleistocenic clays rise up.

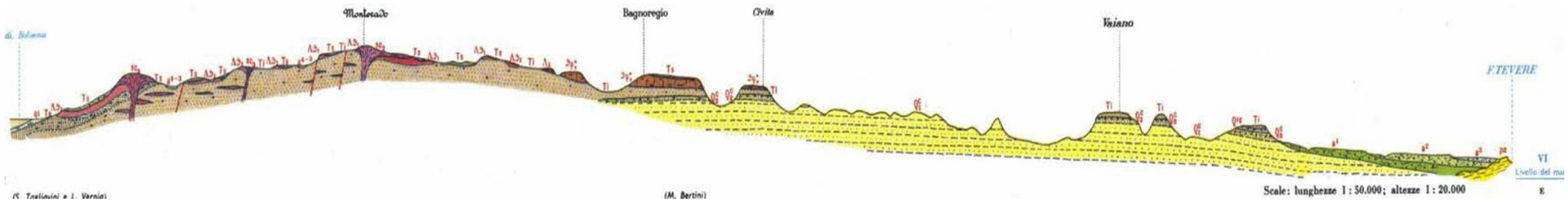
The current geological and lithological configuration is the result of geodynamical events that involved all the Appennini's areas (the Appennini are the main mountain range in the middle of Italy, NW-SE oriented).

The Appennini's range began to rise up in the Miocene, after that, in the Pleistocene there was a relaxing phase due to the opening of the Tirreno Sea's basin follow by the development of Horst and Graben geological formations with a NW-SE trend. During this phase, due to transgressive and regressive cycles, there was the deposition of big blankets of marine and continental sediments deriving from the Appennini in formation. In the medium and upper Pliocene along the axis of a NNW and SSE oriented Graben there was the rising of a ridge and the consequent moving back of the Tirreno basin. This rising up had is maximum during the medium Pleistocene. This phase was followed, in the upper Pleistocene, by a tectonic collapse stage in which extensional faults were formed. Along these faults an intense volcanic activity took place whereas the internal residual basins were fill up creating environments of fluvial lacustrine sedimentation by

the Tiber river. At the end of the Pleistocene the volcanic activity stopped followed by a phase characterized by the deposition of continental sediments type conglomeratic.
The volcanic activity of the northern Lazio is developed with the formation of three different volcanic complexes:
Cimino complex: is the most ancient complex (1.3 0.9 MY), its formation is immediately following to the deposition of the plio-pleistocenic clays.
Vicano complex: is the younger volcanic complex of the area (0.8-0.09 MY); its current morphology is defined by the Vico lake.
Vulsino complex: it's the northernmost complex and it's from an age between the Cimino and Vicano. Its volcanic activity, mainly of explosive feature, it's the one that involved the area of Civita di Bagnoregio.

This complex itself is divided in four minor complexes:

I. Paleovulsino complex
II. Montefiascone complex
III. Bolsena Orvieto complex
IV. Latera complex



[5] Geological section of the area

The area of Civita di Bagnoregio is part of the Bolsena-Orvieto complex, of which the sequence is here briefly explained.
· Before the volcanic activity, the area was interested by a general rising followed by erosive phenomena that begin the disassembling of the marine deposits.
· About 0.35 MY ago a pre-calderic effusive phase took place related to the faults formation.

Above the laves it's found the stratified tuff, characterized by prolonged rhythmic layers not uniform, but which in some areas are present along with continental deposits type glacial-fluvial. These kinds of deposits are represented by the Albornz series at Orvieto (a layer between the basal clay and the tuff plate).
· After the engulfment of the caldera (the current lake of Bolsena) there were pyroclastic type eruptions with the deposition of thick blankets of ignimbrites in the sunken areas.
· At the end of the Pleistocene the volcanic activity ended with the caldera's activities and the deposition of continental type conglomeratic sediments.

The geology of the town of Civita di Bagnoregio itself can be described as an overlapping of materials of which the formation is referred to the above-mentioned geological phenomena.

From the bottom to the top there are:

· Marine sandy clay with loam (Plio-Pleisocene). It represents the basal formation of the area. It is of sedimentary marine origin and it is composed mainly by silty clay layers and blankets separated by thin sandy layers. The color of the complex is from light blue to grey and became white-yellow were the clays are dry or altered. In the upper part a layer of about 7-8 m of sand and conglomerates in a feeble clayey matrix emerges above the clays. This outcrop is more evident in the east side of the area bordered by Bagnoregio, Civita and Lubriano. This geological complex, underlying the tuff materials, extends since the altitude of the valley bottom, it is mostly covered by alteration's material and debris coming from the tuff cliff and from the clayey layer itself in the areas subjected to instability. The clayey layer is explicitly visible in the areas most subjected to instabilities in which most superficial layer is in continuous removal (i.e. the saddle from Bagnoregio to Civita).The global thickness of the outcrop it's about 300 m.

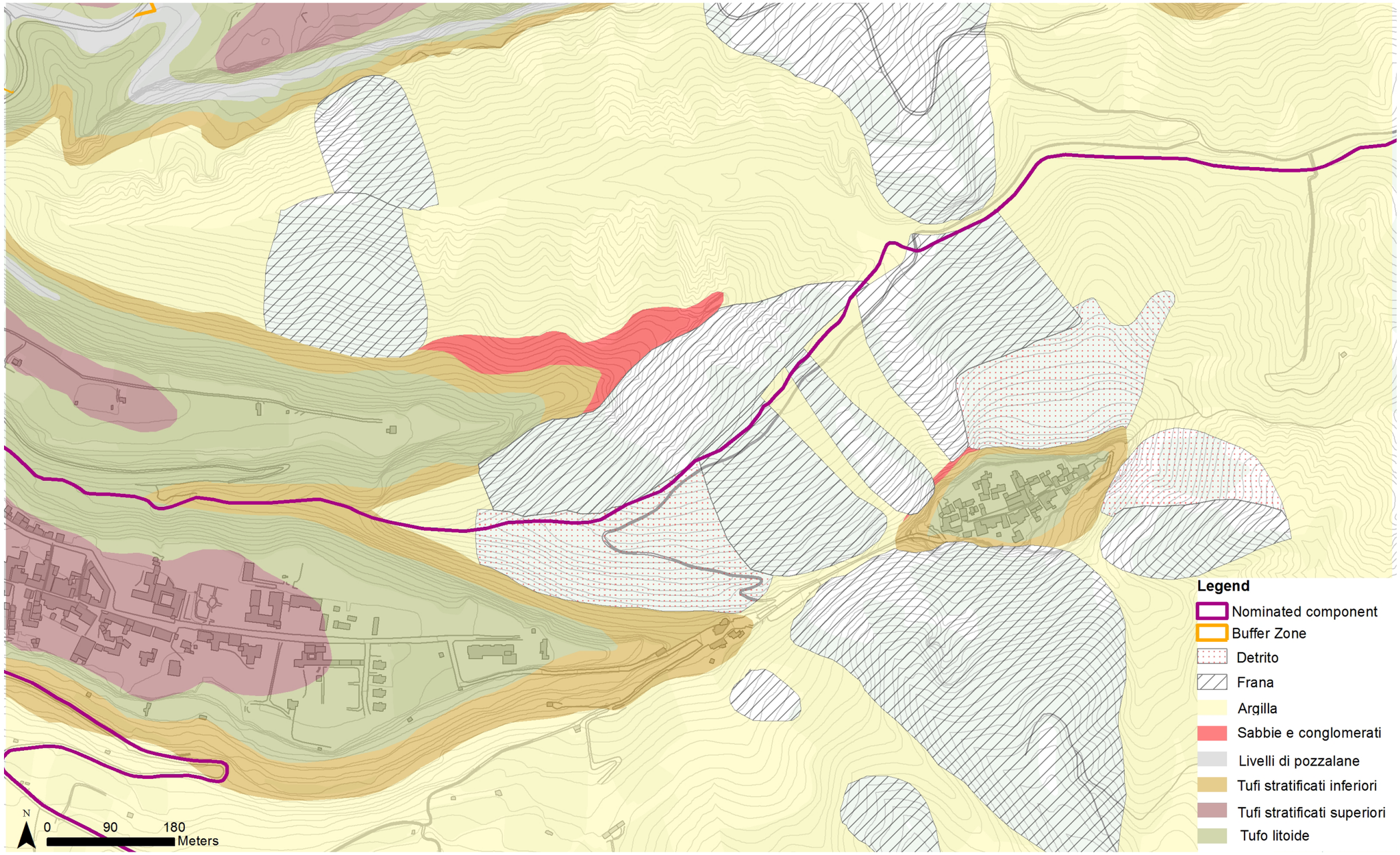
· Lower Stratified tuff (Medium Pleistocene). It represents the oldest outcrops of volcanic origin and stands directly on the clayey layer. It's composed by stratified tuff slightly inclined towards East with alternation of pumice scoria-products similar to soft or poorly cemented soils, and more cohesive ashy levels.
The thickness of the outcrop is around 40 m.

· Litoide tuff in black slags (Upper Pleisocene). It's due to the eruptive phreatic-magmatic phase and it is constituted by massive ignimbrite of yellowish-red color and containing blocks of pumice and slags and thin layers of black pozzolan. This layer covers almost entirely the perimeter of Civita and the underlying tuff formation. The thickness is comprised from 6 to 20 m.

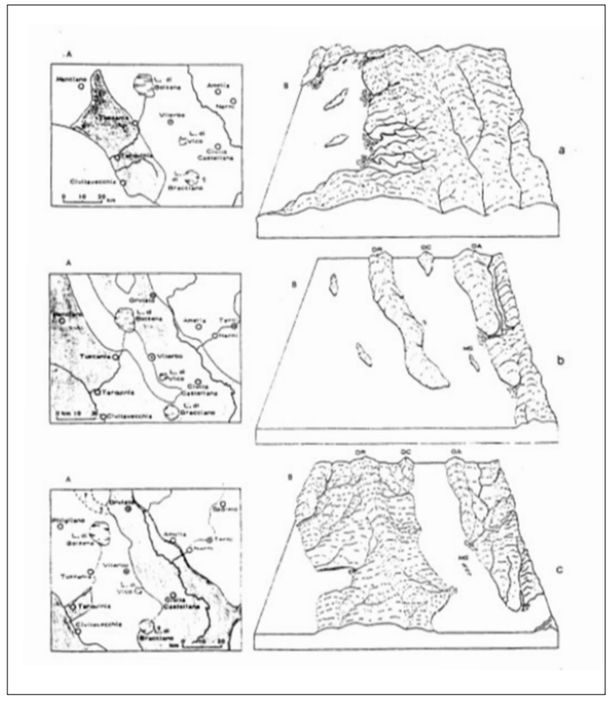
· Upper stratified tuff (Pleistocene). It's composed by earthy yellowish layer grayish volcanic sands, pomici yellow or brown and thin alternation of ashy. They are based on the ignimbrite, or, in its absence on the lower pyroclastic series. The outcrop has an average thickness of 20 m.

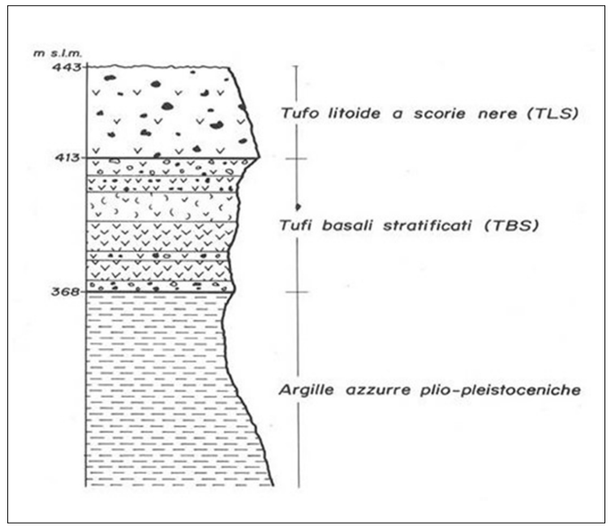


6 Detail of the badlands surrounding Civita



[7] Study area on the Italian geological map (©LINKS Foundation re-edited September 2020)





[8] Paleographic reconstruction of the upper Lazio region in (a) superior Miocene (b) inferior Pliocene (c) medium-superior Pliocene (Baldi et alii 1974)

[9] Stratigraphy of Civita (Margottini et al. 1990)

MORPHOLOGY

The area has the shape of a big valley, particularly sunken, mainly in the west side, in confront to the bordering edges. This sunken valley has a linear development of about 10 km from West to East, with an irregular trend. In the first part, the valley is very narrow and divided in two deep engraving separated by the cliff of Bagnoregio. Proceeding toward East, the valley widens, reaching the length of 5 km on the North-South axis in the central part. Continuing to proceed in East direction, it narrows again; the width is about 1 km in correspondence to the Tiber valley.

The borders of the valley are continuously determined by morphological gaps with sub-vertical cliffs for an altitude from 20 (East side) to 60 m (West side). The altitude gap between the upper edge of the cliff and the valley floor, deeply engraved by the rivers network, is from 120 to 150 m (respectively in Agliano area and in Bagnoregio area).

The morphology of the area is conditioned by the surfacing litotypes. As already explained, these litotypes are mainly attributable to the volcanic and marine sedimentary environments. The overlapping of the volcanic rocks on the clayey soil, with different behavior in physical and mechanical features, associated to the weathering conditions, give rise to strongly evolutionary processes. Weathering erosion, with times, brought to the progressive removal of the volcanic layers with the disclosure of the clayey layer. That leaded to differential erosion processes in the different formations with the making of hills forms characterized by abrupt morphological and vertical tuff cliffs jumps.

In the areas where the volcanic rocks are removed long time ago, it is the development of an intense erosion process due to the superficial run off that leads to a typical badlands environment.

The tuffaceus cliff on which Civita di Bagnoregio standing on rise up in the middle of the "Calanchi Valley" (Badlands Valley), a particular geological formation generated by the geomorphological phenomena of the erosion of the clayey formations. These phenomena are originated by the runoff of the rainy water on clayey degraded rocks with poor vegetation. The cracks and the ridges that are generated on the soil became quickly more severe, extending themselves and stepping back over, multiplying themselves and branching out. This process is extended for multiple cliffs, divided by valleys and narrow ridges and steep slopes which are exposed to the erosional processes too.

The causes that trigger to the badlands formation are various and concomitant, here briefly itemized:

- The presence of a basal layer made up by sandy clays.
- The climate has to be characterized by long and dry summers with intense rainfall concentrated in few periods of the year.
- Exposure of the slopes to South.
- Acclivity of the slopes between 40° and 60°.
- The presence of a less erodible thin layer on the top of the slopes.

The period when the phenomena that leads to the formation of the badlands in Italy begin is probably referred with the Holeocene, when, due to the man-made deforestation, the clayey basal layer was exposed. The run-off and the washout of the rainy water, with landsliding and creep phenomena, became the key factors of the modelling of the soils which led to the badlands genesis.

In the Italian landscape the badlands formation are mainly presents where the plio-pleistocenic clays outcrops. The landscape is characterized by deep groove and steep slopes with thin ridges disposed in parallel, without vegetation on the slopes. The drying up of the soil and the formation of heavy crusts separated by fissures and cracks are the direct consequences of the rains that breaks up and dissolves the soil particles, that, suddenly, due of the quick evapotranspiration, regroup and cement in thick and heavy layers on the surface. This phenomenon is particularly evident on the plio-pleistocenic clays in the central Italy especially in the areas without vegetation, as in the Landscape of Civita di Bagnoregio.

After the '50s of the last century, due to the agrarian reforms, in Italy, most of the badlands where remodeled or be used for agricultural purposes (as example the Crete Senesi area in Tuscany). As consequences a strong reduction of the biodiversity and the landscape heritage was made, making even more unique this type of landscape.



[10] Aero-photo of Civita with view on the Cavon Grande. (©Casa Civita)



[11] Detail of the badlands surrounding Civita. (©Casa Civita)

2.a.2.3 *Ecological System*

Areas with clayey substrate are often without vegetation. This due to both strong erosive activity that do not allow the growth of vegetation and the impermeability of the clays that prevent the imbibition of the soil. In this way, at the end of spring almost all vegetation that grew is dry, especially annual species.

Only few shrubs species grow at the base of the badlands as Broom (Spartiusm junceum), Elm trees (Ulmus minor), Rose hip (Rosa canina), Bramble (Rubus) and Hawthorn (Crataegus). However, in plain areas can be found small forests of Chestnut (Castanea sativa), Hornbeam (Carpinus betulus), Flowering ash (Fraxiunus ornus), Roverella (Quercus pubescens) and Cerro (Quercus cerris).

The cover of vegetation is most important where the geological substratum is composed of volcanic products, as layers of tuff. In fact, both better retention capacity, less erodibility and presence of nutrient chemicals such as potassium, allowed the presence of wooded areas, especially mixed oak tree forest.

From an instability management standpoint, it is better to avoid the advancement of vegetation and pedogenesis on the Rock's ignimbritic substrates, which is why arboreal vegetations should be avoided, together with the shrubby and herbaceous ones which are dynamically related to them. This does not exclude that the tufa ledges can host plant communities, stable by nature and with little aggressive root systems, which can help preventing the penetration of wood species.

Therefore, we will look through holm species, especially the ones present in Civita which are better adapted to living on lithoid substrates capable of slowing the dynamic of vegetation.



[12] Aero-photo of Civita and badlands valley

Given the exiguous dimension of the water streams in the area, the articulation of the vegetation types typical of this sequence is limited to a few elements: arboreal formations predominated by White Willows (Salix alba) and English Poplars (Populus nigra), with ingressions of Smooth Leaved Elms (Ulmus minor) and White Poplars (Populus alba) from the valley floor. In the arboreal communities it can also be alternately found French Willows (Salix triandra), European Dewberries (Rubus caesius) together with Common Reeds (Phragmites australis) and Reed Maces (Typha latifolia).

Regarding the instability management, the preferable vegetation is undoubtedly the arboreal one, while the phenomenon to fight, even before the clay slopes erosion, is the deepening of the two water streams. Furthermore, it would be useful if measures could be taken to keep an almost continuous plant cover on the whole river basin, capable of slowing down the speed of run-off waters and therefore contain their erosive capacity. Herewith the intention is not to alter the badlands landscape, as that would distort Civita itself, but for example measure could be taken in the agricultural sector, switching to techniques that require minimal soil movement. Regarding clayey slopes, it is believed that the species to favor with environmental engineering techniques are False reeds first, together with Brooms and Inulas. False reeds present several benefits about stabilization as they form an interweaving of rhyzomes and present remarkable evapotranspiration capabilities.

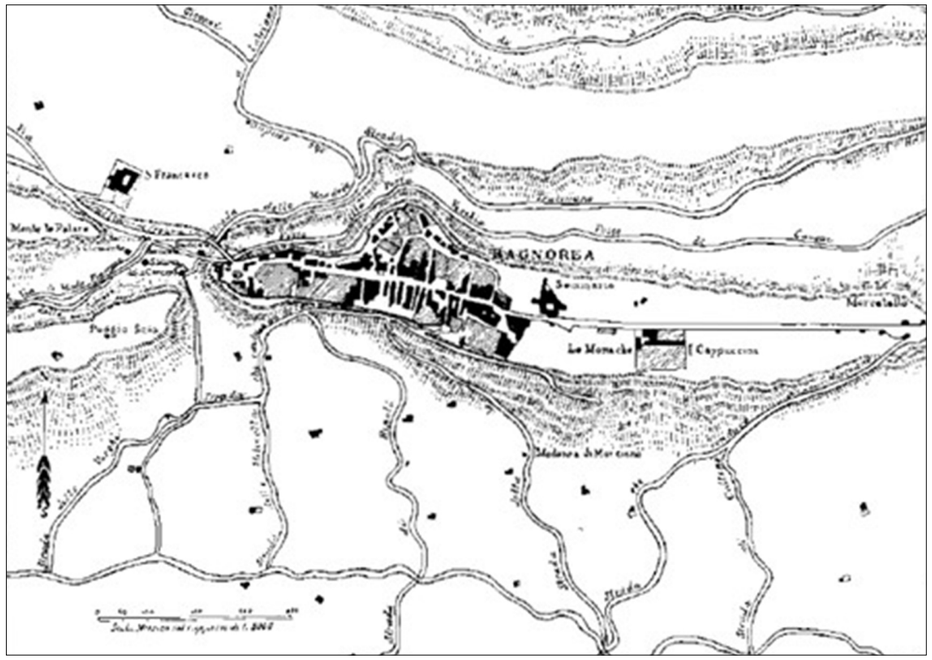
The animal species are similar to those living in the surrounding areas. Indeed, the Tuscia area is characterized by hilly geomorphology with agricultural and wooded areas.
Several species of nocturnal and diurnal raptors live in this area. Belong to the first group the Owl (Athene noctua), the Barn owl (Tyto alba), the Scops owl (Otus scops), the Long-eared owl (Asio otus) and the Tawny owl (Strix aluco). Among the diurnal raptors there are Sparrow (Accipiter nisus), Buzzard (Buteo buteo), Kestrel (Falco tinnunculus) and Eurasian hobby (Falco subbuteo).

In addition to those mentioned above, live other species of birds such as Green woodpecker (Picus viridis) in wooded areas, Kingfisher (Alcedo atthis) near water courses, Jackdaw (Corvus monedula) and Pigeon (Columbia livia) in villages and on tufa cliffs. Other animals that are commonly found are Fox (Vulpes vulpes), Porcupine (Hystrix cristata), Hedgehog (Erinaceus europaeus), Hog (Sus scrofa), Badger (Meles meles), Tack (Martes foina) and Weasel (Mustela nivalis). In watercourses, among which the main are Rio Torbido and Fosso di Lubriano, it is possible to observe the Great crested newt (Triturus cristatus) and the Fire salamander (Salamandra salamandra).

To also mention the presence of Lepre italica (Lepus corsicanus) which is in the process of disappearing as a result of the import for hunting purposes of European hare.

2.a.3 **Analysis of the cultural-anthropic component**

Despite living today in an era of change, continuity is something people need and want. In particular, if we refer to a very restricted beginning that struggles to survive in a marginal but resilient area. Indeed, tradition is particularly felt by minority communities which, through it, tend to preserve their identity. If these aspects are so important in different cultures or civilizations, here in Civita it becomes a fundamental element to further underline the life of the city, keeping strong the values of the past.



[13] Urban form of Bagnoregio, as a settlement born along a communication road axis.
From: P. Mencacci, La mano di Dio nell'ultima invasione contro Roma, Roma, 1868

2.a.3.1 *Type of settlement*

Italy, in regions like Toscana, Umbria, Lazio e Abruzzo, is characterized by a high concentration of hill towns. The fertile valleys of those regions, going directly into the remote Apennines, hosts a lot of villages that have been there for centuries.

This territory has been populated since Etruscan and Roman period. We know that some sites have been continuously inhabited since at least the second millennium before Christ, like Sorano and Matera that were built over early cave communities, but we do not have any recorded history. Maybe a few faded documents kept in some church or some carved dates on tombstones telling when the place was founded or how it grew.

Later, during the Middle Ages, the long history of foreign conquest and the rivalry of city-states led to a construction of defendable settlements in the whole territory, especially onto the hill tops. In fact, from records found, it is evident that the most concentrated period of settlements and town building took place during the 11th and 13th century. It was a time of relative calm, a great period for castle building especially in the center and south Italy. All city-states expanded their territory by building fortresses on the frontier or beyond. These first nucleus became new little towns when people were encouraged to settle behind the walls and defend the new territory from assaults.

The position of Civita had the advantage of the defensive situation: the highest and less accessible point to monitor the surrounding territory. Later, when life became more secure, castle and church gave way to the fortified palace, whose first purpose was not defense but comfort and glory for the lord.

CIVITA

Civita di Bagnoregio has a singular natural structure seemed to offer itself in an obvious way to the security of a primitive settlement: perhaps already from the Bronze Age and with almost absolute certainty from the Etruscan Era, even if archaeological documentary proofs are still missing. The remains of the Roman Age are undoubted and the ones attesting the presence of the Longobards are quite consistent. A continuity solution between antiquity and the Middle Ages is not recognizable, but the question remains of the ancient name of the city which is uncertain given that the destination Balneum Regis is witnessed only around 600, that is in the Longobard age. In any case, the important medieval urban center of Balneum Regis, episcopal center, free municipality and homeland of San Bonaventura, must be identified with the rock of Civita. The present Bagnoregio was only the beginning of a village built in the lowlands along the access road to the city, in the area called Rota.

Florishing throughout the Middle Age and the beginning of the Modern Age, the city was struck by various earthquakes (1695 and 1764) which determined its almost topographical isolation, and from the incipient marginal erosion of its crest of tuff and friable rocks. But, above all, there were also general historical external factors to determine the depopulation of the city as the impoverishment of the papal Tuscia.

This is how the exodus of the population began downwards, towards the village at the bottom which now received the name of Bagnoregio.

Antifragility of the traditions

There are several centuries-old traditions preserved, still inauge in Civita and Bagnoregio. Here are some details.

Good Friday procession
The most heartfelt appointment of the town of Civita takes place on Good Friday, when the S.S. is placed inside the Church of San Donato during a moving ceremony. The crucifix is placed on a coffin to be transported to the centuries-old Good Friday procession in Bagnoregio.

The legend says that during a plague epidemic of 1499 in the whole territory around Bagnoregio, the Crucifix spoke to a pious woman, who went every day in front of the revered Image asking with her prayers that the torture ended . One day, while the woman prayed "the Christ", she heard a voice, which reassured her and warned her that the Lord had answered her prayers and that the plague would soon end, as punctually happened after a few days at the same time as the death of the pious woman.

Living nativity scene
During the Christmas period, a living nativity scene is staged; the events of Maria and Giuseppe are set in the medieval streets of the city creating an almost magical setting and atmosphere.





[14] A moment of the procession from Civita to Bagnoregio
[15] An image of the Palio della Tonna

Palio della Tonna

On the first Sunday of June and the second of September, the centuries-old Palio della Tonna (“rotonda” in the local dialect) is set up in the main square, in which the districts of Civita challenge each other supported by the cheering of the inhabitants. It is a race, on the back of a donkey, during which jockeys must secure the highly coveted “Palio”.

The party takes place in Piazza San Donato, in front of the Church, in the beating heart of Civita and is certainly one of the most awaited events in Tuscia, an event that recalls ancient traditions and a deep bond between man and nature, in the past in fact the donkey was the only transport messenger to reach the country.

The regulations stipulate that each jockey must travel three circular rounds of the square and then continue taking part in a series of other races. The two best jockeys will participate in the final race.

2.a.3.2 *Urban-architectural features*

Civita di Bagnoregio shows the signs of a material culture of the highest value, expressed through traces of settlements of Etruscan and Longobard foundation which in the present tell, with the immediacy of the traces still visible, a story that since the seventeenth century has been marked by seismic events, demolitions, landslides and subsequent reconstructions that mostly took place with recycled materials.

The genesis of the settlement is therefore qualified through a continuous process of sedimentation and reduction which takes on both geological and constructive meaning. The site looks like a qualified settlement from a continuity that from natural becomes artificial (built) where the degree of permanence of each epoch is entrusted to the consistency of the fragments that testify to the passage.

The process of construction and continuous re-construction through materials and elements of reuse represented the answer to the serious difficulty of supplying the latter from the outside of the fortress, transforming the site into an inexhaustible quarry of material already worked, available for an uninterrupted self-regeneration of the built-up component. Addition, inclusion, fragmentation are the terms that most effectively represent the life course of the settlement that arose in the valley of the gullies. A process whose outcome does not manifest itself as a reduction of the original meanings but as an exaltation of the plurality made up of single episodic elements, each of which has no completed form, but which contributes, with different weights, to outline a continuity other than the uniformity of the original phase of each constructed fact.

The urban settlement of Civita di Bagnoregio with its own Etruscan/Roman grid based on the presence of Cardo and Decumano, influences the patterns of built form.

All buildings in Civita share a body of construction technology, consisting of load-bearing masonry walls (local tuff, Peperino and Basaltina stones), chestnut beams, masonry vaulting and tile floors and roofs. These constructive technologies influence the patterns of built form in Civita as well.

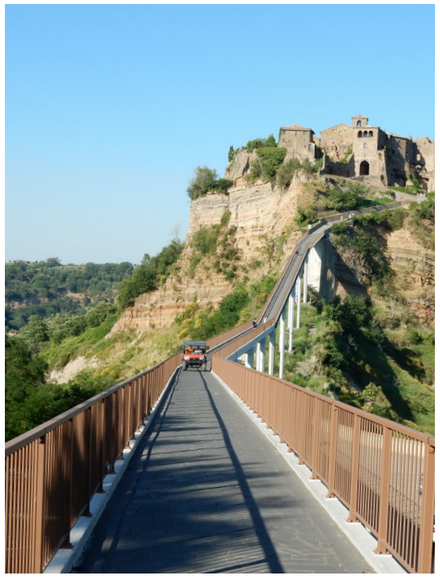
The borgo can be considered as a unique architecture, a monolith blend with the rock. After a careful analysis, the built environment reveals the existence of three arrangements of units: the row house scheme, the cluster scheme and the Palazzo, which bear the marks of variation and individuality. The row house pattern/type is both the simplest and most prevalent aggregation of units. The cluster scheme results when access is available from a side street or rear elevation. The Palazzo pattern, in Civita, is a simple modification of the cluster type.



[16] Civita di Bagnoregio. Urban framework (©LINKS Foundation re-edited on the study of The Civita Institute - NIAUSI)

Civita di Bagnoregio can be considered as a resilient architecture ensemble, expression of a combined works of nature and humankind, manifestation of a long and intimate relationship between people and their natural environment. There are in Civita constructive solutions, which bear the marks of variation and individuality: the shed, the cardo-room and the cluster-Palazzo. The sheds in Civita are the result of either of two considerations, namely the need for minimal, economical attached space -without the need of an entire unit- or the conversion of a damaged or reduced unit into a smaller usable space. They are small spaces that occasionally appear on the ends of a row house assembly.





[17] Civita di Bagnoregio. The borgo looks like a monolith, a sculpture carved on the top of a ridge eroded by time and natural events
[18] The Bridge as only link between Civita and Bagnoregio (©LINKS Foundation)

The certain other spaces that are not recognizably units are possibly infill rooms (Cardo room), built across the path of streets. This would likely have occurred if a street end collapsed after an earthquake, rendering the remaining street obsolete. It may also have occurred if two assemblages of units were joined together behind a single facade – most typically a Palazzo facade –, which blocked the street. Cardo rooms are infill spaces built on former streets and are found in clusters and Palazzi. Palazzi in Civita are the result of modifications of facade and access to the cluster type.

The Palazzo phenomenon suggests a period of prosperity in Civita during the Renaissance when a Bishop was in residence. But there are not true Palazzi built from the ground up in Civita. This is remarkable: even the influx of religious authority and great wealth did not violate the existing nature of units and their assembly.

The persistence of forms, typologies, apparatuses, accompanied by the still lasting re-use of materials and the permanence of working systems and construction techniques make up the unity of the urban context. *Civita looks like a monolith: it looks like a sculpture carved on the top of a ridge eroded by time and natural events.*

The search for differences, necessary for understanding a context that exhibits only apparent homogeneity, highlights articulated series of signs and reveals a reality rich in variations on the theme of the construction of the parts and of the figurative order. It reveals the secret of a unity of materials that is not preordained, but rather recovered over the centuries (which have progressively erased the original plasters and colors) as happens in archaeological excavations, making the tuff surfaces emerge more and more forcefully and bringing the soil (generally steep) to merge almost with the risers.

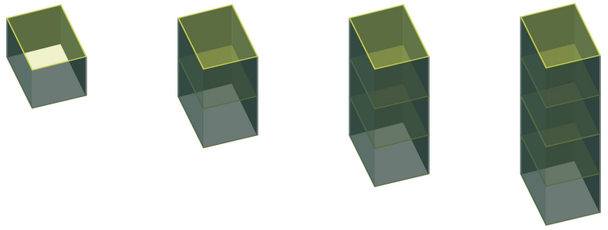
The built Unit

1 floor Unit

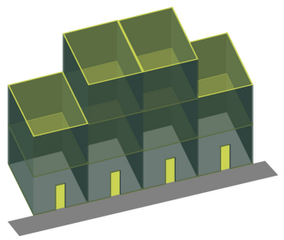
2 floors Unit

3 floors Unit

4 floors Unit



The Rowhouse

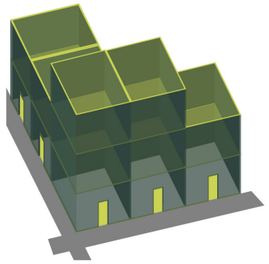


The ROWHOUSE is the simplest assembly of Units, where Units are aggregated and adjacent each other.

Each Unit is independent and has an individual access from the street.

All Units have the same orientation so that all exterior openings are on the same side.

The Cluster

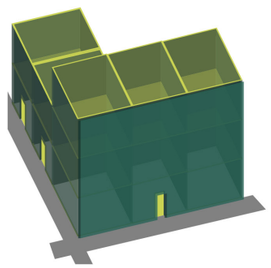


The CLUSTER, as the rowhouse, has indipendent Units with individual access from the street.

Differently from rowhouses, the access can be from side or rear streets.

Units can have different orientations, so that Cluster can easily fit to streets directions.

The “Palazzo”

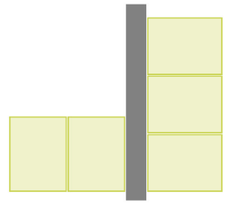


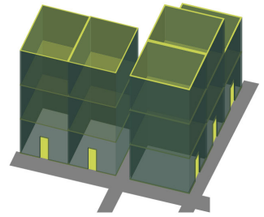
The PALAZZO is the modification of the cluster type.

The façade is organized to provide a unique aspect to the assembly of Units and a major entry.

Units are still visible but accessible on the basis of the new organization.

19-20 Progressive assembly of the generic unit. Each successive type is more complex, less prevalent. An historical progression is likely, with Palazzi being the most recent addition to the Civita fabric (©LINKS Foundation re-edited on the study of The Civita Institute - NIAUSI)

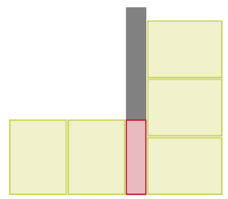


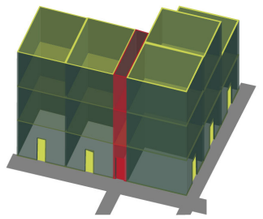


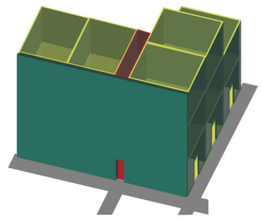
2 Clusters

Cluster with cardo room

Palazzo with cardo room











[21] Building elevation (number of floors) in Civita di Bagnoregio
(©LINKS Foundation re-edited on the study of The Civita Institute - NIAUSI)

[22] Public/Private open spaces analisys
(©LINKS Foundation re-edited on the study of The Civita Institute - NIAUSI)





[23] Slub, buttress and counterfor map
(©LINKS Foundation re-edited on the study of The Civita Institute - NIAUSI)

[24] Gardens in Civita di Bagnoregio
(©LINKS Foundation re-edited on the study of The Civita Institute - NIAUSI)



The built environment of Civita - which over the centuries has suffered painful wounds in its fabric - shows its antifragility in the supporting elements that here are declined in the multiple forms of thank you, spurs and buttresses whose realization is aprioristic and dictated by the needs of the moment. Private open spaces are relevant in Civita as well as built heritage for their number and their historical function. In a town where the exit from the urban perimeter have always been difficult, and dangerous in case of attacks, inhabitants used the limited space between houses to provide food. Almost all residential units had a private space used as small, productive, soil that has been passed on from generation to generation. Even if today gardens are mostly for pleasure, we can observe that size, layout and vegetation are essentially the same than in the past. Most importantly, garden's culture belongs to the town cultural tradition so that it is frequent to observe people of Civita devote to its gardens, using time for activities as irrigation, fertilization, pruning and vegetables collection.

[25] Map of hypogeal spaces in Civita di Bagnoregio
(©LINKS Foundation re-edited on the study of The Civita Institute - NIAUSI)



[26] Historical mansory buildings in Civita di Bagnoregio. Notice the characteristic entrance with *Profferlo*. Civita di Bagnoregio houses a vast collection of underground spaces, some of which have seen different uses over the centuries (© LINKS Foundation)

Another noteworthy element is the presence of the *Profferlo*, a characteristic form of external staircase used in the medieval civil architecture of Lazio (especially in Viterbo). In the housing units that have this particular type of access, the main dwelling floor is raised to the street level by just enough to develop a ground level service. To reach this level it is therefore sufficient a short scale of development, usually of a single ramp, which takes place along the façade of the house and leads to a landing, which is at the same time a balcony, on which opens the door of home entrance. Thanks to a second door at the bottom of the staircase, the balcony remained separate from the street. In buildings of a certain importance the *Profferlo* instead develops inside the courtyard. Structurally, the *Profferlo* consists of a wide lame arch, built as a cantilever by means of long ashlars embedded in the wall to which it is placed. In some later and larger examples, the balcony is instead supported by shelves and columns.



[27] The “Bucaione” large tunnel (©Casa Civita)

The best known is certainly the large tunnel “*Bucaione*” that crosses the cliff from one side to the other: it does not date back to Etruscan times as is generally believed, but was excavated in 1932 as a road tunnel, widening a previous tunnel that captured the water (perhaps meteoric, or more probably of a small pitch suspended in stratified tuffs) on the north side of the cliff and led it to the opposite side. The route of the original tunnel can still be deduced from the marks left by the excavation tools on the gallery ceiling.
To the north of the tunnel are the ruins of an ancient tomb.

During the Second World War also served as a refuge and hiding place. Many stories have marked this place that opens to the Valley, where there are remains of vegetable gardens and crops now largely abandoned.

On the walls of the rock of Civita and the surrounding ones, the remains of many dovecots are visible today largely unreachable due to the collapse of the access passages. These environments were not incineration tombs, as has often been claimed, but intensive pigeon breeding, which was an easy source of protein, especially in the event of a siege. In the Contrada Carcere, which for the most part sank into the valley below during the strong earthquake of 1695, is the Cappella della Madonna del Carcere (Chapel Our Lady of prison): originally an Etruscan tomb, it was also used as a dwelling and a stable for shepherds and cattlemen, to then be transformed into a votive place.

The rock of Civita is therefore characterized by an extensive network of hypogea distributed on several levels, of various shapes, sizes and uses, which tell more than two millennia of history of use of the tuffaceous subsoil. Most of the underground today belong to private houses, but some of them can be visited and used for various purposes (exhibition purposes, catering, wine conservation, worship, etc.).

Starting from the early eighteenth century, the urban layout of Civita di Bagnoregio was reconstructed with the help of numerous topographic maps, the comparison of which allowed to verify a progressive thinning of the cliff due to the landslides that led to the disappearance, in later periods, housing settlements located on the edge of the cliff itself.

These manifestations are mainly localized:
1. in the "Ponte" area (on the western side, towards Bagnoregio), where there were many buildings, facing the door of S. Maria; today only the ruins of the housing nucleus closest to the door remain;
2. in the southern area, where the Church - Casa di S. Bonaventura, still partially existing in 1869, has definitively disappeared in the 1937 map;
3. in the "Carcere" area (eastern sector of Civita, opposite Bagnoregio);
4. in the northern side facing Lubriano.

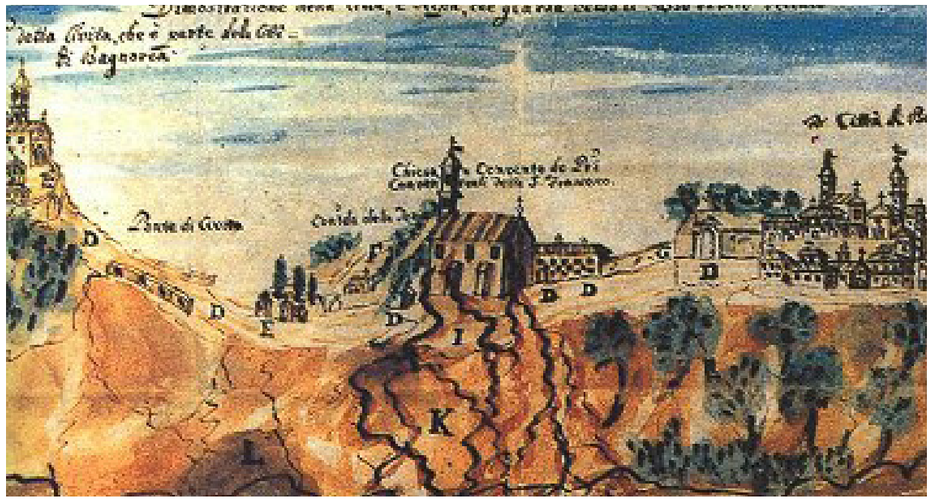
Among the events that contributed most to the degradation of the houses of Civita must be remembered the earthquake of 11 June 1695, during which a large part of the Carcere district collapsed in the underlying valley.



[28] Chapel Our Lady of prison (https://www.civitadibagnoregio.cloud/wp-content/uploads/2016/06/DSC_9697-1.jpg)

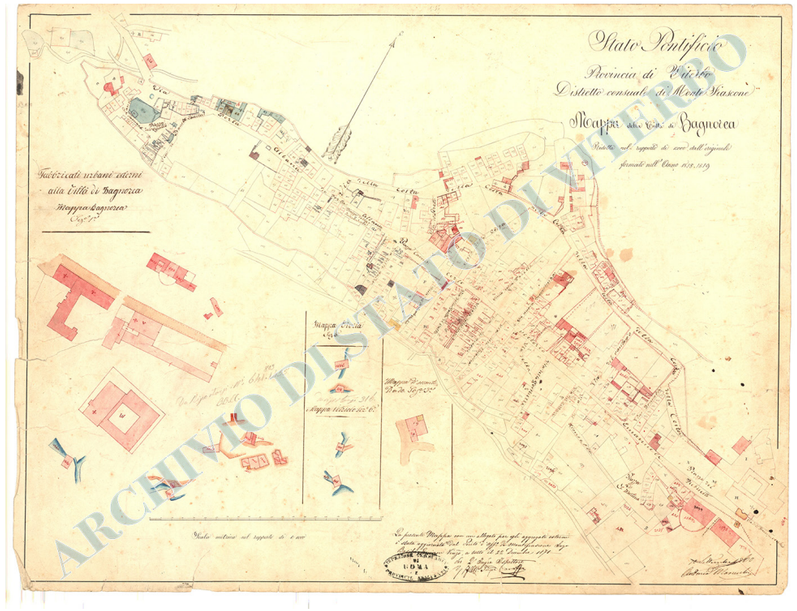
Civita di Bagnoregio is connected to Bagnoregio only by a pedestrian bridge with a difference in altitude between the start and the gateway to the country of about 50 meters, with a maximum gradient in some parts of about 40%. The starting point of the bridge is the Mercatello area, where there is a parking lot. The evolution of the area is particularly evident along the access ridge to Civita that from 1764 has undergone a lowering of about 40 meters.

In medieval times in this area there were some important buildings such as the fortress of Castel Gomizi, the S. Francis convent and the Mercatello district with the Town Hall and the market: the group of houses that still bears the name of Mercatello are little remains of the original form of the medieval village.



[29] This 1765 drawing depicts the convent of San Francesco which no longer exists and which was located halfway between the city of Bagnoregio and Civita

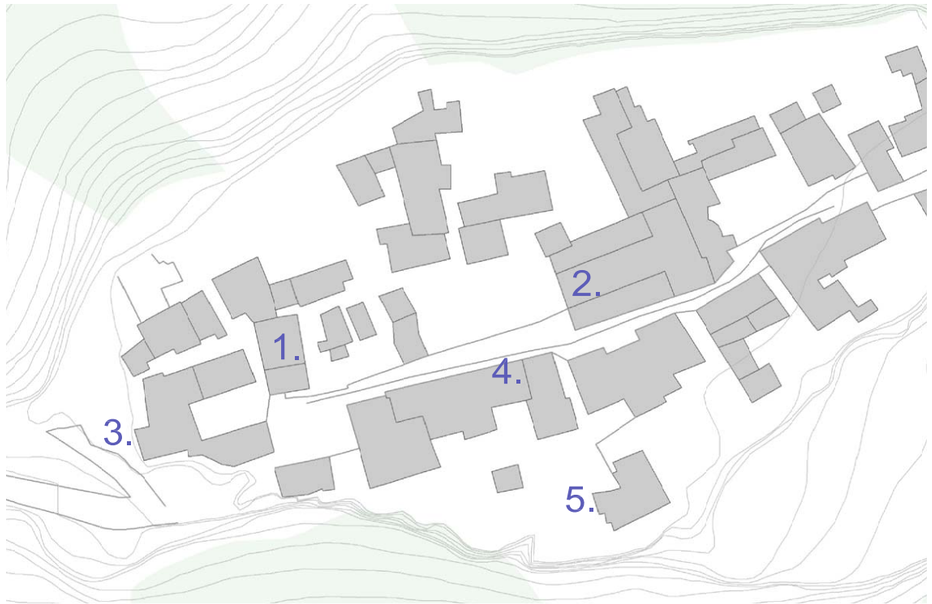
The settlement of Bagnoregio originally corresponded to the typical "settlement nucleus", that is, it is an urbanized area made up of residential and service structures, connected via the roads to the territorial pole (Civita). The formation of Bagnoregio took place in a linear form, as the distribution of the settlement was initially set up along the main road axis: it is a "road settling" extended by tape. With the growth of Bagnoregio the settlement becomes compact and the houses become connected to each other, with alignment of the fronts, facing along the main roads.



[30] This 1765 drawing depicts the convent of San Francesco which no longer exists and which was located halfway between the city of Bagnoregio and Civita

2.a.3.3 *The main important buildings of the area*

Buildings in CIVITA



1. Alemanni Palace **2.** Church of San Donato **3.** Santa Maria Door **4.** Bishop's Palace **5.** San Bonaventura House

1. ALEMANNI PALACE - Civita

Palazzo Alemanni Mazzocchi is a Renaissance building that dominates a large part of the San Donato Square; in the past it belonged to the Alemanni family, one of the oldest and noblest families of Civita. The construction of the palace began in 1585 by the notary Sir Francesco Alemanni on the area obtained from the demolition and renovation of several homes. In 1587 the sons of Sir Francesco Alemanni, Alexander, Ortenzio and Coriolanus decided, by mutual agreement with their father, to divide the house under construction in Civita and all the other family properties: Alexander had the eastern part of the building

(the atrium remained in common), Ortenzio Coriolanus had the western part. In 1658, through the marriage of the great-granddaughter of Sir Alexander, Catherine, with Sir Muzio Mazzocchi, the palace passed to the Mazzocchi family. The visit of the basement shows the traces of different uses, as the oldest one consisting in a large cistern from the Roman period (Tozzi, 2014).

During the Middle Ages the underground environment was used as a warehouse or a cellar and then made accessible through a ladder and a corridor. The Roman cistern was in the center of the ancient settlement, probably near the forum. Its considerable size suggests that it served a public function. It has a circular plan with the walls slightly recessed downwards and the flat ceiling where the bushing from which the water was drawn opens. In some points on the walls a tenacious layer of hydraulic mortar is still preserved, composed of lime mixed with fragments of brick.

The violent earthquake occurred on June 11, 1695 seriously damaged the building that, over the years, was renovated respecting the ancient architectural lines. Today, the palace is the headquarters of the Geological and Landslides Museum, which tells the geological evolution of the ***Valle dei Calanchi*** territory and explains to the patrons what are the processes that are slowly leading Civita to disappear. In fact, the threat of landslides and erosion has always loomed over the population of Civita di Bagnoregio: Etruscans, Ancient Romans, already implemented urban planning processes to limit these phenomena as much as possible and to secure the city, for example by creating banks for particular rivers and drains for rainwater.

Civita di Bagnoregio is at the center of Inner Areas national narrative, inasmuch considering territories which have suffered a progressive population abandonment and decrease of public services, as consequence showing an increase of costs deriving from hydro-geological and environmental degradation, even if preserving an inherent cultural and landscape value.

Although it is outside the perimeter of Italian "Inner Areas", the local polititians are aiming for the insertion of Civita in these areas so that economic support can be reached and used to support these areas which, despite the many difficulties, have always tried, succeeding, to survive.



[31] Palazzo Alemanni Mazzocchi, headquarters of the Geological and Landslides Museum (http://www.museogeologicoedellefrane.it/en/images/palazzo-alemanni-a-civita-di-bagnoregio.jpg)

2. CHURCH OF SAN DONATO - Civita

Built in the seventh century and renovated several times over the years. In 1511 the most significant restyling, designed by Nicola Matteucci. Inside there is a wonderful wooden crucifix from the 15th century. Romanesque and dating back to the 5th century but with a Renaissance facade. The bell tower that stands above the church is a tower and at its base there are two Etruscan basalt stone sarcophagi.

The church, which was a cathedral until 1699, is austere and peaceful inside. Among the most interesting works you will notice a fresco from the Perugino school and a fifteenth-century wooden crucifix from the Donatello school.

St. Donato church was founded in the seventh century on a pre-existing Roman temple. It was originally a basilica type, with exterior porch and the plant was shorter than the actual one because there were no presbytery and choir. Over time it underwent many changes including the most important one that was in 1511 decided by the Bishop Ferdinand of Castiglia, designed by the architect Nicola Matteucci from Caprarola: the eastern wall, the upper choir with its high altar, the crypt and the lower choir were demolished; the presbytery and the choir were built, the walls and roofs of the aisles were raised, and the facade was transformed from the Romanesque style to the Renaissance style.

Inside the church there are the relics of St. Hildebrand, bishop of the city in the ninth century, and a precious wooden crucifix of the 15 th century by the school of Donatello, considered miraculous by the local faithfuls. The Church of St. Donato was a bishopric until 1699 when, following the earthquake of 1695, the seat was moved to Bagnoregio.



[32] St. Donato church (http://www.museogeologicoedellefrane.it/en/images/img_3113.jpg)

3. SANTA MARIA DOOR - Civita

The doorway in Civita (the only one remaining of the two once existing) is called Santa Maria, because it was erected near a church dedicated to S. Maria. It is also known as "hollow door" because in the origin it was cut in the tuff by Etruscan. During the Middle



[33] St. Maria doorway
(http://www.museogeologicoedellefrane.it/en/images/civita_di_bagnoregio_-_01-porta_santa_maria.jpg)

Ages it was rearranged with a Gothic arch. On the tuffaceous walls there are graffiti with crosses on triangles, representing Golgotha hill, attributable to pilgrims returning from the Holy Land or to the Knights Templar. On both sides of the door there are two bas-reliefs with a lion holding a human head in its claws, placed in memory of the victorious uprising of the inhabitants of Civita in 1457 against the Monaldeschi family from Orvieto. In the fifteenth century the Monaldeschi family, in fact, tried to take control on Civita in order to keep it as a Guelph garrison against the Ghibellines of Viterbo: in 1457, as a result of their oppression in administration and in taxation on the community, the inhabitants rebelled destroying the castle of Cervara, from which the Monaldeschi were exercising their power.

4. BISHOP'S PALACE - Civita

It is the birthplace of Giovanni Fidenza, who went down in history as Bonaventura da Bagnoregio.

5. SAN BONAVENTURA HOUSE - Civita

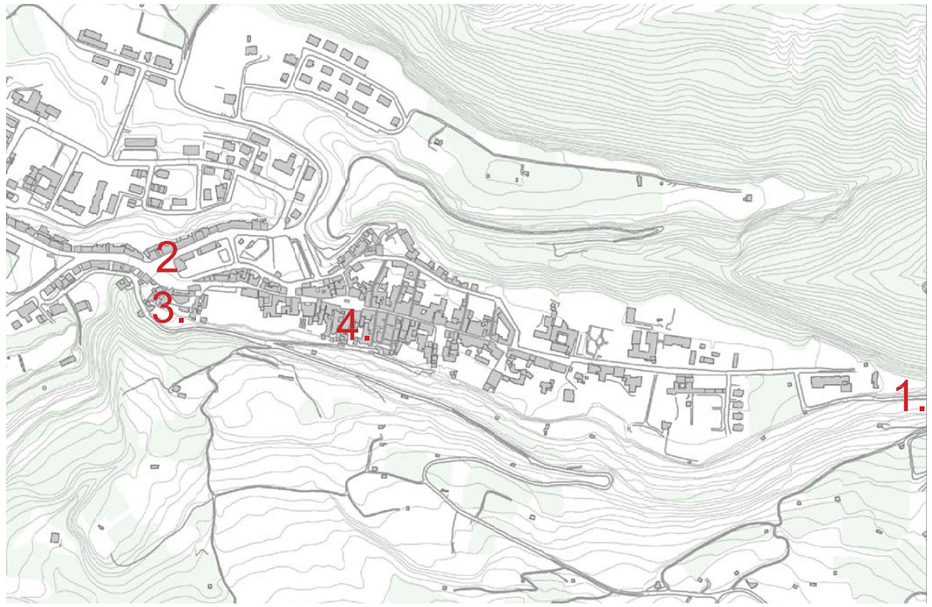
A shrine is located where once there was the house in which St. Bonaventura spent his teenage years; the house was later converted into a church dedicated to him in 1524. Damaged by the earthquake of 1695, the continuous landslides led to its abandonment in 1826. Nowadays it is visible what remains of a wall edge; a metal staircase suspended on the cliff (not accessible) leads to what remains of the basement. In 1846 in the new church of San Francesco in Bagnoregio a chapel was built with the remaining stones of the house in honour of St. Bonaventura. In 1524, the home of St.

Bonaventure is transformed into a church of which there is little news. To date, as a result of the continuous collapses, it remains only a ruin. The only iron ladder, which brings in what remains of the house, is visible but not accessible to the public by being suspended in space. It is worth moving to this corner of the village and try to intercept the contemplative dimension that accompanied Bonaventura in his important life and in trips that realized over Europe. Those who arrive here stop to think about what a great man was born and lived his youth in this place so remote and secluded. Here came into the world and raised the biographer of St. Francis, the man who wrote the Legenda Maior that inspired the great Giotto Assisi that depicted scenes from the life of Francis.



[34] St. Bonaventura house
(http://www.museogeologicoedellefrane.it/en/images/civita_di_bagnoregio_-_casa_di_s_bonaventura_-_01.jpg)

Buildings in BAGNOREGIO



1. The Bridge **2.** Albana Door **3.** San Bonaventura Church **4.** Cathedral of Saints Nicholas, Donatus and Bonaventura

1. THE BRIDGE - Between Civita and Bagnoregio

An evident example of the rapid evolution of the landscape that characterizes the clay deposits is represented by the morphological saddle on which the bridge that leads to Civita di Bagnoregio is located. In medieval times in this area some important complexes arose such as the fortress of Castel Gomizi, the convent of S. Francesco and the district of Mercatello where the town hall was located and where the city market was held: the group of houses that still today It bears the name of Mercatello and preserves very little of the original shape of the medieval village.

The terrible earthquake of 1695 also canceled the ancient road of Roman origin that led to the Civita. Today the village is accessed only through a 300 meter long reinforced concrete pedestrian bridge, built in 1965. Actually, the brick bridge was destroyed during the second world war by the German bombing. Then, to ensure a link between Bagnoregio and Civita a temporary wood runway was made. Since 100 m from Mercatello district the way were confined by two retaining wall, of which the one on the north were totally undermined at the foundation, after about 46 meters of wood path represented the link with the ancient brick bridge.

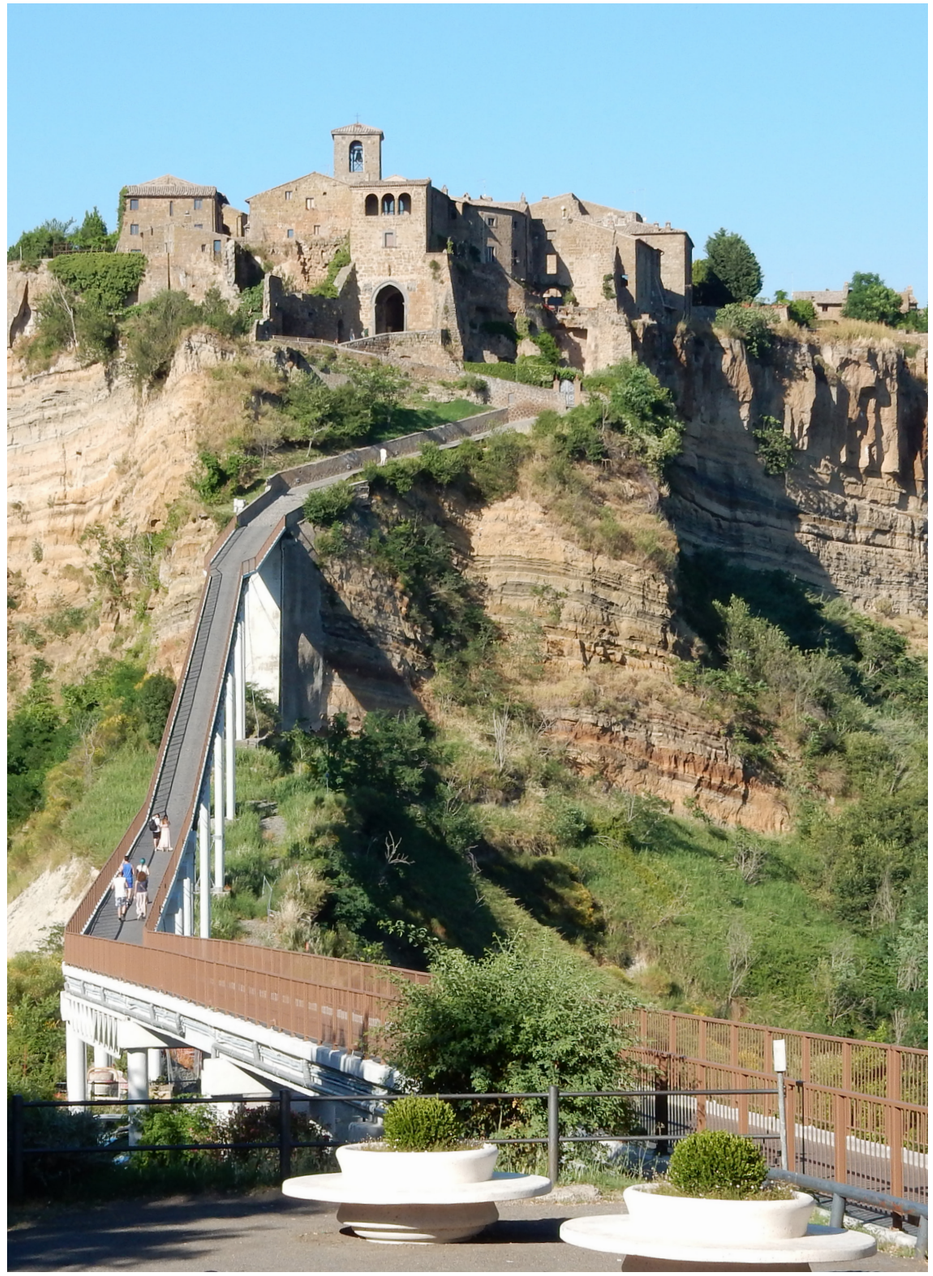
In 1962, on the 17th of April, the Committee of Ministers for the extraordinary works in Northern and Central Italy gave its consent to the funding for the repair work of the connection road to Civita, authorizing the Public works office of Viterbo to submit to the Public Works Inspectorate for Lazio the project of the upcoming works. After another landslide, on the 21 of February 1963, which hit the southern side of the lowest part of the road, the Ministry of Public Works, with the aim of avoiding the isolation and the abandonment of the population of Civita, started on the same year the demolishment of the old artifacts and the stripping of the clayey crest of the badland, to construct a prefabricated viaduct made with reinforced concrete.

The viaduct, still existing, was designed by Eng. Prof. Bernini, Colombini and Nardelli, directed by Eng. Nardelli, with the surveillance of the Public works office of Viterbo and build by the S.C.A.C. company; started on 7 March 1963, the work was officially unveiled on 12 September 1965.

The pillars of the existing bridge lean on very sturdy clay in depth: it is precisely the depth of the piles made with reinforced concrete (around 25 m) that ensured its durability over time, in spite of the continuous landslides happened over time on the sides of the saddle where it is located. The walkway is now accessible only to pedestrians, except for small mechanical vehicles for emergencies and basic needs. The state of the section of the road between Mercatello and the cliff of Civita, when the Public works office of Viterbo started the lowering (around 20 meters) of the clayey saddle on which the road rested (in preparation for the platform of the reinforced concrete viaduct), was the following: starting from a point near to the beginning of the new viaduct, and for a length of 100 meters, the road was confined between two retaining walls, and the left one of these (facing Lubriano), up to 20 meters high in some parts, was completely dug out at its base; the wooden walkway was just after it, with its 46 meters length, connected to the leaning brick-built bridge, about 40 meters long, with 5 tufaceous round-headed arches , two of which collapsed and replaced by the wooden platform. The brick-built bridge ended close to the cliff.

All the still standing parts of the artifacts were dilapidated and rickety, and for this reason many families were moved, since the start of the 60s, in some of the new houses built by the State in the area named “Civita Nuovo”, while others left the country forever.

Trying to end this “exodus” was exactly the reason why the new bridge was built and the merit of this intervention goes especially to Professor Bonaventura Tecchi. Not only he managed to achieve a lasting communication between Civita and its surroundings, but



[35] The Bridge nowadays (©LINKS Foundation)

also worked to ensure that Civita's inhabitants, left entirely to their own since ever, received more assistance and were able to rely on the most fundamental public services at the very least. The pedestrian viaduct, which still stands today as the main communication route between Civita and the surrounding area, has been built between 1963 and 1965. It has 14 beams made with prestressed reinforced concrete, 256 meters long, which simply lean on piles having an interaxle spacing of around 18.90 cm.

Taking Civita as a starting point, the viaduct, with a walkable area 2,20 meters wide, has a first downhill stretch with a significant steepness, around 20%, which covers 5 spans. The relative piles, going from number 1 to number 5, have different heights ranging between 11 and 15 meters, and the pile number 4 is the highest one. After the first downhill section there is a stretch which is mostly horizontal, going from pile number 5 to pile number 9, while the last one is slightly uphill, with a 6% steepness; these last two stretches lean on piles having a much lower height than the first ones.

The beams, as already mentioned, have three ribbings made with prestressed cement conglomerate, with a completion foundation made with reinforced concrete, granting the resistant section an overall height of 80 cm.



[36] The Bridge in ancient times (©Marco Scorsino)



[37] The Bridge in 1874

The interaxis between the ribbings is around 90cm long, while the overall height of the foundation is 2.50m, including the 15 cm long lateral curbs, with corresponding metallic parapets. The span of every bay is around 16.70m, and only the first bay from Civita has a lower span of around 16 m. All the piles are built with 4 pylons made of reinforced concrete and having circular cross-section, with a 40 cm diameter, each connected to the others on the top part by a pulvinus having a rectangular layout 65 cm high.

The foundation block, on which the pylons stand, is made with reinforced concrete too, and leans on piles with an undefined depth, which varies from pile to pile up to a maximum of 25 meters. The flooring, made with multiple pieces of “Basaltina” stone laid down as opus incertum, together with the iron railing and the lighting system, complete the structure.



[38] The Porta Albana in 1900



2. ALBANA DOOR - Bagnoregio

The door was built on the proposal of Cardinal Giovanni Girolamo Albani Perpetual Governor of Bagnoregio and inaugurated in 1589.

3. SAN BONAVENTURA CHURCH - Bagnoregio

The church of San Bonaventura da Bagnoregio is a Catholic place of worship in the municipality of Bagnoregio, in the province of Viterbo, in the diocese of Viterbo. In the site of the present church there was once another church, dedicated to Saint Angelo. This was acquired on March 13, 1632 by the Compagnia di San Bonaventura, who began to officiate the church with the title of San Bonaventura da Bagnoregio.

[39] The Catedral of Saints Nicolas, Donatus and Bonaventure



[40] The San Bonaventura Church

In the nineteenth century it was thought to rebuild the church, now falling, and on October 27, 1856, work began, directed by the architect Pietro Gagliardi. In 1862 the works were completed inside and the roofing of the dome in lead plates was made. In the church there are two altarpieces, an ancient fresco depicting the Madonna del Popolo and the canvas of the high altar, made in 1874 by fra Silvestro dei carmelitani barefoot and depicting San Bonaventura and the sacred Heart of Jesus.

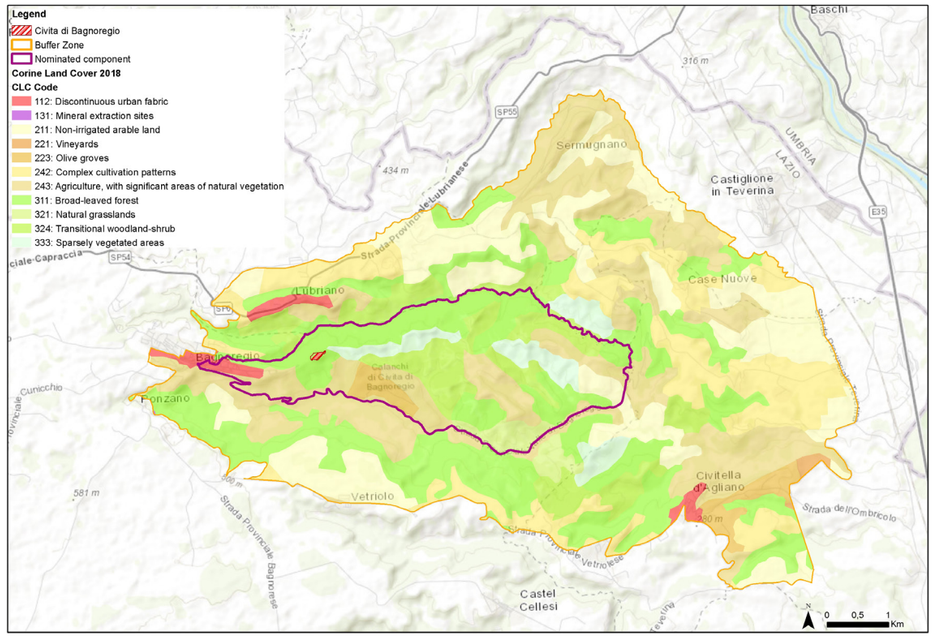
4. CATHEDRAL OF SAINTS NICHOLAS, DONATUS AND BONAVENTURE - Bagnoregio

The church is dedicated to Maria Santissima Annunziata, although it is commonly and erroneously called St. Augustine, due to the presence, in the vicinity, of the ancient convent of the Augustinians. Transformed, in the fourteenth century, from the original Romanesque forms into Gothic, it preserves inside the valuable sixteenth-century frescoes (some attributed to Taddeo di Bartolo and Giovanni di Paolo) and a wooden crucifix of the eleventh century. The bell tower dates back to 1735.

Adjacent to the building there is a cloister, made entirely of terracotta by Ippolito Scalza based on a project by Michele Sanmicheli. On the right side of the counter-facade is the tomb of Vincenzo Bonaventura Medori, bishop of Calvi and Teano.

2.a.3.4 *Land use (Corine Land Cover)*

The territory comprised in the buffer area consists mainly of agricultural areas (42.674 ha) and the remaining parts is occupied by forest and semi natural areas (2.394 ha), only a small part is artificial surfaces (534 ha). Agricultural areas consist of arable land, heterogeneous agricultural areas and in a minimal part permanent crops (olive groves). Forests and semi natural areas mainly consist of forests (1.212 ha), scrub and/or herbaceous vegetation associations (534 ha) and open spaces with little or no vegetation (171 ha). Artificial surfaces may be identified as urban fabric (80 ha) and mine, dump and construction sites (36 ha).



[41] Land Use. The Corine Land Cover project is born at European level specifically for detection and monitoring of land coverage and utilization characteristics with a special attention for environment protection requirements; Data analysed come from CLC 2018

2.a.4 **Analysis of the perceptive component**

The Cultural Landscape of Civita di Bagnoregio, with its own borgo perched on unsound foundations (that have gradually been reduced due to centuries of earthquakes and landslides which have chipped away at its soft volcanic base), in fascinating foggy days looks like it floats over the fog, over the Badlands Valley whose chasms and chalky cliffs resemble a mini Grand Canyon.

This exceptional view has forged the imaginary of the visitors, leaving a unique impression in those who have visited it, and rediscovering childhood memories of enchanted towns in those who only hear about it. Landscapes provide the setting for our daily lives and the concept of landscape connects people to nature, recognizing their interaction with the environment. At first, a landscape awakens in us emotions and feelings: our first approach is therefore aesthetic, emotional and sensory. For this reason, literature and iconography are an interesting method of landscaping investigation that provides a reading of the landscape not detached from the experience (of the writer / photographer / painter).

Proceeding with a 'sensitive approach' to reading the Cultural Landscape of Civita di Bagnoregio it will be provided an important tool for knowledge and protection of the territory.

The phenomena that for centuries have connoted and shaped the territory not only determine the overall perception of the landscape of this place, but also involving the social, cultural, settlements, infrastructural, architectural aspects.

LITERATURE for the Cultural Landscape of Civita di Bagnoregio

Named Dying town by the Civita-born writer Bonaventura Tecchi (Bagnorea, od. Bagnoregio, 1896 - Roma 1968), this town has long been condemned by authorities over fears that its collapse into the valley is not only probable but inevitable. Today the town's community has dwindled to just ten permanent residents, although that number increases to around 100 during the summer months.

Already in 1819 a mass evacuation of residents took place, and again after the town was declared unfit in the beginning of XX century the majority of its inhabitants abandoned their houses. More recently, the town in 1988 saw the birth, with a bottom up process, of the Associazione Progetto Civita, an association that, step by step, has involved public and private institutions and it has grown into a major cultural force, organising exhibitions in Italy as well as helping to promote the conservation of Civita itself.

The last book that Bonaventura Tecchi left us has the title of "Antica Terra" (Ancient Land), scattered pages, fragments written from 1934 to 1967. The ancient land of Tecchi is the high Lazio, a Tuscia that still remind a little about Etruria, and his Bagnoregio where he often returned to finish his works and to rest.

The love for his homeland transpires from his stories and in particular, he describes Civita di Bagnoregio.

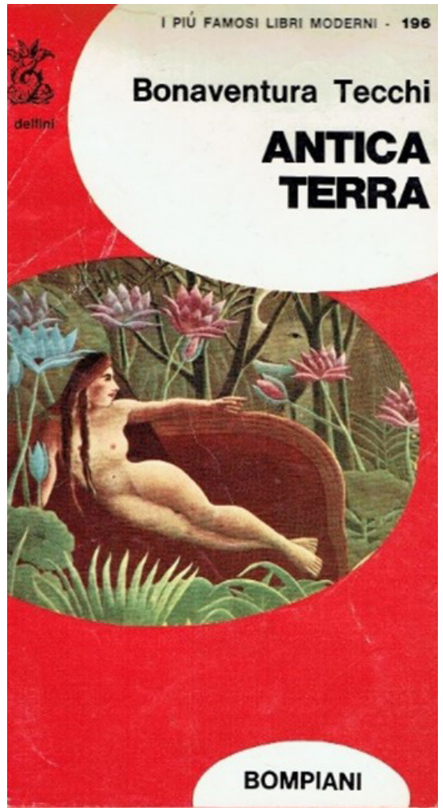
« All that is left - a tuft of ruined houses and walls, black on the tuff, erected as if on emptiness - now breathes the atmosphere of the end. The only street, thin and white like a ribbon, which connects the world here, to the firm and safe earth, the black tuft of houses, the high islet of tuff, suspended in the middle of the sea of the clays and abyssal 'cavoni 'is about to collapse. It collapsed once a few years ago: a little strip of tuff remained like a miracle, engineers and builders rushed in, hoisted slender arches over the void, planted boards and bases. The deaf work of the ditches at the bottom of the valleys, the profound and secret slippage of the clays, the insistence of the rains, have reappeared again, within a few years, what was to be solid and lasting. In a few months or a few days, perhaps one of these rainy winter nights, the only slight bond will fall. I went once again to see, before it's too late [...] »[1]

[1] «Tutto quel che è rimasto – un ciuffo di case e di mura in rovina, nere sul tufo, erette come sul vuoto – respira ormai l'atmosfera della fine. L'unica strada, esile e bianca come un nastro, che congiunge al mondo di qua, alla terra ferma e sicura, il ciuffo nero di case, l'isolotto alto di tufo, sospeso in mezzo al mare delle crete e degli abissali 'cavoni', sta per crollare. Crollò già una volta alcuni anni or sono: rimase come per miracolo una strisciolina di tufo, accorsero ingegneri e muratori, issarono archi snelli sul vuoto, piantarono assi e basamenti. Il lavorìo sordo dei fossi al fondo delle valli, lo slittamento profondo e segreto delle crete, l'insistenza delle piogge, han ròso di nuovo, nel giro di pochi anni, quel che doveva esser solido e duraturo. Tra qualche mese o qualche giorno, forse una di queste notti piovose d'inverno, l'unico esile legame cadrà. Sono andato ancora una volta a vedere, prima che sia troppo tardi […]»

And on this ancient land the reference point for Tecchi will always be that village suspended in mid-air "in the rugged volcanic nudity of tuff and clays", fantastic, apocalyptic and with the profound fascination of precariousness and fragility. Ancient land with its ancient village and its ancient village condemned and threatened by death but which has not yet given up: "Civita never dies".

« The fairy tale of the dying town - of the country that is attached to life amidst a lunar choir of silent and shining gullies, and has the chain of blue mountains of Umbria behind its back - will still last »[2]

[2] «La fiaba del paese che muore – del paese che sta attaccato alla vita in mezzo a un coro lunare di calanchi silenziosi e splendenti, e ha dietro le spalle la catena dei monti azzurri dell'Umbria – durerà ancora»





[42] Antica Terra, Bonaventura Tecchi (book cover)
[43] Monument to Bonaventura Tecchi by Alessio Paternesi (2007) in Mercatello area

CINEMATICS ARTS for the Cultural Landscape of Civita di Bagnoregio

Between the first and the second post-war period, by the means of the diffusion of the cinematography both in private and in public life, for the first time it was possible to describe the landscape by moving images. The short and the full-length films become not only media at the service of the regime propaganda or supports for instruction documentaries, but they are also instruments of artistic works or familiar memories, in which urban and rural landscapes are main characters or simple backgrounds. Therefore, today cinematography can offer a lot of valuable opportunities in order to study city and landscape transformations.

The Historical Archive LUCE is one of the richest in the world, and continues to grow while to become the audiovisual memory of the '900 Italian and Mediterranean. A vast collection consists of film funds, photos and documentaries. Since the direct production of still and moving images from 1924 (the year of his birth) 1962, to private funds and audiovisual collections acquired over time. A time span that covers the entire twentieth century. Newsreels, documentaries, directories, photographs, an archive of contemporary life.

A set of documentary production that represents the Cultural Landscape of Civita di Bagnoregio is available (from 1951 to 1974) useful to study the changing of the place over the years.



[44] Frame of the video " La settimana Incom 01021 del 25/11/1953. Un paese che scompare"
Source: https://www.youtube.com/watch?time_continue=53&v=rNWK9--w_-E

Due to its unique characteristics and genius loci, Civita lends its views and streets to creating special atmospheres for many different movies. In fact, its beauty has caught the imagination of numerous artists and filmmakers: Japan's Hayao **Miyazaki** drew inspiration from Civita for his 1986 animated movie Laputa: Castle in the Sky, which won the Oscar as best animation movie in 2003. This work is incredibly part of the recent history of Civita di Bagnoregio, and has strongly contributed to create its myth. The author of the enchanted city, some time ago told in an interview that the enchanted village of the province of Viterbo would have been one of his sources of inspiration, along with other landscapes seen in Wales. This would be one of the reasons why today many tourists from the Asiatic countries arrive in Civita di Bagnoregio. The success of Civita, in addition to the policies implemented and the ability to radically change the collective point of view on the dying and reborn city, is therefore partly due to the success of the anime released in 1986 and considered one of the most beautiful in always.



[45] Comparison between Civita di Bagnoregio and Laputa, the castle in the sky (by Hayao Miyazaki) Source: https://www.lafune.eu/civita-di-bagnoregio-ispiro-lanime-laputa-di-miyazaki-storia-di-un-successo-planetario/

The resemblance can indeed be seen alongside the images of Civita and the Castle in the sky. Others argue that in reality Miyazaki is inspired by Calcata, another village in the province of Viterbo, although the confirmations of eastern tourists arriving in the Dying City suggest that Civita had been imprinted in the mind of the Japanese genius (maybe together with Calcata and landscapes of Wales). While in 1986 Miyazaki had never been to Civita, he was so enchanted by the photos of this place that he decided to visit it personally in 1990.

Before Miyazaki, already the famous italian director Mario Monicelli, elected Civita as the location for the opening scenes of his movie "Il medico e lo stregone" (1957), shot entirely in Tuscia, and with an exceptional cast that included Marcello Mastroianni,



[46] Frame of the movie "Il medico e lo stregone" (1957) by Mario Monicelli



Vittorio De Sica, Alberto Sordi, Marisa Merlini. It is curious to note that the Civita di Bagnoregio was still accessible by a narrow road, as the current concrete bridge was in fact built by the Civil Engineers in 1965. Also the Badlands Valley is filmed and gives a unique atmosphere to the firsts scenes.

Few years later, the comedian Totò was in Civita for shooting “I due colonnelli” (1963), with Steno as director, having the town as a war setting that pretended to be in Greece.
In 1970 Civita was then the ambience of Contestazione Generale. The film, directed by Luigi Zampa, gives us a memorable Alberto Sordi in the role of a sad priest who administers a parish in a state of neglect, the one of Civita di Bagnoregio, during the time of the great youth protests of 1968. It is interesting to note the state of Civita in that period, five years after the construction of the bridge that connected it to the “mainland” again. The church propped up, many houses in a state of ruin. It really felt like the dying town.

[47] Frame of the movie “Contestazione Generale” (1970) by Luigi Zampa

For some decades then it seems that Civita has not recalled other directors, except the fantasies of Miyazaki. And it is only in 2002 that the initial scenes of the Brazilian soap opera Terra nostra 2, focusing on the history of some Italian immigrants in Brazil at the beginning of the last century, were shot partly in the village of Civita of which some characters of the series were originating.

Writer-director, Jan Sardi worked on the production of his film Love’s Brother on location at Civita di Bagnoregio. Love’s Brother is set in Daylesford, Victoria in the late 1950s and has as its central theme the lives of young Italian immigrants who have recently settled in the area. Sardi chose Civita di Bagnoregio for the Italian component of the film because “it has remained unchanged since mediaeval times”.



[48] Frames of the movie “I due colonnelli” (1963) by Steno

Alberto Sironi chose the hilltop town as the setting for his 2009 film Pinocchio, starting a new myth that is still visible in the streets of the hamlet. With a great Italian and international cast, starring Bob Hoskins and Alessandro Gassman, it shaped the imaginary of the visitors, to which the ancient Etruscan hypogeum oil mill transformed into museum is nowadays the House of Geppetto, as well as the main access Porta is the pastry shop where Pinocchio and Lucignolo steal the donuts.

Coming to recent years, Questione di Karma (2017) with Fabio De Luigi has some scenes set in Civita: the protagonist reaches "the lost town in central Italy" to talk with the writer Ludovic Sterne. The village on the mountain reached by a long walk is once again portayed in a film, where the balance between full and empty spaces makes it seem a place born on the clouds, ethereal and fantastic.



[49] Frames of the movie "Puoi baciare lo sposo" (2018) by Alessandro Genovesi

The year after, Puoi baciare lo sposo (2018) by Alessandro Genovesi shows a funny scene on the famous Civita's bridge.

The story of the film Lazzaro Felice (2018) is that of farmers in a medieval system in which sharecropping still exists and is framed between the old houses and the hills of Lazio, particularly in Civita di Bagnoregio. The protagonists are led from the insulating bubble of the countryside to the crudeness of modern civilization, thus allowing to underline the diversity of lifestyles.

Lastly, a new film project has been launched by Natalie Reuss, with a crowdfunding campaign for 'Civita the film': the enchanted city in the sky – its history, ancient culture and folklore, and few remaining raconteurs – are all disappearing. More important, Civita itself is under increasing assault by geological disasters and harsh weathering; CIVITA the film wants to play an important role in bringing its fragility to the world's attention.
The iconic value is important. All those mentioned are historical sources that allow us to read the perception and actual change of the place over the years. A striking example is the bridge, built in masonry at the beginning of the twentieth century ("The week Incom 01021 of 11/25/1953. A country that disappears", Istituto Luce), already rebuilt after the war bombing in the 1940s, and in reinforced concrete in the 70s ("General Dispute", Luigi Zampa), a symbol of modernity and emblem of a flourishing historical moment, in which the Made in Italy and the construction sector triumphed, in a contest of exceptional economic boom.

2.b HISTORY AND DEVELOPMENT

The Cultural Landscape of Civita di Bagnoregio is established on an unstable ground, the result of the eruptive activity of the volcanic complex of the Monti Vulsini. Thousands of years ago the area between Montefiascone, Bolsena and Orvieto was an insecure territory, in continuous change due to the presence of five volcanic complexes.

The eruptive activity that began about 600,000 years ago from the paleo-vulsinal zone later shifted to a more external area. Here 330,000 years ago very violent eruptions began which deposited over a 200 km² surface pyroclastic debris on which Civita di Bagnoregio currently rests. The ignimbrite formed as a result of volcanic eruptions was deposited over the clay present in that area, making the land on which the village was built unstable. Problems related to the soil were already evident to the first inhabitants of the territory: the Etruscans. These had begun the work of channelling rainwater to prevent the clay base from being eroded.

The Romans had continued the drainage action but with the disintegration of the Empire the channels no longer had maintenance, causing, together with an extensive action of deforestation, the crumbling of the land. After the Lombard domination, the town was liberated by the Franks and handed over to the Papal States in 774.

The thirteenth century marked an important step for the village because it saw the birth of a certain Giovanni Fidanza. Now the name does not suggest anything to the contemporary reader, but if we add the name that was subsequently assigned to him, Bonaventura, here we connect it to the saint who was born here. Born in 1217 Giovanni was seriously ill; his mother ardently prayed to Saint Francis who had founded a community here. After the miraculous event, Giovanni Fidanza, now Bonaventura, entered the Franciscan order, becoming a leading figure. His house was destroyed during the earthquake that occurred at the end of the seventeenth century. Today, a memorial with the effigy of the saint remains in memory of the house.

During the sixteenth century, strict laws imposed that forbade the grazing of cattle and the cutting of the forest. Even the inhabitants were forced to plant trees but all these measures could do nothing against erosion. The tuff block on which the ancient Civita di Bagnoregio stands today is, therefore, the result of the crumbling produced in all these centuries. An action of water but also of the earthquakes that occurred in that sector, especially those that occurred in 1695 and in 1764.

Now Civita, suspended over the ***Valle dei Calanchi*** surrounded by the Torbido and Chiaro rivers, is connected to Bagnoregio only by a 300-meter long pedestrian bridge, a passage that prepares the visitor for a place and an atmosphere now disappeared.

2.b.1 History of Civita and Bagnoregio

Civita was founded 2500 years ago by the Etruscans. It stands on one of the oldest streets in Italy that joining the Tevere (then the great navigation route of Central Italy) and Lake Bolsena. It was one with the current Bagnoregio, but since the sixteenth century, due to the erosive phenomenon, the two cities were separated.

Civita di Bagnoregio's location turned into an island and the pace of the erosion quickened as the layer of clay below the stone was reached in the area where today's bridge is situated. Bagnoregio continues as a small but prosperous town, while the older site became a resilient center. The ancient inhabited area of Civita was accessed via five gates, while today the so-called gate of Santa Maria or della Cava constitutes the only access to the town. The urban structure of the entire inhabited area is of Etruscan origin, consisting of thistles and decumans according to Etruscan and then Roman use, while the entire architectural cladding is medieval and Renaissance.



[50] View of Civita at the end of 1800 (Archivio Mauro Galeotti) and in the 40's



Bagnoregio was born as a district of Civita, located downstream and connected by a bridge to the original core. This district was called Rota. Originally there were in this area the Church of Santa Lucia on which the hospital of the same name depended (which appear in the cadastre of the bishop's canteen in 1464). The Mercatello area (current parking area for access to Civita) was instead characterized by the presence of the Church of San Simeone, mentioned by the Municipal Statute of 1373 and of which there is a trace in the cadastre of the bishop's canteen of 1464. Always in those years (1469) there are the first landslides that cause the collapse of some houses in Civita. In 1474, a municipal document was written about the municipal building in Rota: as early as the fifteenth century, Rota began to assume its own identity, becoming gradually independent from Civita. In 1497 Rota ends and repairs its walls with battlements.

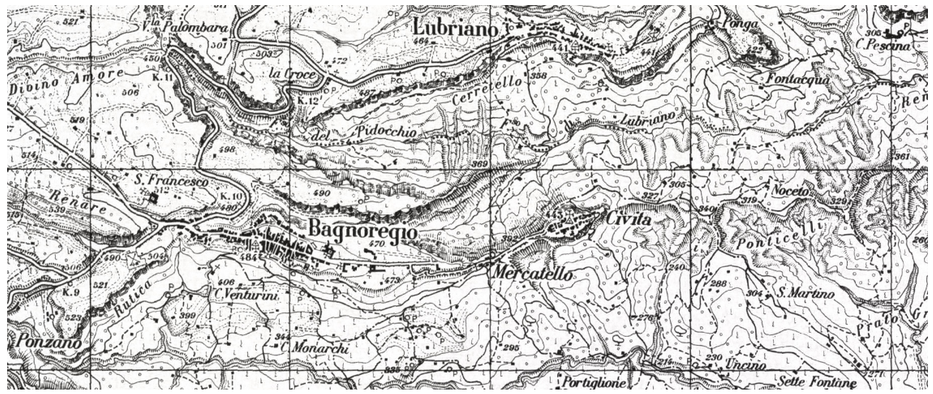
[51] Postcard of Civita in 1900 (Archivio Mauro Galeotti)

The phenomenon that would lead to the division between the two villages, that of Civita and that of Rota which would later become Bagnoregio, began. In fact, the earthquake that hit Civita, which until then was the Bagnorea proper, on June 10, 1695, separated it (with the formation of a deep cliff) from the other two districts of Mercato (today Mercatello, then municipal headquarters) and Rota: the latter will experience a strong civitonic immigration becoming the new Bagnorea, that is the current Bagnoregio.

This is also confirmed by the fact that with motu proprio of 19 February 1699, Innocent XII authorizes the transfer from Civita to Rota of the Cathedral and Episcopio, as well as the merger of the capitol of the cathedral with that of the collegiate of San Nicola. In 1706 the seminar will also be transferred.

Since the IGM of 1954 it is possible to see the limited development of Bagnoregio, located in the valley respects the historical city. Comparing it with today's conformation we can see a growth of the city towards the west.







[52] Source: Archivio di Stato di Viterbo, Catasto Italiano, Cancelleria del Censo di Montefiascone, aggiornamento del Catasto Gregoriano, (1855-1875), foglio V

[53] In 1944 the city og Bagnoregio is limited. It will be spread in the territory in the second half of the XX century

[54] The part of Bagnoreggio expanded over the course of 10 years, probably in correspondence with the economic recovery after the end of the World War. Here Civita is highlighted in green and Bagnoregio in white. Source: Aerophotogrammetry, 1954

Toponym of the city

The name "Civita" as other cities of Etruscan origin that have similar names (E.g. Civitavecchia; Civita Castellana; etc.), derives from the Latin Civitas (city). Civita di Bagnoregio was the seat of a bishop from at least 600 A.D. until 1696 and obtained the name Balneum Regis (bath of the king) probably while under Longobard domination.

The town is mentioned around 636 in two geography books as Belneion Regis and Balneum Regis (Petrangeli Papini, Cronologica storica, p.11). From a letter written by Adrian I to Charlemagne we learn that in the year 788 the city was still called Balneum Regis or Balneoregis.

The area is known for good water and mineral springs and there have been reports of ruins of baths near a spring in the valley to the south of Civita.

Starting in the eleventh century, the town was more often called Bagneoregium, then became Bagnoregiom the form in which it is mentioned in Dante's Divine Comedy, Canto XII:

Io son la vita di Bonaventura
da Bagnoregio, che ne' grandi offici
sempre pospuosi la sinistra cura.



[55] The name in the map is Balneum Regis.
Source: Extract from Delisle Guillaume, Regionum Italiae mediarum Tabula Geographica pernoscendis Historiae Romanae primordiis praesertim utilis, sed et cui multa sequioris aevi addita, Paris, Apud Auctorem in Ripa Sequanae vulgo dicta le Quai de l'Horloge, 1711

One English translation is as follows (The portable Dante, translated by Laurence Binyen, edited by Paolo Milana, Viking Press, New York, 1947):

I am the spirit of Bonaventura,
born in Bagnoregio, in great offices
the temporal care ever I had in scorn.



[56] The name in the map is Bagnarea.
Source: Extract from Sanson, Nicolas, Estat du Grand Duc de Toscane, & Estats de l'Eglise Dressé sur les Lieux Par N. Sanson, Geographe du Roy, Amsterdam, between 1701 and 1724

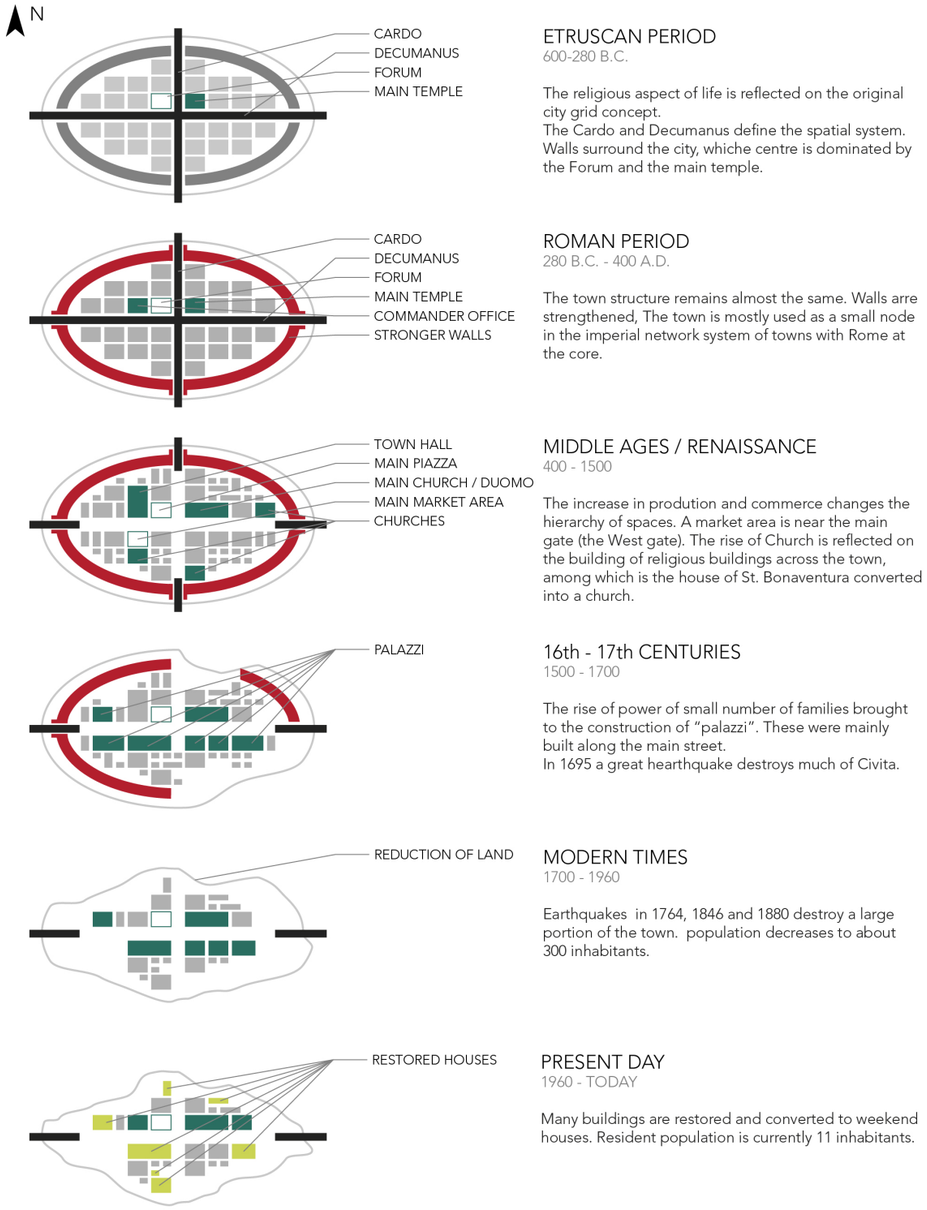


With the prevalence of the Italian language it will turn into Bagnoregio, Bagnarea, Bagnorea. The town known by these names had two sub-divisions, called Civita (the oldest part of the town) and Rota (today Bagnoregio). These names were used from about 1000 A.D. Until 1695 when Rota adopted the name Bagnarea. In 1922 the name was returned to Bagnoregio, the form immortalized by Dante, following a royal decree and Civita will become part of the municipality. Civita is now known as Civita di Bagnoregio.

[57] The name in the map is Bagnarea or Balneum Regium.
Source: Extract from Ameti Giacomo Filippo, Patrimonio di S. Pietro, con le sue piu conspicue Strade Antiche e Modena e principali casali e Tenute di esso descritto da Giacomo Filippi Ameti Romano, e data in luce da Domenico de Rossi in Roma l'Anne 1696 Patrimonivm Petri olim Tvscia Svbvrbicaria edentibus Homannianis Heredibus, Norimberg, edentibus Homannianis Heredibus, 1745

The main phases of the history of the place are summarised below.

600-280 B.C.	Etruscan period
280 B.C.	Beginning of Roman Domination
150 B.C.-400 A.D.	Pax romana maintains order, however, resources and population depleted to support empire
500-700	General instability, countryside abandoned, population swells in small fortified towns such as Civita
1150 APPROX	Last feudal lord gives freedom to Civita. Increase in production and commerce
1219-1222	St Francis established monastery on bluff across from Civita
1448	Civita aquires town hall
1476	Sixtus IV visits Civita
1499	Plague hits Civita. Population decimated
1511	Church of San Donato remodelled
1550	Palazzo Alemanni constructed
1610	Family of Sain Bonaventura leaves Civita
1695	Great earthquake. Much of Civita destroyed
1699	Bishop's seat moved to Bagnoregio
1764	Earthquakes causes Franciscan to move
1809-1814	Civita and Bagnoregio under Napoleonic domination
1814	The city under the Papal States and remained until 1870
1846	Earthquake
1867	Battle between the Papal Militia and Garibaldi's volunteers
1880	Earthquake
1922	The government ordered the evacuation of Civita and the removal of all its inhabitants
1926	Stone bridge built to connect Civita and Bagnoregio
1930S	Electricity arrived in Civita
1943	Occupied by Germans
1944	Occupied by Allies
1952	Priest leave parochial house
1960	Water main and sewers in Civita
1962-1963	Main bridge destroyed. Many families leave
1963-1965	Realization of a new bridge built
1965	Restoration of houses for vacation use began
1970-1974	Restoration of the church of San Donato
2005	The gullies of Civita di Bagnoregio were proposed as a site of community interest.



[58] The main phases of the history of Civita di Bagnoregio

PREHISTORY

The first finds that bear witness to traces of human life in the territory of Bagnoregio belong to the Neolithic period (6000-3000 B.C.). There are tools, flint weapons including cusps of arrows, small spears, knives, scrapers and axes.



ETRUSCAN PERIOD (3rd century B.C.)

Civita was part of Etruria, which had its capital at "Vulsinium", the current Orvieto.
In those days Civita consisted of a single conurbation: it was located on the site of the acropolis with the temples and the forum, ideal center of civil and religious life of the entire village.

[59] Etching of Bagnoregio (1867)

There is no certain information about the Etruscan period, either on the consistency or on the name of the settlement. Some historians of the XVII century, however, hypothesize Bagnoregio with the Etruscan city called by Pliny the Elder "Novempagi" (city of nine villages). The findings of remains of buildings and tombs with funerary furnishings, dating from around the seventh - fifth century. BC. The remains of the tombs, which date back to around the VII - V centuries B.C., attest to the continuity of life even in this period, probably on the top of the hill where Civita stands. Important are the burial chamber tombs, excavated in a cave, in the rocks of Civita and Bagnoregio. These testimonies are present especially in the area called San Francesco Vecchio. Also the cave of San Bonaventura, where it is said that St. Francis healed the little Giovanni Fidanza, who later became St. Bonaventura, is actually an Etruscan chamber tomb. The Etruscans made Civita (of which we do not know the ancient name) a flourishing city, favoured by its strategic position for trade, thanks to its proximity to the most important roads of the time.

The Etruscans themselves had to face the problems of seismicity and instability in the area, which in 280 BC resulted in earthquakes and landslides. Actually, they put in place some works that had the specific purpose of protecting Civita from earthquakes and landslides, damming rivers and building drainage canals for the proper flow of rainwater.

The Romans resumed the works of their predecessors, but after them these were neglected and the territory had a rapid degradation that led, finally, to the abandonment of the Civita. When the Romans arrived, in 265 B.C., the imposing works of channelling rainwater and containing streams, started by the Etruscans were resumed.

ROMAN PERIOD (2nd century)
Civita was probably conquered by Rome about the same time as Volsinii (264 B.C.).
There was probably little change in the physical appearance of the town, which would have changed only slowly as Roman architecture developed. Some of the cisterns, waterways and cellars may date from the Roman period.

A dense population must have inhabited Bagnoregio in the Roman period and this is evidenced by the numerous funerary stones, gravestones, sarcophagi, and numerous tombs of the columbarium type (with niches arranged in regular rows to contain the funerary urns), especially those exposed south of Bagnoregio, Civita and the Hill of Trucinano.

An event of considerable importance after the Roman conquest was the birth of the Via Cassia which, according to a strictly military plane, connected Rome to Florence, skirting the eastern shore of Bolsena Lake with a straight path. Probably the Roman road called Consolare led from east and west ends of Civita and that paving stones from it are visible on the top of the Montion, which is now an isolated peak of tufo to the east of the town. It may be the proof of how much erosion has occurred since Roman times.

During the late empire, the new Christian religion found more and more followers and spread among the population, despite the fierce persecution of the Roman emperors. In 303 the first evangelizer of Bagnoregio, S. Ansano Romano, of the Anici family, carried out conversions and miracles before going to Siena, where he suffered martyrdom under Diocletian and Maximian.

HIGH MIDDLE AGES - Longobardic Civita (5 th century)
During this period, the Via Cassia is abandoned and the archaic route passing through the new bishopric is reactivated. At that time, the name of Bagnoregio indicates the whole town that was divided into two parts connected to each other: Rota to the west and Civita to the east.

After the fall of the Western Roman Empire (476 AD), in the 6th century, the Roman-barbarian kingdoms were born in Italy. The Goths dominated the area from 495 to 553. They settled in Tuscia and defended it through a system of military cornerstones: the most important ones in the area are Orvieto, the Martana Island and the Castrum of Balneum-regis (Bagnoregio).

During this period Bagnoregio experienced an intense increase in population, also due to the abandonment of Volsinii Novi, destroyed by the barbarians in the fifth century.
At the end of the 6th century, the city became a diocese and was first mentioned under the name of Balneum-regis, in a letter from S. Gregory the Great (599-600) to the bishop of Chiusi, in which the name of John is mentioned, presumed to be the first bishop of Bagnoregio.

Some archaeological finds and recent studies attest to the economic and military importance of Bagnoregio in the context of the Gothic possessions. This was followed by the years of the Byzantine restoration, until the Longobards broke into Italy, who, after the definitive conquest of Orvieto and Bagnoregio by Agilulfo in 605, controlled a large part of the territory of Tuscia (Tuscia longobarda). Desiderious was the king in that period. From the few available ancient documents, we know that Civita and Bagnoregio

were parts of the same city called Balneum Regis (the bath of the king). This name was given by the Lombard king, Desiderious, as his wounds were cured by the salutary waters of the hot springs present in the area.

They remained there until 774, when Charlemagne, king of the Franks, defeated Desiderio, the last Lombard monarch, reconfirming to the Pope the donation made to him by the father of the territories of Orvieto, Bagnoregio, Ferento, Viterbo and other places.The birth of the papal state dates back to 774.

In the hard times of the barbaric invasions monasticism is affirmed. In the area of Bagnoregio is attested from the early years of the ninth century (the Benedictine cells are S. Nicholas, S. Clement, S. Maria de Valle, S. Salvatore, S. Valentino, S. Sylvester, S. Christine, S. Cipriano (Glass), S. Maria in Capita (The Magione). The Benedictine monks disappeared from its territory between the 11th and 12th centuries, giving way to other religious orders.

Between the end of the 11th century and the middle of the 12th century, the profound social transformations led to the establishment of a new political order, the Comune, regulated by statutes, such as the Community one of 1373 and the Arts one of 1400
The Statuto Comunale of March 28, 1373 gives much information about the government of Civita and the habits and occupations of the citizens. The city was divided into two parts, called Civita and Rota (today Bagnoegio). Both were divided into four contrade, or neighborhoods. For Civita the four contrade were: Mercato, Ponte, Civita and Carcere.
In the Middle Age Civita looked much as it does today, but the hilltop was larger, the population much greater and there were many shops, stables, wine cellars, bell tower and workshops.

MIDDLE AGES - Feudal era (8th century)
The feudal one is one of the most confused and dark period of Bagnoregio. The existence of the medieval bridge of which you can still see the remains on the edge of the cliff (just before the Santa Maria door), suggests that in this period Civita was connected to Rota through a straight road on a land currently completely eroded. In 1140 the village became a free municipality and it was divided into 8 districts: 4 in Rota and 4 in Civita.

From the end of the XII century, the powerful municipalities of Viterbo (Ghibellines) and Orvieto (Guelphs) fought for the supremacy of Tuscia: Bagnoregio and Teverina, due to their particular strategic position, became the scene of bloody battles. Bagnoregio takes sides with Orvieto. In addition to war, diseases and natural disasters contributed to making life difficult for poor city dwellers. In 1348, a violent epidemic of black plague raged throughout Europe.

RENAISSANCE
The social and political importance of the two parts of Bagnoregio is more or less similar, although in Civita was the bishopric.

In order not to create an imbalance between Civita and Rota, the Town Hall was located halfway (in the Mercatello district). But this balance begins to deteriorate in the fifteenth century, when the authorities decided to transfer the municipal power. In 1448, the City Hall was moved in Civita on the S. Donato Square, just in front of the cathedral and Civita prevailed over Rota.

Renaissance theories of city planning had little effect on Civita. A few palazzi were built, but the continued erosion and frequent earthquakes was already making Rota (Bagnoregio) the center of the new building activity. Actually, by the 16th century, Civita di Bagnoregio was beginning to decline, becoming eclipsed by its former suburb Bagnoregio. At the passage in Civita of the cardinal governor, Giovanni Girolamo Albani (1585-1591), the monumental entrance door was built: Porta Albana.

18th - 19th centuries

In 1695 a terrible earthquake almost entirely destroyed Bagnoregio and Civita, causing 32 deaths and 40 injuries. Two churches and many houses were completely destroyed. Following this event, in 1699, the bishop moved from Civita to Bagnoregio. The area suffered from malaria epidemic in 1707, others earthquakes were in 1783, 1785, 1789.

The urban structure of Civita di Bagnoregio has been rebuilt with the help of numerous maps from the beginning of the eighteenth century: the comparison of the maps shows a progressive thinning of the cliff due to the landslides that led to the disappearance of the buildings located on the edge of the cliff.

In 1744 the Spanish troops, coming from Umbria, occupied Bagnoregio carrying out thefts, violence, famine and epidemics. Between 1783 and 1786 the territory of Bagnoregio and Teverina was invaded by locusts that caused a severe famine with economic repercussions for Bagnoregio's inhabitants, for debts incurred for pest control and for the purchase of food.

After the fall of the Roman Republic, the administration of the city is governed by a provisional government headed by the bishop of Bagnoregio Cordella (2 July 1799). In 1809 the city came under control of Napoleon and becamepart of the Department of Tiber, with Viterbo as the capital. Under Napoleonic rule, the diocese of Bagnoregio was abolished in 1810.

Starting from 1867 the town was the stage of violent clashes between the troops of Garibaldi and the Papal States, following which the village became a part of the Kingdom of Italy. These are episodes linked to the Campaign of the Agro Romano for the liberation of Rome from the temporal power of Pius IX in 1867. A group of Garibaldians, led by Giacomo Galliano and Girolamo Corsieri from Castiglione in Teverina, crossed the border of the Papal State on 28 September 1867, occupying Grotte S. Stefano and advancing as far as Ronciglione. From here, after a clash with the Pontiffs, the Red Shirts withdrew to rejoin the other group of volunteers in Bagnoregio; in the meantime other gangs of Garibaldians occupied Acquapendente, Farnese and Ischia. In the high Viterbese, in San Lorenzo and Valentano, clashes and skirmishes follow one another, culminating in the battle of Bagnoregio on 5th October 1867. The battle, fought between Poggio Scio (cemetery) and San Francesco, ends with the victory of the papal troops and the Garibaldi's troops are forced to abandon Bagnoregio.

In memory of this battle is preserved the "Pyramid" Monument-Sacrarium Garibaldi guardian of the Volunteers fallen in the clashes against the pontiffs the scientific director of the complex is the historian and journalist Prof. Francesco Guidotti.

THE TWENTIETH CENTURY

Once again the road connecting Civita with the outside world had to be changed because of the erosion. A new road was built going along the slide of the hill to the location of the present-day bridge. Communications were improved with the introduction of the railway line and then a bus line Rome-Florence, with a bus stop in Bagnoregio (1874, 1909). Electricity came in Bagnoregio in 1911 (in Civita in the late 1930s).
In the meanwhile landslides continued eating the perimeter of Civita.

In 1922, when Civita still has 650 inhabitants, the government decides again to evacuate it to transfer the population to a new purpose-built suburb. But, while the projects are still being discussed, the war comes to block any initiative. Throughout the '900 the landslides mainly concern the Bagnoregio-Civita road.

Occupying forces used the town as a battleground and way station during World War II. The Germans controlled the area in 1943, with several soldiers stationed in Civita and resistance groups were formed. To natural disasters, in 1944, added the effects related to the war events, when the retreating German troops blew up the masonry bridge.
After the war a committee promoting the beauty of Civita was born. Money was given in 1953 and 1960 by government to restore the buildings that have been damaged during the war. A water main and a sewer line were installed, and the street repaved.

In 1963 the wooden gangway built to replace the old masonry bridge collapsed. The current reinforced concrete bridge, built by the Ministry of Public Works, was inaugurated on 12 September 1965; it is a disfiguring work but necessary to ensure a minimum connection between the ancient village and Bagnoregio.

The year 1695 marks the beginning of the rapid decadence of Civita: on 11 June at 3:30 local time, an earthquake estimated at the IX - X degree of the Mercalli-Cancani-Sieberg scale, caused the collapse of numerous buildings, the death of 37 people and the wounding of 61. The victims would have been much more numerous if the disastrous seismic event had not been preceded by a quarter of an hour by a warning shock; the epicenter is in Bagnoregio, but the area of resentment reaches the Castelli Romani and Perugia.

The telluric event causes the opening of many cracks in the ground, the collapse of the bridge that connected the two inhabited areas and, according to some authors, the collapse of a part of the cliff; for Civita the progressive, inexorable process of isolation and decay begins to which we still witness and to which the efforts of many are directed.

The earthquake formed the wide cliff that separated Civita forever from the other two districts, Mercato (today Mercatello) and Rota, which became the current Bagnoregio.
The environmental degradation causes the transfer also of the main public institutions to Rota, in 1699 and moreover, the continuation of the earthquakes, accelerates that isolation started for Civita with the first earthquake.



RELATIONE
DEL DANNO CAGIONATO
DAL
TERREMOTO
Succeſſo à dì 7. Giugno 1695.
Nelle Città di Bagnarea, Orvieto,
e Luoghi conuicini.

Si vendono da Franceſco Leone Libraro in Piazza Madama,
e Renato Bono in Piazza Nauona.

IN ROMA, Per Gio: Franceſco Buagni. 1695. *Con lic. de' Sup.*

[60] Image of the docments with the title "Report of the damage caused by the earthquake in Bagnoregio, Orvieto and nearby places"

May 20, 1759: the collapse of the Civita-Rota linking road

On 20 May 1759 the road that connects Rota to Civita collapses, a road that from now on will be continuously interrupted by landslides, creating serious problems for the economic and social life of the town.

Five years later, the bridge of the access road to Civita collapses and the convent of S. Francesco remains damaged. The decline is unstoppable. The city struggles to survive. Following the succession of landslides, in 1819 the Sacra Congregazione del Buon Governo di Roma ordered the abandonment of Civita and the transfer of the population to the permanent areas of Bagnoregio. This injunction will be limited only to the clearing of the houses facing the cliff near the church of San Bonaventura, due to the reluctance of the civitonici to leave their village.

The first systematic interventions of reclamation of the cliff and of the saddle are of the XIX century: a first bridge is realized in 1850 and at the same time the bridles of the valley bottom are built in order to regulate the flow of water

Historical resilience

Historical resilience means the city's ability to defend its borders and institutions, from its origin. The problems linked to the geology of the territory have always put the city to the test, but in its initial phase it is also the continuous struggles with the surrounding areas that allow to define Civita as a "resilient" city. In particular, from the 11th century until the 15th century, significant events have been documented that tell the tenacity of Civita.

Below is a list of significant moments that represent the resilience of the city despite the continuous attacks to prevail over it:

1074 **Rebellion of the Counts of Bagnoregio against the papacy. The Pope organizes a military expedition to tame the rebels, without being able to carry it out.**

1150 **Bagnoregio is constituted in a free commune, escaping the feudal dominion.**

1162 **The Municipality is occupied by Federico Barbarossa.**

1163 **Bagnoregio returns under the Church, following the agreements made in Orvieto between the imperial and ecclesistic factions.**

1186 **Henry VI occupies and then returns Bagnoregio, clashing against the Orvietan faction.**

1249 **The Orvietani send an army against Bagnoregio and devastate the masses of the territory. The following year peace was stipulated, resulting in a peace of 20 years.**

1278 **The Municipality of Orvieto had a unilateral reconnaissance of the borders between the territories of Orvieto and Bagnoregi carried out. From this reconnaissance, which involves a rectification of the borders themselves and is considered by the inhabitants of Bagnoresi as damaging and unjust, contrasts that will last about two centuries.**

1303 **The Ghibelline Nerio, from Orvieto, invades the territory of Bagnoregio. Periods of tension between the two parties begin.**

1322 **After years of continuous clashes between Guelphs and Ghibellines. When the Ghibellines conquered Rota, the Guelphs of Orvieto and Bagnoregio trained to scoff at them.**

1356 **A diatribe was born on the territorial borders also with Viterbo.**

1363 **In order to avenge the injustice of the territorial division dictated by Orvieto in 1278 the Bagnoresi did justice with violence and removed the elements that had been contributed to define the territorial limits. This led to reprisals on the part of the Orvietani.**

1440 **Years later the dispute over the borders between Bgnoregio and Orvieto has not yet been resolved.**

1447 **Attempts to insert Bagnoregio into the diocese of Viterbo.**

1449 **The Bagnoresi, exasperated by the opposition of the Orvietani on the question of borders, ride on the Lubriano territories to the detriment of Orvieto itself.**

1453 **The Bagnoresi again remove the limits of the borders with Orvieto.**

1467 **A period of peace begins between Orvieto and Bagnoregio.**

1494 **Orvieto attempts to incorporate within its territory that of Bagnoregio and other nearby towns.**

Since the fifteenth century the city began problems related to earthquakes, landslides, plagues, having to face continuous reconstruction and rethinking of the city structure, from the plague of 1449 and then 1467, to the first landslides of 1469. The great earthquake of 1695 decreed for Civita the official beginning of its continuous struggle for survival against nature itself.

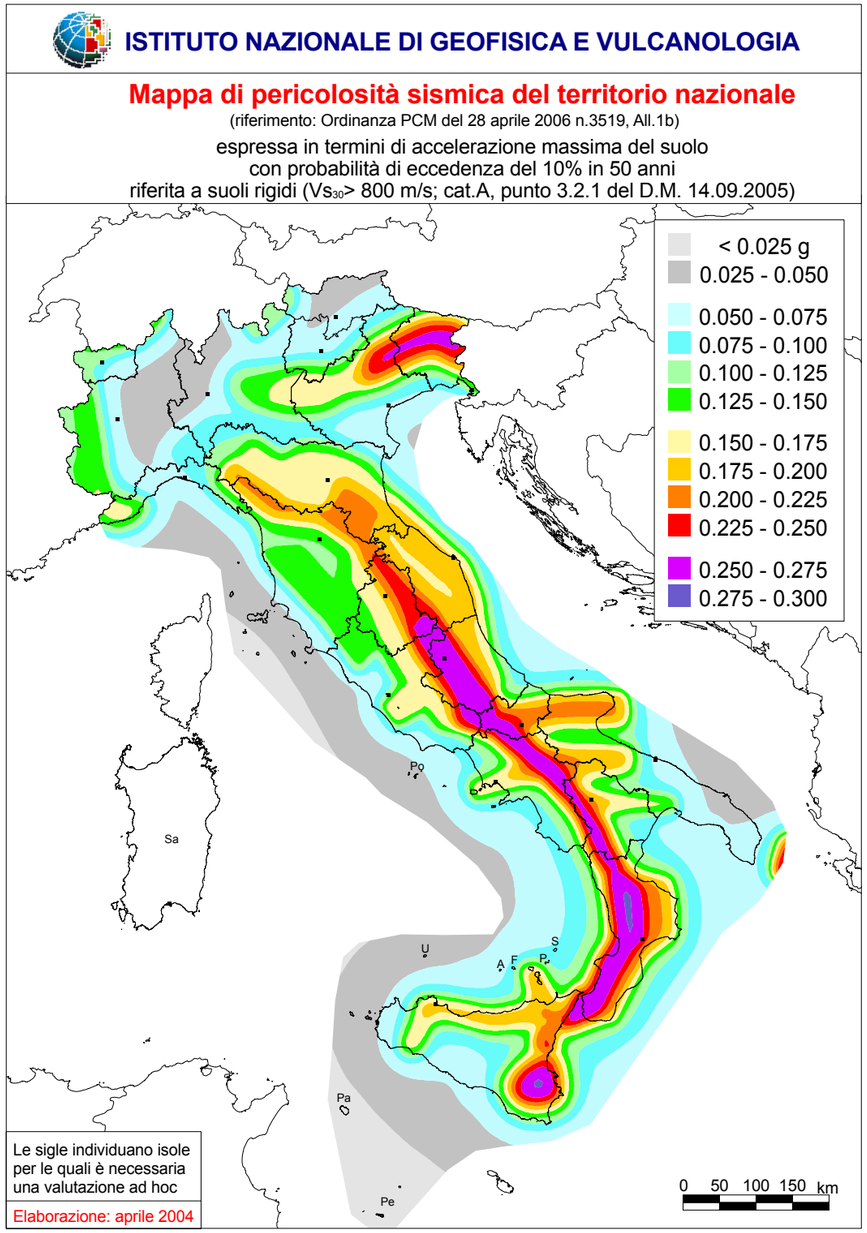
2.b.2 History of seismicity and landslides

2.b.2.1 *Seismicity*

The regions of central Italy have been historically affected by seismic events of varying intensity. Thanks to the earthquakes historical record it is possible to know in summarized and chronological form all existing information concerning earthquakes having the epicenter in the district of Bagnoregio and nearby. Clearly, given the lack of proper equipment, the reported magnitude (MS) is estimated from the observable effects caused by the seismic event.

- 1550, the first recorded earthquake with probable epicenter in Civita di Bagnoregio;
- 11 June 1695, MS 5,7;
- 5-16 June 1696;
- 1707;
- 19 July 1738, MS 5,3;
- 21 January 1743, MS 5,0;
- 1764, during this event the road connecting Civita to Bagnoregio collapsed. Having lost the only access road, the isolation of the cliff started, together with the exodus of its inhabitants.

In particular, the earthquake that occurred in June of 1695 happens to be very important, as its effects have been described in a report written by the Bishop of Bagnoregio.
From this report we can observe the differences of the consequences for the same earthquake between Civita settlement, the initial one, and Rota settlement, the current Bagnoregio. The higher extent of the damage recorded in Civita is, in fact, to be attributed to the highly unstable stratification, still susceptible to erosion phenomena. That event thus accelerated the decline of the ancient hamlet, causing the relocation of the bishopric and the town hall to Bagnoregio.



[61] Seismic hazard map (April 2004)

From what we've seen, in the seismic history of the area, the strongest events (VIII-IX MCS in 1965 and VII-VIII MCS in 1738) correspond to local events pertaining to a seismogenic source characterized by widespread seismicity having moderate energy, with just a few higher magnitude events that caused significant damage in areas of limited extension, thanks to the shallowness of the hypocenters.

A VII MCS event has been observed following the Reatino earthquake in 1703 (epicentral intensity XI MCS), while there are no observations related to seismic events generated in the Umbrian Marchigiano Apennine, apart from the IV MCS caused by the sequence of 1997. Overall, we can assert that the seismicity of the central-northern Apennine, even if still relevant for high magnitudes and occurency, given the significant epicentral distances, does not have effects greater than the ones attributable to the local events.

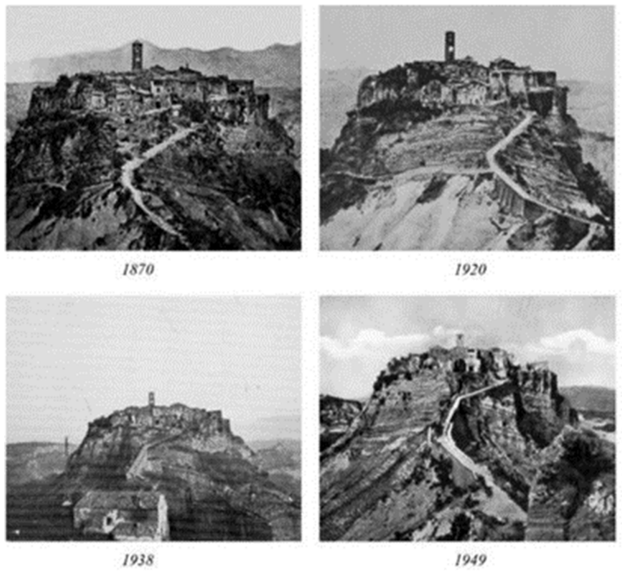
Below is the seismic hazard map for the national territory, drawn up by the National Institute of Geophysics and Volcanology (INGV).

2.b.2.2 *Recorded Landslides in the past*

Historical phenomena have been reported since the fifteenth century. In total about 130 phenomena have been identified. The first record of the instability phenomena involving the area date back to 1450, when the convent of Clarisse, located in the Carcere district, began to collapse following a series of Landslides.

Then between 1466 and 1469 instability phenomena occurred in the north side of the cliff causing the collapse of numerous buildings, just in front of the hamlet of Lubriano. The oldest information about the connection between Civita and Bagnoregio date back to 1545 when there were necessary the modification of the access street plan and the construction of two retaining walls. The occurred landslide of considerable proportions led in fact to the ruin of Porta di Ponte and of the walls of the Carcere district. From the XVII century the reports about instabilities and landslides are more detailed, starting from the collapse of the access road connecting Civita to Bagnoregio in the proximity of the old church of S. Vittoria at the beginning of the century (1606-1608), and also the building collapse in the south side of the cliff, nearby the house of S. Bonaventura da Bagnoregio.

The 11th of June 1695 an earthquake happened with epicenter just nearby Bagnoregio. The earthquake caused the destruction of the access and also the opening of deep cracks on various buildings and the disappearing of the Carcere district with a huge landslides. This event not only led to multiple damages to the material constructions but also the beginning of the decay of Civita with the consequent moving of the principals activity, the bishop, the cathedral and the most of the inhabitants to the near Rotha, the current Bagnoregio. Another earthquake in 1707 caused such a major landslide that led to the total obstruction of the Torbido river.



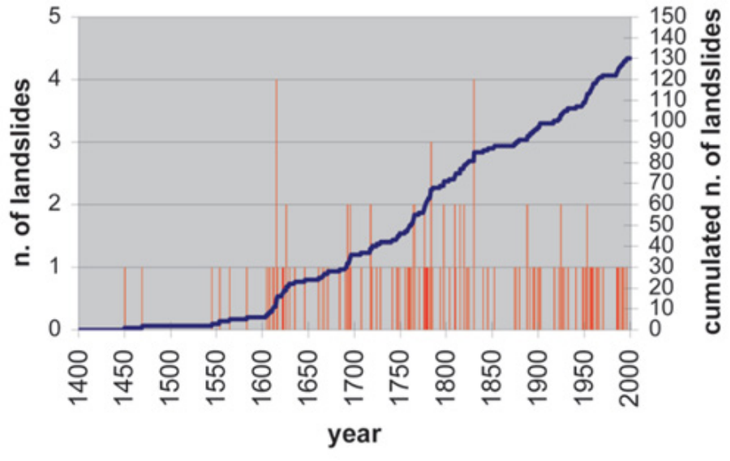
In the 1794, another earthquake induced landslide caused the total collapse of the access road connecting Civita to Bagnoregio, dragging with it the convent of S. Francesco, established in the medieval age by the saint himself.

After this event, the first brick bridge connecting the two district of Bagnoregio and Civita was made. The bridge was made using tuffaceous stones, with five round arches. In 1810, after various interruption of the connection between Civita and Bagnoregio, and the collapse of part of the cliff just nearby the church of S. Bonaventura, various buildings were abandoned. The church of S.Bonaventura collapsed definitively in the XIX century.

[62] Evolution of the access ridge

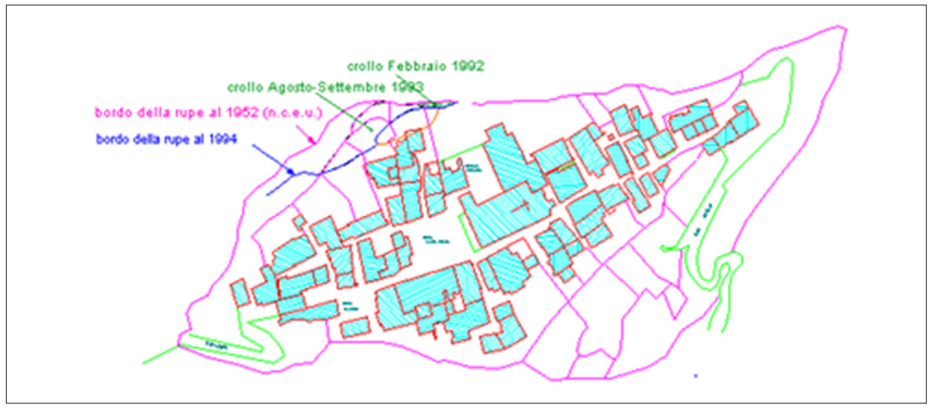
The church of S. Vittoria was demolished in 1888, after its partial destruction. In the last decades, various instability phenomena have interested the landscape of Civita; among these the most intense and striking have involved the north side of the cliff, above the underlying depression known as Cavon Grande. Detailed information about the progressive moving back of the cliff are available from the 1947. A weathering station was installed in the city in 1987 so to analyze the weathering effects on the instability phenomena. In the 1993 also thermometric station were installed into the rocks so to analyze the effects of changes in temperature. The following figure shows the moving back of the cliff from 1952 (violet line) to the 1994 (blue line).

The complex geomorphology of the area ensures that exist a connection between all the instability phenomena occurring around Civita di Bagnoregio.



[63] Recorded landslides in the area of Civita di Bagnoregio since the fifteenth century until 2000 (Garbin et al. 2013)

Then, it is definitely worth to mention the landslides in the town of Lubriano, which the instabilities phenomena and the geomorphology are strictly connected with the stability of the cliff of Civita di Bagnoregio. Using radiometric techniques it was possible to date the greatest landslide event occurred in Lubriano in the past, which date back to 1114. This landslide effectively re-routed the Lubriano river toward the north side of Civita di Bagnoregio, leaving the area much more unstable (Delmonaco et al. 2008).





[64] Evolution of the north side of the cliff in the last century (ENEA, 2003)

[65] Area of the landslide along the side of Lubriano. Red dots: landslide main crown; red line: body of the landslide, blue broken line: former route if the Lubriano river; continuous blue line: present course of the Lubriano river (Delmonaco et al. 2008)



Rock-falls February 1992

Caused a scarp retrogression of 2 m and a crown surface of about 40 m; the displaced blocks covered, in the cliff's toe, a pre-existing rock-fall accumulation. Moreover, along the cliff's border of new formation (in correspondence of Vecovado square), an opened joint, sub-parallel to the scarp direction was observed. In the periods preceding the rock-fall no relevant rain fall were happened. Also, the cryoclastism effects are not to taken into account.

Rock-falls August-September 1993

The rock-fall interested an area located 20 m west of the previous landslide with a scarp length of about 60 m. The fall involved both massive and stratified tuff producing an average cliff retrogression of 6 m .Such failure represents the prosecution of the existing joint in Vescovado square, prolonged in west direction. This joint is isolating by the rockslide. This rock-falls happened after a period characterized by extreme temperature and drought.

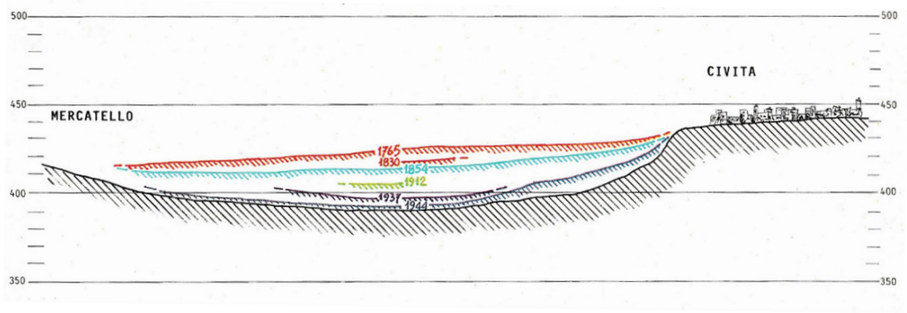
[66] Landslide in August-September 1993

Even if cryoclastism phenomena are not to taking into account, the variations of temperature during the day seems to be an important factor for the stability of the external part of the cliff. A study of backanalysis on this landslide shows that also little increasing in the interstitial pressure in the stratified tuff could actually trigger to new joints and falls.

Debris flow December 1996

The fall materials by the landslide in 1992 and 1993 were accumulated in the depression of Cavon Grande. These materials caused a debris flow that arrived since the valley, about 300 m after the cliff. This landslide caused the complete removal of the rock's layer on this area leading to the complete exposure of the underlying clay at the toe of the cliff, so to make this area more vulnerable to scouring processes. The days preceding the landslide were very rainy and of course this is the main reason of the instability phenomenon.

Backanalysis study on this landslide verified that there was a debris-slide on the clayey substrate, with a sliding friction angle equal to the interface friction angle between debris and clay.



[67] Evolution of the profile of the ridge in the last 250 years (ENEA, 2003- Museo geologico delle frane)





[68] Cliff wall after the rock falls in August-September 1993

[69] Instability phenomena along the mophological ridge (Bollettino Geologico della Teverina)







[70] Landslides in Mercatello district, 2013 (Bollettino Geologico della Teverina)
[71] Landslides on the southern slope of the saddle. Evolution between 2012 and 2015 (Bollettino Geologico della Teverina)
[72] Rock-falls November 2014 (Bollettino Geologico della Teverina)

This angle corresponds with the friction angle determined in laboratory on clay normal consolidate in condition of total softening (no cohesion) and constant volume. Moreover, in that days various soil streaming and mudflows were registered due to the saturation of the debris-clay layer because of the intense rainfall. The sliding surfaces of these landslides (generally superficial) involved mostly the north side of the saddle.

Landslides on the morphological saddle

The instability in the clayey slopes of the morphological saddle has characterized the past evolution of the area. As a consequence of the decay of clay materials, the narrow ridge connecting Civita to the mainland is in fact continuously affected by soil erosion and landslides as consequences of the decay of clayey materials. The following figure shows the evolution of the access to Civita from medieval time till to present. The lowering is estimated to be around 40 m in the last three hundred years.

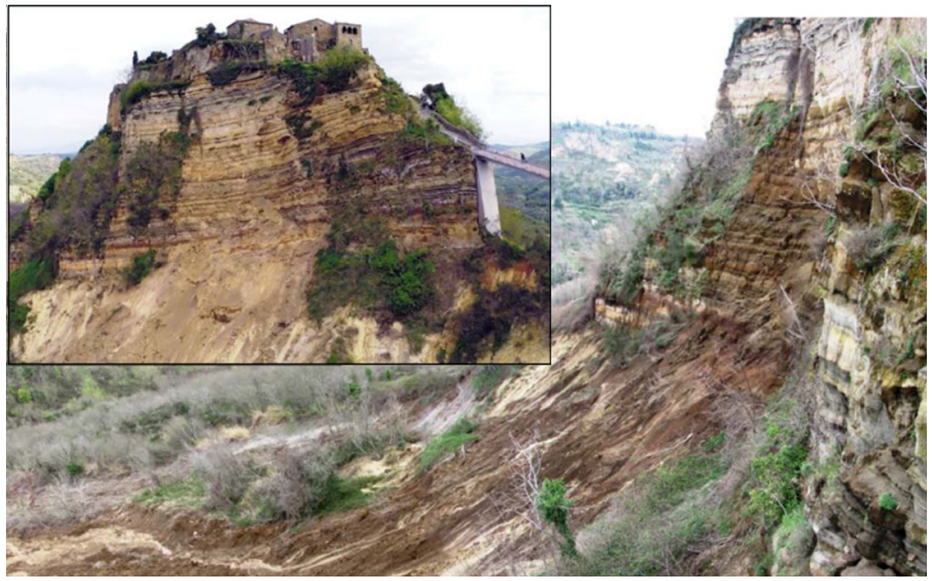
In the last years, the instability phenomena involving the saddle mainly manifest themselves in the southern slope, as the northern slope was location of stabilization interventions since the nineties.The phenomena have been reactivated substantially in December 2008 and March 2010 after heavy and prolonged rainfalls (Garbin et al. 2013). Along the southern slope, the landsliding events displayed as shallow translational mechanisms type involutes in arthflows with speed from slow to moderate (m\year cm\month) and intensity, in terms of volumes mobilized from small to medium (from thousands to tens of thousands of m^3).

From 2012 to 2015 nine landslides in the south side of the ridge were been documented and reported from the web magazine “Bollettino Geologico della Teverina”, mostly characterized as earth and mud flows, and translational sliding.

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[73] Debris flow and slidings, May 2015 (Bollettino Geologico della Teverina)

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[74] Landslide on the southern slope of the saddle (Bollettino Geologico della Teverina, 2015)

of volumes mobilized from small to medium (from thousands to tens of thousands of m^3). From 2012 to 2015 nine landslides in the south side of the ridge were been documented and reported from the web magazine "Bollettino Geologico della Teverina", mostly characterized as earth and mud flows, and translational sliding.

Mercatello district, northern side 2013

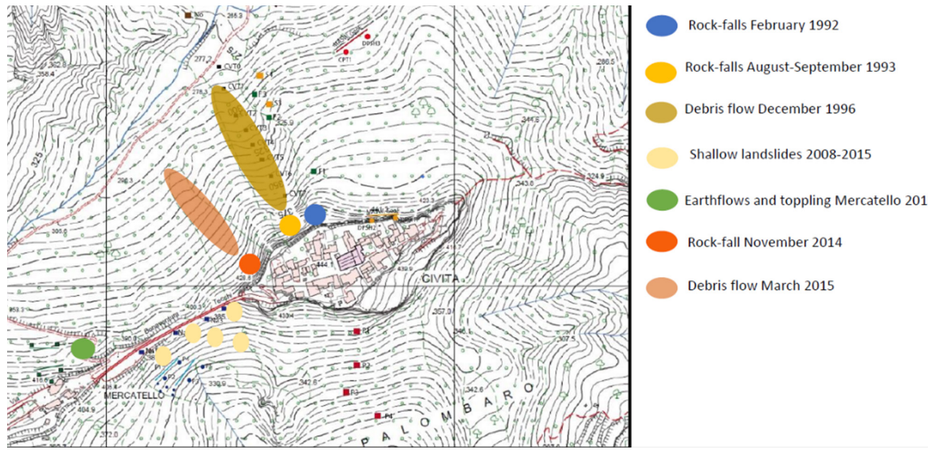
The instability of the clayey foundation in the northern side of the ridge it's also reflected on the tuffaceous spur of Mercatello, area immediately preceding the access ridge. The earthflows of the clayey formation lead to toppling phenomena on the tuff with consequent accumulation of a debris blanket on the clays. These phenomena have been reactivated since 2013 (Bollettino Geologico della Teverina).

The rock-falls November 2014

The rock-fall involved the north-west side of the cliff. The fall involved the pyroclastic stratified rocks in which various discontinuities' families were observed. No backanalysis were conducted on this landslide but it could be attributable to termoclastism phenomena in the external part of the tuff; moreover, most of the discontinuities could be attributable to a lateral detensioning by the degradation of the rocks from the infiltration water.

Rock falls November 2014 and Debris flow March 2015

A rock-fall involved the north-west side of the cliff. The rock-fall involved the lower part of the pyroclastic tuff; various discontinuities' families were observed, probably caused by the alteration of the rocks from infiltration water and termoclastism. After a rainy period, the debris deposit by the rock-falls was mobilized up on the clayey layer, with resulting in a debris flow and translational sliding in March 2015. The trigger causes of this instability phenomenon could be the combination between the load of the debris deposits that weight on the clayey layer, degraded by swelling and softening after rainfalls. Even if no backanalysis were conducted on this landslide, it seems reasonable to compare it with the debris flow in December 1996.



[75] Location of the major recorded landslides between 1992 and 2015 (Lupino 2017)

2.b.2.4 *Evolution of the landscape*

Badlands Valley - "The lost jumpers"

Due to the geology and the geomorphology of the ***Valle dei Calanchi*** (Badlands Valley), a particularity of the landscape is its fast evolution. As a representative testimony of this phenomena the people of the area surrounding Civita tell about "The lost jumpers".

The jumpers are particular pathways, used by the people living the area for different purposes, on the crest of the badlands. Due to the erosional phenomena on the badlands these pathways became thinner every year. At the beginning of the sixties the jumpers were still used by the people of the area. At that time the testimonies tell about very narrow pathways almost suspended in the air. The pathways were large almost two meters and they were covered by wooden sleepers to facilitate the passage.

Already at that time the pathway wasn't completely intact, it was common to bump into slide down sleepers or holes. Anyway the jumpers were still used to go to farm and handle animals following a very shorter pathway compared with the ordinary streets. Frequently people used to follow the jumpers with animals such as mules to carry various stuffs.

Since the end of the seventies become very common to reach the so called montijone, that is a sort of tufaceus spur just before of the jumper, and verify the impossibility to continue the pathway due to the advanced dismantling of the crest. Then, became impossible to continue to use these pathways as road connections in the badlands valley.

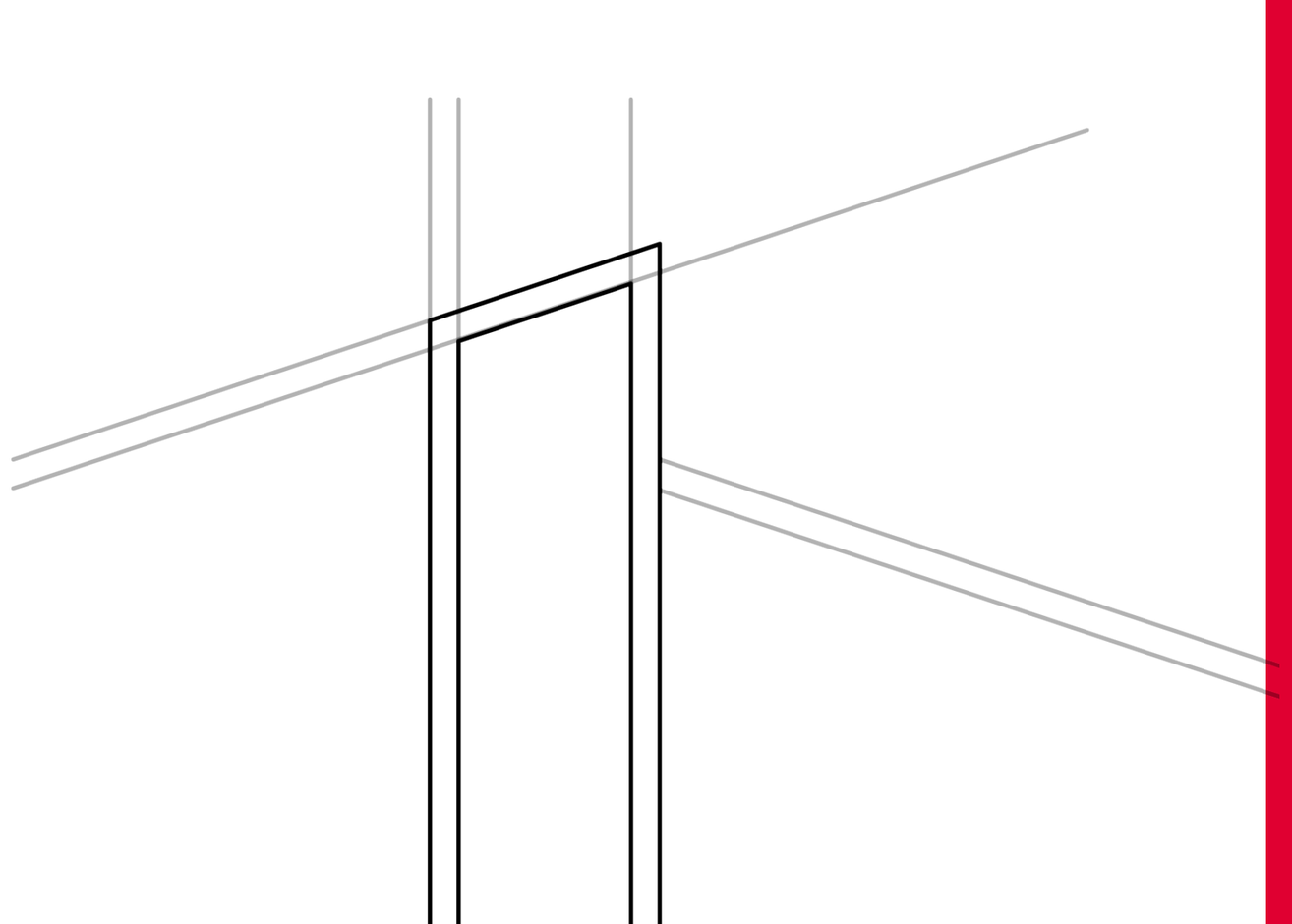






[76] The jumpers in the 50's.
[77] The jumpers in the 1969 (ph. by E. Ramacci)
[78] The jumpers nowadays (ph. by E. Ramacci)

JUSTIFICATION FOR INSCRIPTION



5

3 JUSTIFICATION FOR INSCRIPTION

3.1 Justification for inscription

3.1.a Brief synthesis

3.1.b Criteria under which inscription is proposed (and justification for inscription under these criteria)

3.1.c Statement of Integrity

3.1.d Statement of Authenticity

3.1.e Protection and management requirements

3.2 Comparative Analysis

3.2.a Methodology

3.2.b Step 1: Table comparison

3.2.c Step 2: Indepth comparison

3.3 Proposed Statement of Outstanding Universal Value

3. JUSTIFICATION FOR INSCRIPTION

3.1 JUSTIFICATION FOR INSCRIPTION

3.1.a Brief synthesis

(1) Summary of factual information.

The summary of factual information sets out the geographical and historical context and the main features. The Cultural Landscape of Civita di Bagnoregio constitute the object of this nomination to the World Heritage List. The property is nominated under the category of **Cultural Landscape** as outstanding example of combined work of nature and of man. In particular the property constitutes an "**organically evolved continuing landscape**" which retains an active social role in contemporary society and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its evolution over time.

The property is located in central Italy, in the inland of Lazio Region, an area where past geodynamic and volcanic events together with the modelling of more recent exogenous processes have produced spectacular wide table landforms, like plateaus and smaller mesas and buttes, characteristic throughout the whole area. These mesas and buttes became shortly favourite and confortable sites for human settlements and, in times, for secure and defensible historic towns. Such ancient and often precious urban centres are continuously affected by natural hazards such as landslides that threaten their survival due to the strong geomorphological activity. The resulting scenery, where human modifications contrast and overlap the natural landforms acquires the value of a Cultural Landscape.

Civita's peak is part of a valley called ***Valle dei Calanchi*** (Badlands Valley) excavated by two, small, Tiber tributaries named Rio Torbido and Rio Chiaro who flow to the basis of the rocky cliff. The property is on the top of a tuff hill rising 423 m a.s.l., connected to the center of Bagnoregio by a morphological clay ridge. Because this geological formation has been eroded by weathering, a reinforced concrete bridge was built in 1965 as necessary solution to provide a secure access to the ancient town. Originally, the clayey saddle permitted to get from the one to the other settlement from Civita to Rota, the ancient Bagnoregio, and vice versa, through the hamlet of Mercatello walking in plan. Today, that is no longer possible and Civita's transformation from peninsula to perched, isolated, island is already completed.

Administratively, Civita di Bagnoregio belongs to the province of Viterbo and to the municipality of Bagnoregio. Although its prehistoric origins, we have more evidence through archeological remains of the Etruscan or Villanovian period (7th century BC), during which the city belonged to a regional state whose capital was the present Orvieto. Later, it was conquered by Romans who made it an important commercial hub for the traffic from the Tyrrhenian to the Adriatic and from Bolsena to the Tiber since the river was navigable up to Rome. Several dominations succeeded over time, from the Goths, to the Longboards, to Charlemagne and again several feudal lords up to the Church, which held the city's control until the unity of Italy.

Town history is not only of invasions and wars, but also the geomorphological one, made of erosive and landslide phenomena. Topographical and cadastral maps, dating back to the beginning of the 18th century as well as other historical maps and documents, prove the progressive shortening of the cliff due to landslides that have caused, in different times,

the destruction of portions of the town built on the cliff edge. Many historical records on occurred landslides and stabilisation works, since 1373 AD, have been collected and analysed in order to reconstruct in detail the evolution of the urban setting and cliff, where landslides repeating continuously throughout the valley are creating an ever-changing landscape that looks different every day.

(2) Summary of qualities.

The summary of qualities should present to decision-makers and the general public the potential Outstanding Universal Value. **The Cultural Landscape of Civita di Bagnoregio is a stunning case where the human presence has tried for centuries to hinder the natural degradation of the cliff. It is a paradigm of the struggle of men aiming to survive in a hostile environment - though of incomparable beauty - and nature that wants to take its course dismantling and eroding reliefs**. The Cultural Landscape of Civita di Bagnoregio thanks to the ensemble of the traces of **historic and contemporary attempts to consolidate and stabilize the property** together with the **antifragility of the urban-architectural features**, proves the sustained relationship (from the antiquity to the present day) of the human settlement with the constantly **evolving geomorphology**. The resulting scenery, where **human modifications contrast and try to overlap the natural landforms** acquires the value of a Cultural Landscape.

Civita di Bagnoregio hilltop dominates the surrounding valley, positioning chosen since Etruscan time for military reasons (easily defensible place) and for be strategically placed into the encounter of ancient commercial roads. Such a kind of settlement influenced the life of Civita during all phases and historical periods, from spatial urban planning

to the building ways as well as current management policies aimed to preserve the exceptional urban and architectural qualities. Isolated in time and space, formidable landmark recognized as an **authentic icon**, Civita and its surrounding landscape enter in the common imagination even for intangible aspects as the stunning aesthetic beauty (and its capacity to attract artists, thinkers and visitors from all around the world) and the exceptional **resilience of the community**.

The attributes/features that define the proposed OUV are:

· Strong geomorphological activity

The geomorphology of the site is characterized by unique accelerated decay processes whose their long lasting impacts on the human settlement of Civita have compelled man to attempts mitigating these impacting phenomena in a continuous struggle for survival. The Cultural Landscape of Civita di Bagnoregio is a unique record of the evolution and alteration of the soil over more than a thousand of years. From the geomorphological point of view it is a Mesa, that is, a tabular structure. Written and graphic historic sources detailing all landslides and collapses since the 11th century AD provide invaluable and unique data for the understanding of the evolution of the landscape. The geological characteristics of the site lying on the border of the Volsini volcanic crater - where a rigid layer of volcanic tuffs covers a plastic clay substratum cut through by river erosion -, is closely linked to the rapidity and relevance of the erosion phenomena on the site and their long lasting impact on the human settlement whose fragility and instability is due to the underlying morphology and geology of the area.

· Antifragility of the urban-architectural features

The built environment of the borgo, in centuries, after suffering painful wounds in its fabric due to the impacting phenomena (landslides, earthquakes) was forced to phisically rebuild themself gaining strengthen, improve and evolve, becoming an antifragile system as a whole. The borgo can be considered as a unique architecture, a monolith blend with the rock. the urban settlement - based on the Etruscan/Roman grid - influences the patterns of the built form that shows with the immediacy of the traces still visible, a story that since the seventeenth century has been marked by seismic events, demolitions, landslides and subsequent reconstructions mostly made with re-using materials.The antifragility of the built environment of Civita is shown in the morfological and typological features where there is a high presence of supporting elements that here are declined in the multiple forms of spurs and buttresses whose realization is aprioristic and dictated by the needs of the moment. During the centuries, local builders projected and built constructions in order to make them resistant to earth oscillations, very closed the one to the others and with punctual reinforcement systems.

· Temporal continuity of hydrogeological risk mitigation actions from natural hazards

The ensemble of the traces of the historic and contemporary attempts to consolidate and stabilize the property, constitute a unique and exceptional historic document for the history of science thanks to a century-old tradition of scientific and technical studies and interventions that have contributed to the development of the landslide science in Italy and at the global scale. The extraordinary intensity and rapidity of geological decay of Badlands Valley provides an exceptional case study for the implementation of new consolidation techniques and for the scientific verification of their effectiveness. The multiple technical solutions applied in the territory offer a complete catalogue of soil consolidation solutions -from landscape interventions and trees plantation to contemporary high-tech anchors/nails and structural shafts - and constitute an exceptional historic document for the history of science thanks to a century-old tradition of scientific and technical studies and interventions that have contributed to the development of the science of soil consolidation (landslide science) in Italy and at the global scale. Particularly innovative for the evolution of consolidation science have been the first electro-osmosis consolidations carried out in Civita in the late 1950s, and the recently completed structural shafts cut into the hill rock.

· Iconic Value

The site due to its unique characteristics and genius loci - intended as the soul of this territory, or rather its deep essence made up of all those typological, environmental, morphological and historical characteristics which in their totality identify it as unicum - has caught the imagination of numerous authors, artists and filmmakers who strongly contributed to create its myth. The extraordinary quality of the medieval village perched on the hilltop perfectly integrated into the natural environment in the surrounding bears a unique iconic value. Even Dante mentioned the city in the Divine Comedy (Canto XII). Named “dying town” by the Civita-born writer Bonaventura Tecchi (Bagnorea, od. Bagnoregio, 1896 - Roma 1968), this town has long been condemned by authorities over fears that its collapse into the valley is not only probable but inevitable. Due to its unique characteristics and genius loci, Civita’s beauty has caught the imagination of numerous authors, artists and filmmakers: one for all the Japanese Hayao Miyazaki who drew inspiration from Civita for his 1986 animated movie Laputa: Castle in the Sky, which won the Oscar as best animation movie in 2003. This work is incredibly part of the recent history of Civita di Bagnoregio, and has strongly contributed to create its myth.

· Resilience of Community

Civita di Bagnoregio's legacy, resulted from a long-time resilience tradition of a community - who always lived permanently the site - that during the centuries repeatedly put in place consolidation attempts in order to preserve the borgo from the natural impacting phenomena (antifragility of the urban-architectural features; actions of soil consolidation and mitigation). Local community adapted to the changes in the natural environment in order to survive. Human presence in this territory resisted faced to the impacting phenomena, thanks to several elements that express the capacity to absorb and react: this quality is commonly known as resilience. Civita's risk situation is not only well know, but processed and assimilated, as well as consolidation attempts not always have been successful, but are repeatedly put in place in order to find new ways to preserve the site. Despite the gradual reduction of the resident's number Civita has always been inhabited and for centuries the borgo opposed to the adverse forces an exceptional willingness to resist, an exemplary attachment to its land and to its idea with continuous works of consolidation, reconstruction. The best example is probably the history of the access to the town, at first consisting in a path and later transformed in a bridge collapsed and reconstructed several times. Equally, during the '20s and the '50s authorities enact several evacuation orders for Civita in order to avoid the risk of further losses of life but a portion of the inhabitants decided not to transfer to the close Bagnoregio. Last but not least, a detailed archive of past consolidation attempts among which the innovative digging of seven wells anchoring the northern part of the cliff are collected by the recently-founded Museo delle Frane (Landslide Museum). In particular the Museum constitutes a territorial presidium focused on geology as instrument of knowledge, dissemination and territorial management.

3.1.b Criteria under which inscription is proposed (and justification for inscription under these criteria)

Criterion (3): to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.

The Cultural Landscape of Civita di Bagnoregio bears an exceptional testimony to an antifragile constructive tradition born as a response to the surronding hostile environment. Ways of building and risks mitigation actions have retained their social and cultural importance in centuries: the number and quality of consolidation attempts - realized in the past and throughout the last one hundred years - to mitigate the impact of landslides proves it.

The Cultural Landscape of Civita di Bagnoregio is unique from different points of view: geomorphological, urbanistic, architectural, but above all in the way these different aspects found expressions influencing with each another. Placed on a high tuff peak rising 423 m a.s.l. that rests on the fragile clay, Civita di Bagnoregio is an example of antifragile hilltop village where successive cultural layers produced a harmonious ensemble masonry buildings and stoned paved narrow streets, set in a fragile and unstable but resilient environment. The borgo, of Etruscan or Villanovian origins (7th century BC), had a great expansion from the Roman Age to the late Middle Age, when the quarters Ponte and Carcere (now disappeared) were added to the original urban nucleus. **Topographical and cadastral maps, dating back to the beginning of the 18th century as well as other historical maps and documents, prove the progressive shortening of the cliff** due to landslides that have caused, in different times, the distruction of portions of the town built on the cliff edge. **Many historical records on occurred landslides and stibilisation works, since 1373 AD, have been collected and analysed** in order to reconstruct in creating an ever-changing landscape that looks different every day.

Originally, the clayey saddle permitted to get from the one to the other settlement from Civita to Rota (the ancient Bagnoregio), and vice versa, through the hamlet of Mercatello walking in plan. Today, that is no longer possible and Civita's transformation from peninsula to perched, isolated, island is already completed. The borgo can be considered as a unique architecture, a monolith blend with the rock in which the urban settlement - based on the Etruscan/Roman grid - influences the patterns of the built form that shows with the immediacy of the traces still visible, a story that since the seventeenth century has been marked by seismic events, demolitions, landslides and subsequent reconstructions that mostly took place with re-using materials. The process of construction and continuous re-construction through materials and elements of reuse represented the answer to the serious difficulty of supplying the latter from the outside of the fortress, transforming the site into an inexhaustible quarry of material already worked, available for an uninterrupted self-regeneration of the built-up component.

During the centuries, local builders projected and built constructions in order to make them resistant to earth oscillations, very closed the one to the others and with punctual reinforcement systems. **The antifragility of the built environment of Civita** - which over the centuries has suffered painful wounds in its fabric - **is shown in the morfological and typological features where there is a high presence of supporting elements that here are declined in the multiple forms of spurs and buttresses whose realization is aprioristic and dictated by the needs of the moment.** Indeed, what makes the town truly exceptional is that almost all the buildings are equipped with reinforcements adapted to withstand the earthquake stresses and testifying a great knowledge of the community about the principles of statics. It could thus be said, even before being peasants, inhabitants were excellent planners and builders able, for example, to bring water to Civita through an aqueduct and to preserve it in cisterns dug into the rock.



[79] Civita di Bagnoregio and the surrounding landscape (©Casa Civita)

The persistence of forms, typologies, apparatuses, accompanied by the still lasting re-use of materials and the permanence of working systems and construction techniques make up the unity of the urban context.

The extraordinary intensity and rapidity of geological decay of Badlands Valley provides an exceptional case study for the implementation of new consolidation techniques and for the scientific verification of their effectivenes. The multiple technical solutions applied in the territory offer a complete catalogue of soil consolidation solutions -from landscape interventions and trees plantation to contemporary high-tech anchors/ nails and structural shafts - and constitute an exceptional historic document for the history of science thanks to a century-old tradition of scientific and technical studies and interventions that have contributed to the development of the science of soil consolidation (landslide science) in Italy and at the global scale. Particularly innovative for the evolution of consolidation science have been the first electro-osmosis consolidations carried out in Civita in the late 1950s, and the recently completed structural shafts cut into the hill rock.

Criterion (v): to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change. **The Cultural Landscape of Civita di Bagnoregio is an outstanding example of human interaction with a hostile environment constantly threated from natural forces. The human ingenuity challenges here a territory with a unique geomorphology (Mesa), characterized by the rapidity and numerousness of the erosion phenomena that for centuries have connoted and shaped the site not only**

determining the overall perception of a such iconic valued landscape - that strongly contributed to create the site's myth -, but that also involving the social, cultural, urban and architectural aspects. The several features that express the capacity of the site and its own inhabitants to absorb and react to the natural hazards, prove an exceptional resilience of the community - typical for the living cultural landscapes -, that attempts to mitigate these irreversible phenomena, in the past and even today. The Cultural Landscape of Civita di Bagnoregio, in its own characteristic panorama and silhouette, was formed by the natural actions and human activity and continues to be shaped by them. The **exceptional geomorphology** (Mesa) characterized by a **high land instability** due to the clay-tuff combination, constitutes the environmental background of this cultural landscape, contribuiting at the same time to make the site a universally known **icon**. Local community adapted to the changes in the natural environment in order to survive here.

The geological features make the badlands landscape unique, here with a **speed and frequency of impacting phenomena** much more prominent than in any other similar evolving landscape. On one side two waterways erode the sides of the cliff, on the other the rainfall thin the crests of the gullies causing the phenomenon of runoff. In this context, large-scale landslides often caused by exceptional precipitation or ground movements, affect the cliff bringing with them parts of the inhabited area (e.g.: the Contrada Carcere, an entire neighborhood of Civita that the sources describe as collapsed during the 1695 earthquake). In other parts of the valley the erosion has already come to chip away the mayor part of tufa, so that can be observed only isolated crests few meters long like the residual called Motijone or the clayey pinnacles called Ponticelli. They show how could appear Civita in few centuries without man's attempts to mitigate

these phenomena. This is what is happening in Civita's surrounding valley, where the clay ridges become thinner from year to year: the best example is the clayey saddle that once connected Bagnoregio (at time Rota) to Civita but that in the last three centuries lowered of forty meters making necessary the bridge construction.

Considering Civita's risk exposure, no other example in Italy and above demonstrates such a determination of the inhabitants and of the scientific world in continuing to keep alive a settlement affected by similar hazards. The impervious position of the hilltop settlement of the borgo did not obstacle the development of the settlement originated during Etruscan time but continuing to be highly relevant until the 1695, date that marks the beginning of the rapid decline of Civita: on 11 June at 3:30 local time, an earthquake shock assessed by the IX - X degree of the Mercalli-Cancani-Sieberg scale, caused the collapse of numerous buildings, the death of 37 people and the injury of 61. The telluric event causes the opening of many cracks in the ground, the collapse of the bridge that united the two inhabited areas and the collapse of a part of the cliff. Environmental degradation causes the transfer of the main public institutions to Rota in 1699 and furthermore, the persistence of earthquakes, accelerates that isolation started for Civita with the first earthquake. On 20 May 1759 the road that connects Rota to Civita collapses, a road that from now on will be continuously interrupted by landslides, creating serious problems for the economic and social life of the town. Five years later, the bridge of the access road to Civita collapses and the convent of S. Francesco remains damaged. The decline is now unstoppable. The city struggles to survive. Following the succession of landslides, in 1819 the Sacred Congregation of the Good Government of Rome ordered the abandonment of Civita and the transfer of the population to the stable areas of Bagnoregio. This injunction will be limited to the evacuation of the houses facing the cliff near the church of San Bonaventura, due to the reluctance of the citizens to leave their village.

The first systematic remediation of the cliff and saddle dates back to the 19th century: a first bridge was built in 1850 and at the same time the bridle of the valley floor was built in order to regulate the flow of water. In 1922, when Civita still has 650 inhabitants, the government again decides to evacuate them to transfer the population to a new purpose-built township. But, while the plans are still being discussed, the war comes to block any initiative. During the whole 1900s the landslides mainly affected the Bagnoregio-Civita road. To the natural disasters, in 1944, were added the effects linked to the war events, when the retreating German troops blew up the masonry bridge; in 1963 even the wooden footbridge built to replace the bridge collapsed. The current reinforced concrete bridge, built by the Ministry of Public Works, was inaugurated on September 12, 1965; it is a disfiguring but necessary work to ensure a minimum connection between the ancient village and Bagnoregio.

Overall, 134 landslides have been documented in detail since the 15th century in manuscripts, chronicles, documents and various publications. The evolution of the area is particularly evident along the access saddle to Civita which, from 1764 to today, has suffered a drop of about 40 meters. For centuries, the valley has been cultivated in terraces and the earth's surface protected by the runoff. When the inland started to face the agricultural land abandonment, the Badlands Valley erosion speed up and with it the landscape changed quickly. It is hardly distinguishable how much human factors have affected, positively or not, on the landscape evolution and vice-versa, what is certain is that in the last 100-years landslides and rock falls incremented (Delmonaco et al., 2009; Margottini, 1990). Despite the gradual reduction of the resident's number Civita has always been inhabited as recalled by the main town's historians "For centuries the city opposed to adverse forces an exceptional willingness to resist, an exemplary attachment to

its land and to its idea" (Petrangeli, Papini, 1970) with continuous works of consolidation and reconstruction.

The rapid deterioration of the cliff documented by the rising number of geological phenomena as earthquakes, landslides and rock falls is at the bases of the town evacuation orders emanated during time. As reported by the World Monuments Found in 2006, Civita fell within the world's most endangered sites because of the land instability and its continuous need of consolidation interventions.

Civita's risk situation is not only well know, but processed and assimilated, as well as consolidation attempts not always have been successful, but are repeatedly put in place in order to find new ways to preserve the village. In no other case isolation is an element of such importance for a town: the original necessity to isolate the settlement for defensive-sanitary reasons changed over the years, until totally disappearing. Despite this and the hazards affecting the site, inhabitants keep on living the town (in spite of the several evacuation orders imposing the forced displacement to the actual Bagnoregio) strengthening the iconic value of Civita more and more present in the collective imagination. This is testified by the international fame, by the number of published studies and also by the increasing tourist interest.

Civita di Bagnoregio has undoubtedly acquired great importance in the collective imagination thanks to the mentioned attributes, perfectly portrayed by the site that stands as a landmark: the rocky spur impossible to access except with the long overhanging bridge. This image immediately recalls the condition of a fragile, precarious city, status that has even fascinated the cult-director Miyazaki and that made Civita a universal phenomenon for its being suspended in space and time.

3.1.c Statement of Integrity

The proposed property includes all the essential elements for a complete representation of its Outstanding Universal Value. As a cultural landscape, the site includes all the anthropic-cultural (settlement, urban, architectural features), natural (badlands, evidence of the continuing impacting phenomena) and perceptive (the relationship between the village and the badland valley) attributes necessary to represent the its characterizing and essential values.

The site's area have adequate delimitation in order to ensure the representation and preservation of the features and processes which convey the property's significance: the boundaries of the nominated site are based on a visual basin capable of restoring the site's great iconic value. Within this area all the distinctive attributes of the site are present. An adequate buffer zone based on a defined landscape constraint; it has been identified in order to guarantee the visual integrity of the nominated property. In this way the perceptive component which links the visual scenery to site's iconic value is ensured.

The entire area of the nominated site reflects the unique spiritual bond between humans and nature, bears valuable qualities retains historical functions and specific sustainable land use methods (hydrogeological risk mitigation actions) related to the peculiarities of the natural environment that express the human capacity to adsorb and react to the impacting phenomena. The **functional integrity** coincides, for the urbanized area, in the still inhabited borgo: there, residents belonging to few local families (Medori, Rocchi) live all year long. Residents are intimately connected to the town by their personal ancestors that were living cultivating the surroundings. Despite Civita's families have often changed the main activity in restoration or accommodation forms because of tourism increasing importance, only very little residential building have changed their function to commercial one.

The majority of the houses belongs to the descendants of original civitonici or has been sold to private buyers who were integrated gradually to the village as in the case of the Civita Institute founders. The many Civita's workers spend the day inside the borgo but live permanently in Bagnoregio maintaining the historic continuity relationship between the two settlements. Is particularly significant to note that public spaces, those areas which are accessible without having to gates, doors, or climbing walls as streets or piazzas, are unchanged in their use. The same can be said for the two principal public buildings San Donato Church and Palazzo Alemanni witch are continuing to host events organized by local community. With regard to the cultivation places, the olive trees and horticulture are the first and most obvious testimony to the past, with considerable extension, which continues even outside the limits of the selected areas. In the south-western part of the hillside ancient cultivated terraces are still visible and partially in use, while the isolated farms scattered in the Badlands Valley constitute the actual, remaining, production points.

The **structural integrity** is given by the permanence of the essential elements structuring both the urban and the agricultural landscape, by the preservation of the functional and morphological characteristics of the infrastructures alternated to forest areas. About the Civita's architectural integrity, the good state of conservation is one of the peculiarities of the borgo. During past decades a number of building remained inhabited without affecting the structural entirely of the individual lots. Today, an extensive work of restauration was carried out by the owners, encouraged by social rebirth of the borgo and by the properties increasing value, so that the medieval-renaissance town aspect is perfectly intact. As demonstrate by the Airbnb pilot project (https://press.airbnb.com/it/il-sindaco-di-civita-di-bagnoregio-diventa-un-host-su-airbnb-per-finanziare-il-recupero-del-borgo/ - see chapter 5) the town become a laboratory to test design renovation projects, both respecting exterior tuff homogeneity and offering new, varied, internal solution. The only exception is Casa Greco, placed in the northern part of Civita, where several ruins can be observed subsequent to '80s and '90's rock falls. The cliff breakdown have nevertheless stopped after the consolidation attempts completed with the excavation of seven wells that are anchoring the fractured parts.

The hillsides and the cliff are undoubtedly the most fragile elements of the entire nominated property as explained in detail in chapter 2.a.1.2 (geomorphology). Infact, **the property has been continuously affected by erosional phenomena and landslides that over time threatened the site's stability conditions. Despite this, all possible measures are implemented to prevent further landslides, together with an extensive monitoring system** (see paragraph 4.b)

The agricultural landscape is well-maintained through olive culture that has characterized this territory since ancient times. The result of the experience gained over the centuries is the guarantee of the integrity of the agricultural landscape. This landscape, while evolving over the different phases of its history, has been preserved as a combination of two factors, both competitors in determining the image that has always characterized it. The first, of a strictly environmental nature, is connected to the hilly morphology of the places, the soil composition of the land and the shape and exposure of the slopes: the combination of these particular natural conditions yields a substrate with excellent characteristic qualities, which has allowed man since ancient times to identify in this environment a particularly favorable area for growing olive trees and producing oil. The second factor of integrity, this time of an anthropogenic nature, is linked to the centuries-old vocation that has rooted itself in this area thanks to the different contributions.



[80] View of Civita di Bagnoregio historical center (©Casa Civita)

With regard to the infrastructural system, integrity is demonstrated by the permanence of roads surrounding the nominated property and following natural factors as waterways or mountain ridges. In fact, the infrastructural grid to arrive to Civita, stratified in different historical periods, has always respected the previous paths which in turn were dictated by the shape of the territory. The best example is the access to the hill town, today represented by the concrete bridge, but since the beginning positioned according to the settlement's longitudinal axis oriented north east- south west.

Tourism has grown in recent years, but flow containment measures are present in order not to threaten the stability of the access bridge and the integrity of the village of Civita as a whole. The property appears remarkably integral also from the point of view of the **visual relationships** and for its undeniable aesthetic qualities, as demonstrated by the diversity of scenic views of the Badlands Valley. Its sharpness shows the evidence of geomorphological processes taking place for millennia: the skyline, characterized by whitish ridges made of marine clay is constantly evolving, being instable. Exactly this landscape mutability is one of the exceptional aspects to consider and to maintain in order to appreciate not only the unicity, but also the integrity of the property.

The landscape has an extraordinary integrity that makes this place an open-air museum of the history of the Earth: in its forms, in its colors, the geological and geomorphological phenomena that have followed one another are still legible. The most evident erosional forms are the badlands, here particularly legible. The areas selected to be part of the nominated landscape represent portions of the territory without any visual detractor elements such as, for example, incongruent building materials or production facilities that do not respect the traditional characteristics of the landscape.

3.1.d Statement of Authenticity

The Cultural Landscape of Civita di Bagnoregio showcases high landscape values and cultural as well. The authenticity of the site is reflected by the tangible values of the different historical periods that shaped its identity. A plenty of documentary, bibliographic, and iconographic sources furnish a rich and differentiated documentation of the importance of Civita as best example of cultural landscape with unique geomorphology resulted from the interaction between man -who adapted to changes in natural environment in order to survive - and the hostile nature. Among the countless sources, the archives of the Bagnoregio municipality and those, private, of the Civita Institute are of particular interest for the documentation of the development of the local settlement as they conserve the memory of the natural and anthropic evolution. The attributes that define the Cultural Landscape of Civita di Bagnoregio have retained their historical and cultural authenticity, and testify the existence, over the centuries, of temporal continuity of hydrogeological risk mitigation actions from natural hazards, proof of the resilience of the community.

The following types of attributes might be considered as conveying or expressing Outstanding Universal Value:

· Location and setting.
The village of Civita di Bagnoregio represents a hilltop town (a center-Italian largely diffused typology which finds in the area of the Tiber Valley its great expression due to geographical and geomorphological conditions) dominating the surrounding valley, positioning chosen since Etruscan time for military reasons (easily defensible place) and for be strategically placed into the encounter of ancient commercial roads. Such a kind of settlement influenced the life of Civita during all phases and historical periods, from spatial urban planning to the building ways as well as current management policies aimed to preserve the exceptional urban and architectural qualities. If Etruscan origins are not clearly recognizable in the urban form, the roman structure made of Decumanus and Cardo Maximum is the main testimony of town's pattern authenticity. The first one in direction north east – south west coincides with the current Via della Madonna della Maestà, the second one, perpendicular, throughs the central Piazza San Donato. Around these two axes the settlement developed during time divided in blocks consist of the same unit (the Schiera, the single-house unit) repeated several time and following the two orientations. No major changes have occurred for human modifications since medieval time as proven by absolute uniformity in the dimension of the built lots. On the contrary, dramatic, seismic-related events have reduced the hilltop surface but without altering its overall structure preserved by urban key-elements as Porta Santa Maria, Piazza San Donato e Piazza Vescovado or by the pathway descending towards the valley from the Giardino del Poeta. The authenticity of the hill town is also proven by other perched villages of the Centre-Italian inland showing similar characteristics, even if hardly with the same clearness, and demonstrating that the model applied for Civita has been applied successfully for centuries.

· Form and design.
Constructive technologies influence the patterns of built form in Civita. The borgo of Civita di Bagnoregio can be considered as a unique architecture, a monolith blend with the rock. The built environment reveals the existence of three arrangements of units: the row house scheme, the cluster scheme and the Palazzo, which bear the marks of variation and individuality. The row house pattern/type is both the simplest and most prevalent aggregation of units. The cluster scheme results when access is available from a side street or rear elevation. The Palazzo pattern, in Civita, is a simple modification of

the cluster type (2.a.2.2 Urban-architectural features). Noteworthy is the large presence of Proferli, external stairs of medieval origin that property's owners decided to maintain over time for their utility and aesthetic elegance. An extensive system of hypogeal spaces is well conserved in Civita: water Cisterns of Etruscan origins, medieval and Renaissance caves to conserve foodstuff, more recent cantinas which serve as warehouses; all these spaces are integral part of the town built heritage and of its inhabitants. Private open spaces are relevant in Civita as well as built heritage for their number and their historical function. In a town where the exit from the urban perimeter have always been difficult, and dangerous in case of attacks, inhabitants used the limited space between houses to provide food. Almost all residential units had a private space used as productive soil passed on from generation to generation. Even if today gardens are mostly for pleasure, we can observe that size, layout and vegetation are essentially the same than in the past. Most importantly, garden's preserving activities belongs to the town cultural tradition so that it is frequent to observe people of Civita devote to its gardens, using time for irrigation, fertilization, pruning and vegetables collection.

· Materials and substance.

All buildings in Civita share a body of construction technology, consisting of load-bearing masonry walls (local tuff, Peperino and Basaltina stones), chestnut beams, masonry vaulting and tile floors and roofs.

· Use and function.

Besides a consolidated cultural tradition largely depending on the city's isolation, is the land-use that demonstrates, in Civita di Bagnoregio, a persistent human interaction with environment, typical for continuing landscape. To prove this relationship, it is sufficient to consider how the original necessity to isolate the settlement for defensive-sanitary reasons changed over the years, until totally disappearing. Despite this, inhabitants keep on living the town in opposition to several evacuation orders imposing the forced displacement to the actual Bagnoregio. The entire site is sparsely inhabited with farms and small agricultural possessions. Obviously, the relationship between farmland and wooded areas has varied over time, depending on the socio-economic circumstances: today, few properties are dedicated to the agricultural production, due to the erosion of the badlands' surface and to the general inland abandonment dynamics. Generally speaking the agricultural landscape is well-maintained through olive culture that has characterized this territory since ancient times.

The territory comprised in the buffer area consists mainly of agricultural areas (42.674 ha) and the remaining parts is occupied by forest and semi natural areas (2.394 ha), only a small part is artificial surfaces (534 ha). Agricultural areas consist of arable land, heterogeneous agricultural areas and in a minimal part permanent crops (olive groves). Forests and semi natural areas mainly consist of forests (1.212 ha), scrub and/or herbaceous vegetation associations (534 ha) and open spaces with little or no vegetation (171 ha). Artificial surfaces may be identified as urban fabric (80 ha) and mine, dump and construction sites (36 ha).

· Traditions, techniques and management systems.

The built form shows with the immediacy of the traces still visible, a story that since the seventeenth century has been marked by seismic events, demolitions, landslides and subsequent reconstructions mostly made with re-using materials. The antifragility of the built environment of Civita is shown in the morfological and typological features where there is a high presence of supporting elements that here are declined in the multiple

forms of spurs and buttresses whose realization is aprioristic and dictated by the needs of the moment. During the centuries, local builders projected and built constructions in order to make them resistant to earth oscillations, very closed the one to the others and with punctual reinforcement systems.

Civita's risk situation is not only well known, but processed and assimilated, as well as consolidation attempts not always have been successful, but are repeatedly put in place in order to find new ways to preserve the village. In no other case isolation is an element of such importance for a town: the original necessity to isolate the settlement for defensive-sanitary reasons changed over the years, until totally disappearing. Despite this and the hazards affecting the site, inhabitants keep on living the town (in spite of the several evacuation orders imposing the forced displacement to the actual Bagnoregio) strengthening the iconic value of Civita more and more present in the collective imagination. The multiple technical solutions applied in the territory offer a complete catalogue of soil consolidation solutions -from landscape interventions and trees plantation to contemporary high-tech anchors/nails and structural shafts - and constitute an exceptional historic document for the history of science thanks to a century-old tradition of scientific and technical studies and interventions that have contributed to the development of the science of soil consolidation (landslide science) in Italy and at the global scale.

[A DYING TERRITORY NO MORE]

The Cultural Landscape of Civita di Bagnoregio, from 'dying territory' to driver for the development of new knowledge, ideas and projects related to historical, cultural and environmental heritage.

[AT THE CENTER OF THE TRANSFORMATIONS OF THE TERRITORY]

The Cultural Landscape of Civita di Bagnoregio, from a symbol of isolation to a hub for the regional and interregional territorial network for the creation of an integrated and coherent offer system in which all actors are able to identify themselves and which is able to maintain a high level of tourist experience and quality of life for the local community. This is particularly useful to implement strategies that aim at dispersal of visitors and visitor segmentation by the mean of developing new itineraries and attractions.

[NOT JUST A POINT OF ARRIVAL]

The Cultural Landscape of Civita di Bagnoregio as natural laboratory: The nomination recognises that Civita has Outstanding Universal Value for the world as a prime example of the combined works of nature and man. World Heritage Site status would be a befitting celebration of this combination, but with a clear focus on ensuring that Civita will be managed in a way that enables its ongoing evolution whilst protecting and enhancing those attributes.

[MAINTAINING A STRONG SENSE OF COMMUNITY]

The Cultural Landscape of Civita di Bagnoregio as a community centre for cultural and creative activities aimed at the resident community, to whom it is necessary to convey the awareness that the hidden value of cultural heritage is capable of triggering virtuous circles that can have a positive impact on everyone's quality of life. Improving the integration of local communities in the tourism value chain and promoting their engagement in the sector, and ensuring that tourism translates into wealth creation, will guarantee the long-term sustainability of urban tourism and cooperation of local stakeholders.

3.1.e Protection and management requirements

The nominated property is protected by different regulatory restrictions at national and regional level. The *Cultural Landscape of Civita di Bagnoregio* is subjected to the **Codice dei Beni culturali e del Paesaggio** (Legislative Decree no. 42 of 22/01/2004 «Code of Cultural Heritage and Landscape») a National law that defines the rules for conservation, the fruition and enhancement of cultural heritage (consisting of cultural property and landscape assets). The nominated property is totally subject to a landscape constraint that requires any intervention on this area must be authorised by the Region and by the Superintendency.

The property is also subjected to the **National hydrogeological constraint** (R.D.L. n.3267/1923), aimed at ensuring that the transformations carried out on the area do not produce instability, or destroy the balances reached and consolidated, following modification of the slopes related to the use and ineffective regulation of rainwater or groundwater. The presence of the constraint implies the need for specific authorization for all works that require earth movements, changes in the water regime or changes in the use of the land with changes in the vegetation cover.

Boundaries comprise also a Special Areas of Conservation (SAC) aim to the preservation of natural and semi-natural habitats which are commonly interesting for their rarity and their primordial and ecological role. The establishment of the **SPA-SCI site "Calanchi di Civita di Bagnoregio"** (Site Code: IT6010009) added naturalistic and faunistic restrictions. The management plan of the SPA-SCI site "Calanchi di Civita di Bagnoregio" provides a tool necessary to preserve and enhance the environmental component of the proposed site.

At local level, the municipal Fabrication Program Programma di Fabbricazione-Comune di Bagnoregio recognizes and identifies naturalistic, landscape and cultural values by providing a good level of in-depth analysis of the knowledge relating to the existing building heritage. The nominated property has been drawn following the boundaries of the **A zone – Historic Center** (Zona A – Centro Storico) providing provisions relating to the eligible physical transformations and compatible uses, aimed at the highest level of protection and valorisation of the city.

A large part of the built heritage of the Municipality is also subject to the monumental restrictions (**Vincolo Monumentale**), an additional tool of protection based on the monumental, historical or artistic aspects of the building subject to protection. This form of additional protection falls within the powers of the Superintendence for Landscape and Architectural Heritage and implies the need to issue the further relative authorization for each work that concerns the building itself.

The Municipality of Bagnoregio has also adopted a text to find new forms of financing for the monumental complex of Civita, it contains, for example, indication on the way to access, to visit and to organize events on the hilltop. Among the others, the mayor issued an order without temporal restrictions named ***Regolamento misure per la tutela del patrimonio culturale del sito di Civita di Bagnoregio*** (2018) to suspend and therefore prohibit the opening of new commercial activities in Civita, encouraging them in Bagnoregio and in particular in the historic center. The intention is to strengthen the relation between the two centers besides to distribute tourists' flows on a wider area capable to receive them. Another main objective is to preserve urban and historical peculiarities for which the city it is known without transforming it in a museum piece.

The Management Plan has been prepared in order to guarantee that the Outstanding Universal Values and the attributes of the Cultural Landscape of Civita di Bagnoregio are properly managed, conserved and transimitted to future generations. Therefore, the overall objectives of the Management Plan arise firstly from the assessment of the state of conservation carried out in Chapter 4 and the subsequent priorities; secondly, from the participation process involving residents and local operators, in order to define measures to mitigate and reverse the long processes of demographic contraction and of quantitative and qualitative reduction of services, with a special attention to sustainability.

Conservation, Fruition, Capacity Building and Participation of the Communities are the pillars of the three-year Management Plan for the Cultural Landscape of Civita di Bagnoregio together with the **global objectives of sustainable development of the 2030 Agenda.** The first step of the Management System was set up through a Memorandum of Understanding signed between the **MiBACT** *(Ministry for Cultural Heritage and Activities and for Tourism)*, the Lazio Region, the Province of Viterbo, the Municipality of Bagnoregio, the Casa Civita srl company. According to the Memorandum of Understanding, the signatories identify the Municipality of Bagnoregio as the Managing Body and agree to unanimously take care of the drafting, implementation, updating and monitoring of the Management Plan. The Memorandum of Understanding was the starting point for the definition of the governance framework of the nominated property.

Therefore, the Management System, is structured around only three main operating bodies, with a view to the sustainability and efficiency of the System:
· the **Steering Committee**, with the function of dictating the strategic and programmatic lines for the development of the site: it will be composed by Lazio Region, **MiBACT** *(Ministry for Cultural Heritage and Activities and for Tourism)*, Unione dei Comuni della Teverina (Municipality of Bagnoregio, Municipality of Castiglione in Teverina, Municipality of Civitella D'Agliano, Municipality of Graffignano, Municipality of Lubriano, Municipality of Celleno);
· the **Tecnical Advisory Board** a consultative and participatory level of encouragement and guidance in relation to both management performance and future development: it will be composed by experts from Territorial Offices of the **MiBACT** *(Ministry for Cultural Heritage and Activities and for Tourism)*, Universities, the Civita Institute, the Geological Museum of the Landslide;
· the **Management Plan Coordinator** an operational level that is responsible for managing the implementation of the actions defined according to received guidelines: Casa Civita S.r.l the joint-stock in house company 100% owned by the Municipality of Bagnoregio and established in 2019 to guarantee managing skills and administrative versatility to the city's municipal cultural and tourist services.

The three subjects correspond to distinct levels of governance - institutional, participatory, operational - from which separate tasks and activities descend as outlined below. The correct functioning of governance is made possible by two mechanisms of interrelation between the bodies:

- plenary meetings, in which the three bodies take part, every six months;
- one to one meetings between the Steering Committee and the Management Plan Coordinator team, on a quarterly basis.

Finally, stakeholder participation in the decision-making and implementation processes of the Management Plan is guaranteed through the project which, in the broader framework of the Action Plan dedicated to Community Engagement, is focused on the objective of promoting a participatory governance of the Cultural Landscape of Civita di Bagnoregio.

3.2 COMPARATIVE ANALYSIS

3.2.a Methodology

The nominated site represents an exceptional and highly representative example of a broader phenomenon, of global reach, therefore widespread nationally and internationally. These are landscapes made from small "resilient" villages, built in "difficult" landscape contexts, such as badlands, cliffs or rocky spurs. The Cultural Landscape of Civita di Bagnoregio therefore lends itself to testifying in a most exemplary way a series of attributes present in Italy and in other world contexts, as its iconic value, its image, is decidedly stronger, recognized and represented internationally, and this is closely linked to the speed of the decay processes that have always forced the local community to find forms of adaptation and contrast to the natural phenomena themselves.

The comparative analysis consists of comparing the Cultural Landscape of Civita di Bagnoregio through its distinctive features with other sites - both at national and at international level - in order to demonstrate its extraordinary representativeness of special vaues and at the same time highlight the reasons that make the nominated property stand out. The analysis was carried out on three different types of properties:

· properties already inscribed on the World Heritage List, where the category of values for which the Cultural Landscape of Civita di Bagnoregio is proposed is not represented in the List;

· properties present on the Tentative Lists of States Parties;

· other sites considered to possess similar values.

Following the Operational Guidelines for the implementation the World Heritage Convention, a preliminary research has identified which sites could have a combination of attributes similar to the Cultural Landscape of Civita di Bagnoregio. **The research of terms of comparison is based on the actual attributes (and the related criteria) defined into the Justification for Inscription.**

The properties singled out for this comparison were selected on the basis of thematic, cronological and typological parameters. In Particular, the selection of sites to compare with the Cultural Landscape of Civita di Bagnoregio concerned:

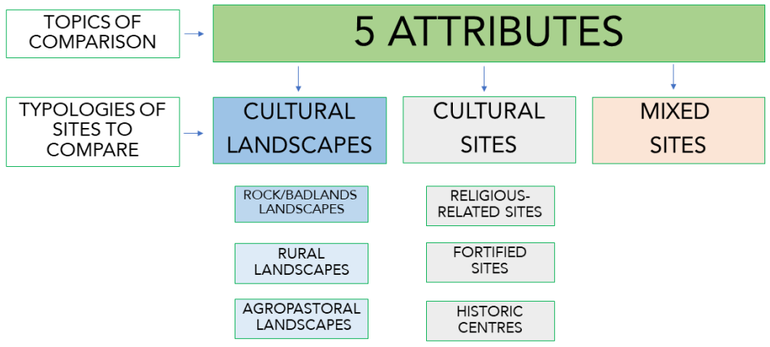
· Living cultural landscapes, thus excluding the no longer inhabited landscapes (ie relict landscapes) because continouing landscape still powerfully alive is one of the founding characteristics of the nomination, at the base of the attribute of resilience;

- the types investigated were in particular: rock / badlands landscapes (the typology in which the nominated site falls), agro-pastoral landscapes and rural landscapes.

· Cultural sites that were typologically and / or aesthetically similar to the nominated site were also considered, specifically: historic centres, religious-related sites, fortified sites.

· Mixed sites were considered as some had similarities with the nominated site.

· As regards the sites not inscribed in the WHL or in the TL, a number of landscapes or sites have been selected, considered significant from a typological and geographical point of view, useful to highlight how the phenomenon represented in an extraordinary



[81] Conceptual framework of the comparative analysis

exemplary way by the Cultural Landscape of Civita di Bagnoregio is widespread all over the world. The analisys starts in central and southern Italy were some sites present strong similarities with the proposed site, then moves to other international landscape contexts. The comparison has been structured in two levels: the first level considers a fairly broad overview of sites, selected on the basis of the parameters listed above; the second level is a more indepth comparison with of the most similar sites enriched with a narrative justification.

The first level is summarized in a table, divided into **two blocks**.
The first block reports basic information useful in order identify possible analogies between properties:
· **Name of property and State Party;**
· **Year of inscription on WHL or submission on TL** (not filled for sites not included in WHL or TL);
· **Criteria of inscription or nomination** (not filled for sites not included in WHL or TL);
· **Property surface;**
· **Category:** cultural landscape, cultural site or mixed site (not filled for sites not included in WHL or TL);
· **Typology:** for cultural landscapes: rock / badland landscape, agropastoral landscape or rural landscape, for cultural sites: historic centre, religious-related sites, fortified sites.

The second block takes into consideration the specific attributes of the Cultural Landscape of Civita di Bagnoregio. These attributes are directly linked to inscription criteria (iii) and (v) and represent the features at the basis of the OUV demonstration, i.e.:
· Strong **geomorphological activity:** information related to the presence of badland formations and the presence of accelerated decay processes or impacting phenomena (seismic, hydrogeological, erosive phenomena, etc.) were considered;
· **Antifragility** of the urban-architectural features: information related to continuous fabric reconstruction / reinforcement systems was considered, such as adaptation to the topography of the place, construction techniques and materials, consolidation techniques, etc.
· **Resilience of Community:** continuous struggle of local community adapted to the changes in the natural environment in order to survive. To clarify this attribute, two aspects were investigated: the continuity of human precence and historical evidence on the perseverance of the population in living in that place.
Temporal continuity of hydrogeological risk mitigation actions from natural hazards: information relating to the presence of exemplary and ongoing interventions relating to the prevention and containment of natural risk phenomena was considered;
· **Iconic Value:** the aesthetic-perceptive value of the landscape was considered, in particular linked to the image that the site has in the collective imagination at an international level.
Attributes are compared using the following evaluation system:

	Attribute present and strongly representative of the site's value
	Attribute partially present and/or representative of the site's value
	Attribute not present

The **second step** of the comparative analysis concerns a more in-depth comparation with the properties that follows the table-based evaluation, and that proved to be most similar to the nominated property. A textual analysis, which aims to clarify the similarities and/or differences in greater detail, has been drafted.

3.2.b Step 1: Table comparison

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
World Heritage Properties										
Cultural Landscape of Civita di Bagnoregio (Italy)	(iii)(v)	-	992,64	Cultural landscape	Rock / Badland Landscape	Presence of badlands; High seismicity, strong erosive phenomena; High hydrogeological risk	Perfect adaptation of the building to the morphology and topography of the place; Continuous and perfected interventions to contrast the oscillations of the ground	Always inhabited from the Etruscan period to today; Historical testimonies about the perseverance of the inhabitants not to abandon the site	Continuous interventions and experiments on the cliff and on the badlands to contrast erosive phenomena	Evoked in the collective imagination as a resilient landscape, suspended in time and space, object of great attention by artists, directors at an international level

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
World Heritage Properties										
Mount Wutai (China)	(ii)(iii)(iv)(vi)	2009	18,415	Cultural landscape	Rock / Badland Landscape	No relevant information about this feature	No relevant information about this feature	Inhabited since 1 century BC, perseverance of monks in rebuilding temples several times	Restoration work on individual temples, soil consolidation not needed	Sacred mountain for Buddhists, it has influenced other sacred mountains in the world
Al-Ahsa Oasis, an Evolving Cultural Landscape (Saudi Arabia)	(iii)(iv)(v)	2018	8,544	Cultural landscape	Rock / Badland Landscape	Affected by desertification	No relevant information about this feature	Area inhabited since Neolithic times, elaborated irrigation system according to the desert climate	No relevant information about this feature	The largest oasis in the world
Richtersveld Cultural and Botanical Landscape (South Africa)	(iv) (v)	2007	160,000	Cultural landscape	Rock / Badland Landscape	Presence of badlands Low seismicity	No relevant information about this feature	Populated for over two millennia for the transhumance	No relevant information about this feature	Cultural landscape linked to the culture of the Nama population

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
World Heritage Properties										
Costiera Amalfitana (Italy)	(ii)(iv)(v)	1997	11,231	Cultural landscape	Rural Landscape	High hydrological risk	Exemplary adaptation of the settlements built on the rock, houses huddled	Intensely inhabite since the Middle Ages	Construction and maintenance of stone terraces. Isolated consolidation works on the slopes	Internationally recognized aesthetic value: perched villages overhanging the sea
Portovenere, Cinque Terre, and the Islands (Italy)	(ii)(iv)(v)	1997	4,689.25	Cultural landscape	Rural Landscape	High hydrological risk	Exemplary adaptation of the settlements built on the rock, houses huddled	Inhabited since the Middle Ages	Construction and maintenance of stone terraces. Isolated consolidation works on the slopes	Internationally recognized aesthetic value: perched villages overhanging the sea
Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato (Italy)	(iii)(v)	2014	160,000	Cultural landscape	Rural Landscape	Presence of badlands in buffer zones Landslide risk, erosion of the hillsides	Perched villages adapted to the hilly morphology	Inhabited since the Roman period	Hills arranged a “girapoggio”, terraces in buffer zones	Recognized as an archetype of the European wine landscape

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
World Heritage Properties										
Val d'Orcia (Italy)	(iv)(vi)	2004	61,187.9609	Cultural landscape	Rural Landscape	Presence of badlands Moderate seismic risk and hydrogeological instability	Adaptation of the settlements to the hilly morphology: perched, compact, fortified villages	Mostly medieval and Renaissance villages	Monitoring and arrangement of the hilly slopes, interventions on the badlands for agricultural purposes	International icon of the Tuscan and Renaissance landscape
The Causses and the Cévennes, agro-pastoral Cultural Landscape (France)	(iii)(v)	2011	302,319	Cultural landscape	Agro-pastoral Landscape	Presence of badlands (Cirque de Navacelles)	No relevant information about this feature	Inhabited for three millennia, conditions of isolation	No relevant information about this feature	Agro-pastoral landscape emblem
Cultural Landscape of Sintra (Portugal)	(ii)(iv)(v)	1995	3,641	Cultural landscape	Rural Landscape	Medium seismicity, limited hydrogeological risk	No relevant information about this feature	Arab settlement, discontinuity of human presence	No relevant information about this feature	Icon of European Romantic architecture

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
World Heritage Properties										
Cultural Landscape of the Serra de Tramuntana (Spain)	(ii)(iv)(v)	2011	30,745	Cultural landscape	Rural Landscape	Wind and sea erosion	No relevant information about this feature	Island inhabited since prehistoric times, subject to recurrent attacks	Elaborate system of terraces and irrigation channels to prevent instability phenomena	Mediterranean landscape emblem
Landscape of the Pico Island Vineyard Culture (Portugal)	(iii)(v)	2004	987	Cultural landscape	Rural Landscape	High seismicity, strong erosion of the winds and the sea	No relevant information about this feature	Inhabited since the 15th century AD, isolated in the middle of the Atlantic ocean	No relevant information about this feature	Wine-growing landscape in a hostile context
The Sassi and the Park of the Rupestrian Churches of Matera (Italy)	(iii)(iv)(v)	1993	4,365	Cultural site	Historic Centre/ Religious-related site	Slow geomorphological processes, different types of erosion and landslides	Exceptional adaptation of the settlement to the geomorphological context of the murgia, spaces excavated (or excavated-built) in the rock	Matera inhabited since the Paleolithic era, resilience of the population. Most of the Sassi were evacuated in the 1950s.	Various restoration interventions (Sassi and rock churches)	Icon of troglodyte settlement

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
World Heritage Properties										
Ouadi Qadisha and the Forest of the Cedar of God (Lebanon)	(iii)(iv)	1998	1,720.2	Cultural site	Religious-related site	Medium seismicity Strong atmospheric erosion	Construction of monasteries on the rock, excavation of hermitages	Inhabited since before Christ, 2000m above sea level	Restoration plan of agricultural stone terraces and paths in the valley	Religious value: among the first Christian monasteries in the world
Historic Walled Town of Cuenca (Spain)	(ii)(v)	1996	22,79	Cultural site	Historic Center	Low seismicity Slow geomorphological phenomena	Adaptation to the morphology of the place Technological solution of the Puente de San Pablo and "suspended houses"	Inhabited since Roman times	No relevant information about this feature	Exceptional example of medieval fortress town

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
World Heritage Properties										
Ksar of Ait Ben-Haddou (Morocco)	(iv)(v)	1987	3.03	Cultural site	Fortified site	Low seismicity limited atmospheric erosion	Adaptation to the climatic context, lateral reinforcements of the settlement through the use of towers	Settlement of the 17th century, only partially inhabited	No relevant information about this feature	Outstanding example of traditional Saharan architecture
Erbil Citadel (Iraq)	(iv)	2014	15.6	Cultural site	Fortified site	High seismicity, frequent earthquakes	No relevant information about this feature	Inhabited by the Sumerians (3,000 BC), originated from the continuous historical stratifications	Building restoration projects and embankment consolidation	Peculiar fan-like pattern
Goreme National Park and the rock sites of Cappadocia (Turkey)	(i)(iii)(v)(vii)	1985	9,883.81	Mixed site	Religious-related site	Presence of badlands Strong atmospheric erosion, medium seismicity	Spaces (and entire cities like Kaymakli or Derinkuyu) carved out of the rock	Inhabited since the 4th century. D.C., arid, rocky, rough, most of the site is now uninhabited	Consolidation and safety measures for falaises and underground spaces	Outstanding example of rock settlement, high aesthetic value, artistic value (frescoes)

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
World Heritage Properties										
Mount Athos (Greece)	(i)(ii)(iv)(v)(vi)(vii)	1988	33,042.3	Mixed Site	Religious-related site	High seismicity and high fire risk	Monasteries and access roads built on the rock and adapted to the context	Inhabited since the 10th century D.C., secular religious community	Existence of restoration plan for monasteries and artistic works	Religious value (Orthodox Christianity) internationally recognized
Meteora (Greece)	(i)(ii)(iv)(v)(vii)	1988	271.87	Mixed Site	Religious-related site	Medium seismicity and atmospheric erosion	Monasteries and access roads built on the rock and strongly adapted to the geomorphological context	Inhabited since 11th century AD, almost inaccessible monasteries	Localized consolidation works (access paths and monasteries) and water drainage	Religious value (Orthodox Christianity) and example of hermit life

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
Sites inscribed on the Tentative Lists										
Volterra: Historical City and Cultural Landscape (Italy)	(iv)(v)	2006	-	Cultural landscape	Rock/ Badland Landscape	Presence of badlands (Balze) High hydrogeological risk	Isolated seismic measures (towers)	Inhabited since Etruscan times, mainly medieval-Renaissance city	Geognostic studies, monitoring of slopes, interventions to secure the walls	Ancient Etruscan city
Mardin Cultural Landscape (Turkey)	(ii)(iii)(iv)	2000	-	Cultural landscape	Rock/ Badland Landscape	Medium seismicity	Houses built "as terraces" along contour lines	Inhabited since the 4th millennium BC, 1000m above sea level., difficult climatic conditions	No relevant information about this feature	Religious meeting point and commercial hub
Ein Karem, a village and its cultural landscape (Israel)	(ii)(iii)(v)(vi)	2015	-	Cultural landscape	Rock/ Badland Landscape	Medium seismicity	No relevant information about this feature	Inhabited since the Iron Age	Agricultural terraces, irrigation canals	High religious value

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
Sites inscribed on the Tentative Lists										
Jibla and its surroundings (Yemen)	(ii)(iv)(v)	2002	-	Cultural landscape	Rock/ Badland Landscape	Low seismicity	No relevant information about this feature	Inhabited since 1000 d.C., 2000m a.s.l.	Aqueduct, terraces, canals	Ancient capital, outstanding buildings
The Cultural Landscape of Uramanat (Iran)	(i)(iii)(v)	2007	-	Cultural landscape	Rock/ Badland Landscape	High seismicity, frequent collapses	Urban form and architecture adapted to topography	Inhabited since 1 millennium BC, Kurdistan recognised as resilient region	Terraces and irrigation canal systems	"Heroic agriculture" emblem and symbol of Kurdish culture
Historical-town planning ensemble of Ston with Mali Ston (Croatia)	(i)(iii)(iv)(v)	2005	-	Cultural landscape	Agro-pastoral landscape	Medium seismicity Atmospheric and vmarine erosion	Perfect adaptation to the topography of the place	Inhabited since the Neolithic period, imposing fortification works	No relevant information about this feature	Urban form and outstanding buildings
Orvieto (Italy)	(i)(iv)(v)	2006	-	Cultural site	Historic Centre	Medium hydrogeological risk, medium intensity erosive processes	City built on the rock, adapting to the terrain orography	Inhabited since Etruscan times, isolated from all sides	Frequent interventions to safeguard and consolidate the cliff and to mitigate landslide risk	Historical-architectural and artistic importance linked to the Gothic and Renaissance heritage

GENERAL INFORMATION							ATTRIBUTES			
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
Sites inscribed on the Tentative Lists										
The town of Melnik and the Rozhen Monastery (Bulgaria)	(i)(iv)	1984	-	Cultural site	Religious-related site	Presence of badlands Low seismicity, strong atmospheric erosion	No relevant information about this feature	Valley inhabited since the Middle Ages	No relevant information about this feature	Religious importance of the Rozhen monastery
The historic urban site of Počitelj (Bosnia and Herzegovina)	(ii)(iii)(iv)(v)(vi)	2007	-	Cultural site	Historic Centre	High seismicity	No relevant information about this feature	Inhabited since the Middle Ages, historically contested	No relevant information about this feature	Urban form and outstanding buildings
Shatili (Georgia)	(v)	2007	-	Cultural site	Fortified site	High seismicity, frequent collapses, floods	Compact structure, presence of a multitude of towers	Founded in the Middle Ages, 1400m above sea level, now partially uninhabited	No relevant information about this feature	Caucasus fortified settlement emblem

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
Sites inscribed on the Tentative Lists										
Ayquina and Toconce (Cile)	(ii)(iii)(iv)(v) (vi)	1998	-	Cultural site	Historic Centre	Medium seismicity	No relevant information about this feature	Inhabited since pre-Columbian times, 3000 meters above sea level, arid terrain	Terraces and irrigation canal systems	Traditional festivals
Amedy city (Iraq)	(i)(ii)(iii)(vii) (viii)	2011	-	Mixed Site	Historic Centre	High seismicity, frequent collapses	City built on a rocky plateau	Inhabited since 1 millennium B.C., 1500m above sea level, isolated, accessible only by a staircase carved into the rock	No relevant information about this feature	Ancient capital, outstanding buildings

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
Other sites										
Villages in Tuscia region (Vitorchiano, Calcata, Pitigliano, ecc...)						Medium seismicity, frequent cliff collapses, moderate hydrogeological risk	Construction on the rock, presence of compact centers and architectural reinforcement elements	Inhabited since Etruscan times, often fortified with walls and towers	Punctual interventions of consolidation of the cliff	Historic villages of regional/national importance. Vitorchiano among "The most beautiful villages in Italy", Calcata known as "artists' village"
South-eastern Basilicata: the villages of Aliano and Pisticci (Italy)						Presence of badlands Medium seismicity, very frequent collapses	Settlements built on rock or clay deposits	Inhabited since before Christ	Punctual interventions of consolidation of the rocky slopes	Set of national film productions
Town of Ronda (Spain)						Medium seismicity, moderate atmospheric erosion	City built on the rock. Puente nuevo: "base of 100 meters"	City inhabited since the 10th century BC, imposing fortifications	Monitoring and consolidation of the cliff	Known as the "home of bullfighting" and described by several artists

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
Other sites										
Villages of Provence and Luberon (France)						Presence of badlands Medium seismicity, moderate atmospheric erosion	Settlements built on the rock that follow the morphology of the ground	Villages of origin (at least) medieval still inhabited	Hydrogeological risk prevention tools	Villages famous tourist destination
Valle de la Luna (Bolivia)						Presence of badlands High seismicity, strong erosion	No relevant information about this feature	Partially inhabited, frequented mostly for tourism purposes	Arrangements to regulate and dispose of rainwater	Important tourist destination, "lunar landscape"
Village of Walpi (U.S.)						Low seismicity, strong erosion	No relevant information about this feature	Inhabited since 900 AD from Hopi community	Recent project for restoration and recovery of the buildings	Absolute isolation, former Indian reserve

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
Other sites										
Tusheti National Park (Georgia)						High seismicity	No relevant information about this feature	Inhabited since ancient times (3 sec. BC), tradition of transhumance	No relevant information about this feature	Known as ”Land of the Tush” and recently tourist destination
Stone Towers between Sichuan and Tibet Provinces (China)						Very high seismic risk	Traditional anti-seismic construction of the towers	Erected between the 3rd-15th century AD, still inhabited territory	Building recover-restoration program	Land of minorities, moderate relevance of tangible and intangible assets
Leh Old Town (India)						Very high seismic and flood risk	Anti-seismic systems typical of Tibetan architecture	Permanently inhabited since 10 sec AD, at 3500 m above sea level	Building recover-restoration program	Ancient capital, outstanding buildings
Khinalyg Village (Azerbaigian)						High seismicity	No relevant information about this feature	Inhabited for 2,000 years at 2,300m above sea level, in isolated conditions	No relevant information about this feature	Known for its intangible heritage

GENERAL INFORMATION						ATTRIBUTES				
Site	**Criteria**	**Year of inscription**	**Property Surface (ha)**	**Category**	**Typology**	**Strong geomorphological activity**	**Anti-fragility of urban and architecture feautures**	**Resilience of community**	**Risk mitigation actions**	**Iconic value**
Other sites										
City of Jaisalmer (India)						Low seismicity, instability of the cliff	Fortress built on a rocky ridge	Inhabited since the year 1000 AD	Water drainage system	Known as "The Golden City", relevance of the fort that dominates the city
Villages of Wadi Dawan and Al Hajarah (Yemen)						Low seismicity landslide caused by rainy season	Villages built on rock Particular architectures in raw earth	Secular villages (10 sec.d.C.) Continuity of human presence despite hostile climate	Continuous maintenance of the architectures	Historic cities and relevant tourist destinations
Village of Castellfollit de la Roca (Spain)						Low seismicity Fragility of the basaltic flow prone to collapse	Adaptation to the topography of the place	Medieval village. Continuity of human presence despite isolation	No relevant information about this feature	No relevant information about this feature
Rocamadour (France)						Low simicity. Substantial stability of the limestone spur	Adaptation to the limestone spur	Rock carvings, continuously inhabited since the Middle Ages, fortified	Risk prevention plan (collapses and torrential precipitations)	City destination for pilgrimages and excursions. Recognised as “Un des plus beaux villages de France”

3.2.c Step 2: Indepth comparison

The general survey carried out in the table was useful to show the sites having at least one attribute in common with the nominated property. However, as prescribed by the WHC in Preparing World Heritage Nominations: "*Comparisons should be drawn with properties expressing the **same values** as the nominated property, and within a defined geo-cultural area*" , which means, not only sites belonging to a similar geo-cultural area should be identified, but above all those that are closer to the nominated property not only for a single attribute, but for the combination of different attributes. From the previous comparison, few sites can be considered really comparable with the Cultural Landscape of Civita di Bagnoregio. For those sites, here follows a more specific overall evaluation. Compared to the sites already inscribed in the World Heritage List, it is possible to highlight that, although there are some similarities relating to some attributes, no site is recognized for the same value expressed by the Cultural Landscape of Civita di Bagnoregio, even among the rocky or badland landscape. In general, the "character" of the landscape, which distinguishes the places from a natural, anthropic and perceptive point of view, is totally different, and therefore the OUV itself does not overlap with that proposed for the Cultural Landscape of Civita di Bagnoregio (some examples below).

The Italian landscapes of **Portovenere, Cinque Terre and the islands and of the Costiera Amalfitana** are explicitly recognized as cultural landscapes generated within a difficult geomorphological context. **The primary character of this landscape is however profoundly different from that of the proposed site in that both are strongly characterized by agricultural-production activities** that have largely shaped the natural substrate. Furthermore, the coastal / marine environmental context that characterizes both sites (the Costiera Amalfitana is explicitly recognized as an example of Mediterranean landscape) makes them from the iconic point internationally recognized from a very different point of view respect to Cultural landscape of Civita di Bagnoregio.

Still in the Italian context, the **Val d'Orcia** presents a landscape in some places similar to the one proposed, as there are badland formations and a settlement system made up of small perched villages. From a geomorphological point of view, the badlands in Val d'Orcia are similar to those of Civita di Bagnoregio, generated by erosion of Pleistocene clays. However, the mitigation measures carried out on the badlands in Val d'Orcia were carried out in order to block erosive processes for purely agricultural issues. In these areas the badlands have been leveled on the ridges and fertilized: for this reason these have much more rounded shapes and less steep slopes than those of the proposed site. The geomorphological activity and the interventions aimed at its mitigation do not represent, moreover, relevant aspects in the definition of the site's OUV: **the Val d'Orcia is in fact inscribed in the WHL as an associative cultural landscape, as an exceptional example of the redesign of the landscape in the Renaissance**, which illustrates the ideals of good governance in the fourteenth and fifteenth centuries of the Italian city-state and the aesthetic research that guided its conception, therefore **for values completely different from those of the nominated site**. Furthermore, the iconic aspect is strongly present in Val d'Orcia, but explicitly refers to the emblem of the Renaissance landscape.





[82] WH site Portovenere, Cinque Terre and the islands in Italy
[83] WH site Val d'Orcia in Italy

The Sassi and the Park of the Rupestrian Churches of Matera is undoubtedly an expression of human resilience over a very long period of time. Since the Paleolithic, man has chosen life in the cave here, testifying to an adaptation to the environment which over the millennia has translated into a housing form, peculiar only to Matera, of exceptional cultural and anthropological value. **Matera is in fact recognized as an intact example of a troglodyte settlement in the Mediterranean region, thus presenting an OUV and a territorial scale very far from those of the Cultural Landscape of Civita di Bagnoregio.** Furthermore, Matera has undergone a certain **housing discontinuity: the Sassi have in fact been abandoned since 1952**, even though many of them have now been transformed into hotels and accommodation facilities. On the contrary, **the cultural landscape of Civita di Bagnoregio has never been abandoned**, despite the evacuation orders issued by Rome first in 1819 and then in 1922.



[84] WH site The Sassi and the Park of the Rupestrian Churches of Matera in Italy

Finally, the formations between Matera and the Cultural Landscape of Civita di Bagnoregio are clearly different. The erosive forms present in Matera area are basically due to the incision made by streams, over millions of years, in deposits of limestone origin. The geology of Matera is characterized by a limestone base of Pleistocene origin to which, locally, layers of calcarenite are superimposed, and above these clayey layers of more recent origin (from this point of view the geological succession is practically overturned compared to Civita where the clay deposits are below the rocky ones). The indicated geomorphological processes are generally very slow due to the type of material to be eroded, as well as landslides are localized with limited threats to the inhabited area. On the contrary, the proposed site is characterized by a very rapid evolution of the landscape caused by the waterways that cause phenomena to undermine the clayey slopes and consequent landslides or landslides. For these reasons, the anti-fragility attributes of the building and risk mitigation characterize the UNESCO site of Matera in a smaller proportion and in any case less evident than the nominated site.

The Greek sites of Meteora and Mount Athos present some characteristics of similarity with the proposed site. Both were built in certainly hostile natural contexts, being monasteries built on rocky peaks that are difficult to reach. For both of them the strongest value is the spiritual value.

For the mixed site of **Meteora** the most reliable hypothesis about the nature of the geological phenomenon that characterizes the site is that these huge masses of rock were created from debris (river pebbles and limestone) deposited by a large river which, millions of years ago, it poured into a deep gulf in the sea which then covered Thessaly. The geomorphological phenomena are therefore very different from those of

the geological history of the Cultural andscape of Civita di Bagnoregio, characterized by intense volcanism and, subsequently, by the erosive action of the rivers and rainfall that gave rise to the badlands. The monasteries are also inhabited only from the 11th century and in any case the community that lives there is represented only by hermit monks. **The value of the site is therefore strictly linked to the ideal of hermit life of the modern age as well as to the testimonies of post-Byzantine art, values that do not belong to the candidate site at all.** Furthermore, paradoxically, although the rocky peaks on which the monasteries are located are even higher than the cliff of Civita di Bagnoregio, the level of risk to which they are subject is much lower because the rock that supports them is more compact. Consequently, Meteora's risk mitigation measures are also aimed at the preventive restoration of buildings and artistic works rather than the consolidation of the soil on which they rest.

Similar considerations can be made for **Mount Athos**, inscribed in the WHL as an emblem of Orthodox Christianity. Moreover, the geological formations present in the sites of Civita





[85] WH site Meteora in Greece
[86] WH site Mount Athos in Greece

di Bagnoregio and Mount Athos differ both in terms of periods and types. The granite formations of Mount Athos are subject to instability phenomena basically deriving from two mechanisms: degradation of the properties of the rocks due to marine agents (both chemical and mechanical action of the waves) and intense tectonic movements (presence of tectonic faults). The combination of these phenomena gives rise to typically rocky instability phenomena through collapses according to sub-vertical fractures of the rock mass, therefore profoundly different from those found in the proposed site.

Beyond the specific geomorphological characters, the most significant difference lies in the fact that both Greek sites – which are not **recognised as cultural landscapes** - are inscribed as religious-related sites, with key values related to spirituality. **Even their iconic value, decidedly strong and internationally recognized, is therefore strictly linked to this aspect**, which does not correspond at all to the reasons for which the nomination of the Cultural Landscape of Civita di Bagnoregio is presented.

Therefore, it is possible to say that the continuous interrelation and adaptation of human presence in the cultural landscape of Civita di Bagnoregio with landsliding and erosional phenomena constitutes a première in the World Heritage context. No other property provides this unique combination of urban and architectural vestiges and of a unique geological formation actively erasing the human presence in an accelerated and partially unstoppable process of decay. The iconic value of the landscape, strictly connected to these physical and continouing characters, is not present in any other site. Furthermore, as emerged from the analysis, where other cultural landscapes present some attributes in common with the proposed site, these do not constitute key values and founding the OUV of the site itself.





Orvieto and the Cultural Landscape of Civita di Bagnoregio share both the long history of human presence (starting from the Etruscan era) and the geological one. The two sites have the same lithological units, which however differ in their physical and mechanical properties due to the different deposition processes of volcanic materials. The different evolution of the two landscapes is mainly due to the proximity of Civita di Bagnoregio to the waterways which with their erosive action have "demolished" the tufaceous cover over time. Under the current conditions, the erosive action of these watercourses pours onto the clayey slopes that border the remaining cliffs, making them increasingly steep and causing the known instability phenomena.

In the context of Orvieto, the distance from the waterways is such as to ensure that their erosive capacity is not directly reflected on the volcanic cliff in current conditions. These streams are also near the inhabited center of Orvieto, near the confluence with the Paglia river. In this section, sedimentation prevails over erosion with the result that the clayey slopes in the surroundings of the Orvieto cliff have a slope much less steep than those of the

[87] The town of Orvieto in Italy
[88] Amedy City in Iraq

Civita di Bagnoregio area and are covered by a blanket of alluvial deposits. This coverage allows the erosive processes on the clays to be much less intense, ensuring greater stability on the slopes and not allowing the formation of bad areas. For this reason, the mitigation measures and the anti-fragility characteristics of the building are also less developed in Orvieto than the proposed site. Furthermore, **Orvieto's nomination for WHL as a cultural site is mainly based on the value of Gothic and Renaissance architecture in the historic center, with particular emphasis on the Cathedral building**, a true city icon, aspects completely distant from the candidacy of the Cultural Landscape of Civita of Bagnoregio.

Different theories have been developed over the years regarding the formation of the **Amedy City** Plateau. Until a few years ago the most accredited theory predicted that the plateau had been formed following a large landslide originating from nearby Martina Mountain. More recent studies believe that the formation of the limestone plateau occurred by deposition of the river environments present in the Pleistocene and Eocene epochs. In any case, the current conformation of the area sees a limestone plateau resting on a substrate consisting of siltstone and argillite sandstones. Both theories on the generation of the Amedy plateau describe very different scenarios compared to those that led to the formation of the Civita di Bagnoregio area. However, the most significant aspect to underline is that both sites are included in the respective TL as **historic centers - therefore not cultural landscapes -, relevant for the architectures and / or archaeological remains that contribute to tracing the civil and artistic history of the areas they belong to**, values that are not those for which the Cultural Landscape of Civita di Bagnoregio is applied.

Outside the World Heritage List and the Tentative Lists, at international level it is possible to identify numerous landscapes that have characteristics similar to that of Civita di Bagnoregio. From the selection of sites in the table, it emerges that some of these possess one or more attributes in common with the proposed site, without however never presenting the entire combination. In some cases, the landscapes have been inhabited since more recent times (Middle Ages or even later), thus not presenting the long history of human attendance that distinguishes the nominated site instead. In other sites the geomorphological phenomena are of a different nature or in any case much less rapid and intense than those recorded in the Cultural Landscape of Civita di Bagnoregio, ensuring that consolidation and mitigation interventions are mostly related to the restoration and maintenance of the dwellings or the most relevant architectures, without the most important measures to mitigate the continuous erosive and landslide phenomena fielded in the proposed site. The iconic aspect is definitely less strong in almost all the selected sites, or in any case more linked to a tourist attraction of recent times - for example in the case of the Provencal villages or the Andalusian city of Ronda. With respect to these considerations, a further study can therefore be done mainly with respect to the Italian villages of Tuscia and Basilicata.

The landscapes linked to villages such as **Vitorchiano, Calcata and Pitigliano** in the so-called Tuscia region, on the border between Lazio, Tuscany and Umbria (but the same could be done for many others such as Blera, Caprarola, Civita Castellana) are relevant examples of hill settlements of Etruscan origin.



[89] Vitorchiano, Italy

They have a similar geomorphological history, **in none of them, however, the erosive phenomena in progress are of such speed and intensity if compared to those of the Cultural Landscape of Civita di Bagnoregio**.

In the same way, the landscape that surrounds them is profoundly different from that of the *Valle dei Calanchi*, which remains unique in terms of extension and landscape relevance throughout Tuscia. While access to Vitorchiano, Calcata and Pitigliano has always been guaranteed and the breakdown of the cliffs on which they are located, in the candidate site the village of Civita di Bagnoregio has experienced periods of almost total isolation due to the gradual lowering of the saddle connecting to Bagnoregio, first, and of bridge collapses, then. **The level of geomorphological stress, the consequent risk mitigation interventions and the resilience shown by the inhabitants of the proposed property therefore have no equal despite the proximity of those villages.**

Another landscape context similar to the Cultural Landscape of Civita di Bagnoregio is represented by the landscape of some villages in Basilicata, in particular **Aliano and Pisticci**. While the village of Civita di Bagnoregio stands on a volcanic cliff resting on a clay substrate, the village of Aliano already stands on a badlands formation. The geomorphological processes that govern the evolution of the territory, although in both cases they cause retrogression of the slopes and problems of instability in the buildings of the villages, differ precisely in the geology of the areas. While in the proposed site the clay erosion process is combined with the undermining at the foot of the cliff causing instability phenomena of the rocky slopes, in Aliano the entire erosion process is that of the calanquive type. The Plio-Pleistocene clay formation constituting the Aliano gullies is

very similar to that of the cultural landscape of Civita di Bagnoregio. The lack of volcanic coverage has led to the development of erosive processes with different times.

The different shapes between the two landscapes are mainly due to the exposure of the slopes and the mineralogical composition of the soils. Similar phenomena are found on the slopes surrounding Pisticci, a city that has a history of landslides and landslides caused mostly by atmospheric events of particular power or duration. If there is no doubt that the inhabitants of Aliano and Pisticci have shown resilience in living with particular risk conditions, it is equally true that **soil consolidation interventions seem, in Basilicata, much less systematic than those of the *Valle dei Calanchi***. It is difficult to find complete information on the history of the interventions, mostly reduced to naturalistic engineering works (reforestation and drainage of the slopes), largely still to be undertaken due to the lack of funding.

From an iconic point of view, the villages of Basilicata are also known - even if mainly at national level - as "villages that die", characterized by a "lunar landscape", so much so that they were also film sets (in Aliano Christ Stopped in Eboli was shot). **The collective imagination of the cultural landscape of Civita di Bagnoregio is however much more consolidated, such as to reach an international level.**

Compared to the aforementioned landscapes in central-southern Italy, **the Cultural Landscape of Civita di Bagnoregio constitutes the most representative for the intensity of the geomorphological phenomena, for the documented resilience of the community and for the iconic value.**



To conclude, as already underlined several times, **the long-established image of the nominated site has no equal in terms of international relevance and scope, making the Cultural Landscape of Civita di Bagnoregio truly be considered the most excellent and significant example of a global phenomenon and its values, not yet expressed in the current World Heritage List.**

The exceptional intensity and rapidity of the evolution of the geological landscape visible in Civita is unmatched in Italy and at the global scale, as it is unique for the resilience of community and their attempts to control and stop the geological decay that characterize this property over centuries. As mentioned, some similarities with the proposed site can be found in the recognised cultural landscapes, in particular for what concerns the constant coexistence of man and difficult geomorphological conditions, as it happens in Cinque terre or in Costiera Amalfitana, nonetheless what clearly distinguishes these sites from the candidate one is the type of landscape.

[90] Landscape of Aliano in Italy

In Civita of Bagnoregio we find a badland landscape, strongly characterized by the presence of rocks and erosive phenomenon of the ground, while this doesn't happen in other recognised sites. In the case of Cinque terre and also in Val d'Orcia, we find agricultural landscapes, in which the action of containment of the erosive phenomenon is based on the practice of terracing for agricultural purposes.

In other sites with a similar aesthetic to the offshore ones (Meteora, Monte Athos, ecc...) the similarities are mostly in the aesthetic, while paradoxically what is missing is the aspect of fight and contrast to the erosive phenomena, since often the geomorphological conditions are stable and not continuously evolving, as in the nominated property. Furthermore, these sites are above all bonded to spiritual values, and not recognised merely as cultural landscapes. Where the erosive processes are more present and characterised, as it happens in Orvieto or in the area of Civita (Vitochiano, Calcata, ecc...), the entity of the iconic image which is bonded with Civita since at least two centuries it's not comparable in international recall and resonance.

Lastly, the theme of resilience in the local communities is common to many cultural landscapes characterised by small villages and offshore sites, but in the Cultural Landscape of Civita di Bagnoregio this aspect is deeply rooted in time and the fight for survival is so clearly manifested and documented, that the site can be fully considered an international symbol of this phenomenon.

3.3 PROPOSED STATEMENT OF OUTSTANDING UNIVERSAL VALUE

Brief synthesis

The Cultural Landscape of Civita di Bagnoregio is located in central Italy, in the inland of Lazio Region, an area where past geodynamic and volcanic events together with the modelling of more recent exogenous processes have produced spectacular wide table landforms, like plateaus and smaller mesas and buttes, characteristic throughout the whole area. The site has been continuously affected by natural hazards such as landslides that threaten human survival due to the strong geomorphological activity.

The site represents a stunning case where the human presence has tried for centuries to hinder the natural degradation of the cliff. It is a paradigm of the struggle of men aiming to survive in a hostile environment - though of incomparable beauty - and nature that wants to take its course dismantling and eroding reliefs. The Cultural Landscape of Civita di Bagnoregio thanks to the ensemble of the traces of historic and contemporary attempts to consolidate and stabilize the property together with the antifragility of the urban-architectural features, proves the sustained relationship (from the antiquity to the present day) of the human settlement with the constantly evolving geomorphology. The resulting scenery, where human modifications contrast and try to overlap the natural landforms acquires the value of a Cultural Landscape.

Justification for Criteria

Criterion (iii): The Cultural Landscape of Civita di Bagnoregio bears an exceptional testimony to an antifragile constructive tradition born as a response to the surrounding hostile environment. Ways of building and risks mitigation actions have retained their social and cultural importance in centuries: the number and quality of consolidation attempts - realized in the past and throughout the last one hundred years - to mitigate the impact of landslides proves it. Local community adapted to the changes in the natural environment in order to survive. Human presence in this territory resisted faced to the impacting phenomena, thanks to several elements that express the capacity to absorb and react.

Criterion (v): The Cultural Landscape of Civita di Bagnoregio is an outstanding example of human interaction with a hostile environment constantly threated from natural forces. The human ingenuity challenges here a territory with a unique geomorphology, characterized by the rapidity and numerousness of the erosion phenomena that for centuries have connoted and shaped the site not only determining the overall perception of a such iconic valued landscape - that strongly contributed to create the site's myth -, but that also involving the social, cultural, urban and architectural aspects. The exceptional resilience of the community that attempts to mitigate these irreversible phenomena never stopped in the past and even today.

Statement of Integrity

The proposed property includes all the essential elements for a complete representation of its Outstanding Universal Value. As a cultural landscape, the site includes all the anthropic-cultural (settlement, urban, architectural features), natural (badlands, evidence of the continuing impacting phenomena) and perceptive (the relationship between the village and the badland valley) attributes necessary to represent the its characterizing and essential values. The entire area of the nominated site reflects the unique spiritual bond between humans and nature, bears valuable qualities retains historical functions and specific sustainable land use methods related to the peculiarities of the natural environment that express the human capacity to adsorb and react to the impacting phenomena.

The property has been continuously affected by erosional phenomena and landslides that over time threatened the site's stability conditions. Despite this, all possible measures are implemented to prevent further landslides, together with an extensive monitoring system.

Statement of authenticity

The authenticity of the site is reflected by the tangible values of the different historical periods that shaped its identity. A plenty of documentary, bibliographic, and iconographic sources furnish a rich and differentiated documentation of the importance of Civita as best example of cultural landscape with unique geomorphology resulted from the interaction between man -who adapted to changes in natural environment in order to survive - and the hostile nature. The attributes that define the Cultural Landscape of Civita di Bagnoregio have retained their historical and cultural authenticity, and testify the existence, over the centuries, of temporal continuity of hydrogeological risk mitigation actions from natural hazards, proof of the resilience of the community. The site due to its unique characteristics has caught the imagination of numerous authors, artists and filmmakers who strongly contributed to create its myth.

Requirements for protection and management

The property is protected under the Cultural Heritage and Landscape Code (Decree n°42 of 22 January 2004), under the responsibility of the **MiBACT** *(Ministry for Cultural Heritage and Activities and for Tourism)* and its regional agencies. It defines the responsibilities of the public regional and local authorities and the application procedures. The property is also subjected to the National hydrogeological constraint (R.D.L. n.3267/1923), aimed at ensuring that the transformations carried out on the area do not produce instability, or destroy the balances reached and consolidated, following modification of the slopes related to the use and ineffective regulation of rainwater or groundwater. A Memorandum of understanding for a coordinated management of the nominated property has already been signed by the main public and private authorities involved in the conservation and management of the site. A governance framework has been structured around three main operating bodies: the Steering Committee, the Tecnical Advisory Board and the Management Plan Coordinator. The main goal for the management is to define measures of Conservation, Fruition, Capacity Building and Community Enegagement to mitigate and reverse the processes of demographic contraction and of reduction of services, with a special attention to the goals of 2030 Agenda for Sustainable Development.

STATE OF CONSERVATION AND FACTORS AFFECTING THE PROPERTY

4

4 STATE OF CONSERVATION AND FACTORS AFFECTING THE PROPERTY

4.a Present state of conservation

4.b Factors affecting the property

4.b.1 Development pressures

4.b.2 Environmental pressure

4.b.3 Natural disasters and risks preparedness

4.b.4 Responsible visitation at World Heritage sites

4.b.5 Number of inhabitants within the property and the buffer zone

4. STATE OF CONSERVATION AND FACTORS AFFECTING THE PROPERTY

4.a PRESENT STATE OF CONSERVATION

The Cultural Landscape of Civita di Bagnoregio displays in general, a good state of conservation in all its natural, cultural-anthropic and perceptive aspects as well. The long-time resilience tradition of the community - who always lived permanently the site - and the multiple technical solutions of hydrogeological risk mitigation actions from natural hazards applied in the territory, ensured through time the conservation of site integrity. The constant care of the owners, the citizens' awareness of their heritage and the presence of administrations ready to enact safeguard policies made it possible to preserve this exceptional Cultural Landscape, paradigm of the men' struggle aiming to survive in a hostile environment and the Nature that wants to take its course dismantling and eroding reliefs.

A relevant role, in the present good state of conservation of the site is also played by the different regulatory restrictions at national and regional level (see chapter 5). Generally speaking, breaking up ideally the landscape into its components (natural, cultural-anthropic and perceptive) the present state of conservation is the following:

Natural Component

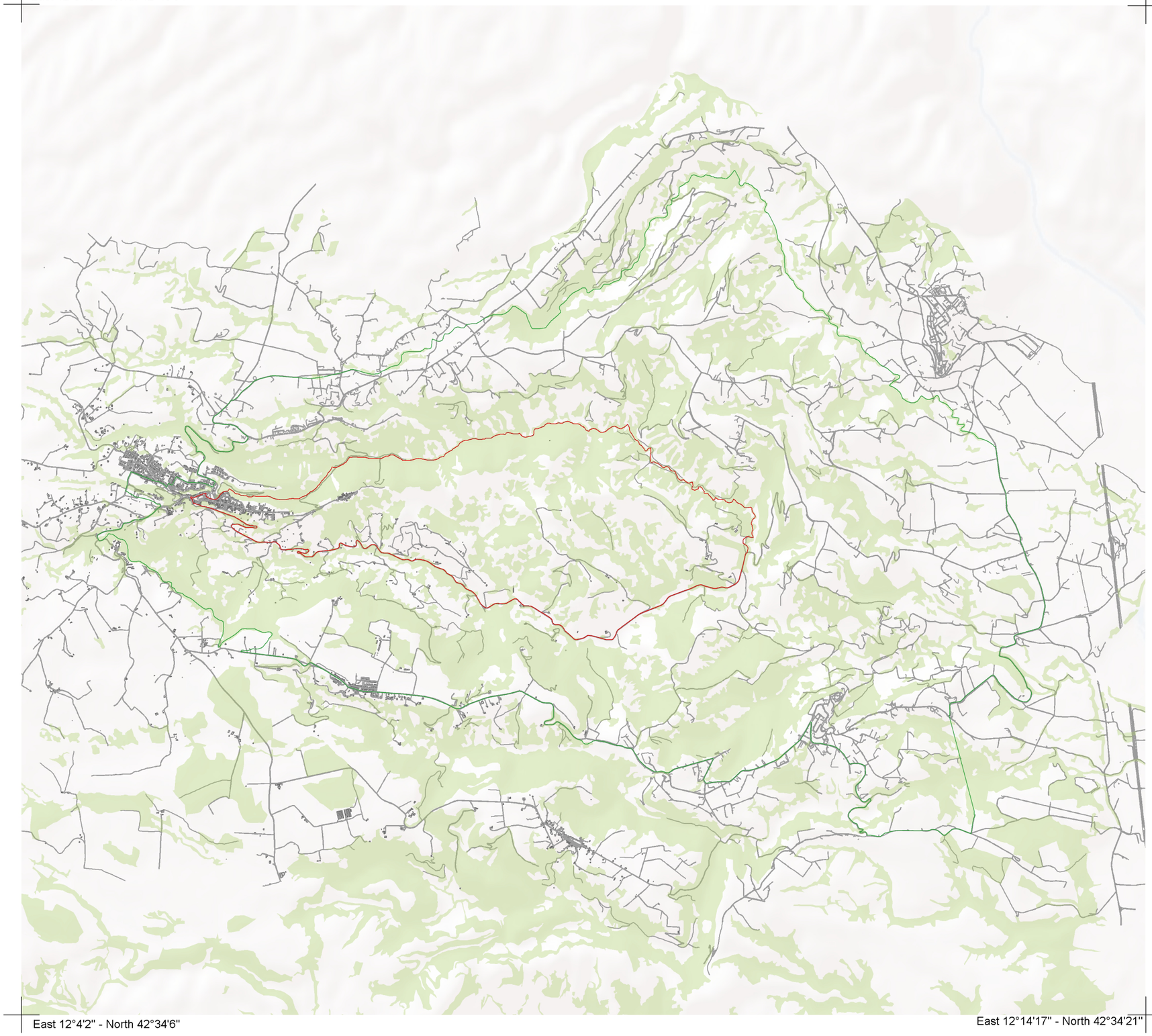
The natural component has always been continuously monitored and managed with the aim of contrasting the erosive phenomena characteristic of this landscape. In particular, over the course of time, there have been numerous preventive works aimed at preserving the cliff from degradation: bridles in the valley floor, electrosmotic consolidation, rainwater regimentation works. The multiple technical solutions applied in the territory -from landscape interventions and trees plantation to contemporary high-tech anchors/ nails and structural shafts - have contributed to the general good state of conservation of the site (see "Hydrogeological Risk Mitigation Actions" chronological list below). We know that the Etruscans started canalization and flood-relief works to contain torrential



[91] Civita di Bagnoregio and the surrounding Badlands Valley, outstanding example of human interaction with a hostile environment constantly threated from natural forces (©Casa Civita)

East 12°3'43" - North 42°40'54"

East 12°13'59" - North 42°41'09"



Legend

- Nominated component
- Buffer Zone
- Natural component
- Cultural anthropic component

Print scale: 1:45.000
Projected coordinate system: UTM-WGS84
Base map: CTR Lazio Region
Municipality of Bagnoregio (nominated site)
Date: December 2020

0 0,5 1 2 Km

East 12°4'2" - North 42°34'6"

East 12°14'17" - North 42°34'21"

erosion, works that were taken up by the Romans. Most of the measures of conservation of the badlands areas were focalized to reduce the erosional phenomena of the slopes under the bridge because of the strategic importance of the area.

In the 50's some efficient works were done using the technique of the Viminate (Wattle fences). This is a technique of the bio-soil engineering and consist in weaving together scions with twigs or branches founded on woody piles to stabilize the growth of the scions on the slope and stabilize the slope itself. This kind of intervention helps in blocking the erosional flow and stabilize the toe of the slope from the erosional phenomena.
Also gabions were placed to clock the deepening of the valley, but the intervention seems to be no effective.
In the 80's new kinds of interventions were tested on the clayey slopes. In particular it was tried to employ the same kind of intervention used on the tuffaceus cliff using tie-rod concrete plates to block landslides and slopes erosion. The intervention didn't work as expected, even more to prepare the construction site it was necessary to cut the slopes to make roads and retaining walls in reinforced soils that caused landslides occurring even during the construction works. Also some weirs were placed in the Torbido River and in the Lubriano River to reduce the erosional power of the streams. Both the successes and the failures helps the scientific community to understand the best practices to preserve the badlands.

In particular, the following consideration were made:
· The tentative to use rigid retaining structures on the clays is not efficient;
· The only intervention of seeding and planting is not sufficient if not properly integrated with other strategy of mitigation.

Many studies were leaded on this theme for the badlands valley of Civita di Bagnoregio. Based on the previous experiences and on the studies leaded, guide lines for the preservation of the badlands were made for the area. Reducing the erosional phenomena in the clayey soils is fundamental to reduce the instabilities on the cliff but the interventions have to preserve the landscape of the badlands valley.

In support of the conservation status description of the natural component, are reporting additional information relating to the Ecological System (Badlands Valley ecosystem). Site's naturalistic elements (habitat and species) keeps a satisfactory state of conservation. The priority habitat "Pseudo-Steppes paths of grasses and annuals Thero-Brachypodietea" and the fauna species of CE interest (SPA-SCI "***Valle dei Calanchi***") are not threatened by the massive erosion phenomena that characterize the site. The aforementioned habitat is kept in a satisfactory state of conservation thanks to the widespread phenomena of surface erosion that keep the vegetation at a perpetually pioneering stage. For these reasons, these species with a prevalence of Therophytes do not appear to be threatened and should naturally be preserved and perpetuated as long as the interventions aimed at stemming the instability phenomena taking place along the gullies continue to be conducted with non-impacting engineering techniques (naturalistic engineering).

The presence of other nesting species of birds of prey of CE interest (Pecchiaiolo, Black Kite, Pellegrino) was found in areas adjacent to but outside the current perimeter of the SIC / SPA. No specific threat factors were found in the area; most of the areas most suitable for nesting, therefore favorable to the possible settlement of other pairs, are however outside the current borders.

Hydrogeological risk mitigation actions

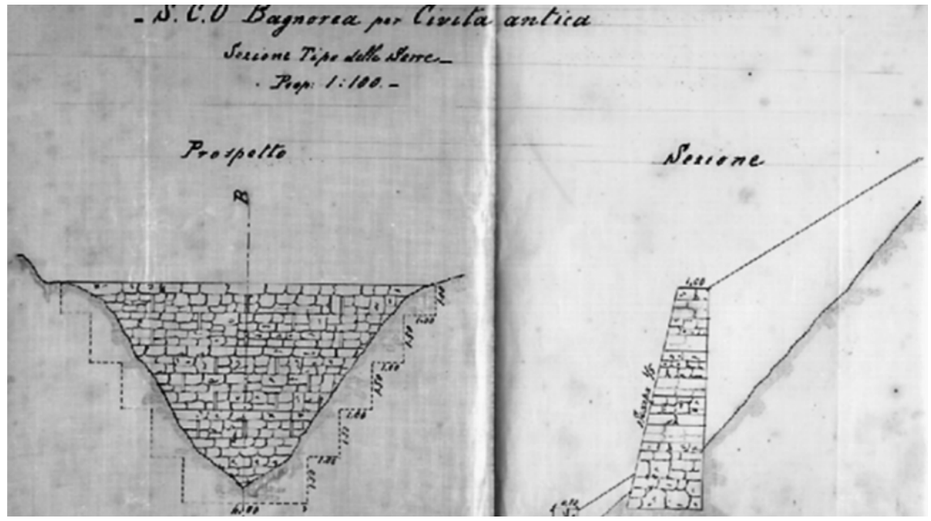
Over the years, numerous projects have been realized in the slopes and on the cliff of Civita.The first recorded interventions are dating back to the 1765 (Antolini) with hydraulic works in the Lubriano river. At the end of the XVIII century (Caporioni 1854), retaining structures were placed to reduce the deepening of the steams around the cliff of Civita di Bagnoregio.

Below there is a chronological list of the interventions which have been performed since the XX century.

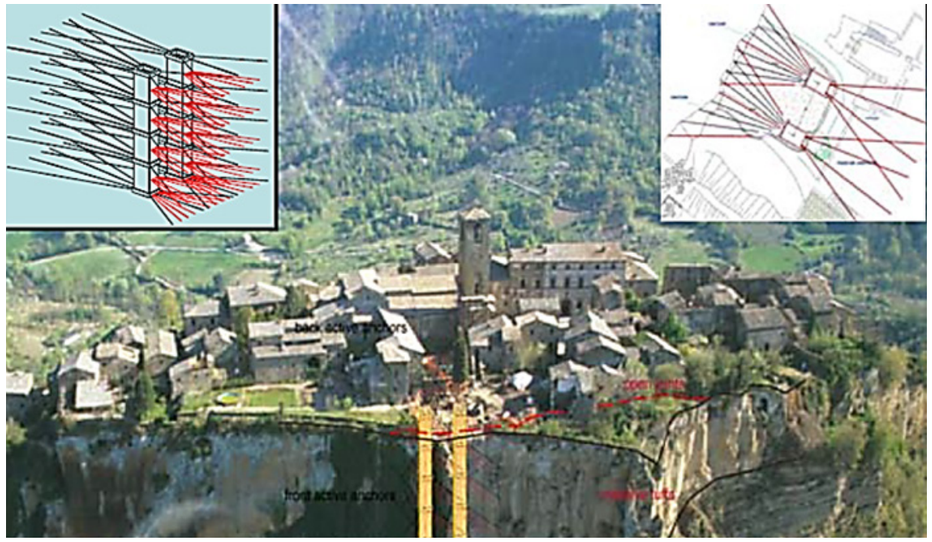
1957: The Ministry of labour and social insurance, through a reforestation worksite n. 111256/R, managed by the Departmental Inspectorate for Viterbo forest, performs fitting-out and reforestation works using Robinia plants on the south slope of the crest where, in its lowest part, the road for Civita passes through (Autumn 1956 – Spring). Even this works will give negative results, because they had been destroyed after a short time by landslides.



[92] Mitigation works in Lubriano river recorded by Antolini (1765)



[93] Retaining structures to mitigate the deepening of the valley by Caporioni (1854)





[94] Detail of the intervention made in 1998
[95] Hydraulic adjustment in Cireneo steam (tributary of Lubriano river)

1959: curated by the Public works office of Viterbo (company and patent Eng. Federico Vittore Nardelli), along one slope of the road connecting Bagnoregio to Civita and, more precisely, on the one in front of Lubriano, electrogeochemical experiments are performed (physical-chemical transformation of the clayey rock using electrical current). It is the first experiment of its kind conducted in Italy.

1961: the Public works office of Viterbo resumes the clay consolidation works, on the slopes of the lower part of the road to Civita, with the electrical method (October, company and patent Eng. Nardelli). It does not seem, however, that results achieved so far are such as to stop the occurrence of the landslides.

1967: curated by the Forestal Department and the Public works office of Viterbo, consolidation works are performed on the clay slopes flanking the reinforced concrete viaduct of Civita, together with protection works for the crest flat summit on which the viaduct pylons rest.

1988: after the funding from the Civil Protection, a consolidation work for the Civita saddle, on the northern side, are assigned to Grassetto. The works started to resolve the noticeable dangerous state in which the access to the town was. 11 meters high concrete walls were built spaced apart in the clayey slope, each one being 16 meters long, with proper foundation and tie-rods. Several nails were also made on the stratified pyroclasts in correspondence of the toothing of the bridge on the tufaceous cliff. Lastly, hydraulic collection and optimization works have been made for the rainwaters and waste waters.

1993-1995: With regards to regional GAL Teverina fundings, a series of naturalistic engineering experimental interventions has been realized to protect the naturalistic routes that were being created. The green walls realized has been proven particularly effective.

1998: the Public works office of Viterbo and Lazio region realize a deviation of the Cireneo pit, which lapped the detrital soil created after the 1996 debris flow. This deviation, still perfectly working, has allowed to move away the flow of the pit from the slopes of Civita.

1998: The National Civil Protection funds a consolidation intervention for the cliff of Civita, to stabilize a portion of the northern slope that had a significant collapse in 1993. The Municipality assigns the task to ENEA, specifically to doc. Claudio Margottini, in collaboration with prof. Vittorio Colombini from Potenza's University. The type of interventions chosen used in the project for the stabilization of the tufaceous slope required the realization of 2 hollow shafts with reinforced concrete, close to the two landslips (Bandis et al., 2000). This innovative typology allowed to realize outwards both land reclamation interventions using injections and connection interventions with nailings and tie-rods for unstable rocks. The interventions have proved useful.

2000-2012: during this period, the city council assigns the construction of 5 more shafts, among the Environment Ministry (two shafts), Civil Protection (two shafts) and Lazio region (one shaft). The shafts are realized close to the Cavon grande area, and the technique is the same used in 1998 with the project assigned to ENEA, but the morphological conditions are substantially different.

2012-2016: consolidation project for the stratified pyroclasts, using the Eight POR Thousand funds (2008 annuality). The project included the construction of passive nailings in the Cavon grande area (northern side).

2012: Lazio region funds a hydraulic optimization intervention for the southern side of the access saddle to Civita di Bagnoregio, damaged by the mudslides that happened in 2010. The interventions included the construction of two large-scale weirs in the transportation area of the mudslides and a series of limited hydraulic optimizations in the initiation area. The results did not prove them very effective.

2012: after the sliding of a detrital layer in Mercatello, in 2010, Lazio region funds the reclamation of that area. Four palisades are constructed, each one connected in the front part with a concrete foundation, in the clayey part of the slope and a series of tie-rods with containment grids on the overlying tufaceous formation.

2016: in the same area of Mercatello, affected by the interventions in 2012, another subsidence and slipping of the stratified pyroclastic formation happens in 2015. The Lazio region funds a first early intervention and, subsequently, the consolidation of the area using micropiles interconnected in the higher part of the road using a cement concrete foundation. More drainage works are currently in progress.



[96] Urban settlement of Bagnoregio and its own Civita hilltop hamlet in the background (©Casa Civita)

Cultural-Anthropic Component

The Cultural-Anthropic Component of the property consists in all the human ingenuity manifestations (human settlement, built heritage and its own construction techniques, consolidation attempts, etc.). Generally speaking, it displays a good state of conservation, thanks to preventative actions and protection measures carried out through time.

The built heritage of the human settlement (Bagnoregio and the connected hilltop borgo of Civita) results from a long-time resilience tradition of a community - who always lived permanently the site - and that during the centuries repeatedly put in place consolidation attempts in order to preserve the borgo from the natural impacting phenomena (antifragility of the urban-architectural features; actions of soil consolidation and mitigation). Since the 2000s, ordinary activities of maintenance by the local administration help to maintain a good state of general preservation of the site (see chapter 5). The built environment, in centuries, after suffering painful wounds in its fabric due to the impacting phenomena (landslides, earthquakes) was forced to phisically rebuild themself gaining strengthen, improve and evolve, becoming an antifragile system as a whole.

The urban settlement - based on the Etruscan/Roman grid - influences the patterns of the built form that shows with the immediacy of the traces still visible, a story that since the seventeenth century has been marked by seismic events, demolitions, landslides and subsequent reconstructions mostly made with re-using materials.

The antifragility of the built environment is shown in the morphological and typological features where there is a high presence of supporting elements that here are declined in the multiple forms of spurs and buttresses whose realization is aprioristic and dictated by the needs of the moment.



Civita's risk situation is not only well know, but processed and assimilated, as well as consolidation attempts not always have been successful, but are repeatedly put in place in order to find new ways to preserve the site. In general, all the constrained buildings included in the component of the site displays a good state of conservation both in their structural and decorative set of elements.

The general good state of conservation is possible thanks to the interventions of an ordinary and extraordinary nature carried out over time, under the direct control of the competent Superintendency. Referring to the buildings not listed as cultural assets, municipal regulations (see chapter 5) have ensured (and still continuing on it) to monitor and make possible all the needed conservation and/or restauration measures.

[97] Urban settlement of Civita di Bagnoregio. The extraordinary quality of the medieval village perched on the rocky cliff hilltop perfectly integrated into the natural environment bears a unique iconic value (©Casa Civita)

The road system (pedestrian and driveway) including the bridge connecting Bagnoregio to Civita, display in general, a good state of conservation. As for the conservation and restoration of the pavements of the borgo, the provision of adequate furnishings and urban equipments and, in general, the maintenance of public spaces, the latest interventions were carried out between 2007 and 2008 thanks to a regional funding granted trhough by the Regional Law 38/1999 "Rules on the government of the territory".

The implemented interventions involved the maintenance of some architectural elements and street furnitures as well (including some parapets and masonry benches leaning against the facades overlooking the public streets).



[98] Civita di Bagnoregio. Property's built heritage displays in general a good state of conservation and still retains its own distinctive elements such as the *Profferlo*, a characteristic form of external staircase used in the medieval civil architecture of Lazio (©LINKS Foundation)

Furthermore, in order to cope with the maintenance of public spaces, the municipality of Bagnoregio has proposed (as part of the initiative promoted with DPCM of 27 September 2018 "Bellezz @ - let's recover the forgotten cultural places") a project aimed at recovering some spaces of the historic center of the hamlet of Civita and the access routes (via di Santa Maria del Cassero and via Madonna della Maestà).

To this, there are other interventions of recovery and safety of the parapets, redevelopment of the pavements and its related works of furniture and public lighting, in particular:
- Restoration of the ruins of the ancient access bridge to the village;
- Restoration of the door of Santa Maria;
- Restoration and recovery of the birthplace of San Bonaventura;
- Redevelopment of stone flooring and public lighting of the entire borgo of Civita.

The conservation and restoration activities of the settlement have received a boost during the immediate second post-war period thanks to a series of interventions, many of which were directly promoted by the then Superintendence for Monuments of Lazio at the Ministry of Public Education. In that period, the **MiBACT** has allocated various loans for the recovery of some of the private residential buildings still inhabited and contextually arranged various measures with which it ordered the owners of the remaining abandoned buildings to provide for the necessary conservation interventions at their own expense.

Already in 1953 some restoration and recovery works had been undertaken on the church of San Donato with sums made available by the Prime Minister and the Superintendency. The following year (1954), thanks also to the direct interest of the then Superintendent Carlo Ceschi (1952-64), the Ministry allocated an initial loan for the recovery of some of

the private residential buildings still inhabited (completed in 1959); contested the same office ordered various provisions with which it ordered the owners of the remaining abandoned buildings to provide for the necessary conservation interventions at their own expense.

In 1958 the Superintendency started the first works with its own funds to prevent the loss of Palazzo Alemanni Mazzocchi, then privately owned, and in 1960 obtained further funding with which new conservation works were undertaken on several houses in the hamlet. Throughout the fifties there was therefore a strong commitment promoted by various state administrations in order to save the town from physical deterioration and depopulation; this interest did not cease in the following decade, during which other important works were recorded. In the following years and up to the present day, there has been no shortage of interventions aimed at the conservation, restoration, consolidation and securing of the site, in all its natural, cultural-anthropic and perceptive components.

The presence of historic preservation regulations established by the Ministry for Cultural Heritage and Activities and for Tourism guarantees not only the safeguard of the site but also correct methods of intervention when necessary. Local Superintendence has in fact the function to authorize, supervise and monitor all the works of conservative rehabilitation, restoration and extraordinary maintenance that concern the assets liable to preservation restrictions, ensuring the use of materials and techniques consistent with the recommendations of restoration charters as wewll as of national and international conservation principles.



[99] The antifragility of the built environment of Civita is shown in the morfological and typological features where there is a high presence of supporting elements that here are declined in the multiple forms of spurs and buttresses whose realization is aprioristic and dictated by the needs of the moment (©LINKS Foundation)

In more recent times, the following restoration interventions are reported:

· 1969, the Superintendence carries out a restoration intervention on Porta Albana, consolidating the structures due to static problems caused by the nearby sewage system and restoring the wall and stone parts;

· 1972, the municipal administration carries out the first restoration of the building in which the building of the municipality of Bagnoregio is now located;

· 1989, the Superintendency carries out a consolidation and restoration intervention on Porta Santa Maria del Cassero, which was then in a precarious condition;

· 2000, the municipal administration promotes restoration work on the Carmine church;

· 2001, the municipal administration carries out new restoration works on the municipal building of Bagnoregio; on this occasion the roof was redone, some floors and extraordinary maintenance and conservation of the external facades;

· 2003, the municipal administration carries out a conservation and consolidation intervention on the walls of Civita, Porta di Valle, with some restoration works of the church of Valle and other recovery works of the flooring in the external areas;

· 2006-07, the municipal administration (with funding from Framework Program 9 of the Lazio Region, PSR 2000-2006) undertakes a large project in several lots for the recovery of the northern tuff ridge along via Tiezzia. In addition to the stabilization of the rocky walls, the rainwater regimentation, the safety of the cavities in the tuff cliff, interventions are carried out to recover urban spaces, paths (redevelopment of the pavements and annexed structures) and to restore the church of Valley;

· 2007, the municipal administration implements interventions aimed at redeveloping the pavements of Piazza Sant'Agostino;

· 2009-10, the municipal administration undertook the recovery of various facades of the facing rows on Corso Mazzini (Bagnoregio) thanks to a regional loan for the recovery and rehabilitation of homes in the historic centers of Lazio (GR n. 354 / 2004, 419/2006 and 72/2007);

· 2010, the municipal administration carried out restoration works and other urban settlements to connect the cultural center where the "Taruffi Museum" and the "Museo delle Forre" (ex-slaughterhouse) are located with the Multipurpose Hall of Casa del Vento;

· 2014, the municipal administration carried out with a very urgent procedure some interventions to make a building in via delle Balze safe;

· 2014, the municipal administration carried out works to "improve and restore the original state of the places" of the access roads to Civita (safety works, wall reinforcement, consolidation of tuff cavities, nailing of tuff walls, removal of debris landslides); works were also carried out to secure the parking area below the walkway.

Against the background of a state of conservation of the site that appears generally satisfactory, there are critical issues in the San Francesco Vecchio area for which effective actions are planned for their management and resolution.

Specifically, reference is made to the building known as "ex cantina didattica" and the remaining portion of the ancient convent of San Francesco Vecchio dei Minori Osservanti. The building called "ex cantina didattica" (owned by the Province of Viterbo), built in the early seventies and currently in a state of neglect and evident decay.

The "Declaration of intent between the Province of Viterbo and the Municipality of Bagnoregio aimed at resolving the question of the 'ex cantina didattica' in view of the UNESCO objective" (Protocol no. 26279 of 10/29/2020) makes official the intent to proceed, with the necessary speed and in compliance with legal procedures, to identify a definitive solution to the problem of the "ex cantina didattica" in order to definitively redevelop the area.

The remaining portion of the ancient convent of San Francesco Vecchio dei Minori Osservanti is currently owned by the Agosti Foundation. Today the building is in conditions of evident degradation and is in need of recovery and restoration, even in the face of the high historical and cultural value, rather than artistic, that it holds. In fact, the property, in addition to being a material testimony of one of the oldest factories in the area, is closely linked to the hagiography of San Bonaventura and the nearby cave.

The complex, although not yet affected by a specific constraint decree, is subject to the protection provided for by part II of the Code of Cultural Heritage and Landscape (ex articles 10 and 12 of Legislative Decree no. 42/2004), which is why each intervention must be carried out consistently with the methods of protection provided for by the Code; the owners or holders are obliged to ensure the conservation of the property, including through conservation measures.

Perceptive Component

The Perceptive Component of the property, still retain the characteristics that makes iconic the site. There are no specific punctual/spatial elements or that interfere with the main views. Planning at different levels has always been careful not to interfere with the aesthetics of the landscape, preserving its internationally recognized image over the years.





[100] Civita di Bagnoregio as the scenary of the film La strada with actors Antony Queen and Giulietta Masina (1954)
[101] Civita di Bagnoregio in a Postcard of the years 50s-60s



[102] Badlands Valley. Site's naturalistic elements (habitat and species) keeps a satisfactory state of conservation (©Casa Civita)

THE BRIDGE CONNECTING CIVITA TO BAGNOREGIO

The viaduct was realized in 1965 and is still working in security. Costant care and monitoring during the years ensure a good state of conservation and function. In particular, the implemented measures of conservation were focalized to reduce the erosional phenomena of the slopes under the bridge that may affect its stability. In 1967 the Public works office and the Forestal Department performed some consolidation works for the clayey slopes on the sides of the viaduct and the saddle above. Some species typical of the area were also planted, like Brooms and grass having strong roots, in order to stop the surface runoff, but with poor results. In 1970 the Lazio region performed consolidation works on the anchorage point of the new bridge, during which the underlying support staircase collapsed. During the whole duration of the resettlement, an iron walkway was planted between the anchorage point and the first pile of the new viaduct.



[103] The bridge connecting Civita (on the left side) to Bagnoregio (on the right side)



Between 1989 and 1990 more stabilization works were performed on the northern side of the slop, executed by the Grassetto Costruzioni S.p.A Company, who realized terraces supported by geotextiles, anchors with tie-rods and drainage trenches. Recently, in 2014, process of securing works were carried out in the parking area below the walkway.

104 The bridge connecting Civita to Bagnoregio

ALEMANNI-MAZZOCCHI PALACE AND THE "GEOLOGICAL AND LANDSLIDES MUSEUM"

The "Geological and Landslides Museum", housed in the Renaissance Alemanni Palace in the hilltop borgo of Civita, is active since 2012 in studying, researching and divulgation. The Museum constitutes a territorial presidium focused on geology as instrument of knowledge, dissemination and territorial management.



105 Civita di Bagnoregio. Alemanni Mazzocchi Palace in the 60s



The Museum staff has set as his target the establishment of a permanent local presence for territorial protection, developing and calibrating a functional model, potentially exportable to other areas, where the geologist is a reference figure to consult with in order to get a more careful and convenient management of the territory. This can be done only by constantly working on preventive measures against landslides which will turn out to be much more incisive and cost-effective than the measures that will be necessary to take as a result of natural - but predictable - disasters. Palazzo Alemanni Mazzocchi, built in the mid-sixteenth century by the will of Francesco Alemanni on the main square of Civita (mergering of pre-existing buildings), in 1966 became the property of the municipal administration thanks to a donation made by the last heirs, Messrs Fabi and Foresti.

[106] Civita di Bagnoregio. Alemanni-Mazzocchi Palace

In 1947 - when the hamlet of Civita was almost uninhabited - the building was in ruins, threatened by substantial collapses that had affected the roof, devoid of windows and therefore uninhabitable. All this is attested by a document with which the owner, Fabio Fabi, asked the Superintendent for authorization to sell one of the stone fireplaces to the Marquis Bourbon del Monte, who intended to relocate it to his palace in Lubriano; Mr. Fabi describes a building in ruins and dilapidated, on which it was not his intention to invest given also the continuous and progressive depopulation and evacuation orders.



[107] Civita di Bagnoregio. Alemanni-Mazzocchi Palace: Exhibition spaces at Geological and Landslides Museum

In 1958, when the building was still privately owned, the then Ministry of Education (Superintendence) financed the first restoration works on which occasion part of the roofs were restored, some of the floors and deteriorated structures were renovated and new windows were made.



[108] Civita di Bagnoregio. Alemanni-Mazzocchi Palace: Exhibition spaces at Geological and Landslides Museum

In the seventies (1974-77), in view of the celebrations for the seventh centenary of the death of San Bonaventura, a new substantial campaign of restoration was promoted by the Ministry of Public Education (Superintendence). The intervention made it possible to restore, consolidate and make the property accessible, which in the meantime had become the property of the municipality.

The latest works that have substantially defined the current state of the building, have been started with the resolution of the municipal council no. 143/2000, with which was authorized the preliminary project to complete the restorations and assign the property to the "Geological and Landslides Museum". During these last restoration works (2004-08) the roofing system was revised, some floors were consolidated and some of the walls were strengthened, equipping the building with original and electrical systems suitable for the new use, arranging an appropriate detection / extinction and anti-intrusion, replacing some of the internal flooring, preparing the remaining finishes, fixtures and all the furnishings necessary to set up the museum spaces.

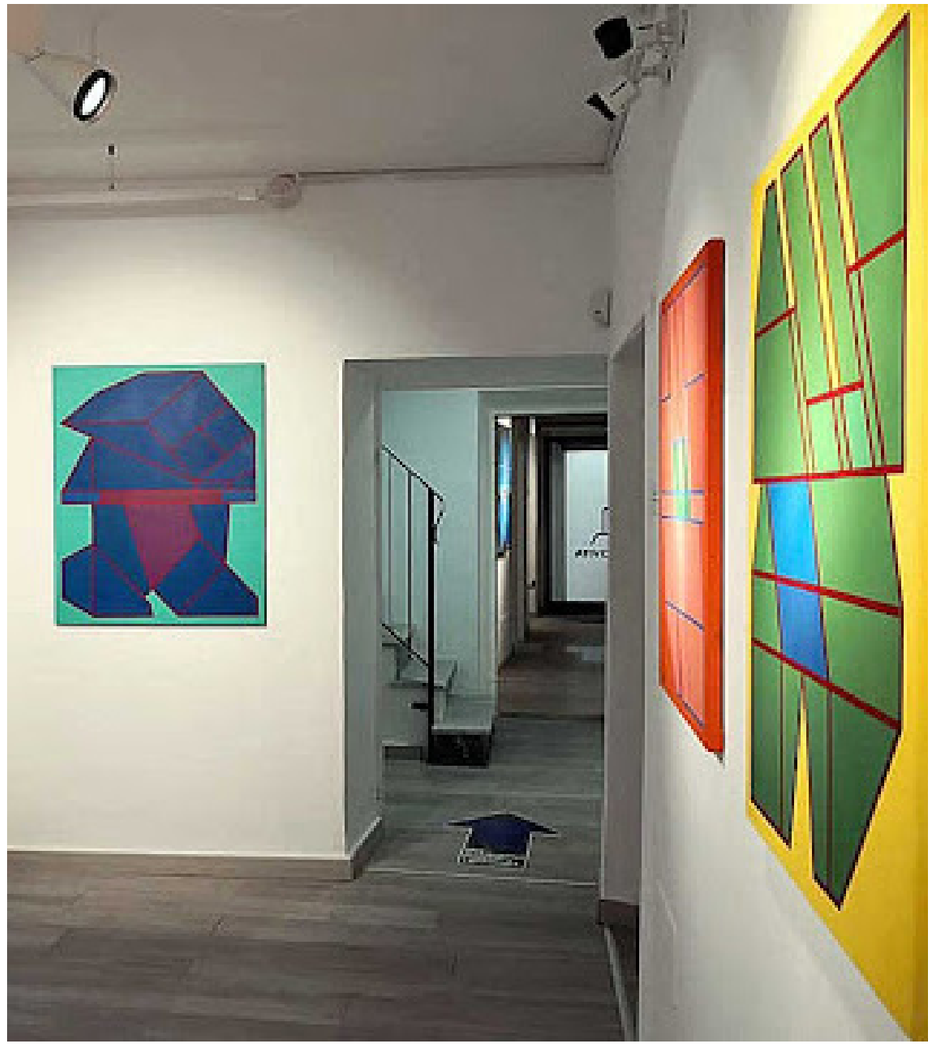
In 2006, other works were undertaken to complete the work on the building as well as the restoration of Greco House (conceived as an integral part of the museum). The restoration works defined spaces for the ticket office and the bookshop, while on the Greco House were realized interventions of conservation and securing, without removing the peculiar lesions and signs due to subsidence and landslides that had affected the area, elements destined to become an integral part of the museum itinerary.

PETRANGELI PAPINI PALACE

Palazzo Petrangeli Papini hosts the Art Center “CAPPP – Centro per l’Arte palazzo Petrangeli Papini,” and since 2019 is the headquarters of Casa Civita srl, a 100% company owned by the Municipality of Bagnoregio.

A company called to deal with tourism development in the municipal area but also with a view to a “vast area”. Casa Civita is the place for managing existing tourist services and for the conception, planning and implementation of other useful actions for welcoming and improving the use and promotion of the tourist experience. Casa Civita is called to design, build and implement the communication of the territory, working on the definition of a “vast area” and providing consultancy services for tourism development to other municipalities or individuals interested in it. At the same time, Casa Civita is also entrusted with the mapping of the territory, with the collection of quantitative and qualitative data on accommodation facilities, refreshment points, and commercial activities of the tourist sector or related to this.

The building has undergone several restoration works, initially aimed at hosting the “museum of ceramic”. At the beginning of the 2000s, part of the roof was rebuilt together with other small works and the securing of the electrical system. A series of building works will follow shortly thereafter aimed at adapting the existing toilets and plant equipment as well as some restoration and finishing works. During these last works, in addition to the arrangement of the garden, the setting up of the museum spaces was prepared to exhibit the demo-ethno-anthropological collection of tools and artifacts of the peasant culture donated by the Papini family to the Municipality of Bagnoregio.



[109] Bagnoregio. Pietrangeli Papini Palace: Exhibition spaces at Art Center

Since 2007, work has been carried out to securing and restore the ground floor and basement to house the “exhibition center of local resources”. On the ground floor, a flexible and versatile set-up was planned, to be dedicated to the temporary display of local food products, crafts and agriculture, as well as a wine shop. This intervention also involved the rooms of the underground cellars to create exhibition spaces dedicated to the viticultural culture that distinguishes the area. This last intervention, in addition to allowing the realization of the necessary building and finishing works of the ground and basement levels as well as the consolidation works of the building, has allowed a further adaptation of the plant equipment, the construction of an elevator and the preparation of museum spaces .



110 Bagnoregio. Pietrangeli Papini Palace

SAN DONATO CHURCH

Built in the seventh century and renovated several times over the years. Romanesque and dating back to the 5th century but with a Renaissance facade. The bell tower that stands above the church is a tower and at its base there are two Etruscan basalt stone sarcophagi. St. Donato church was founded in the seventh century on a pre-existing Roman temple. It was originally a basilica type, with exterior porch and the plant was shorter than the actual one because there were no presbytery and choir.



111 Civita di Bagnoregio. San Donato Church (inside) (©LINKS Foundation)



[112] Civita di Bagnoregio. San Donato Church and the square (©LINKS Foundation)

Over time it underwent many changes including the most important one that was in 1511 decided by the Bishop Ferdinand of Castiglia, designed by the architect Nicola Matteucci from Caprarola: the eastern wall, the upper choir with its high altar, the crypt and the lower choir were demolished; the presbytery and the choir were built, the walls and roofs of the aisles were raised, and the facade was transformed from the Romanesque style to the Renaissance style.

The Church of St. Donato was a bishopric until 1699 when, following the earthquake of 1695, the seat was moved to Bagnoregio. Among the main restoration works realized in the building in recent decades, there are a series of consolidation interventions of the masonry structures (50s and 60s), the reconstruction of the floors and the conservation of the plaster (1973), the reconstruction of the roofing (1991) and of the most urgent works for the consolidation of the transept and bell tower (2001-2002). The last restoration work dates back to 2009 with the restoration of the facade.

4.b FACTORS AFFECTIONG THE PROPERTY

The Cultural Landscape of Civita di Bagnoregio even though suffering from pressures that may be adverse has put in acts protection measures - at all levels - that ensure the maintenance of site integrity. Environmental pressures (ii) and Tourism (iv) are the most significant for the site. For each pressure type, both the present state and the possible solutions (in progress or at design stage) are discussed, with reference to the players involved, in order to highlight how the pressures are managed and kept under control.



[113] View of Civita di Bagnoregio surrounded by Badlands Valley (©Casa Civita)

4.b.1 Development pressures

Below the development pressures acting on the property, reported following the Pressure/ Solution scheme.

Population decline

Pressure: Population in the Cultural Landscape of Civita di Bagnoregio counts XXX units. Focusing to the hilltop borgo of Civita (a hamlet of Bagnoregio) a population decline was registered during the times, due the problems related to the collapse of its borders and the difficulty to physically reach the borgo (connected trhough the pedestrian bridge) as well, which inhibits any form of residential development. Residents, here, are stabilized at around twenty units.

Mitigation: Although the Cultural Landscape of Civita di Bagnoregio is located outside the perimeter of the "National Inner Areas Strategy" the site is at the center of this national narrative. "National Inner Areas Strategy" represents a direct action to support sustainable territorial competitiveness, in order to contrast, in the medium term, the demographic decline that characterizes the internal areas of the country. The goal is to create new income opportunities and to ensure the inhabitants have access to essential services (local public transport, education and social and health services) as well as to improve the maintenance of the territory itself.). Within the framework of a possible local development strategy, the so-called territorial capital defined as the sum of the natural, cultural and cognitive ones, becomes the fulcrum of its development. As consequence, the presence of elements of resilience represented by its territorial capital and its exploitation through tourist-cultural value chain, can trigger local development dynamics that makes the Cultural Landscape of Civita di Bagnoregio an example of territorial resilience and a point of reference for the surrounding areas.

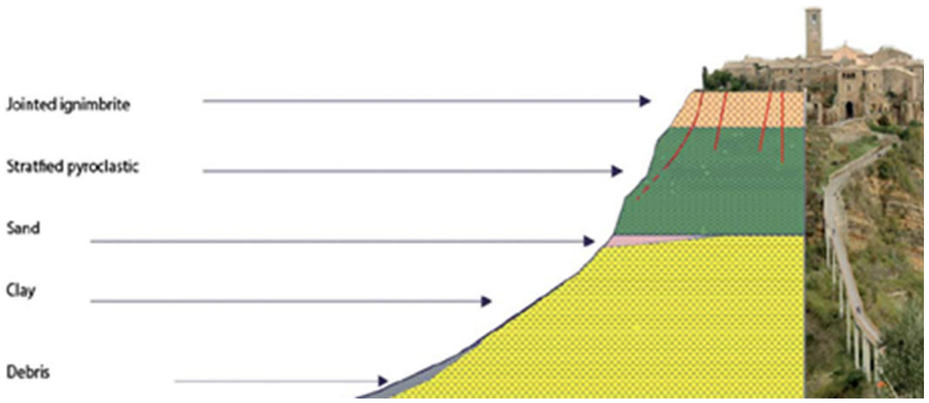
4.b.2 Environmental pressure

Below the environmental pressures acting on the property, reported following the Pressure/Solution scheme.

Deformation and failure of the soil

Pressure: The landscape of Civita di Bagnoregio is subjective to different instability phenomena related to the difference of the existing formations. Around the cliff's borders it's possible to see the marks of a complex morphology almost totally controlled by phenomena of deformation and failure of the clayey layer, with reduction in its mechanical characteristics, under the volcanic ones.

The tuff cliff is mainly interested by the collapse of the more external part with toppling type of landslides. The clay layer is more subjected to mud-flows type of landslides due to the degradation of the mechanical properties in the first meters of the layer by the rainwater.



[114] Current stratigrafy of the cliff and the valley of Civita di Bagnoregio (margottini, Di Buduo 2016)

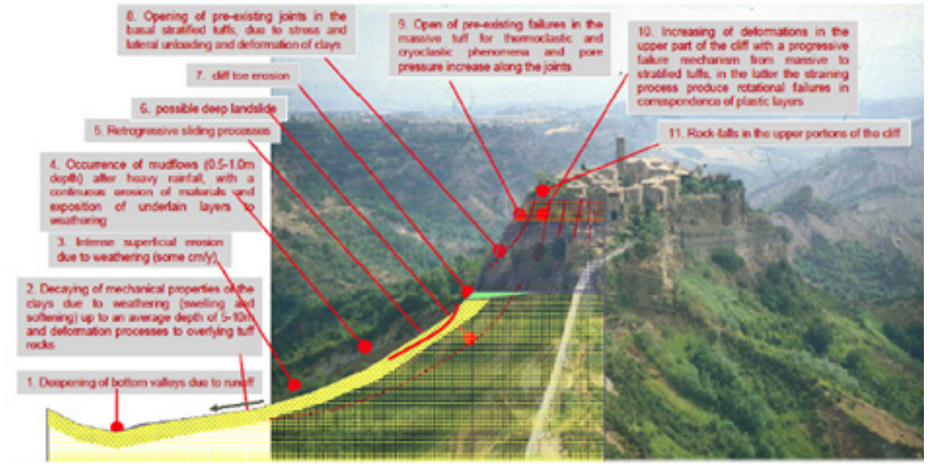
The high inclination and the low permeability of the clay slope reduce the infiltration of water and favors the fast surface outflow, resulting in the removal of the altered surface clay and the engraving of a dense drainage network (badlands).

One of the main phenomena to consider is the interaction with the rain water that, with different mechanisms, leads to the decreasing of the shear strength. The interaction with the rainwater leads to a decay of the physical-mechanical properties of both the volcanic rocks and the clays. Chemical dissolution phenomena are present both in the tuff and in the badlands because both soils are rich in sulphur. The basal clayey layer is instead more subjective to alteration phenomena as changing in the microstructure of the clay due to swelling and consequent softening of the same. Due to the low permeability of the clays the effect of the rainwater is also represented by the superficial runoff that, removing the most superficial part of the layer, on one hand makes the slopes steepness, in the other hand exposes new parts of the clayey layer to the physical-chemical alteration.

The morphology of the cliff is almost totally connected by phenomena of deformation and failure of the basal clayey layer underlying the tuff layers. The infiltration of the water inside the porous and fissured tuff, determines, at the contact with the underlying impermeable clays the formation of a water table with spread emerging springs.The prolonged contact of the clay with the free water leads to the swelling of the clay and the decay in the clay's properties that, activating superficial landslides causes the scouring at the base of the tuff cliff. The swelling of the clays, in the parts in contact with the tuff, also lead to the failure of the rocks along sub-vertical discontinuities, these discontinuities represent the planes of failure and separation.

The tuff cliff is then subjected to unloading stress (stress release) and detensioning (stress relief) respectively due to the deepening of the valley and lateral unloading, and to the contrast in stiffness between marine clays and the volcanic deposits. The condition of instability of the tuff are typically regressive and then, if not properly mitigated, may involve more internal portion of the cliff.

The removal of debris materials by landslides and the continue making of sub-vertical discontinuities bring to the verticality of the cliff's sides. The stresses at the toe of the tuffaceous cliff lead to visco-plastic deformations in the clayey layer with consequent vertical cracking and lowering of the external parts of the tuffaceous cliff.



[115] Outline of the geo-morphological processes on the cliff, the slope and the valley of Civita di Bagnoregio (Delmonaco et al. 2008)

Starting from the valley erosion caused by the water-courses, the instability mechanisms involving the area are then the result of the interaction of various phenomena which can be summarized as follows (Garbin et al. 2013):

a. Deepening of the valley bottom due to runoff
b. Decaying of the clay mechanical properties due to weathering up to an average depth of 5-10 m.
c. Occurrence of the mudflows interesting 0.5-1 m depth (were the clay is most altered), with a continuous erosion of materials and exposition of the underlying layers to mechanical decay
d. Intense superficial erosion by the weathering
e. Opening of the pre-existing joints in the basal stratified pyroclastic formation, due to significant increasing of deviatory stress associated with lateral unloading and clay deformation.
f. Opening of pre-existing fractures in the upper massive ignimbrite due to thermoclastic and cryoclastic phenomena as well as the water pressure increase along the joints.
g. Increasing of deformation in the upper part of the cliff with a progressive failure mechanism from the pre-existing joints of upper tuffs to the stratified pyroclastic materials; in the latter, the straining process produces rotational failures in correspondence of the plastic layer.

The main geomorphological features of the area are summarized in a Geomorphological map, scale 1:10.000. According with the stability conditions, the landslides reported on the map are divided in:

I. Quiescent: landslides that are not moving in the last seasonal cycles, but with geomorphological evidences or proof of the past activities and possibility of reactivation.

II. Actives: landslides that where in place during the surveys, or recurrent in a seasonal cycle.

III. Inactive: stabilized landslides, for which the movement causes have been naturally or artificially removed.

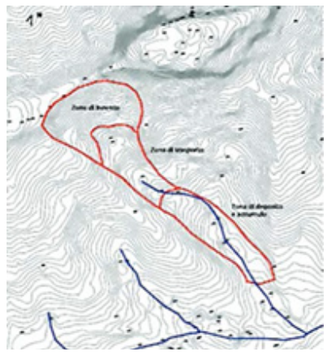
The drawing of the geomorphological map was made detecting the areas involved by the instability phenomena in the time, using aero- photograph and surveys in situ.

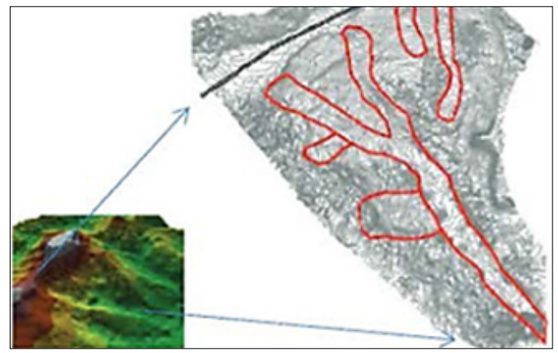
Mitigations: The Cultural Landscape of Civita di Bagnoregio is still exisisting thanks to human modifications contrast and overlap the natural landforms. Over the years, numerous projects have been realized in the slopes and on the cliff of Civita.

INSTABILITY PHENOMENA INVOLVING THE SOUTHERN SLOPE OF THE ACCESS RIDGE

The geomorphological processes involving the ridge connecting Civita with Bagnoregio arise halfway between the processes abovementioned. That means we are dealing with an area in which there is not any more the tuffaceous upper plate, but not so far to develop completely a badlands landscape. The narrow ridge was continuously affected by soil erosion and landslides as consequence of decay of clay material. Data coming from many sources testify the evolution of the ridge in times. From a reconstruction made through the available archaeological, paintings and topographic measurements it was possible to evaluate the lowering of the ridge in the past 250 years, assessed around 40 m.

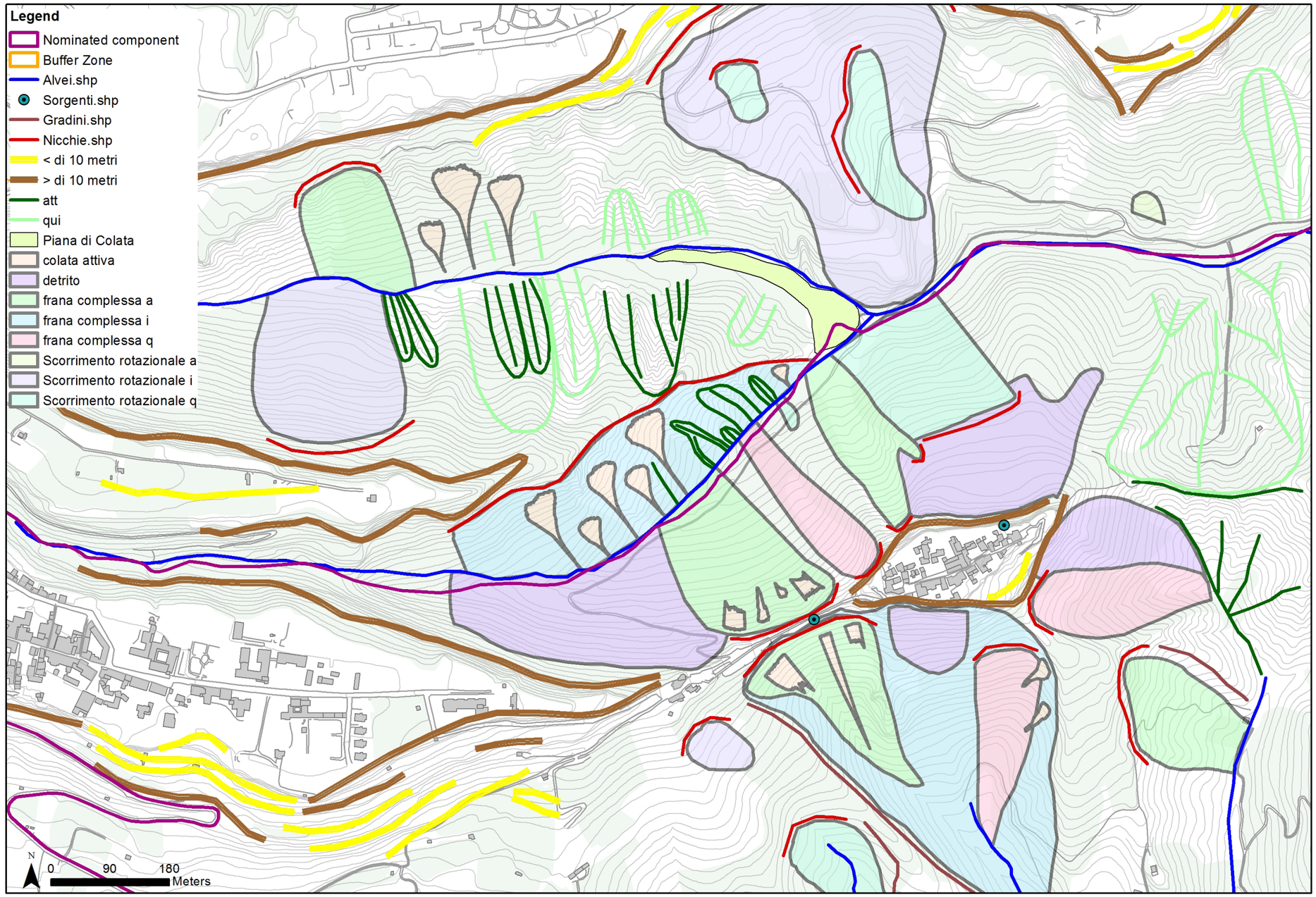
The instability present along the slopes are then a phenomenon that characterized the past evolution of the southern side of the ridge. This phenomenon was in a quiescent condition since a reactivation in December 2008 and March 2010 caused by heavy and prolonged rainfalls.





[116] Geomorphological zoning of the southern slope in terms of source, transportation and accumulation of the triggered earthflow (Garbin et al. 2013)

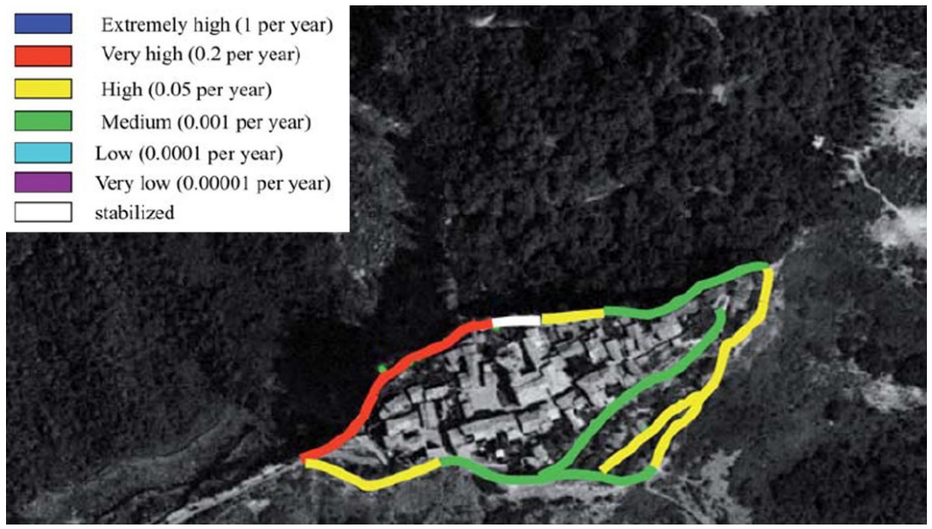
[117] Earthflow instability along the southern slope (Garbin et al.2013)



[118] Geomorphological map of site's built-up area (re-elaborated by LINKS Foundation from ENEA 2003)

4.b.3 Natural disasters and risks preparedness

The area of the property has been subjected to study and stabilization works for years (Garbin et al., 2013; Margottini, 2013; Delmonaco et al., 2009; ENEA, 2001; Margottini & Serafi ni, 1990), but after so many years the situation demands to repeat the plea «Let's save Civita». Over the past few years, together with some landslides that has been going on for a lot of time, new mass movements have started, subject to a rapid evolution, even where stabilization works have been performed in the past. The phenomena of instability, if not adequately researched, monitored and stabilized, can keep evolving more or less rapidly; furthermore, with the passing of time and works not properly adapted to the complexity of the slopes, together with no actions being taken, makes increasingly problematic and expensive to secure all unstable areas.



[119] Hazard map at the border of the cliff

A "dynamic" planning is required precisely because the territory is extremely dynamic: in addition to the stabilization works for the unstable areas it is essential to constantly plan maintenance interventions for the territory, properly designed and scheduled overtime to be realized on the whole hillside. Taking this kind of action allows to optimize the investments, working at best, with long-term benefits. The saving of Civita is feasible only through: the synergy of all those who study and work on the territory, together with the monitoring of the hillsides.

As the landscape of Civita di Bagnoregio is very susceptible to different kind of instability phenomena, the occurrence of some kind of natural disaster can surely accentuate, or at least be related, with this instabilities.

In particular, it's possible to list the main natural hazard that can put in danger the area and induce landslides phenomena:

- Hydrogeological risk
- Seismic risk
- Fire risk

For every of this kind of hazard the municipality of Civita di Bagnoregio made an Emergency plan in which are individuated the areas with major susceptibility to each of the listed hazards. The plan also offer the procedures to follow in case of the hazard happen, identify the people who are the reference for any hazard, the rescue paths and the strategical buildings.

Hydrogeological hazard and Landslides

The Hydrogeological risk is deeply connected with the landslides attitude of the area. Most of the recorded landslides are connected with rainy events because of the saturation of the clayey soils.

In the Emergency plan the areas more susceptible to landslides in a chart of hazard are identified. The chart is an instrument for both monitoring and schedule the mitigation interventions. Herewith is shown the chart of susceptibility of the area.

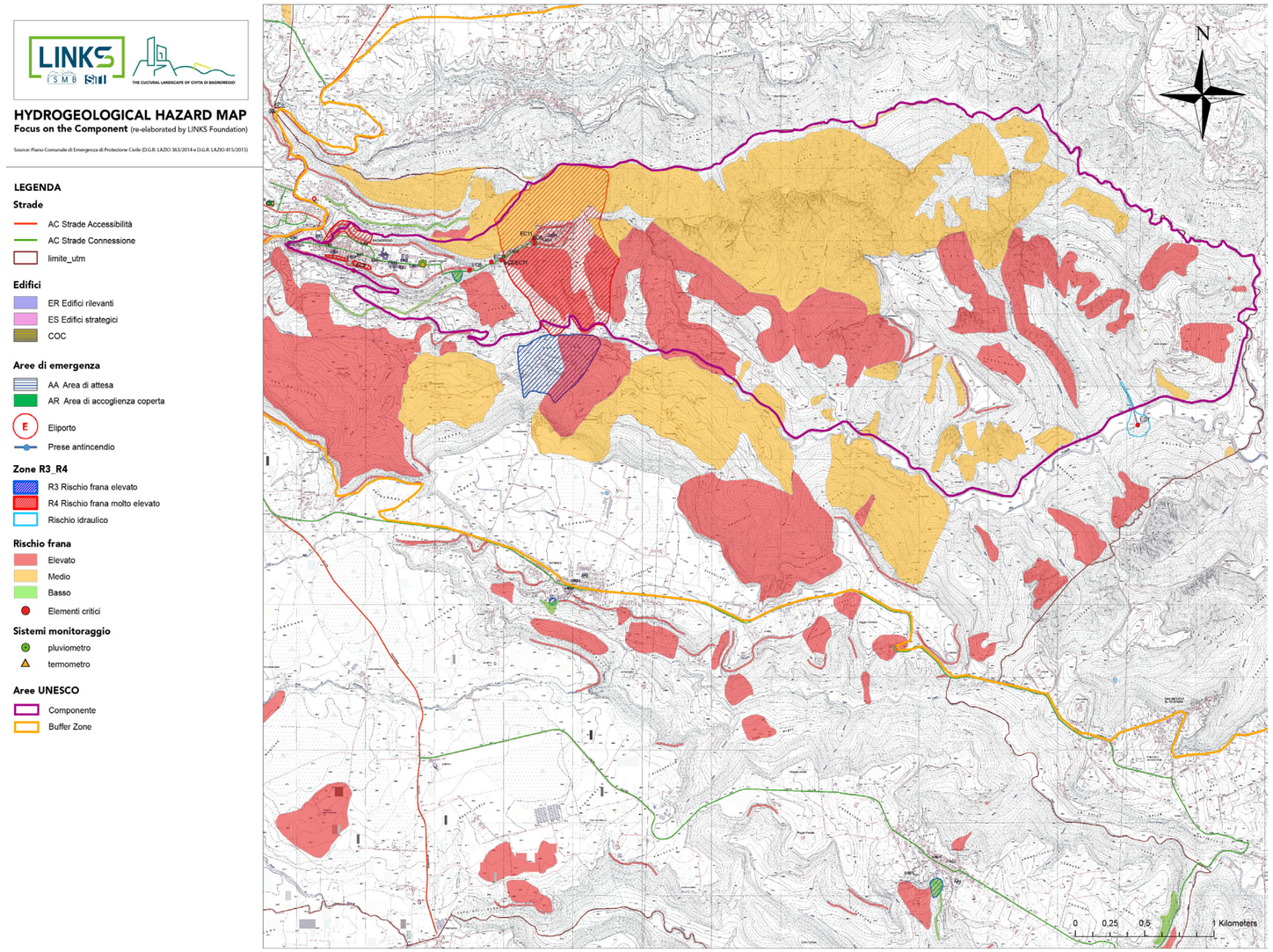
Operational intervention procedures

The Civil Protection Municipal Emergency Plan shows the Standard Operating Procedures to be implemented in case of a weather, hydrogeological and hydraulic event. The procedure is defined for the different activation phases, divided into:

1. Early warning;
2. Attention;
3. Pre-alarm;
4. Alarm.

The conditions that characterize the single activation phase are explained in the Emergency Plan.
The procedure is structured in terms of:

- Person responsible for activating the procedure;
- Activities in which the procedure takes place;
- Subjects responsible for the various activities.



[120] Hydrogeological hazard map. Red: high landslides risk; Orange: medium landslides risk; Green: low landslides risk (map re-elaborated by LINKS Foundation from The Civil Protection Municipal Emergency Plan)

Seismic hazard

The aerea of Civita di Bagnoregio is a seismic area as testified by the INGV (Istituto Nazionale di Geofisica e Vulcanologia) and from the seismic activity recorded in the past that caused the disappearing of many buildings. The area is classified as ***2B*** that means that is an area with a medium seismic attitude where it is possible the occurrence of strong earthquakes (0.15< ag<0.2).

In the area of Civita di Bagnoregio a seismic event can, obviously, lead to landslides event. In the chart of seismic susceptibility the areas are then classified in two main categories:

- Areas susceptible to landslides in case of earthquake (with the indication of the different possible instability mechanisms)
- Areas susceptible to topographic amplification in case of earthquake

Operational intervention procedures

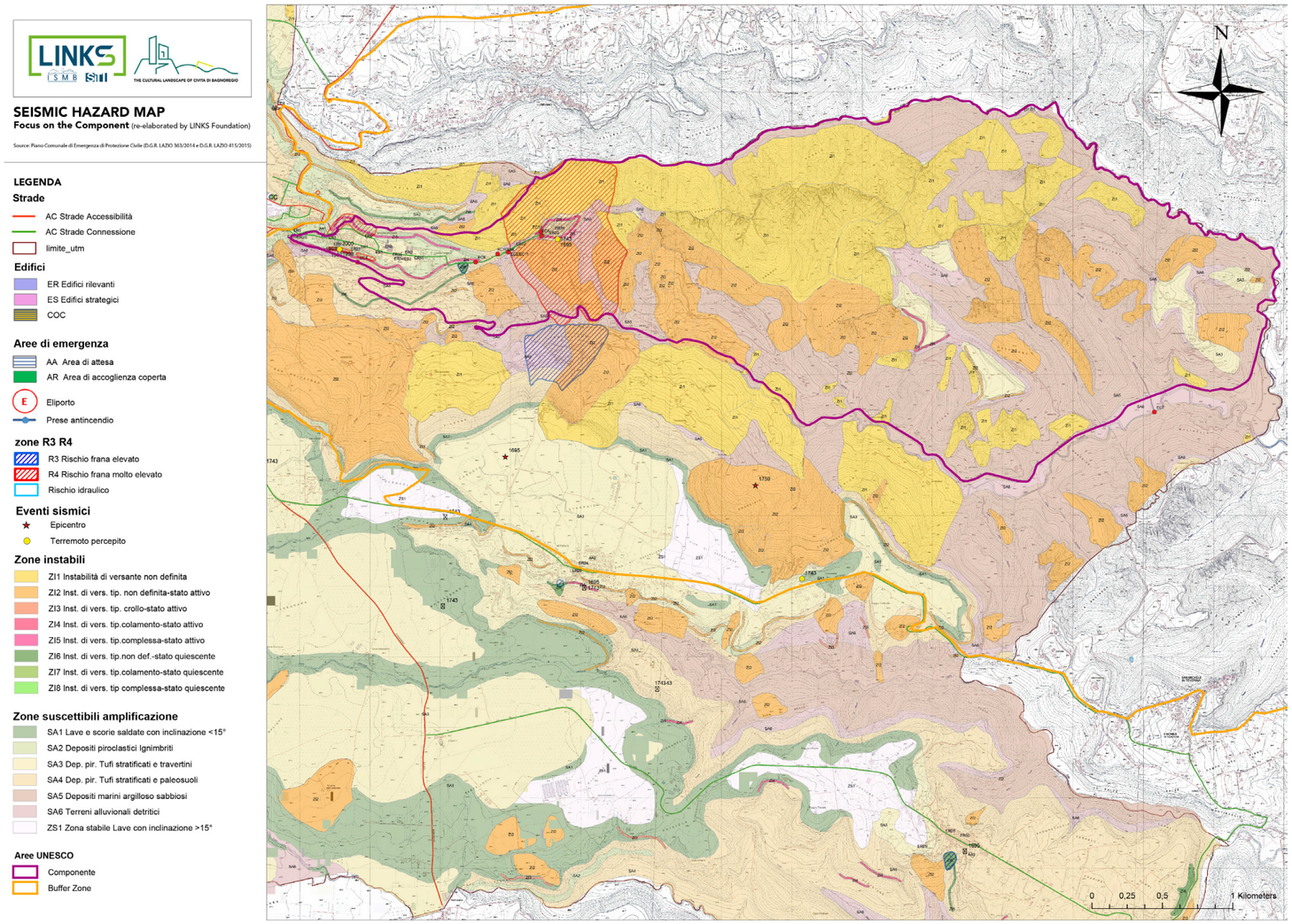
The Civil Protection Municipal Emergency Plan shows the Standard Operating Procedures to be implemented in case of a seismic event. The procedure is defined for the different activation phases, divided into:

1. Early warning;
2. Attention;
3. Pre-alarm;
4. Alarm.

The conditions that characterize the single activation phase are explained in the Emergency Plan.

The procedure is structured in terms of:

- Person responsible for activating the procedure;
- Activities in which the procedure takes place;
- Subjects responsible for the various activities.



[121] Seismic hazard map (map re-elaborated by LINKS Foundation from The Civil Protection Municipal Emergency Plan)

Fire hazard

The area of Civita di Bagnoregio is susceptible to fire because of the presence of the vegetation all around the cliff. In the case of occurrence of a fire, moreover, the eventual deforestation will left the slopes even more susceptible to landslides phenomena.

The municipality of Bagnoregio made a chart with the delimitation of each area susceptible to fire, in the charts the areas are defined in the susceptibility according to the kind of vegetation and the proximity with urban areas.

Operational intervention procedures

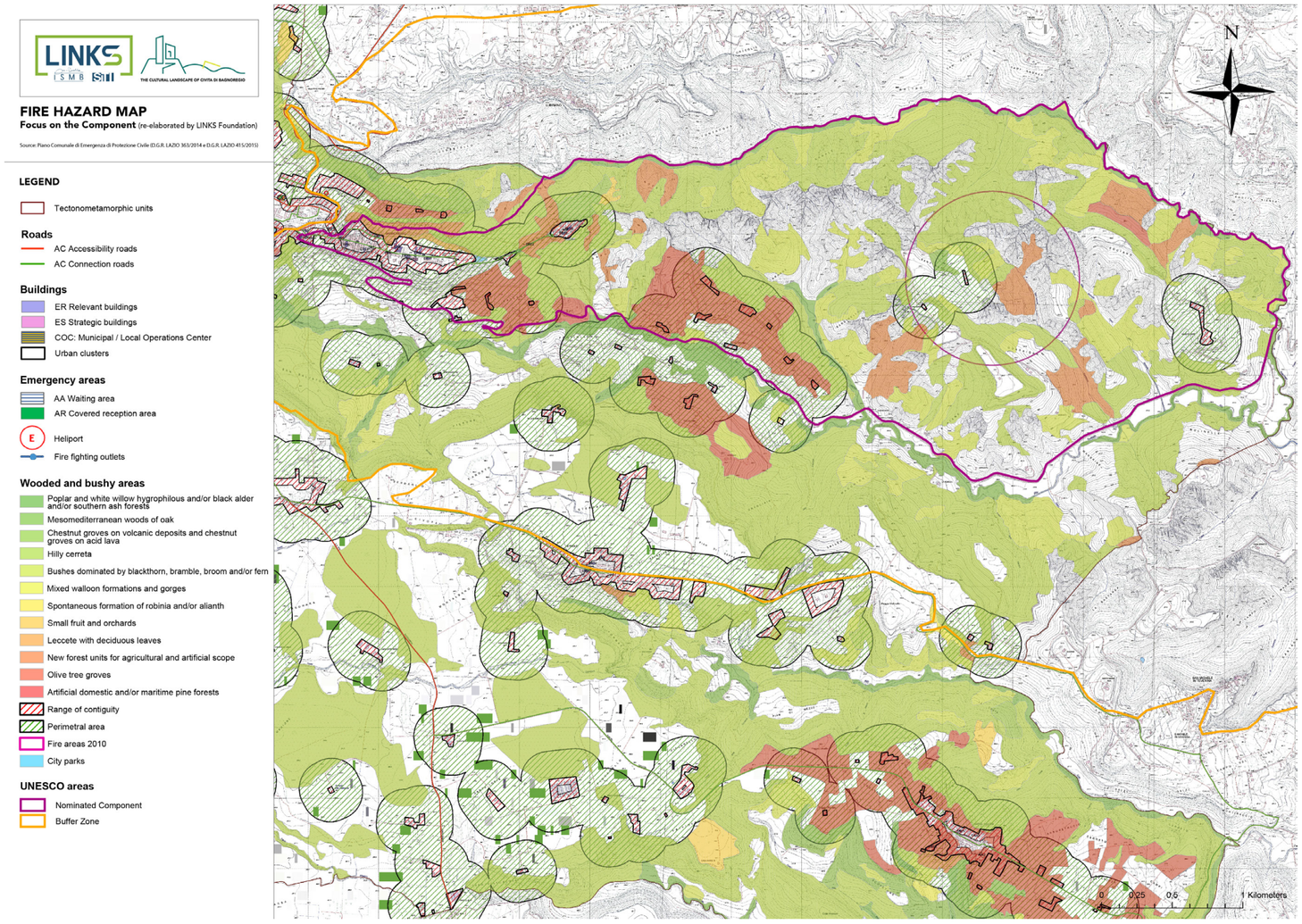
The Civil Protection Municipal Emergency Plan shows the Standard Operating Procedures to be implemented in case of a fire event. The procedure is defined for the different activation phases, divided into:

1. Early warning;
2. Attention;
3. Pre-alarm;
4. Alarm.

The conditions that characterize the single activation phase are explained in the Emergency Plan.

The procedure is structured in terms of:

- Person responsible for activating the procedure;
- Activities in which the procedure takes place;
- Subjects responsible for the various activities



[122] Fire hazard map (map re-elaborated by LINKS Foundation from The Civil Protection Municipal Emergency Plan)

4.b.4 Responsible visitation at World Heritage sites

Tourism Pressure:

The anthropogenic pressure - which weighs more heavily on the village of Civita - is attributable to the huge tourist flows that have the bridge that connects it to Bagnoregio as their only access route.To the specificities of the place both in terms of mobility and fragility, two elements must be added that make the issue of managing tourist flows of particular relevance:

· The relationship with the number of residents, very low when compared to the number of tourists, which makes Civita almost an uninhabited place in the eyes of the tourist;

· The significant increase in flows observed in recent years.

Must be added that Civita is characterized by high flows of same-day visitor (or excursionist), those tourists who by definition do not stay overnight in the place they are visiting. It is a form of tourism generally characterized by a high environmental impact and a low economic importance and which, as such, should be reduced to a minimum in favor of a type of hotel and extra-hotel tourism.

Considering this, it is not believed that tourism can constitute a threat to the conservation of the site, but rather, if well managed, a further opportunity to enhance it, especially considering the efforts made by the municipal administration to achieve a qualitative cultural tourism.

Monitoring and mitigation measures already in place:

In this context, the following tools, partly already operational, partly to be foreseen for the near future, assume fundamental importance:

· A constant and continuous monitoring of the tourist phenomenon both in terms of quantity (arrivals, presences, accesses to the town), already in place and to be continued over time, and of quality and satisfaction, to be planned through ad hoc surveys;

· A careful and rigorous planning of tourism policies;

· Strategy in mid term (Management Plan).

There are already numerous policies for the management of tourist flows. The introduction of an entrance ticket (5 euro/person is one of the most effective solutions. In particular, this action allows you to have detailed access control (tourists/day).

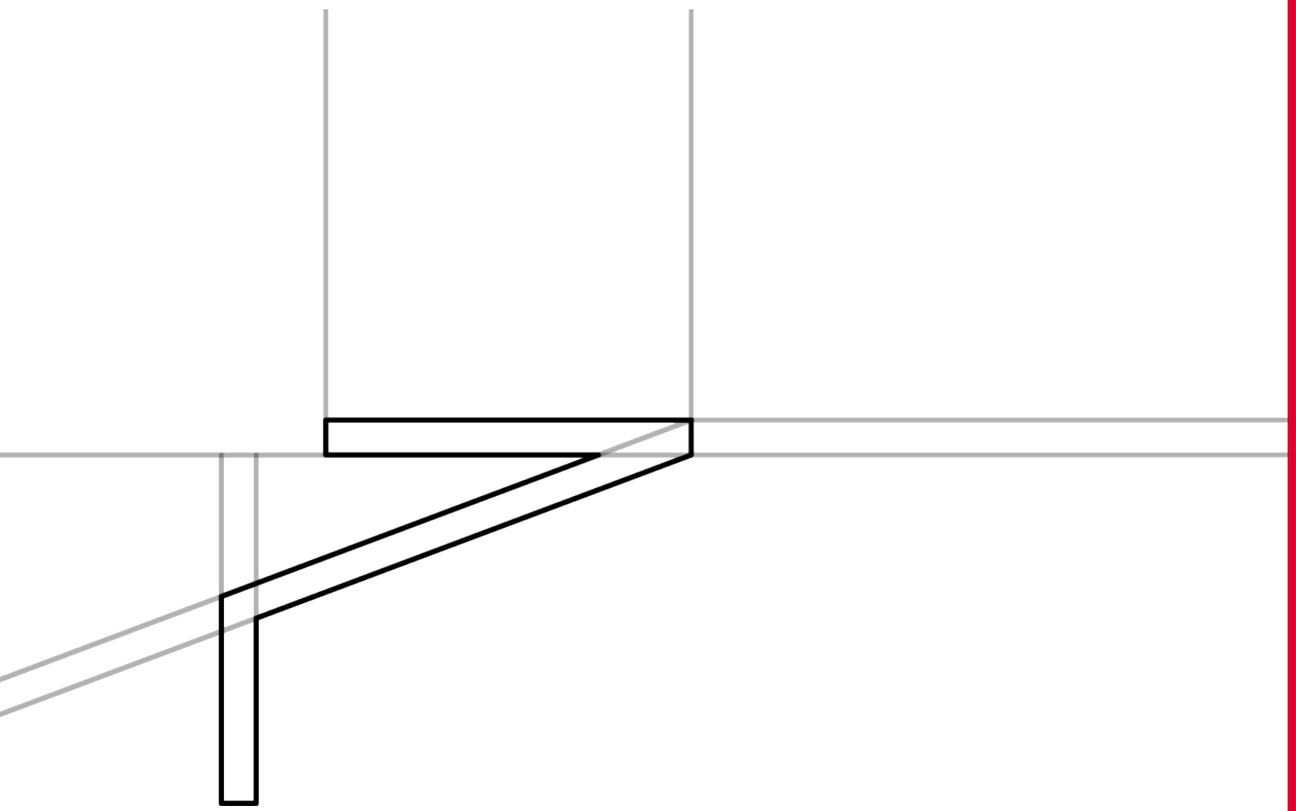
4.b.5 Number of inhabitants within the property and the buffer zone

A contained demographic density characterizes the site and this is due to the presence of the naturalistic area of the Badlands Valley that compose a large part of the site.

The estimation is made up using statistics of ISTAT (National Institute of Statistics), on a territorial scale based on “census sections”, deeper and better than Municipality scale. Year of data is 2020 (last Italian official Census).

ESTIMATED POPULATION	NUMBER OF INHABITANTS
Nominated property	3.556
Buffer Zone Area	2.433
Total number of inhabitants	5.989

PROTECTION AND MANAGEMENT OF THE PROPERTY



5 PROTECTION AND MANAGEMENT OF THE PROPERTY

5.a **Ownership**

5.b **Protective designation**

- 5.b.1 International Conventions
- 5.b.2 European Union law related to environment
- 5.b.3 Legislation protecting cultural heritage and landscape at national and regional level
- 5.b.4 Regulations safeguarding the environment at national level

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

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

5.e **Property management plan or other management system**

- 5.e.1 Action Plan
  - 5.e.1.1 *Conservation Plan*
  - 5.e.1.2 *Fruition Plan*
  - 5.e.1.3 *Capacity Building Plan*
  - 5.e.1.4 *Community Engagement Plan*
  - 5.e.1.5 *Communication Plan*
  - 5.e.1.6 *Monitoring and Evaluation Plan*
  - 5.e.1.7 *Governance Structure and Management System*

5.f **Sources and levels of finance**

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

5.h **Visitor facilities and infrastructure**

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

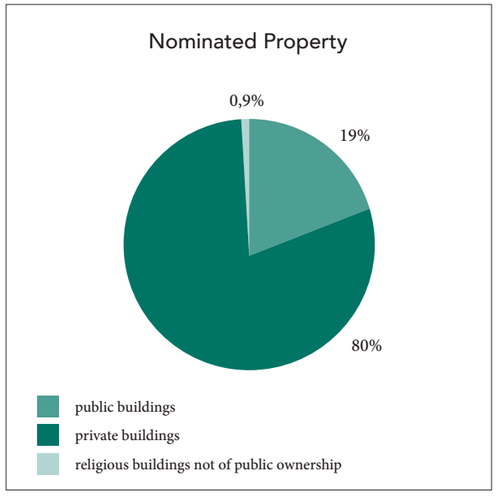
5.j **Staffing levels and expertise (professional, technical, maintenance)**

5. PROTECTION AND MANAGEMENT OF THE PROPERTY

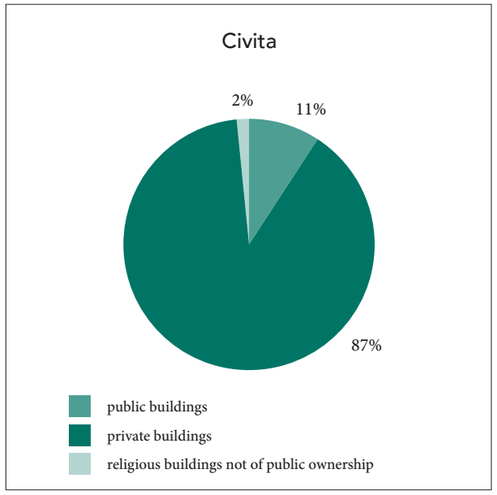
5.a OWNERSHIP

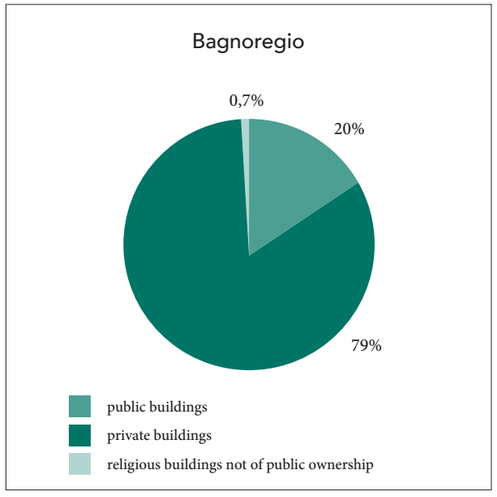
The nominated site falls within the municipal territory of Bagnoregio. It is divided between private property - including basically private residences, accommodation facilities, shops-, the public domain - consisting mainly of public buildings, schools, roadways, public spaces in general - and religious property.

The following charts show the ownership distribution of the buildings in the nominted property.



123 Distribution of the buildings' ownership in the Nominated Property





124 Distribution of the buildings' ownership within the Nominated Property. Focus on Civita and on Bagnoregio

5.b PROTECTIVE DESIGNATION

The nominated property is, on the whole, subject to protection and conservation measures, in compliance with:

- **International Conventions**
  (see paragraph 5.b.1);
- **European Union law related to environment and landscape**
  (see paragraph 5.b.2);
- **National and regional legislation protecting cultural heritage and landscape**
  (see paragraph 5.b.3);
- **National regulations safeguarding the environment**
  (see paragraph 5.b.4);
- **Regional, provincial and municipal instruments of territorial government**
  (see paragraph 5.d).

5.b.1 International Conventions

The protection of the site is guaranteed starting with a series of international Conventions referring to the safeguarding of the cultural heritage and landscape. They represent the juridical basis and the direction for the national legislation of Italy.

Below are the main protection tools of international reference:

· Convention regarding global protection of the cultural and natural heritage (Paris, 1972), ratified by Italy in 1978.
· Convention for the Protection of Cultural Property in the Event of Armed Conflict with Regulations for the Execution of the Convention 1954 (The Hague, 14 May 1954) and its First Protocol relating to the prohibition on exports of cultural goods from occupied territories (The Hague, 14 May 1954) ratified by Italy in 1958 and Second Protocol related to the event of declared war or of any other armed conflict which may arise between two or more of the High Contracting Parties and to all cases of partial or total occupation of the territory of a High Contracting Party (The Hague, 26 March 1999).
· The Council of Europe, European Charter of the Architectural Heritage (Strasbourg, 26 September 1975).
· Convention for the Protection of the Architectural Heritage of Europe (Granada, 1985), ratified by Italy in 1989.
· European Convention on the Protection of Archaeological Heritage (revised; Valetta, 16 January 1992) ratified by Italy in 2015.
· Council of Europe, the European Landscape Convention (Florence, 20 October 2000), ratified by Italy in 2006.
· UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (Paris 17 October 2003), ratified by Italy in 2007.

· UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions (Paris, 20 October 2005), ratified by Italy in 2007.
· Framework Convention of the Council of Europe on the value of cultural heritage to society (Faro, 27 October 2005), ratified by Italy in 2020.

In particular, the conservation of landscape is an important part of the contemporary policies and is an internationally-accepted, tested system of conservation principles that also finds recognition in the main Italian juridical tools. Thanks to the principles of the European Landscape Convention (ratified by Italy in 2006), the sensitivity to conservation problems has gradually extended from a conception of punctual protection, linked to the individual monuments or viewpoints and the complementary surroundings, to a wider consideration of landscape. According to this concept, in order to protect the value of the landscape, the territory has to be considered not only for its aspects of exceptional value but also as a whole, taking its most compromised areas into account as well.

5.b.2 European Union law related to environment

A large part of the nominated property and of its buffer zone fall within an area identified as **Site of Community Interest (SIC)/Special Protection Area (ZPS) "Calanchi di Civita di Bagnoregio"** (IT6010009) **protected due to its biodiversity** (see following map) in implementing "Habitat" Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (put into effect in Italy in 1997) and Directive 2009/147/EEC of 30 November 2009 on the conservation of wild birds (put into effect in Italy in 2012).

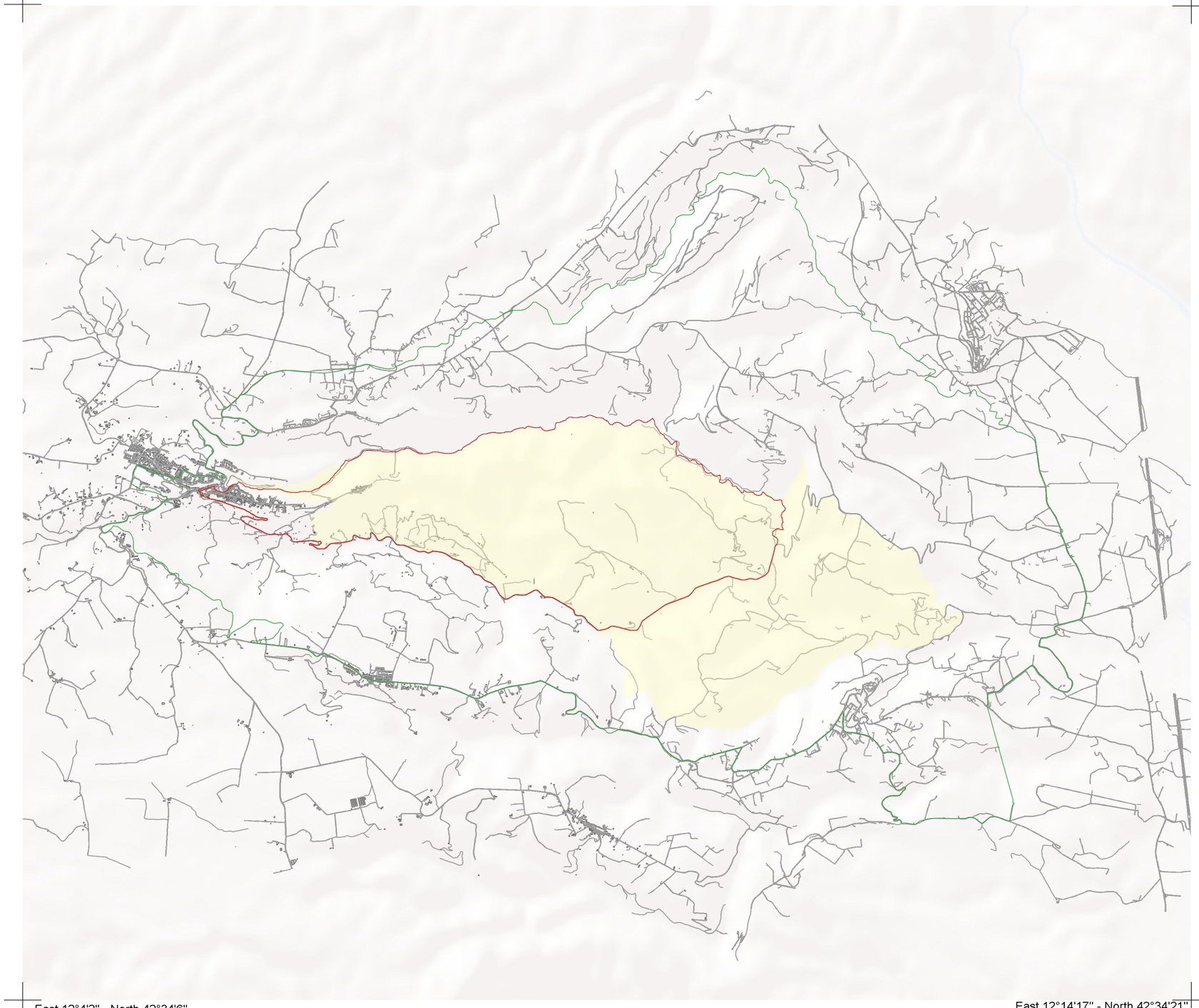
These Directives form the cornerstone of Europe's nature conservation policy built around two pillars: the **Natura 2000 network** of protected sites and the strict system of species protection. The aim of the network is to assure the long-term survival of Europe's most valuable and threatened species and habitats. Areas included in the Natura 2000 network are not strictly protected areas where human activities are excluded.

The Site of Community Interest (SIC)/Special Protection Area (ZPS) "Calanchi di Civita di Bagnoregio" is subject to a specific management plan whose general objective is to ensure the presence, in the best possible conditions, of habitats and species that have led to the identification of the SCI / SPA, implementing required strategies for protection and management, even in the presence of human activities.

East 12°3'43" - North 42°40'54"

East 12°13'59" - North 42°41'09"

Regulatory costraints



East 12°4'2" - North 42°34'6"

East 12°14'17" - North 42°34'21"

Legend

- Nominated component
- Buffer Zone
- ZIC-ZPS “Badlands Valley”

Print scale: 1:45.000
Projected coordinate system: UTM-WGS84
Base map: CTR Lazio Region
Municipality of Bagnoregio (nominated site)
Date: December 2020

0 0,5 1 2 Km

Regarding to the protection of the environment in decision-making, the nominated property is also subject to the European union regulations about the environmental assessment procedure, in particular: Directive 2011/92/EU, known as Environmental Impact Assessment – EIA Directive, and Directive 2001/42/EC, known as Strategic Environmental Assessment – SEA Directive.

These Directives aim to provide **a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation of projects, plans and programmes with a view to reduce their environmental impact**. They ensure public participation in decision-making and thereby strengthen the quality of decisions. These directives have been ratified within the national regulatory framework through subsequent procedures, the last of which dates back to 16/06/2017. This law provides that plans, programmes and projects likely to have significant effects on the environment are made subject to an environmental assessment, prior to their approval or authorisation.

5.b.3 Legislation protecting cultural heritage and landscape at national and regional level

The nominated property is protected within the framework of national and regional legislation pertaining protection of cultural landscape and heritage.

On the basis of article 9 of the Constitution, the Italian Republic shall "***Protect the nation's landscape and historical artistic heritage***", and therefore places the protection of the country's landscape and cultural heritage among its founding principles.

As of today, **Italian cultural and landscape heritage is recognised and protected by the Cultural Heritage and Landscape Code** (Legislative Decree nr. 42 of 22nd January 2004) which represents the national reference regulations.

The unitary exercise of the functions to protect and survey protected heritage is the responsibility of the Italian State and, therefore, of the **MiBACT** *(Ministry for Cultural Heritage and Activities and for Tourism)* and its relevant offices known as *Regional Management and Superintendencies*.

Moreover, the valorisation, management and predisposition of the best conditions of use of the property are the responsibility of the Regions and other local organisations.

As far as **landscape** is concerned, the by the Cultural Heritage and Landscape Code has recognised the guidelines indicated in the **European Landscape Convention**, which regulates the conservation and promotion of landscape assets in part III.

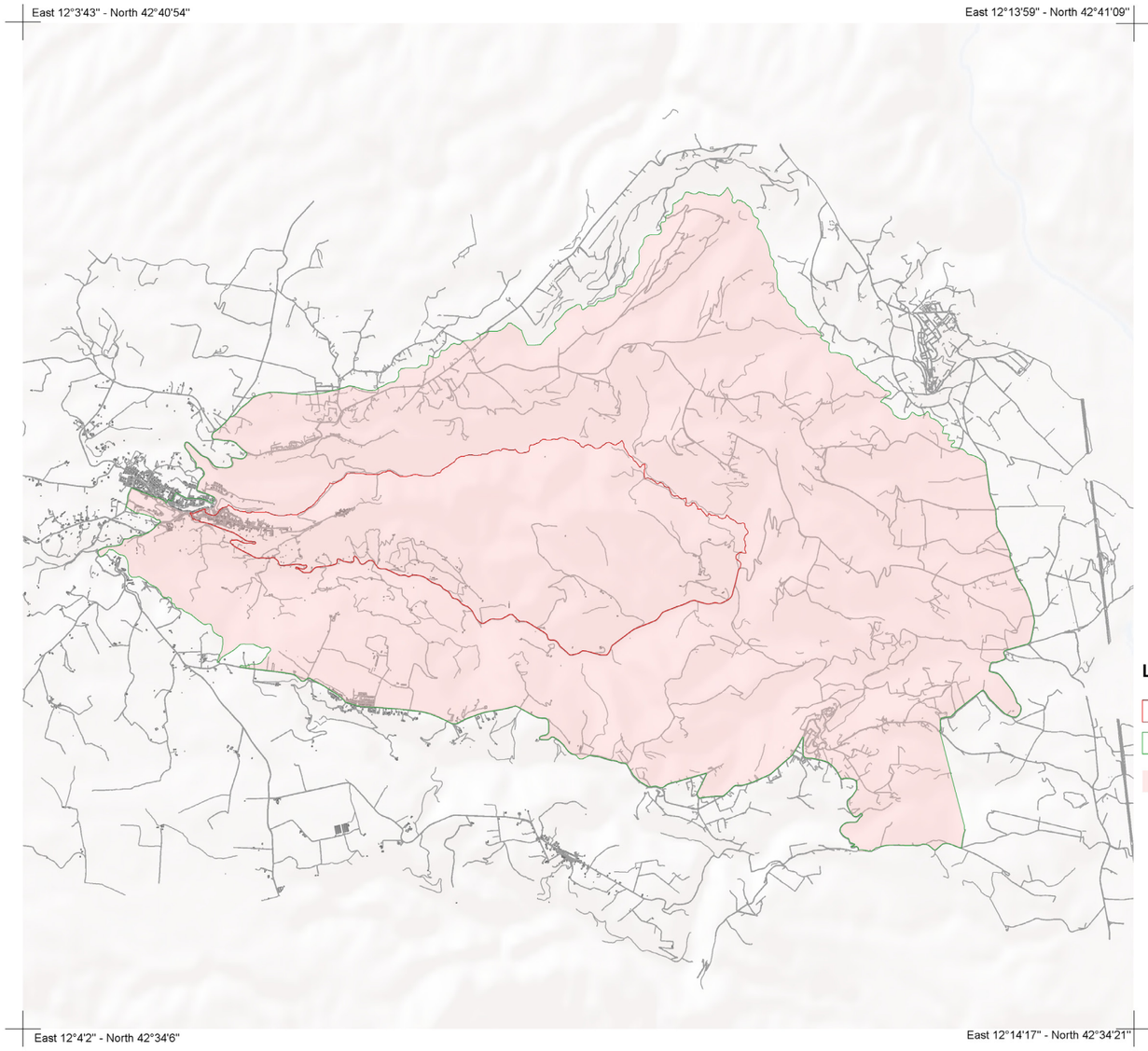
The protection measures acting in compliance with the by the Cultural Heritage and Landscape Code on the nominated property are the following:

- **Art. 10 Cultural Property:** punctually indicates property of artistic, historical, archaeological, ethno-anthropological, archival and bibliographical interest or anything of worth to civilisation. They are subject to protection and conservation for public purposes. Each activity is subject to specific authorisation by the competent Superintendent who may deny it for conservation reasons.
- **Art. 13 Declaration of cultural interest:** guarantees that all activities on the property declared as being of cultural interest must be authorised by the relevant Superintendency.
- **Art. 28 Preventative cautionary measures:** reinforces the system of protection of the Code of the Cultural Heritage and Landscape. The Superintendency may, in fact, order the suspension of any intervention started without or in default of the authorisation.
- **Art. 45 Prescriptions of indirect protection:** defines the distances, measures and other regulations aimed at protecting the integrity of the cultural immovable property, as well as the view or light or surroundings and decorations thereof. Said regulations are adopted within construction regulations and urban planning tools.
- **Art.134 Landscape property:** safeguarding measure applied in areas of interest thanks to their unique landscape features, representing an expression of historical, cultural, natural, morphological and aesthetic value in the territory of reference. The Regions (or delegated organisations) award or deny authorisation for any intervention; while the Superintendency ensures the legitimacy of the authorisation, verifying that the project is compatible with the preservation objectives of the property.

- **Art.136 Real estate and areas of significant public interest:** safeguarding measures applied to those areas of interest thanks to their landscape resources through special legislation. Any intervention on these areas must be authorised by the Region (or delegated organisations). The Superintendency's opinion is final following a check that the project is compatible with the preservation objectives of the property.
- **Art.142 Areas protected by law:** protection measures applied to areas of landscape by law and not according to normal procedures. These are applied to coastal territory within 300 metres from the shore, to territories bordered by lakes within 300 metres from the shore, to rivers, streams, watercourses and the relative banks or beds for 150 metres each, to mountains exceeding 1,600 metres above sea level for the Alps and 1,200 metres above sea level for the Apennines and the islands, glaciers and glacial cirques, parks and national or regional reserves, as well as buffer zones outside of the parks, land covered by forests and woods, and areas of archaeological interest. Interventions on these areas are granted or denied by the relevant authorities (Region or delegated organisations). The Superintendency ensures and checks that the project is compatible with the preservation of the resource in question.

Within the abovementioned legal framework, **the nominated property benefits from a high level of landscape protection due to a national landscape constraint** "*Vallata di Civita di Bagnoregio*" issued pursuant to the abovementioned article 136 of the Code of the cultural Heritage and Landscape. **The buffer zone has been largely drawn following the boundaries of this landscape constraint in order to guarantee a homogeneous protection to the nominated property.**

This is a nationwide constraint that requires any intervention on this area must be authorised by the Region (or delegated organisations). The Superintendency's opinion is final following a check that the project is compatible with the preservation objectives of the property. This national costrains has been reported and incorporated into the main regional government plan for the territory, that is the PTPR - Regional Territorial Landscape Plan of Lazio Region (see paragraph 5.d).



Regulatory costraints

Legend

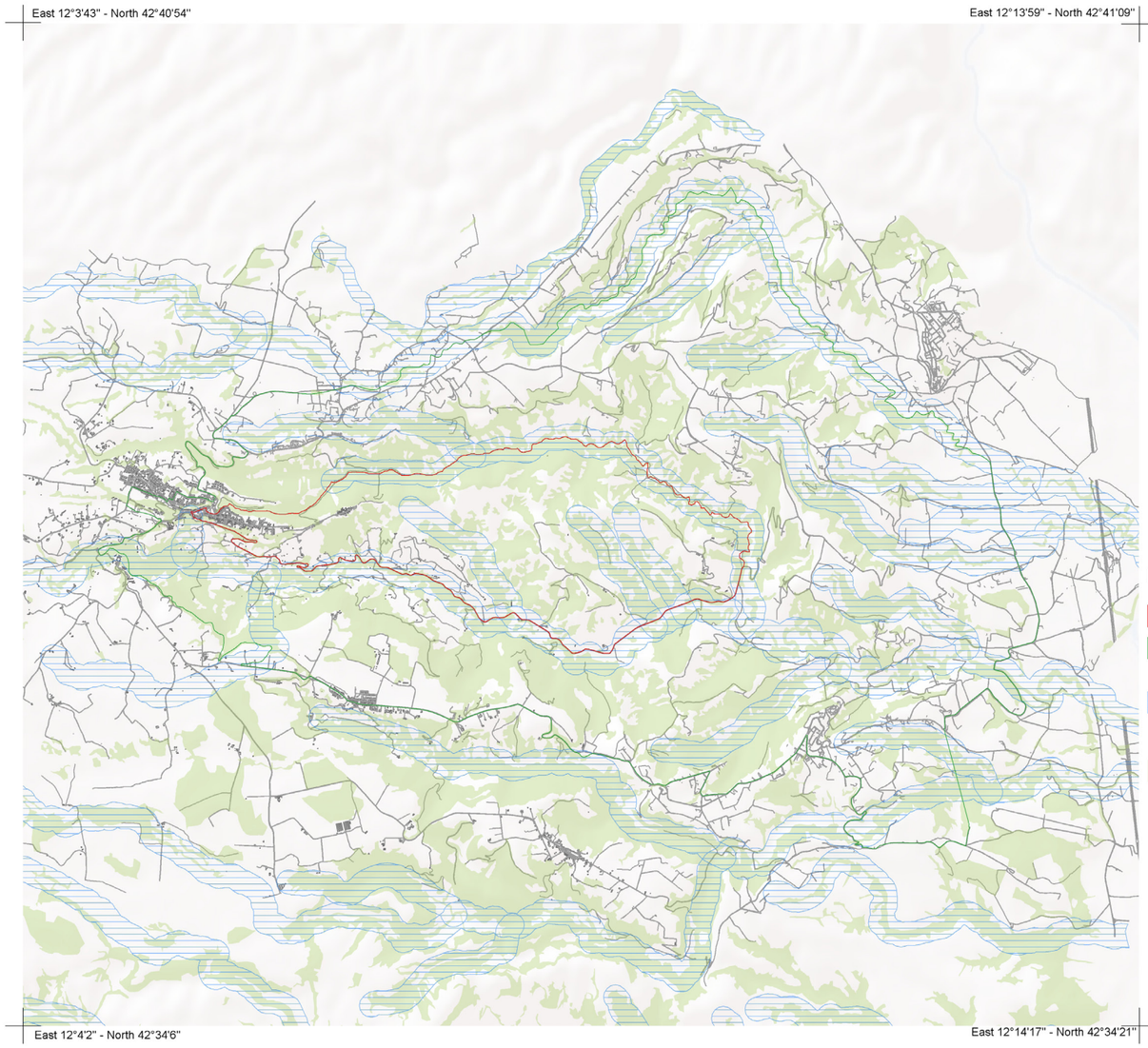
- Nominated component
- Buffer Zone
- Landscape constraint ("Code of the Cultural and Landscape Heritage", Art. 136)

Print scale: 1:45.000
Projected coordinate system: UTM-WGS84
Base map: CTR Lazio Region
Municipality of Bagnoregio (nominated site)
Date: December 2020

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Within the nominated property other national landscape constraints are present too, so-called ***ope legis* constraints**, implemented by art. 142 of the "Cultural Heritage and Landscape Code": according to these provisions, on the site we find large wooded areas and buffer strips from the public water courses (150 meters from the banks). The presence of this constraints implies that the Superintendency ensures and checks the compatibility of projects with the preservation of the resource in question.

The map shows these oper legis constraints.



Regulatory costraints

Legend

- Nominated component
- Buffer Zone
- Buffer strips areas: rivers, streams and water courses and the relative banks or base foundations of embankments ("Code of the Cultural and Landscape Heritage", Art. 142)
- Buffer strips areas: forests or woods and areas subject to reforestation constraints ("Code of the Cultural and Landscape Heritage", Art. 142)

Print scale: 1:45.000
Projected coordinate system: UTM-WGS84
Base map: CTR Lazio Region
Municipality of Bagnoregio (nominated site)
Date: December 2020

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Consistent with the current regulatory framework, in addition to the forms of protection provided for Landscape Heritage, within the nominated property there are **various constraints regarding historical and artistic heritage affixed by MiBACT** *(Ministry for Cultural Heritage and Activities and for Tourism)* **pursuant to art. 10** of the "Cultural Heritage and Landscape Code".

These constraints, listed in the following table, entail various obligations for owners and holders in order to guarantee the full conservation of the asset: for this reason any intervention must be previously agreed and authorized by the competent Superintendency which also has the task of authorizing or denying alternative forms of use, to carry out supervisory and control functions on the management and conservation of the asset, as well as to supervise the execution of authorized conservation interventions.

HISTORICAL AND ARTISTIC HERITAGE				
MUNICIPALITY OF BAGNOREGIO				
NAME	TYPOLOGY	ADDRESS	DECREE	DATE OF COSTRAINT
CASA IN FRAZIONE CIVITA N. 128	Architettura	FRAZIONE CIVITA, 128	L. 364/1909 art. 5	20/04/1938
CASA IN PIAZZA COLESANTI	Architettura	PIAZZA COLESANTI	L. 1089/1939 artt. 2, 3	29/07/1968
CASA IN PIAZZA COLESANTI	Architettura	PIAZZA COLESANTI	L. 1089/1939 artt. 2, 3	03/11/1966
CASA IN PIAZZA COLESANTI	Architettura	PIAZZA COLESANTI	L. 1089/1939 artt. 2, 3	03/11/1966
CASA IN PIAZZA COLESANTI	Architettura	PIAZZA COLESANTI	L. 1089/1939 artt. 2, 3	29/03/1967
CASA IN PIAZZA COLESANTI - PARTT. 97-100	Architettura	PIAZZA S. PIETRO DETTA PIAZZA COLESANTI S.N.C.	L. 1089/1939 artt. 2, 3	29/03/1967
CASA IN VIA DELLA PROVVIDENZA	Architettura	VIA DELLA PROVVIDENZA	L. 1089/1939 artt. 2, 3	29/07/1968
CASA IN VIA DELLA PROVVIDENZA, 18	Architettura	VIA DELLA PROVVIDENZA, 18	L. 1089/1939 artt. 2, 3	15/10/1976
CASA IN VIA DELLA PROVVIDENZA, 32, 34	Architettura	VIA DELLA PROVVIDENZA, 32, 34	L. 1089/1939 artt. 2, 3	24/04/1969
CASA IN VIA DELLA PROVVIDENZA, 24, 30	Architettura	VIA DELLA PROVVIDENZA, 24, 30	L. 1089/1939 artt. 2, 3	07/04/1973
CASA IN VIA DELLA PROVVIDENZA, 5	Architettura	VIA DELLA PROVVIDENZA, 5	L. 364/1909 art. 5	25/04/1938
CASA MEDIOEVALE	Architettura	-	L. 364/1909 art. 5	28/04/1922
CASA NATALE DI S. BONAVENTURA (RESTI)	Architettura	VIA S. BONAVENTURA	L. 1089/1939 artt. 2, 3	02/05/1967
IMMOBILE CON RESTI DI UNA CISTERNA DI ETA' ROMANA	Monumenti archeologici	P.ZZA COLESANTI; N.C.E.U. FG. 15, PARTT. 99, 100	L. 1089/1939 artt. 1, 3, 21	09/03/1967
PALAZZO TECCHI - CRISTOFORI CELIANI	Architettura	PIAZZA LUIGI CRISTOFORI, SNC	art. 13, D. Lgs. 42/2004	23/10/2007

TAB. 5.1 Historical and artistic heritage, Municipality of Bagnoregio

PARCO DELLA VILLA AGOSTI (COMPLESSO)	Architettura	VIALE ALFONSO E GIOVANNI AGOSTI, 7	L. 364/1909 art. 5	12/03/1922
TORRE DETTA CASTELLO	Architettura	-	L. 364/1909 art. 5	19/04/1938
CASA IN VIA S. MARIA, 5	Architettura	VIA S. MARIA, 5	L. 1089/1939 artt. 2, 3	15/03/1968
IMPIANTO PRODUTTIVO DI ETÀ ROMANA CON FORNACI NEI PRESSI DI UN ANTICO ITINERARIO CHE CONDUCEVA AL TEVERE	Monumenti archeologici	FONTE CAPITA, S.N.C. N.C.T. FG. 48, PARTT. 141 (PARTE), 175, 238 (PARTE), 239 (PARTE), 321, 323 (PARTE). PROPRIETÀ DEMANIALE A SEGUITO DI ESPROPRIO DA PARTE DEL COMUNE DI BAGNOREGIO	art. 13, D. Lgs. 42/2004	23/11/2017
PALAZZO ALEMANNI MAZZOCCHI (COMPONENTE DEL COMPLESSO PALAZZO ALEMANNI MAZZOCCHI E CISTERNA ROMANA)	Architettura	PIAZZA S. DONATO, S.N.C.	L. 364/1909 art. 5	28/04/1922; 25/04/1938
PALAZZO GUALTERIO CON IL PARCO ANNESSO	Architettura	VIA ROMA, 14	art. 12, D. Lgs. 42/2004 verifica su istanza di parte	19/07/2011
PALAZZO VESCOVILE CON AFFRESCO CINQUECENTESCO	Architettura	-	L. 364/1909 art. 5	28/04/1922
BORGO DI CIVITA	Architettura	CIVITA	art. 12, D. Lgs. 42/2004 verifica su istanza di parte	30/06/2020

TAB. 5.1 Historical and artistic heritage, Municipality of Bagnoregio

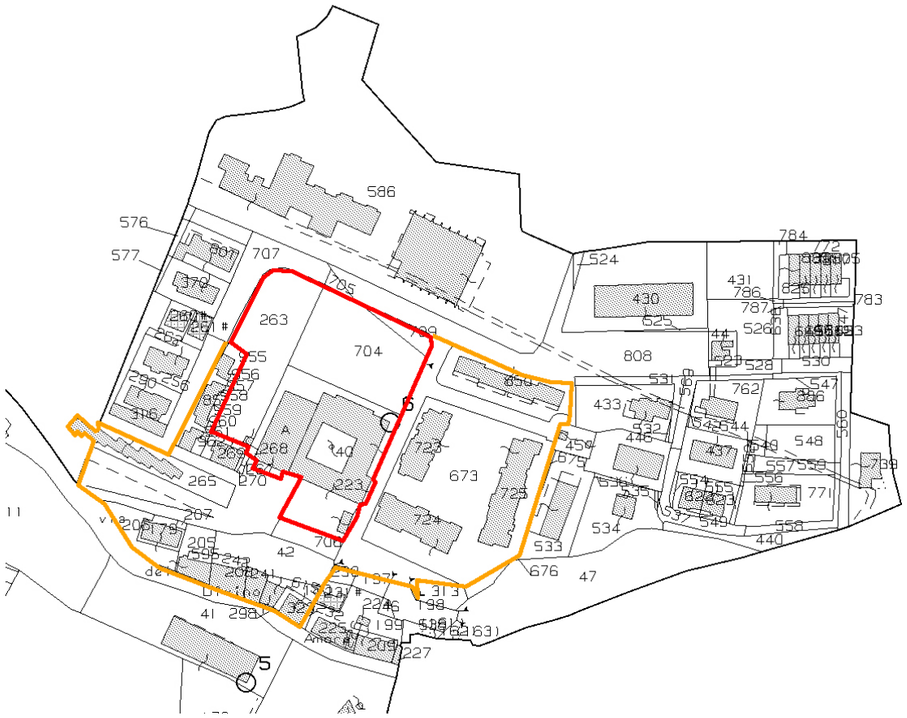
It should also be noted that the Code provides that all publicly owned properties or properties belonging to ecclesiastical bodies (over 70 years old) and works of art by an author who is no longer alive, are protected similarly to those affected by a specific decree of constraint, until different evaluation of the **MiBACT** *(Ministry for Cultural Heritage and Activities and for Tourism)*. From a legal point of view, pending an express declarative constraint, this effectively guarantees a high level of protection for most of the state and religious building heritage.

The **Ministry for Cultural Heritage and Activities and for Tourism** on November 12, 2020 has formally initiated the procedure for affixing a monumental architectural constraint (pursuant to Art.10, paragraphs 1 and 3, letter A of the "Code of the Cultural and Landscape Heritage") relating to the complex of San Francesco Nuovo, that is the church, the convent spaces and all the large outdoor areas that make up the garden and the adjoining park. Once the iter is completed, the complex - located in close proximity to the candidate site and within the buffer zone - will be a Listed Cultural Asset "San Francesco Nuovo Monastery". From the start of the procedure for affixing the monumental architectural constraint, any interventions to be done in the identified areas must be aimed solely at the conservation of the property and must be authorized by the territorially competent Superintendency (pursuant to art. 21 of the "Code of the Cultural and Landscape Heritage").

At the same time, the Superintendency is initiating an additional indirect protection procedure for the complex, in line with the provisions of art. 45 of the "Code of the Cultural and Landscape Heritage" that in paragraph 1 provides that "The Ministry shall have the power to prescribe the distances, measures and other regulations aimed at preventing that the integrity of immovable cultural property be put at risk, that their perspective

or natural light be damaged or that conditions of the setting or decorous aspect of the buildings be altered".

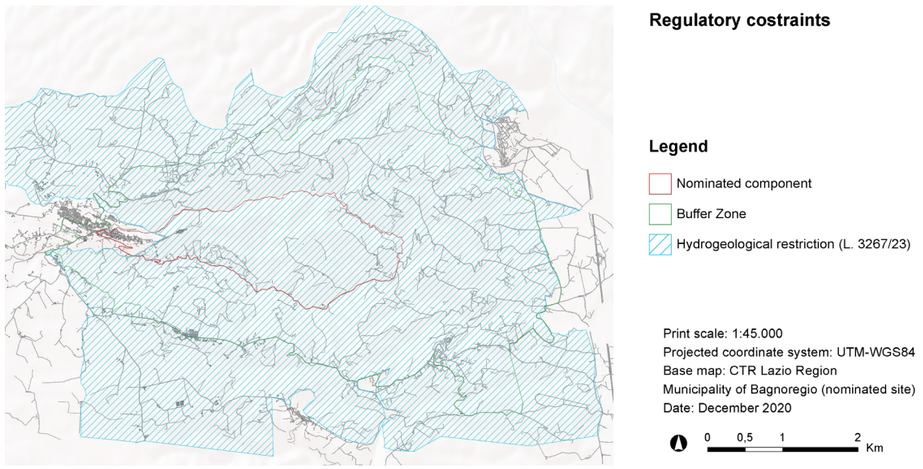
This additional protection is aimed at preserving and improving the architectural conditions of the monument's context, which is why it introduces specific limitations and conditions, such as the prohibition to construct in some specific areas in order not to alter views and perspectives, limit the maximum heights of buildings between the volumes and the monument. The pertainent areas are those located to the south and east of the complex for a radius of about 50 m, up to the adjacent areas already subject to the landscape protection provided for by art. 142 of the"Code of the Cultural and Landscape Heritage".



125 Map showing the boundaries of the monumental architectural constraint of San Francesco Nuovo. In red: direct constraint, in orange: indirect costraint

5.b.4 Regulations safeguarding the environment at national level

The nominated property and its buffer zone are totally included within a **national hydrogeological constraint**, established by the Reorganisation and reform of forests and mountain land (Riordinamento e riforma in materia di boschi e terreni montani) - Royal Decree-Law No 3267 of 30 December 1923. This constraint subjects to protection those areas which, as a result of interventions, such as earth movements or deforestations, can lose stability with public damage or disturb the water regime. The main purpose of the hydrogeological constraint is to preserve the physical environment and therefore ensure that all interventions on the territory do not compromise the stability of the land, nor trigger erosive phenomena with the possibility of public damage, especially in hilly and mountainous areas. **The hydrogeological constraint implies that only interventions approved by authorities and which do not damage or endanger the protected environmental values can be carried out.**



5.c MEANS OF IMPLEMENTING PROTECTIVE MEASURES

The protection established by the Italian State is based on the recognition of a collective interest that therefore imposes a series of obligations and rules. The process to implement these measures on a national level requires the intervention of the organisations involved and responsible for protecting cultural and landscape property, specifically the **MiBACT** *(Ministry for Cultural Heritage and Activities and for Tourism)* through his central and peripheral organisations (Offices).

The protection measures are implemented through authorisation procedures necessary to implement interventions on limited immovable and areas declared to be of landscape interest.

As far as **cultural heritage pursuant art. 10 of the Cultural Heritage and Landscape Code** is concerned (see table 5.1, paragraph 5.b, pag. 334-336), the Superintendency has the task of authorizing or denying alternative forms of use, carrying out supervisory and control functions on the management and conservation of the asset, as well as supervising the execution of authorized conservation interventions. In particular, **the authorisation procedure** has the objective of ascertaining the compatibility of work done on listed buildings or protected areas. Any work involving alterations or modifications of the state of a site and of the exterior of buildings should by authorised beforehand by the Authorities in charge of protecting listed buildings. Such authorisations can only be issued on the basis of detailed documentation supplied with the planning permission requested.

In the case of areas subject to a **landscape constraint pursuant art. 136 of the Cultural Heritage and Landscape Code** (landscape constraint "*Vallata di Civita di Bagnoregio*", see map pag. 333, paragraph 5.b), the Region (or another public institution that may be delegated) has the task of authorizing or denying any interventions. The applicant submits a specific application to the competent istitution to issue the authorization, accompanied by the necessary design documentation and the landscape report, drawn up by a qualified technician. The competent administration examines the application, the documentation and the landscape report relating to the intervention for which authorization is requested, verifying its completeness and, if necessary, requesting the appropriate additions and carrying out the necessary investigations. The Superintendent, having received the documentation, expresses his binding opinion on the request. This assessment is aimed at verifying the compatibility of the interventions with the context and their correct insertion into the landscape, which is why, in addition to the possibility of denying the authorization, the Superintendency can adduce specific prescriptions aimed at guaranteeing the correct insertion of the works in the landscape.

With regard to the areas subject to **hydrogeological constraints**, it is necessary to acquire in advance the **authorization in derogation from the constraint** to carry out interventions involving earth movements and land use transformations.

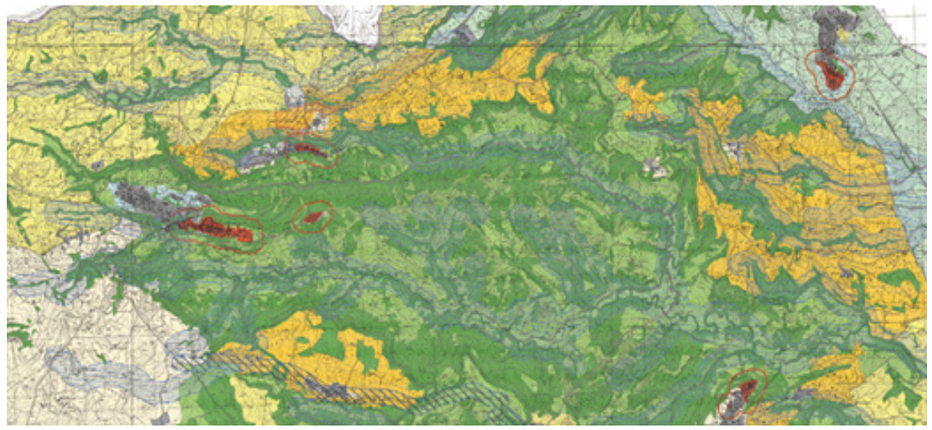
5.d EXISTING PLANS RELATED TO MUNIPALITY AND REGION IN WHICH THE PROPERTY IS LOCATED

The nominated site is subject to the national Low, which establishes the national reference framework on the protection and protection of cultural and landscape heritage. Within the rules thus identified, regional and local planning tools intervene. Among the regional planning tools, the most important is the Regional Landscape Territorial Plan, which establishes further specific landscape protection regulations. Local planning tools must accord with national and regional regulations.

Planning at Regional Level:

- **Regional Territorial Landscape Plan (Piano Territoriale Paesistico Regionale - PTPR)**

Approved on 13.02.2020, the Regional Territorial Landscape Plan implemented the provision of art. 143 of the Code of Cultural Heritage and in line with European Landscape Convention by identifying the landscape assets and in particular the assets of the regional identity heritage.



[126] Table A 03 detail of the TPR Regional Landscape Territorial Plan (sheet 344), with the landscape classification of the Plan

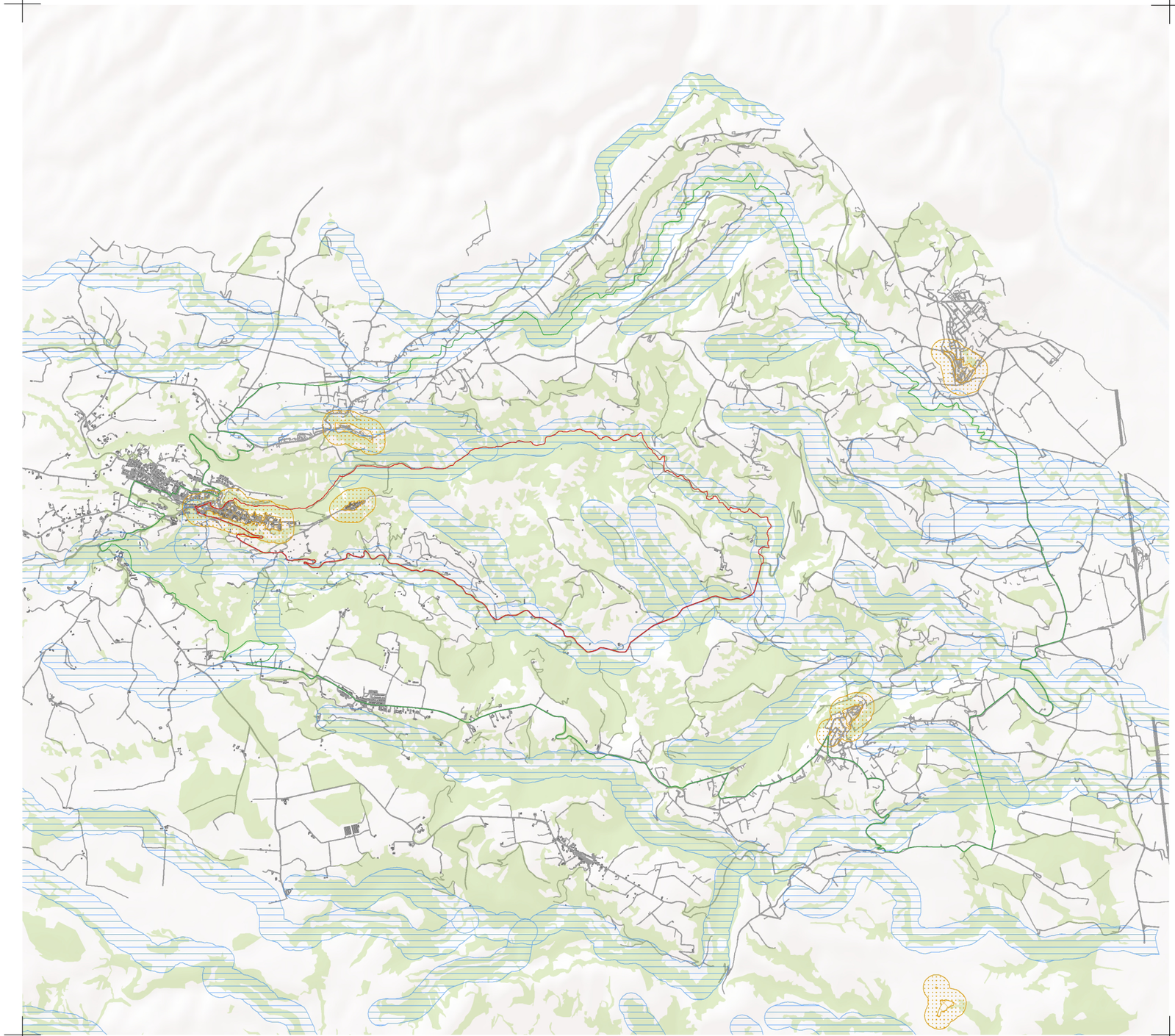
The Plan incorporates all national landscape constraints pursuant art. 136 and 142 of the Cultural Heritage and Landscape Code, already described in paragraph 5.b. In areas subject to constraints, the plan lays down provisions that directly affect the legal regime of the assets and that prevail over incompatible provisions contained in the territorial and urban planning instruments. In the areas that are not constrained, the Regional Territorial Landscape Plan has programmatic effectiveness and dictates guidelines that constitute guidance for the planning and programming activities of the Region and local authorities.

The Plan classifies the entire regional territory in distinct areas by characteristics and vocations, each of which is subject to specific disciplines of use. According to this classification, **the nominated property covers the areas of natural and agricultural systems, for which the highest and most careful forms of protection are provided**, that is the systems of the "natural landscape" and the "natural landscape of continuity" (governed by articles 22 and 24 of the "Technical Standards" of the PTPR). To these are added the areas of "agricultural landscape of significant value" (governed by art. 25 of the "Technical Regulations" of the PTPR) in which the conservation of the traditional elements of the agro-forestry-pastoral contexts is guaranteed, limited consumption of soil and preserved the characteristics of traditional rural construction (inhibiting possible forms of building speculation).

Moreover the city centre of Bagnoregio and Civita di Bagnoregio are classified as "**Historical urban settlements and neighbouring territories included in a strip with a depth of 150m**" within which the interventions must be aimed at conserving or reconstructing the architectural heritage and the undeveloped appurtenances in order

East 12°3'43" - North 42°40'54"

East 12°13'59" - North 42°41'09"



East 12°4'2" - North 42°34'6"

East 12°14'17" - North 42°34'21"

Regulatory costraints

Legend

- Nominated component
- Buffer Zone
- Historic urban settlements (PTPR “Regional Territorial Landscape Plan of Lazio Region”, Art. 43)
- Buffer strips areas: Historic urban settlements (PTPR “Regional Territorial Landscape Plan of Lazio Region”, Art. 43)
- Buffer strips areas: rivers, streams and water courses and the relative banks or base foundations of embankments (“Code of the Cultural and Landscape Heritage”, Art. 142)
- Buffer strips areas: forests or woods and areas subject to reforestation constraints (“Code of the Cultural and Landscape Heritage”, Art. 142)

Print scale: 1:45.000
Projected coordinate system: UTM-WGS84
Base map: CTR Lazio Region
Municipality of Bagnoregio (nominated site)
Date: December 2020

0 0,5 1 2 Km

to allow full use, re-functionalisation and insertion into the real estate market. Article 43 of the Technical Standards introduces **specific forms of landscape protection aimed at preserving, at least in the external aspect, the minor historical building heritage included in the historical centers**, but not protected by a direct constraint (pursuant to article 10 of the Code of Cultural Heritage and Landscape). Art. 43 introduces **technical prescriptions which can guarantee a good level of protection, inhibiting the use of inadequate materials and technical solutions** (such as silicate or plastic quartz dyes, cement plasters, promoting use of compatible materials, such as natural lime and its derivatives) and encouraging organic interventions aimed at enhancing the product in its entirety.

- **Plan for the Regional Hydrogeological Structure (Piano per l'Assetto Idrogeologico Regionale - PAI)**

The Plan -approved by Regional Council with act No. 17 of 4 April 2012- represents the cognitive, regulatory, technical and operational instrument through which the Authority of the Regional Basins of Lazio (Autorità dei Bacini Regionali del Lazio) identifies, within the scope of its jurisdiction, the areas to be protected for the prevention and removal of situations of risk, both through the planning and programming of protection interventions and through the issuing of regulations regarding the use of the territory. **The centre of Civita di Bagnoregio is listed in the atlas of situations of risk due to landslides and avalanches in the province of Viterbo.** For this reason, **any intervention that may interfere with the protection of the hydrogeological structure must first receive a specific authorization from the competent authorities.**

Planning at Municipal Level:

Municipal planning affects the municipality's entire territory, and is a practical response to more authoritative plans at a regional level, in particular the abovementioned Regional Landscape Plan. The plan divides the territory into zones using very accurate detailed scales (the plan's maps go from 1:5000 to 1:500), and through its maps and implementation regulations it shows constraints, land usage and methods and locates public services.

In Bagnoregio **the Fabrication Program** (Programma di Fabbricazione) approved on 28/10/1971 is in force as a new Urban Development Plan is going to be adopted. Through zoning and regulations, the Program defines, for each single portion of its territory, the conversion possibilities and the relative procedures (required use, construction ratios and construction approval procedures). In particular, the areas identified with the **letter "A" are areas that enjoy maximum protection, which in general coincide with old town centres, where only restoration or conservative repair work is permitted** (consolidation, restoration, elimination of extraneous elements added at a later date to a building, repair of a building's main elements, addition of wiring or heating systems required when using a building). Permitted work is therefore directed towards conserving the building's original structure and towards ensuring that it is used in a compatible way, respecting elements of a traditional type, shape and structure. A large part of the nominated site is included within the boundaries of the **A zone – Historic Center (Zona A – Centro Storico)**, area of maximum protection.

As far as the protection of cultural heritage is concerned, the Program acknowledges the constraints deriving from more authoritative legislation and planning, and identifies cultural-landscape assets and defines specific regulations for their conservation.

Framework plan for the reorganization of urbanized areas (L.R.7/2017 - DPR 327/2001). The Plan is currently under investigation by Lazio Region in order to be approved.

The municipality of Bagnoregio provides for the reorganization of the urbanized areas in application of the L.R.7 / 2017 that allows, for the purposes set out in Article 1, the reuse and redevelopment of existing buildings, including demolition and reconstruction, as well as the reorganization of neighboring areas using the techniques and materials typical of the landscape.

Each intervention must be accompanied by the certificate of conformity of the existing building signed by the owner and the designer and remains subject to the provisions of the PTPR; the landscape authorization must be purchased pursuant to Article 146 of Legislative Decree 42/2004 and subsequent amendments and additions.

A total of 12 public initiative interventions are planned (construction of parking areas, public toilets, visitor center, rehabilitationof the disused building "former educational cellar" and the change of use on the ground floor of some buildings along Via Roma and Corso Vittorio Emanuele) regulated according to the provisions of the reference areas:

· Urban Regeneration Programs (Art.2 L.R. 7/17): These are the urbanized portions of territory, in some cases including portions of neighboring agricultural areas of low environmental value, in which urban regeneration interventions are implemented consisting of a coordinated set of urban, building and socio-economic interventions aimed at redeveloping the urban context, areas, building complexes, abandoned or unused buildings in order to improve housing, social, economic, environmental, cultural and landscape conditions.

· Territorial Areas of Redevelopment and Building Renovation (Art.3 L.R. 7/17): These are the portions of the territory where building and urban restructuring or demolition and reconstruction of existing buildings is permitted with the recognition of an additional volume or gross area compared to the existing one. It is allowed to change the intended use between those compatible or complementary within the functional categories referred to in Article 3 paragraph 6 of Regional Law 7/17.

· Change of Destination of Use of the Buildings (Art.4 L.R. 7/17): These are the buildings for which, on the ground floor, building renovation is permitted with a change in the intended use between the functional categories identified in art. 23 / ter of Presidential Decree 380/01 in letters a / bis), b) and c) with the exception of the rural one. The building renovation interventions referred to in this article are limited to the possibility of carrying out commercial, artisanal, exhibition and similar activities with the exclusion of residences, hotel facilities, landlords activities and the opening of medium and large sales structures of referred to in Article 24 c.1 letters b) and c) of the LR 33/1999. The building permit for the change of use is subject to the approval resolution of the City Council.

- **Building Regulation (Regolamento edilizio) of Bagnoregio**

Approved by resolution of the City Council n. 28 of 20/10/2018 and modified by the City Council resolution n. 09 of 16/03/2019, the building regulations govern, within the municipal area, the construction activity, the interventions and transformations related to it, the subdivisions and urbanization works that affect the urban and extra-urban environment. These activities must also comply with: - the regulations of the general and executive planning instruments in force; - the superordinate provisions of the regulations,

national and regional laws in force on the subject, as indicated in Annex B to DGR no. 243/2017, as well as their amendments and additions that may occur after the approval of this regulation. 2. The building regulations: - defines the procedures for obtaining the qualifications regarding the construction, transformation, maintenance and protection of building units and open spaces in the settlement system and in the rural area; - regulates the methods of control and verification of the transformation processes of the building units and open spaces; - defines the requirements of the building units and uncovered spaces in relation to the primary needs of individual and social users; - defines the levels of performance and the minimum conditions necessary to satisfy the aforementioned primary needs as well as the related methods of verification and measurement; - contains the hygiene rules having building relevance pursuant to art. 33 of Law no. 150/1942. 3. Interventions on existing buildings must be adapted to the relevant requirements for the parts on which intervention is to be made. 4. In existing buildings, which do not comply with the rules of this regulation or which, while responding to them, are unhealthy or dilapidated, it is forbidden to carry out integral maintenance work without adapting the buildings to the rules of this regulation; This prohibition excludes buildings of artistic, historical or archaeological importance, whose transformation is subject to the authorization of the competent Superintendency. 5. The reconstruction of buildings demolished or destroyed for any reason, whether partial or total, even if voluntary, must be carried out in accordance with the regulations.

- **Regulations for identifying forms of support for the monumental complex of Civita di Bagnoregio (Regolamento per individuazione forme di sostegno del complesso monumentale di Civita di Bagnoregio)**

The Municipal Administration of Bagnoregio, under the regulatory power assigned by art. 117 of the Italian Constitution and article 7 of the Consolidated Text of Local Authorities (Legislative Decree 267/2000), has prepared certain regulations for the site of Civita. The regulation in question recognizes the medieval village of Civita as a privileged venue for cultural events and activities that can attract attention to the city and the territory as a whole. The text identifies instruments of economic support to be used for interventions and activities of maintenance, conservation and enhancement of the monumental complex of Civita. These instruments are:

· Requests to use the Village: the Municipality of Bagnoregio issues the authorisation to carry out conferences, events and other activities upon payment of a financial contribution aimed at supporting tourist and cultural activities and which is established in each case by the Municipal Council in relation to the use of public spaces, the duration, the importance and the type of event. Reproductions and filming for institutional purposes, cultural, scientific and tourist television programmes and initiatives included in the institutional aims of the Administration and involving the promotion of the Village are not subject to payment of fees.

· Access to the Village and visit upon payment of an admission fee: the existing methods of access are regulated by Resolution no. 1 of 8 January 2019, establishing the payment of a ticket amounting to 5 euros both during weekdays and at weekends. In accordance with agreements made with hoteliers and managers of catering and transport services, appropriate ways of facilitating access to the Village and the participation in activities and events which take place in the Village may be identified, subject to authorisation of the City Council. Citizens and residents of Bagnoregio and their guests, tourists on the occasion of public events and festivals promoted by the Municipality, authorities and State dignitaries invited by the Municipality are excluded from the payment of the ticket.

· Special conditions and free admission: in order to guarantee the access to the Village and to promote it, the Municipality has decided to grant free admission tickets and special conditions to specific categories of visitors, including students and teachers from schools of all levels, people with disabilities, tourist guides, scholars, researchers and donors of works of art.

- **Regulations for the granting of special conditions to promote the old town centres of Bagnoregio, Vetriolo and Castel Cellesi (Regolamento per la concessione di agevolazioni per la valorizzazione centro storico di Bagnoregio, Vetriolo e Castel Cellesi)**

The Regulation was issued with the aim of regulating the granting of special conditions to residents, owners, shopkeepers and craftsmen located in the old town centre of the town and in the villages of Vetriolo and Castel Cellesi with the objective of:

· promoting the creation of start-ups and the development of existing businesses;
· supporting employment processes and new job opportunities for the unemployed and unemployed;
· promoting and supporting business development;
· revitalising the old town centre.

For this purpose, the Municipality of Bagnoregio has introduced incentives consisting in the reimbursement of taxes, fees, municipal taxes and infrastructure charges for people who set up a new business, move an existing business within the area of the old town centre or expand an existing business.

- **Measures for the preservation of the cultural heritage of the site of Civita di Bagnoregio**

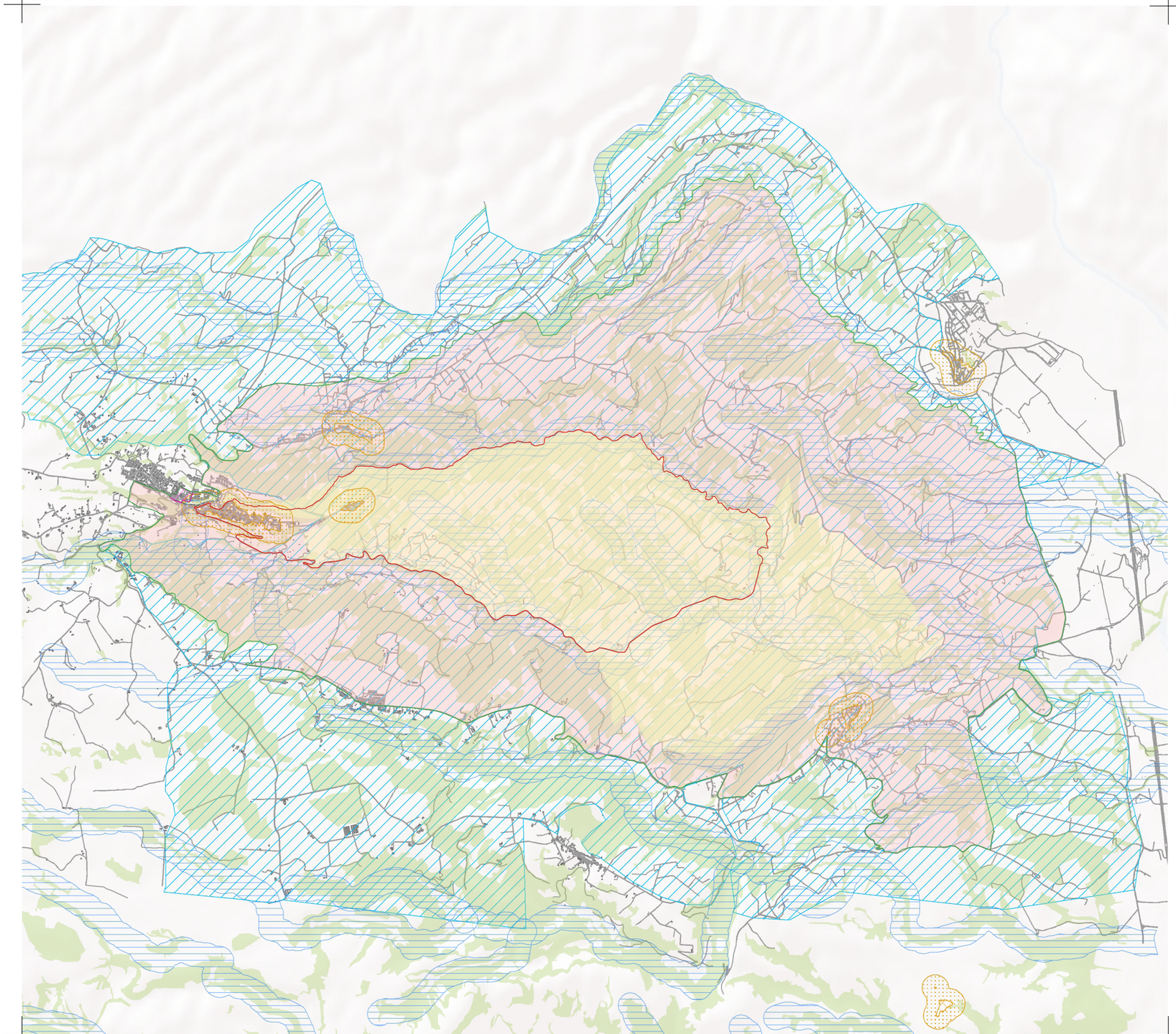
In 2018 the administration of Civita di Bagnoregio issued an order without time constraint to suspend and therefore prohibit the setting up of new businesses in Civita, while encouraging the establishment of new companies in Bagnoregio and in particular in the old town centre. The Regulation (adopted by Resolution of the City Council n. 48 of 29 December 2018) was based on the need to preserve all the urban and historical characteristics and peculiarities for which Civita is known worldwide. Since the site of Civita di Bagnoregio is on the UNESCO World Heritage Tentative List as an area of particular historical, artistic, architectural and environmental interest, these measures of protection have led to the adoption of strict criteria for the setting up of new businesses.

The map in the following page (page 362) summarizes the overall framework of constraints involving the nominated property.

East 12°3'43" - North 42°40'54"

East 12°13'59" - North 42°41'09"

Regulatory costraints



Legend

- Nominated component
- Buffer Zone
- Listed Cultural Asset “San Francesco Nuovo Monastery” (“Code of the Cultural and Landscape Heritage”, Art. 10)
- Historic urban settlements (PTPR “Regional Territorial Landscape Plan of Lazio Region”, Art. 43)
- Buffer strips areas: Historic urban settlements (PTPR “Regional Territorial Landscape Plan of Lazio Region”, Art. 43)
- ZIC-ZPS “Badlands Valley”
- Landscape constraint (“Code of the Cultural and Landscape Heritage”, Art. 136)
- Buffer strips areas: rivers, streams and water courses and the relative banks or base foundations of embankments (“Code of the Cultural and Landscape Heritage”, Art. 142)
- Buffer strips areas: forests or woods and areas subject to reforestation constraints (“Code of the Cultural and Landscape Heritage”, Art. 142)
- Hydrogeological restriction (L. 3267/23)

Print scale: 1:45.000
Projected coordinate system: UTM-WGS84
Base map: CTR Lazio Region
Municipality of Bagnoregio (nominated site)
Date: December 2020

0 0,5 1 2 Km

East 12°4'2" - North 42°34'6"

East 12°14'17" - North 42°34'21"

5.e PROPERTYMANAGEMENT PLAN OR OTHER MANAGEMENT SYSTEM

The application of the Cultural Landscape of Civita di Bagnoregio was developed as a **joint initiative** of the **Lazio Region** and the **Municipality of Bagnoregio**.

The application represents, in fact, an important challenge for the city, but also an opportunity to establish in Italy a new model of development based on the strength of beauty and history, as well as on the struggle between the ineluctable force of nature and the technical ability of mankind, driven by the will to preserve its identity. As set out in the statement of **Oustanding Universal Value**, the Cultural Landscape of Civita di Bagnoregio represents a stunning case where the human presence has tried for centuries to hinder the natural degradation of the cliff. It is a paradigm of the struggle of men aiming to survive in a hostile environment - though of incomparable beauty - and nature that wants to take its course dismantling and eroding reliefs.

The Cultural Landscape of Civita di Bagnoregio, thanks to the ensemble of the traces of historic and contemporary, attempts to consolidate and stabilize the property together with the **antifragility of the urban-architectural features**. The resulting scenery, where **human actions continuously try to mitigate natural hazards** proves the sustained **relationship (from the antiquity to the present day) of the human settlement with the constantly evolving geomorphology**, spreading the landmark **values of iconicity** of Civita and of the **exceptional resilience of its community.**

The Nomination Text is, therefore, the last step of a journey that began several years ago and that has led to an agreement aimed at preserving Civita di Bagnoregio and the ***Valle dei Calanchi***, signed by 151 representatives from the worlds of culture, art, science and entertainment, including figures such as Piero Angela, Massimo Cacciari, Gianni Letta, Ennio Morricone, Mimmo Paladino, Michelangelo Pistoletto, Michele Placido, Francesco Totti, Niccolò Ammaniti, Roberto Bolle, Giorgio Napolitano, Emma Dante, Paolo Fresu, Luca Argentero, Nicola Piovani, Paolo Sorrentino and Mario Tozzi.

In addition to these first endorsements, almost 40,000 signatures from ordinary citizens have been collected through the petition web platform change.org. Therefore, Bagnoregio, Castiglione in Teverina, Civitella d'Agliano, Graffignano and Lubriano approached the candidacy process aware that the coexistence of a broad territorial growth strategy, a governance with real operational possibilities and a Management Plan balanced between strategic objectives, means and tools for measuring the results achieved, can trigger a shared cultural, social and economic development, thanks to a new vision of the history and heritage of the community.

By adopting this shared vision for the future of the territory, the Management Plan aims to concretely respond to the issues of identification, protection, conservation and transmission to future generations of the Cultural Landscape of Civita di Bagnoregio, providing a series of interventions and procedures aimed at to the planning and management of processes of strong social and territorial transformation.

The challenges to be answered through the Management Plan are suggested, first of all, by the assessment of the state of conservation carried out in Chapter 4 of the Notification Text and by the indication of the factors that have the greatest power to negatively affect the OUV of the property.

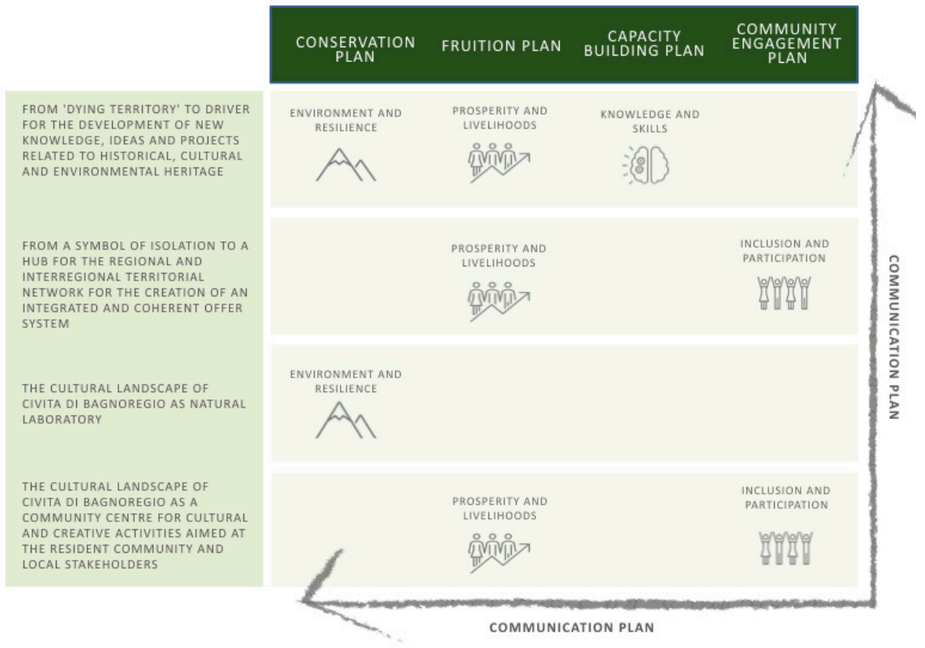
On the other hand, the communities of residents and economic operators, encouraged through working groups and CAWI surveys, to contribute to the reflection on the measures to be adopted for the correct management of the property, have identified latent opportunities in the challenges of conservation and enhancement of the property.

These visions, therefore, converge in the Management Plan and link the interventions to protect the values of universal significance of the property to wider context of urban development, branding, promotion and modern approach to the preservation and promotion of heritage.

Conservation, Fruition, Capacity Building and Participation of the Communities are, the pillars of the Management Plan for the Cultural Landscape of Civita di Bagnoregio, called not only to catalyze and systematize ideas and latent design forces in the area, but also to ensure that all actions for the protection and dissemination of the universal value of the site are consistent with the **global objectives of sustainable development of the 2030 Agenda**. For this reason, in the construction of the strategy for the Cultural Landscape of Civita di Bagnoregio it was always intended to ensure compliance with **Culture|2030 Indicators**.

This framework is an initiative of the institutions and professionals working in the cultural sector, undertaken in partnership with the UNESCO Institute of Statistics (UIS), with the support of AECID (Spain), whit the purpose to measure and monitor the progress of culture's enabling contribution to the national and local implementation of the Goals and targets of the 2030 Agenda for Sustainable Development, both as a sector of activity, and transversally across other sectors.

The projects described in the Action Plan are divided between the 4 pillars Conservation, Fruition, Capacity Building and Participation of the Communities, recalling the strategy expressed in the Budapest Declaration on World Heritage. All the interventions have been selected to respond to the issues raised by the challenges for the Cultural Landscape of Civita di Bagnoregio and can be considered as flagship projects precisely in those sectors on which the Culture|2030 has focused for sustainable development in a cultural view. This, was born the matrix of challenges, represented in figure 127.



[127] Matrix of challenges for the Cultural Landscape of Bagnoregio

Population decline

The demographic indicators of the territory of the Municipality of Bagnoregio and of the municipalities included in the Buffer Zone show a non-uniform trend. Bagnoregio, Civitella d'Agliano and Lubriano were characterized by a not negligible decrease in residents (respectively -2%, -10%, -2% from 2001 to 2019), while Castiglione in Teverina showed a slight increase (+2%). Overall, it is noted that strongly negative natural balances are offset by moderately positive migratory balances throughout the territory. The negative natural balance led to an overall aging of the population.

Focusing on Bagnoregio, the comparison between the structure of the population by age group in 2016 and 2020 shows that after five years, in the face of a population decreasing by approximately 94 units, the numerical consistency of the age group 0-14 is in sharp decrease (-14%) and the incidence of the age class 65 and over rose from 27.9% to 28.2%, bringing the average age from 48.8 to 49.3 years. The landslides combined with the logistical difficulties have led to a continuous depopulation for the fortress of Bagnoregio which has brought the number of residents to 7. Over the centuries, most of the population moved to Bagnoregio, the neighboring town, which was once attached to Civita but was then separated, in the 18th century, by an earthquake and is now divided by a canyon.

To counteract the phenomenon of depopulation, the Municipality of Bagnoregio has developed some incentive policies for residency, the economic coverage of which is guaranteed by the proceeds from the entrance ticket to Civita. Bagnoregio is the first Italian municipality to have lowered municipal taxation and indeed guarantees the population a higher level of welfare thanks to measures such as:

- a bonus for purchases of cultural goods for all 18 year olds, in addition to the national one;
- a new-born bonus, in addition to the national one;
- free school lunch services;
- free school bus service;
- free parking for residents.

Environmental pressure

The landscape of Civita di Bagnoregio is subjective to different instability phenomena. The tuff cliff is mainly interested by the collapse of the more external part with toppling type of landslides. It is then subjected to unloading stress (stress release) and detensioning (stress relief) respectively due to the deepening of the valley and lateral unloading, and to the contrast in stiffness between marine clays and the volcanic deposits.

The clay layer is more subjected to mudflows type of landslides. The infiltration of the water inside the porous and fissured tuff, determines, at the contact with the underlying impermeable clays the formation of a water table with spread emerging springs. The prolonged contact of the clay with the free water leads to the swelling of the clay and the decay in the clay's properties that, activating superficial landslides causes the scouring at the base of the tuff cliff. The swelling of the clays, in the parts in contact with the tuff, also lead to the failure of the rocks along sub-vertical.

Tourism pressure

Civita di Bagnoregio has become a very attractive tourist destination within a few years, positioned by tour operators as the perfect pit stop between Florence and Rome. In the run-up to the pandemic, however, overcrowding phenomena began to appear, affecting the quality of life for hosts (mainly for those living in the borgo rather than for those living in Bagnoregio) and the quality of the experience of guests. In the year 2019, of the 1 milion visitors who reached the village of Civita, 600,000 were tourists and most of them were "hit and run" tourists. However, the web reputation of Civita is increasing: bad reviews on Tripadvisor, for example, have an impact of just 13% on the total. And tourism has improved life for locals: the entrance fee is put towards local infrastructure, meaning that Bagnoregio is the first town council in Italy to waive local taxes for residents.

The objective of establishing Civita di Bagnoregio as a model of sustainable tourism did not fail following the sharp contraction in demand and the profound changes in tourist behavior induced by the Covid 19 pandemic. With the affirmation of proximity tourism, in the summer of 2020 in fact, the entrances to the fortress of Civita di Bagnoregio recorded a significant increase compared to the previous year, supported by a strong expansion of domestic demand: between June and August 2020, 60% more Italians compared to the previous year chosen to visit the village. In the single month of August 2020, the overall variation was + 21% compared to August 2019. This figure keeps the governance and redistribution strategies outlined in the pre-Covid phase decidedly topical.

Casa Civita, the new society founded in October 2019 to stimulate competitiveness of tourism in the area, aims to promote sustainable, responsible tourism, improving the physical, social, ecological carrying capacity of the destination, involving neighboring territories in the development policies, managing (both quantitatively and qualitatively) the drivers of growth and addressing the arising challenges effectively.

Active participation means directing urban, cultural, social, economic and environmental development while taking into account the quality of life perceived by citizens and adopting careful planning which respects the limits of capacity and the specificities of the territory. For a site like Civita di Bagnoregio, which has registered an increase of 150% in the number of visitors to the village over the last six years and which has undergone changes in a very short time, involvement is not only formal, but substantial. For this reason, the strategy of promotion and valorisation of the universal values of the cultural landscape of Civita, described in the following projects, combines the expectations and needs of stakeholders with recommendations formulated by the World Tourism Organisation (UNWTO) to help manage growing urban tourism flows and their impact on cities and residents.

The process aimed at involving stakeholders entailed the organisation of three working groups, the presence of about 50 local operators, days of targeted meetings with chambers of commerce and business representatives and the submission of a CAWI survey to collect ideas and suggestions that could be useful for the application project. By listening to stakeholders, it was possible to focus on the underlying assumption of the Management Plan, namely that Civita di Bagnoregio can represent a model of international interest where the protection of the territory can be combined with sustainable development of both a cultural and creative nature, within the framework of a network.

· the Cultural Landscape of Civita di Bagnoregio, from 'dying city' to driver for the development of new knowledge, ideas and projects related to historical, cultural and environmental heritage;

· the Cultural Landscape of Civita di Bagnoregio, from a symbol of isolation to a hub for the regional and interregional territorial network for the creation of an integrated and coherent offer system in which all actors are able to identify themselves and which is able to maintain a high level of tourist experience and quality of life for the local community. This is particularly useful to implement strategies that aim at dispersal of visitors and visitor segmentation by the mean of developing new itineraries and attractions;

· the Cultural Landscape of Civita di Bagnoregio: the nomination recognises that the Cultural Landscape of Civita di Bagnoregio has an outstanding universal value for the world as a prime example of the combined works of nature and man. World Heritage Site status would be a befitting celebration of this combination, but with a clear focus on ensuring that Civita will be managed in a way that enables its ongoing evolution whilst protecting and enhancing those attributes;

· the Cultural Landscape of Civita di Bagnoregio as a community centre for cultural and creative activities aimed at the resident community, to whom it is necessary to convey the awareness that the hidden value of cultural heritage is capable of triggering virtuous circles that can have a positive impact on everyone's quality of life. Improving the integration of local communities in the tourism value chain and promoting their engagement in the sector, and ensuring that tourism translates into wealth creation, will guarantee the long-term sustainability of urban tourism and cooperation of local stakeholders.

5.e.1 Action Plan

Compliance with the 2030 framework was a guiding star in the construction of the strategy for the protection and management of the Cultural Landscape of Civita di Bagnoregio and in the declination of the strategy in the Action Plan projects. Thanks to this approach, the Management Plan covers all aspects of the territory - life, movement, work, fun, nature, knowledge - and, in this diversity, enhance culture to play a leading role in sustainable development and promotion of well-being and resilience in individuals and communities, ensuring access to information, and encouraging awareness and tolerance.

The soundness and sustainability of the operating system is guaranteed by the simultaneous presence of:
· projects that the stakeholders have brought to a high level of planning regardless of the application process but which have evident elements of coherence with it;
· interventions already being carried out in the area, which are further developed in the Management Plan. The application process has, in fact, stimulated a new collaboration between the stakeholders who have proved ready and able to reshape the contents of historical projects or in any case already known in the area, making them more consistent with the recommendations for the Oustanding Universal Value;
· new projects resulting from discussions with and between stakeholders. The Management Plan was able to boost networking among organizations involved in heritage preservation and enhancement and has allowed the stakeholders to develop the effective ability to introduce innovation, combine the instances of promotion and development in a tourism key, integrate the widespread cultural heritage and the distinctive supply chains of the territory (local productions , tourism, agri-food);
· In order to make the structure of the Plan clearer and therefore to define the contents, to identify people responsible, to plan the details of the interventions, as well as the

necessary resources, the projects have been grouped into specific areas of intervention to which five sectoral Action Plans are dedicated: Conservation, Fruition, Capacity Building, Community Engagement and Communication.

Within each Action Plan, the projects are distinguished on the basis of:
· their relevance: at the opening of each plan, the flagship projects are presented with a priority order and identified by a characteristic icon;
· the genesis of the project: in order to enhance the collaboration between the stakeholders of the Plan, they are identified separately according to whether they are totally new projects (BRAND NEW), remodeled for the purpose of a greater compliance with the objectives of the candidacy (FOR A GREATER COMPLIANCE) or independent of the candidacy path (JOINING);
· their effective implementation within a horizon:
  - of short term: 01/2021 - 12/2021;
  - of medium term: 01/2022 - 12/2023;
  - of long term: 01/2024 - 01/2025;
  - ongoing: 01/2021 - ….

5.e.1.1 *Conservation Plan*

This Plan deals with issues related to the collection and updating of information necessary for the effective individuation, protection, management and valorisation of the Cultural Landscape of Civita. This Plan, more than any other, is highly focused on future generations, whose guarantee of usability of the site should be ensured by the provisions of the Plan.

The heart of the Action Plan for the Conservation of the Cultural Landscape of Civita di Bagnoregio is represented by the activation project inside the Geological and Landslides Museum of a monitoring cabin for the slopes and the base of the cliff, through which it will be possible to collect promptly the most useful data for planning the necessary consolidation interventions, thus mitigating the environmental pressure to which the village of Civita is subjected (Project 1.1). All the safety and structural restoration interventions envisaged by the various Municipalities are linked to this project (Projects 1.4, 1.5, 1.6, 1.7, 1.8).

Since the OUV of the Cultural Landscape of Civita di Bagnoregio is also threatened by demographic dynamics and anthropic vulnerability, the Management Plan articulates the Conservation Action Plan in a series of projects to protect the identity and transmission of the memory of the places in a collective level. Unlike biological inheritance, cultural memory must, in fact, be kept active through guarantors, continuity mediators whose main processes are repetition and interpretation. These guarantors are made available through the Management Plan, thanks to the projects related to collecting oral, written and photographic memory of the territory (Project 1.3).

Moreover, the Plan aims at programming methods and tools of study and in-depth analysis with the final aim of making knowledge about the heritage of the Cultural Landscape of Civita di Bagnoregio and its related context available to the community, whether citizens or not (Projects 1.10, 1.11). Finally, to complete the Plan, projects are planned to protect the perspective component of the Cultural Landscape of Civita di Bagnoregio (Projects 1.2, 1.9). For a full detail of the projects included in the Conservation Plan, please see the **Annex A. Action Plan.**

	MEASURE		TERM	GENESIS
	1.1	Geotechnical and structural monitoring programme for cliffs and slopes	SHORT	BRAND NEW
	1.2	Renewal of the former teaching cellar area of Bagnoregio	SHORT	BRAND NEW
	1.3	Oral memory in the Badlands Valley	SHORT	BRAND NEW
	1.4	Securing and consolidating the southern slope of the Civita di Bagnoregio cliff	SHORT	JOINING
	1.5	Securing the landslide in Mercatello	SHORT	JOINING
	1.6	Hydrogeological arrangement in Acquamatta (Bagnoregio)	MEDIUM	JOINING
	1.7	Safeguarding the high base of the pedestrian access walkway to Civita di Bagnoregio	SHORT	JOINING
	1.8	Securing the access road to Civita di Bagnoregio	SHORT	JOINING
	1.9	Competition of ideas for the redevelopment of the access bridge to Civita di Bagnoregio	MEDIUM	BRAND NEW
	1.10	Collection of private photographic heritage and related digitization to make it accessible and public	SHORT	BRAND NEW
	1.11	Collection of books, degree and PHD theses on Bagnoregio and the Badlands Valley	SHORT	BRAND NEW

TAB. 5.2 Action plan: measure, term and genesis

5.e.1.2 *Fruition Plan*

The Fruition Plan is the section of the Management Plan that outlines activities to ensure and improve the usability and accessibility to the attractions and the Cultural Landscape of Civita di Bagnoregio as a whole.

The Municipalities of Bagnoregio, Castiglione in Teverina, Civitella d'Agliano, Graffignano and Lubriano, although not identified by the National Strategy for Internal Areas as peripheral territories, present a territorial offer in many respects similar to an internal area: they are rich in environmental resources (water resources, agricultural systems, forests, natural and human landscapes) and cultural resources (archaeological heritage, historical settlements, abbeys, small museums, craft centers), but the distance from the centers offering essential services (education, health and mobility) significantly penalizes the demographic trends underway.

For this reason, the Management Plan, through the Fruition Action Plan, identifies a series of local development projects focused on cultural and environmental issues, capable of activating a new demand - including residential - focused on the specificities of the territory and its latent growth factors: protection of the territory and local communities, enhancement of natural and cultural resources and sustainable tourism, agro-food systems and local development.

In the Fruition Action Plan, projects for the enhancement of individual monumental or environmental emergencies (Projects 2.1, 2.6, 2.7, 2.8, 2.11, 2.12, 2.13, 2.18) and network projects (Projects 2.9, 2.10, 2.15) can thus be found, which aim to counteract the limited tendency to cooperation, both horizontal (between operators in the same sector) is vertical (between operators from different sectors) that currently prevails in the territory. In this

sense, the work of elaborating the Management Plan has made it possible to overcome the complexities generally emerging in the initial phase of conception / development of the network and connected to the selection / identification of cultural heritage and places, facilitating the development of a territorial vision.

Taking into account the risk related to the increasing tourism pressure, great attention was given to projects aimed at strengthening the local system of knowledge and skills necessary to mitigate the anthropic vulnerability of the Cultural Landscape of Civita di Bagnoregio (Projects 2.3, 2.4, 2.5). For a full detail of the projects included in the Fruition Plan, please see the **Annex A. Action Plan.**

	MEASURE		TERM	GENESIS
⚑	2.1	MUS.A. MUSEUM OF THE SOUL The Cultural Landscape of Civita di Bagnoregio	SHORT	BRAND NEW
⚑	2.2	THE ENCHANTED CITY International meeting of the designers who save the world	ONGOING	FOR A GREATER COMPLIANCE
⚑	2.3	TOURISM MONITORING Methodology and toolkit	MEDIUM	BRAND NEW
⚑	2.4	Study of the carrying capacity of Civita di Bagnoregio	SHORT	BRAND NEW
	2.5	Governance and management of flows for sustainable tourism in Bagnoregio	SHORT	BRAND NEW
	2.6	PROGETTO BELLEZZ@. MUNICIPALITY OF CASTIGLIONE IN TEVERINA. MUVIS - Museum of Wine	LONG	JOINING
	2.7	PROGETTO BELLEZZ@. MUNICIPALITY OF CIVITELLA D'AGLIANO Recovery and enhancement of the Monaldeschi Tower in Civitella d'Agliano	LONG	JOINING
	2.8	PROGETTO BELLEZZ@ MUNICIPALITY OF BAGNOREGIO	SHORT	JOINING
	2.9	TREKKING IN THE BADLANDS A green belt in the Cultural Landscape of Civita di Bagnoregio	MEDIUM	FOR A GREATER COMPLIANCE
	2.10	I BORGHI RACCONTANO Theatre and Perfoming Arts in the Badlands	SHORT	FOR A GREATER COMPLIANCE
	2.11	TUSCIA DIGITAL ARCHEOPARK - Innovative solutions for the valorisation of a network of archaeological parks in the Tuscia area	LONG	JOINING
	2.12	VALLE DELLA PAURA Ciclopath	SHORT	JOINING
	2.13	Widespread archaeological site of Civitella d'Agliano	MEDIUM	JOINING
	2.14	A new tourist transport system in Bagnoregio	MEDIUM	JOINING
	2.15	TO AND FROM BAGNOREGIO Connecting the Cultural Landscape to the other World Heritage Site	LONG	BRAND NEW
	2.16	People of Civita. Exhibition	SHORT	BRAND NEW
	2.17	GiUSTO Culture and taste, our heritage	SHORT	FOR A GREATER COMPLIANCE
	2.18	The Baglioni Castle in the Regional Network of historical residences	SHORT	FOR A GREATER COMPLIANCE

TAB. 5.3 Fruition plan: measure, term and genesis

5.e.1.3 *Capacity Building Plan*

The Plan was born with the goal of raising the capacity of the stakeholders involved in the effective management of the property, of the community and of the local operators, with regard to the specific skills that they can apply to all activities related to World Heritage property. Casa Civita (selected, as specified in pharagraph 5.e.1.7, as the site manager of the nominated property), schools and the Geological and Landslides Museum are identified as drivers of the capacity development process.

	MEASURE		TERM	GENESIS
	**3.1**	DEALING WITH THE MONITORING AND EVALUATION SYSTEM OF A WHS - A formative session for the site management team	**SHORT**	**BRAND NEW**
	**3.2**	WHS DESIGNATION AS AN IMPACT - Conferences and webinar on socio cultural, physical and attitudinal changes in/around World Heritage Sites in Italy	**SHORT**	**BRAND NEW**
	**3.3**	A new kit for teachers from the World Heritage Education Programme	**MEDIUM**	**BRAND NEW**
	3.4	The Civita Institute Fellowship Programme	**SHORT**	**FOR A GREATER COMPLIANCE**
	3.5	HOSPITALITY PROGRAMME - Training for operators and companies operating in the hospitality industry in a WHS	**SHORT**	**BRAND NEW**
	3.6	A SPASSO CON ABC Discovering the Badlands Valley	**ONGOING**	**FOR A GREATER COMPLIANCE**
	3.7	Building capacities through the Geological and Landslides Museum	**MEDIUM**	**FOR A GREATER COMPLIANCE**

TAB. 5.4 Capacity building plan: measure, term and genesis

In combination with the other action plans, the Capacity Building Action Plan is able to guarantee a shared understanding of the property by all stakeholders. Starting from the management team to whom a training project is dedicated on the purposes, the methodologies and the tools necessary to successfully complete the Periodic Reporting and the monitoring activities of the Management Plan (Project 3.1). In line with the Global Capacity-Building Program of the World Heritage Center, the Plan contributes in safeguarding the heritage and harness its potential for sustainable development, through projects (Projects 3.3, 3.4)capable of enhancing the ability of the various stakeholders to work with the problems posed by the purpose of disseminating the universal value of the nominated property, introducing a more dynamic relationship between heritage and its context and greater mutual benefit based on a more inclusive approach (Projects 3.2, 3.7). For a full detail of the projects included in the Capacity Building Plan, please see the **Annex A. Action Plan.**

5.e.1.4 *Community Engagement Plan*

In order to promote the strong will for participation shown by a large and varied community, from the very beginning the Management Plan was intended as a tool/process of involvement for the construction of a shared vision. The elaboration of the Plan is, therefore, the result of the collaboration between the institutions, the territory's main stakeholders – including representatives of trade, business, labour, volunteer and culture associations – and citizens, who have provided useful indications and recommendations for the purposes of the Plan and its integration with their own point of view.

The projects included in the Community Participation Plan intend to promote a new vision of the relationship between cultural heritage and the communities that preserve it, underlining the value and potential of cultural heritage as a resource for sustainable development and for the quality of life, encouraging participatory enhancement processes. For a full detail of the projects included in the Communities Engagement Plan, please see the **Annex A. Action Plan.**

	MEASURE		TERM	GENESIS
	4.1	MUS.A. MUSEUM OF THE SOUL Visitor centre for the Cultural Landscape of Civita di Bagnoregio	MEDIUM	FOR A GREATER COMPLIANCE
	4.2	A growing heritage community	ONGOING	BRAND NEW
	4.3	The Cultural Landscape of Civita di Bagnoregio for the World Heritage Volunteers Campaign of 2022	MEDIUM	BRAND NEW
	4.4	2023 National Heritage Forum	LONG	BRAND NEW
	4.5	World Heritage in Young Hands Kit Civita's edition	SHORT	BRAND NEW
	4.6	The community meets the Nomination Format and the Management Plan	SHORT	BRAND NEW
	4.7	VILLA PRAEDIIS Field School in Sipicciano	SHORT	FOR A GREATER COMPLIANCE
	4.8	Events for the promotion of the candidacy and the presentation of the property with the involvement of international artists and cultural operators	ONGOING	BRAND NEW
	4.9	Survey on the Cultural Landscape of Civita di Bagnoregio	LONG	BRAND NEW
	4.10	Annual photographic competition "In the shadow of Civita"	SHORT	FOR A GREATER COMPLIANCE

TAB. 5.5 Community engagement plan: measure, term and genesis

5.e.1.5 *Communication Plan*

The actions envisaged in the Communication Plan complete the Community Engagement strategy, integrating the interpretational tools, the chances to interact with the Site Manager and the main stakeholder involved in the management of the property, both through physical touchpoints and on - line interaction tools.

MEASURE		TERM	GENESIS
5.1	Communication Plan for the Cultural Landscape of Civita di Bagnoregio	**SHORT**	**BRAND NEW**
5.2	Graphic identity and creativity of the Cultural Landscape of Civita di Bagnoregio	**SHORT**	**BRAND NEW**
5.3	DIGITAL STRATEGY FOR CIVITA Development of the dedicated website for the promotion of the WHS	**SHORT**	**BRAND NEW**
5.4	DIGITAL STRATEGY FOR CIVITA Engineering of the app for the promotion of the WHS	**SHORT**	**BRAND NEW**
5.5	DIGITAL STRATEGY FOR CIVITA Social media strategy for the WHS	**SHORT**	**BRAND NEW**
5.6	Social Wall for the Cultural Landscape of Civita di Bagnoregio	**SHORT**	**BRAND NEW**
5.7	CIVITA INCONTRA Festival of cultural appointments	**ONGOING**	**BRAND NEW**
5.8	The Cultural Landscape of Civita di Bagnoregio in B2B travel events	**ONGOING**	**FOR A GREATER COMPLIANCE**

TAB. 5.6 Communication plan: measure, term and genesis

The Communication Plan leverages new tools and channels, assuming the following objectives:

- to construct a shared identity and homogeneity for the Cultural Landscape of Civita di Bagnoregio, involving all the municipalities in the process;
- to encourage the construction of bidirectional and continuous relationships between the property and its target audiences;
- to be an instrument of coordination between all stakeholders involved in the implementation of the strategy for the promotion of the values of the Cultural Landscape of Civita di Bagnoregio.

TARGET GROUPS FOR THE COMMUNICATION INITIATIVES

The targets for the communications are:

Internal (local community):

- inhabitants and small business in the nominated property;
- citizens of Bagnoregio, Castiglione in Teverina, Civitella d'Agliano, Graffignano, Lubriano;
- school-age children and families;
- stakeholders from the local community:
  - local private cultural operators;
  - local tourist services;
- other local stakeholders;
- institutions and promoting bodies of the Nomination;

External:

- general public (potential users and cultural consumers, potential residential users in the nominated property - young professionals and creative class, founders of start–ups, etc.);
- cultural sector:
  - cultural institutions (archives, museums, libraries, private cultural institutions);
  - creative and cultural industries;
- tourist sector (institutional and private tourist operators, tourist services);
- universities;
- operators of business acceleration programmes, incubation of start–ups, innovative start–ups (ICT and creative sector);
- business community;
- collective stakeholders, such as users on the territory of the Cultural Landscape of Civita di Bagnoregio (scholars, researchers, students, tourists).

5.e.1.6 *Monitoring and Evaluation Plan*

The Monitoring and Evaluation Plan aims to ensure the effective implementation of the Action Plan, as well as to focus on coordination mechanisms for its implementation in order to assess its effective functioning.

The monitoring and evaluation plan considers two levels, that of the individual projects of the Management Plan and that of the strategy. The observation of the phenomena related to each project aims to provide information on the effective implementation of the Management Plan: the output indicators correspond to this level, through which the products of the projects will be measured, their consistency with respect to what is expected and hence the degree of internal effectiveness of the Management Plan.

The monitoring and evaluation at the strategy level, on the other hand, have the purpose of verifying over time the correspondence between strategic lines and objectives of the Management Plan with respect to the identified needs and to direct, if necessary, the updating. In the framework, through the outcome indicators, the changes in the behavior of the beneficiaries of the projects are measured, while through the impact indicators it is possible to explain the results of the conservation, accessibility and use, capacity building, community engagement and communication policies promoted in the Management Plan. The two levels are therefore complementary, feed each other and contribute synergistically to the achievement of the following objectives:

1. Create a survey system that constitutes an information base for better resource management;
2. Identify clear objectives not only for output but also for outcome;
3. Link the monitoring system to the strategy;
4. Identify responsibilities and timelines for implementing monitoring and evaluation;

5. Provide stakeholders with an immediately usable system in order to develop a virtuous cycle of monitoring, evaluation, feedback and review of the strategy;
6. Direct the subjects involved on the use of the tools most appropriate to the information needs of the case;
7. Communicate objectives and results within and outside the organization, as well as compare their performance with a view to benchmarking in the event that some indicators are common to several organizations.

According to this approach:
· the output indicators are shown by project;
· the effects at the outcome level are recorded for each Action Plan. The link between the three different levels (Nomination Format, monitoring of outputs and monitoring of outcomes) is the evaluation of the impacts envisaged through the indications in the Periodic Reporting: therefore, for each indicator the connection with the 14 primary factors and the related secondary factors is provided;
· the effects at the impact level are measured with respect to the sustainable development policies summarized in the framework Culture 2030 | Indicators of the World Heritage Center. The starting point for the construction of the indicators is represented by the four thematic dimensions and the related indicators provided by the World Heritage Center: to ensure a high level of consistency with respect to the issues of the Cultural Landscape of Civita di Bagnoregio, a selection of these indicators and/or a re-design of them as been done.

For each indicator a time indication about the need for data collection is provided. It should be noted that the timing for data collection does not necessarily coincide with the timing for data processing and reporting, since a medium-long term horizon is required for the effects of the Nomination process to manifest themselves.

For the purpose of evaluating the outcomes, the proposed indicators will be assessed in two years from the possible enrollment in the World Heritage List, while for the purposes of evaluating the impacts, the proposed indicators will be assessed in two different moments: at the very beginning, soon after the enrolment in the World Heritage List, to measure the initial situation and after five years to detect all modifications on recipients, urban and natural context.

ID	PROJECT TITLE	PROPOSED INDICATORS	TIMING
1.1	Geotechnical and structural monitoring programme for cliffs and slopes	Geotechnical and structural monitoring system (yes/no)	Once, at project conclusion
		New sensors at the base of the cliff (number)	Once, at project conclusion
1.2	Demolition of the cellar area of Bagnoregio	Abatement of the cellar (yes/no)	Once, at project conclusion
1.3	Oral memory in the Badlands Valley	Podcasts/Video Pills created (number)	Once, at project conclusion
1.4	Securing and consolidating the southern slope of the Civita di Bagnoregio cliff	Intervention of securing and consolidating of the slopes (yes/no)	Once, at project conclusion
		Intervention of restauration of a pedestrian path for a new escape route (yes/no)	Once, at project conclusion
1.5	Securing the landslide in Mercatello (Bagnoregio)	Structural reinforcements (yes/no)	Once, at project conclusion

TAB. 5.7 Output indicators, shown by project of the Management Plan

1.6	Hydrogeological arrangement in Acquamatta (Bagnoregio)	Restoration of viability (Strada dell'Aquamatta)	Once, at project conclusion
		Wastewater treatment plant (yes/no)	Once, at project conclusion
1.7	Safeguarding the high base of the pedestrian access walkway to Civita di Bagnoregio	Antierosive protection intervention (yes/no)	Once, at project conclusion
1.8	Securing the access road to Civita di Bagnoregio	Structural reinforcements (yes/no)	Once, at project conclusion
1.9	Competition of ideas for the redevelopment of the access bridge to Civita di Bagnoregio	Call for ideas (yes/no)	Once, at project conclusion
		Projects and ideas submitted (number)	Once, at project conclusion
1.10	Collection of private photographic heritage and related digitization to make it accessible and public	Images of the territory collected and archived (number)	Once, at project conclusion
1.11	Collection of books, degree and PHD theses on Bagnoregio and the Badlands Valley	Books, degree and PHD theses collected and archived (number)	Once, at project conclusion
2.1	MUS.A. MUSEUM OF THE SOUL The Cultural Landscape of Civita di Bagnoregio	Ticket office set up (yes/no)	Once, at project conclusion
		Concept store set up (yes/no)	Once, at project conclusion
		Totem for automatic ticketing (number)	Once, at project conclusion
		Museum rooms with interactive layout (number)	Once, at project conclusion
2.2	THE ENCHANTED CITY International meeting of the designers who save the world	Programming days (number)	Yearly
		Events realized (number)	Yearly
		Artists involved (number)	Yearly
		Artist residencies assigned (number)	Yearly

2.3	TOURISM MONITORING Methodology and toolkit	Study on visitors tracking (yes/no)	Once, at project conclusion
		Partners involved (number)	Once, at project conclusion
		Tools provided (number)	Once, at project conclusion
2.4	Study upon the carrying capacity of Civita di Bagnoregio	Study upon the carrying capacity of Civita di Bagnoregio (yes/no)	Once, at project conclusion
2.5	Governance and management of flows for sustainable tourism in Bagnoregio	Web portal for the management of tourist flows (yes/no)	Once, at project conclusion
2.6	PROGETTO BELLEZZ@ MUNICIPALITY OF CASTIGLIONE IN TEVERINA. MUVIS Museum of Wine	New museum exhibits (number)	Once, at project conclusion
		Concept store (yes/no)	Once, at project conclusion
		Museum website (yes/no)	Once, at project conclusion
		MUVIS mobile application (yes/no)	Once, at project conclusion
		Museum's social channels (number)	Once, at project conclusion
		Followers for each social channel (number)	Monthly
2.7	PROGETTO BELLEZZ@ MUNICIPALITY OF CIVITELLA D'AGLIANO. Recovery and enhancement of the Monaldeschi Tower in Civitella d'Agliano	New access to the Tower (yes/no)	Once, at project conclusion
		New connection between the Tower and Palazzo Monaldeschi (yes/no)	Once, at project conclusion
2.8	PROGETTO BELLEZZ@ MUNICIPALITY OF BAGNOREGIO	Restoration interventions (number)	Once, at project conclusion

2.9	Trekking in the Badlands	New trails (km)	Yearly
		Mobile app for the use of the trails (yes/no)	Once, at project conclusion
		Trails tracked in the mobile app (km)	Yearly
		New signage (number)	Yearly
		Regulatory plan of the paths (yes/no)	Yearly
2.10	I BORGHI RACCONTANO Theatre and Perfoming Arts in the Badlands	Shows and perfomances (number)	Yearly
		Artists involved (number)	Yearly
		Publications on Atclmagazine (web magazine) (number)	Yearly
2.11	TUSCIA DIGITAL ARCHEOPARK Innovative solutions for the valorisation of a network of archaeological parks in the Tuscia area	Thematic islands of experimental archeology (number)	Once, at project conclusion
		Website dedicated to the Archeopark (yes/no)	Once, at project conclusion
		Social accounts of the Archeopark (number)	Once, at project conclusion
2.12	VALLE DELLA PAURA Ciclopath	New ciclopaths (km)	Once, at project conclusion
		Downloads of the mobile app for the use of the trails (number)	Once, at project conclusion
		Trails tracked in the mobile app (km)	Yearly
		New signage (number)	Once, at project conclusion
2.13	Widespread archaeological site of Civitella d'Agliano	Buildings made accessible for the public (number)	Yearly
		Archaeological finds exhibited (number)	Yearly
		Operators involved (number)	Yearly

2.14	A new tourist transport system in Bagnoregio	New bus trails (km)	Yearly
		Bus rides (number/day)	Yearly
2.15	TO AND FROM BAGNOREGIO Connecting the Cultural Landscape to the other World Heritage Sites	New bus trails (km)	Yearly
		Bus rides (number/day)	Yearly
2.16	PEOPLE OF CIVITA Exhibition	People of Civita exhibition (yes/no)	Once, at project conclusion
		Visitors (number)	Once, at project conclusion
2.17	'GiUSTO' Culture and taste, our heritage	Meetings in schools per year (number)	Yearly
		Partners involved (number)	Yearly
2.18	The Baglioni Castle in the Regional Network of historical residences	Accreditation (yes/no)	Once, at project conclusion
3.1	DEALING WITH THE MONITORING AND EVALUATION SYSTEM OF A WHS SITE - A formative session for the site management team	Webinars/Conferences (number)	Once, at project conclusion
		People involved (number)	Once, at project conclusion
3.2	WHS DESIGNATION AS AN IMPACT Conferences and webinar on socio-cultural, physical and attitudinal changes in/around World Heritage Sites in Italy	Webinars/Conferences (number)	Yearly
		People involved (number)	Yearly
		World Heritage Sites involved (number)	Yearly
3.3	A new kit for teachers from the World Heritage Education Programme	Kits for teachers (number)	Yearly
3.4	The Civita Institute Fellowship Programme	Fellowhips (number)	Yearly
3.5	HOSPITALITY PROGRAMME Training for operators and companies in the hospitality industry in a WH site	Courses (hours)	Once, at project conclusion
		Participants (number)	Once, at project conclusion

3.6	A SPASSO CON ABC Discovering the Badlands valley	Guided tours (number)	Yearly
		Local experts involved (number)	Yearly
		Participants (number)	Yearly
3.7	Building capacities through the Geological and Landslides Museum	Refresher courses for teachers (hours)	Yearly
		Teachers involved (number)	Yearly
		Educational training for students (hours)	Yearly
4.1	MUS.A MUSEUM OF THE SOUL Interpretation center of The Cultural Landscape of Civita di Bagnoregio	Virtual Touchpoints (dedicated email, website) (number)	Yearly
		Contact Center (number)	Yearly
		Visitors (number)	Yearly
4.2	A growing Heritage Community	Organized events (number)	Yearly
		Citizens involved (number)	Yearly
4.3	The Cultural Landscape of Civita di Bagnoregio for the World Heritage Volunteers Campaign of 2022	Application for the selection of the projects for the World Heritage Volunteers 2022 campaign (yes/no)	Once, at project conclusion
		Volunteers involved (number)	Once, at project conclusion
		Local institutions involved (number)	Once, at project conclusion
4.4	2023 National Heritage Forum	People involved (number)	Once, at project conclusion
		Local institutions involved (number)	Once, at project conclusion
		Italian WHS involved (number)	Once, at project conclusion

4.5	World Heritage in Young Hands Kit Civita's edition	World Heritage in Young Hands Kit. Civita's edition (number)	Once, at project conclusion
		Experts involved (number)	Once, at project conclusion
4.6	The community meets the Nomination format and the Management Plan	Presentation days (number)	Once, at project conclusion
		People involved (number)	Once, at project conclusion
4.7	Villa Preedis. Field School in Sipicciano	Students involved (number)	Yearly
		Excavation days completed (number)	Yearly
		Excavated surface (mq)	Yearly
4.8	Events for the promotion of the candidacy and the presentation of the property with the involvement of international artists and cultural operators	Events to promote the enrollement in the World Heritage List (number)	Yearly
4.9	Survey on the Cultural Landscape of Civita di Bagnoregio	CAWI surveys submitted (number)	Yearly
4.10	Annual photographic competition "In the shadow of Civita"	Partecipants (number)	Yearly
		Photos in competition (number)	Yearly
		Artists and artisans involved in the creation of the prizes (number)	Yearly
		Catalogue (yes/no)	Yearly
5.1	Communication Plan for The Cultural Landscape of Civita di Bagnoregio	Multichannel Communication strategy (yes/no)	Once, at project conclusion
5.2	Graphic identity and creativity of the Cultural Landscape of Civita di Bagnoregio	Graphic identity (yes/no)	Once, at project conclusion

5.3	DIGITAL STRATEGY FOR CIVITA Development of the dedicated website for the promotion of the WHS	Website (yes/no)	Once, at project conclusion
		Monthly average users	Monthly
		Permanance on the website (percentage of scroll)	Monthly
5.4	DIGITAL STRATEGY FOR CIVITA Engineering of the app for the promotion of the WHS	New mobile APP for IOS and Android (yes/no)	Once, at project conclusion
5.5	DIGITAL STRATEGY FOR CIVITA Social media strategy for the WHS	Instagram/Twitter/Facebook account (yes/no)	Once, at project conclusion
		Followers of the social accounts (for every social account) (number)	Monthly
5.6	Social wall for the Cultural Landscape of Civita di Bagnoregio	Posts on the Social Wall (number)	Monthly
		Users on the Social Wall (number)	Monthly
5.7	CIVITA INCONTRA Festival of cultural appointments	Events (number)	Yearly
		Guests/Artists involved (number)	Yearly
		Participants (number)	Yearly
5.8	The Cultural Landscape of Civita di Bagnoregio in B2B travel events	Stands in national B2B events for tourism (number)	Yearly
		Stands in international B2B events for tourism (number)	Yearly

OUTCOMES	INDICATOR	RELATIONSHIP WITH THE PERIODIC REPORTING	TIMING
Conservation	Planned conservation projects started (number)	Sudden ecological or geological events – Avalanche/Landslide	Biyearly
	Public and private funds used for conserving (€)	Management and Institutional factors – Management System/ Management Plan	Biyearly
	Universities involved in conservation projects (number)	Management and Institutional factors – Management System/ Management Plan	Biyearly
Fruition	Cultural events (number)	Social/Cultural uses of heritage Society's valuing of heritage	Biyearly
	Products/services for slow tourism delivered (number)	Social/Cultural uses of heritage Society's valuing of heritage	Biyearly
	Trends in the number of admissions to local museums (%)	Social/Cultural uses of heritage Society's valuing of heritage	Biyearly
	Cultural attendance - Population who have participated at least once in a going-out cultural activity (%)	Social/Cultural uses of heritage Society's valuing of heritage	Biyearly
	Tourists' average stay time (number)	Social/Cultural uses of heritage Society's valuing of heritage Buildings and Development - major visitor accommodation and associated infrastructure	Biyearly
Capacity Building	Population that claims to have increased the comprehension of the World Heritage issues (%)	Social/Cultural uses of heritage Society's valuing of heritage	Biyearly
	Local operators that claim to have improved theire skills in presenting and promoting the World Heritage issues (%)	Management and institutional factors - Human resources	Biyearly
	Training courses on skills in ecological or geological events mitigation (number)	Management and institutional factors - Human resources	Biyearly
Community engagement	Population that claims to be satisfied with community engagement process (%)	Social and cultural uses of heritage Identity, social cohesion, changes in local population and community	Biyearly
	Community-led processes (number)	Social and cultural uses of heritage Identity, social cohesion, changes in local population and community	Biyearly
	Projects and services for the conservation and enhancement of Cultural Landscape of Civita di Bagnoregio promoted by the community (number)	Social/Cultural uses of heritage Society's valuing of heritage	Biyearly
Communication	Trends of the volume of online research relating to the Cultural Landscape of Civita di Bagnoregio (%)	Other factors - notoriety of the Cultural Landscape of Civita di Bagnoregio	Biyearly
	Trends of the volume of online research relating to the municipalities set in the Buffer Zone (%)	Other factors - notoriety of the Cultural Landscape of Civita di Bagnoregio	Biyearly
	Online and offline publications related to the Cultural Landscape of Civita di Bagnoregio (number)	Other factors - notoriety of the Cultural Landscape of Civita di Bagnoregio	Biyearly

TAB. 5.8 Outcomes indicators, shown by Action Plan and relationship with the Periodic Reporting

IMPACT	INDICATOR
Environment and Resilience	Expenditure on the preservation, protection and conservation of all cultural and natural heritage (€)
	Distribution of cultural facilities through spatial mapping (qualitative indicator)
	Open space for culture (m^2)
Prosperity and Livelihoods	Cultural business (number, %)
	Cultural patronage, sponsorship or public-private partnership (€)
	Programmes/measures to advocate and raise public awareness on culture's contribution to well-being and sustainable development (number)
Knowledge and Skills	Capacity-building and training programmes implemented to increase heritage management staff's expertise in protection and conservation of tangible and intangible heritage (number)
	Heritage education programmes for children and/or youth that contribute to improving understanding of heritage, promoting diversity and fostering intercultural dialogue (number)
	Heritage properties and museums operating World Heritage awareness programmes (number)
Inclusion and Participation	Access to culture - Availability of cultural infrastructure in relation to the distribution of the population (qualitative indicator)
	Projects and services delivered with the involvement of the community (number)
	Community structures actively involved in fostering tangible and intangible heritage (number)
	Population that claims to have increased a feeling of belonging, and an experience of investment and ownership in local, regional, national, or international communities (%)
	Level of population satisfaction (%)

TAB. 5.9 Impact indicators and compliance with framework Culture 2030 | Indicators

5.e.1.7 *Governance Structure and Management System*

To support the application and ensure correct implementation of the Management Plan of the Cultural Landscape of Civita di Bagnoregio, the Memorandum of Understanding was approved between the Ministry for Cultural Heritage and Activities and for Tourism, the Lazio Region, the Province of Viterbo, the Municipality of Bagnoregio, the Casa Civita srl company. According to the Memorandum of Understanding, the signatories identify the Municipality of Bagnoregio as the contact person and agree to unanimously take care of the drafting, implementation, updating and monitoring of the Management Plan.

The signatories also propose to activate collaborations with other subjects, nationally and internationally, operating in the sectors of activity connected with the management of the archaeological, historical-artistic, architectural and landscape heritage, as well as intangible cultural heritage and heritage. natural, for the purposes of the protection and enhancement of the territory concerned.

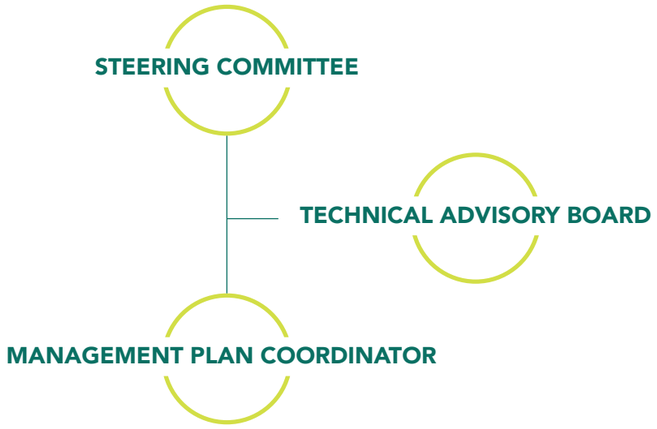
Considering the multiplicity of subjects involved in the application process and in the management of the site, a managerial structure inspired by the following principles has been created:

- **cooperation and participation** of the various stakeholders involved;
- **openness, participation and listening** in relation to all operators involved;
- enhancement of **skills**;
- efficiency and effectiveness of implemented actions;
- **sustainability** of the governance system.

And it is exactly within a view of sustainability and efficiency, that it was considered appropriate to keep a short governance chain whose main bodies are:
· the Steering Committee, with the function of dictating the strategic and programmatic lines for the development of the site;
· the Technical Advisory Board a consultative, participatory level of encouragement and guidance in relation to both management performance and future development;
· the Management Plan Coordinator an operational level that is responsible for managing the implementation of the actions defined according to received guidelines.

The figure above and the following table help to understand the relationships existing between the three bodies and the different members that compose them.

ORGANISATIONAL STRUCTURE



[128] Organisational structure chart

Consistent with the mission of Casa Civita, the team includes skills related to the intellectual professions and highly specialized in the management of the territorial offer system, communication and community engagement. Together with these, the technical skills - architects and engineers - borrowed from the operational structure of the Municipality of Bagnoregio and those of the administrative secretariat, also borrowed from the Municipality of Bagnoregio, will flow into the site management team. Moreover, thanks to the legal nature of the entity, it will be possible to expand the network of experts and select, if necessary, highly specialized profiles for the assigned activities. Finally, in order to enhance scientific activities and promote technology and know-how transfer, framework agreements (aimed at establishing stable forms of collaboration) and scientific collaboration agreements (aimed at developing a specific research program) are envisaged with those universities that are part of the Technical Advisory Board.

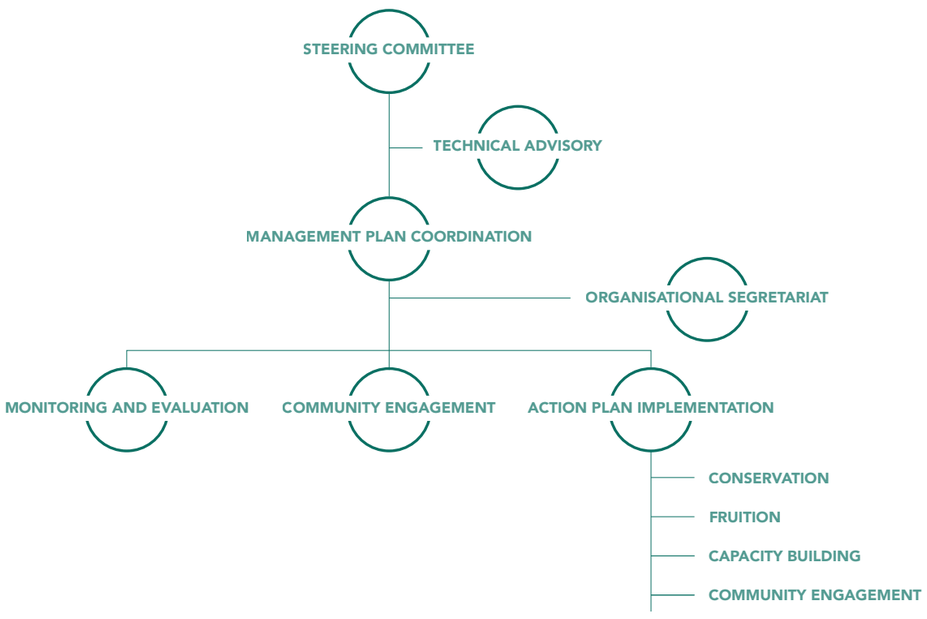
As further highlighted by the function chart and table (TAB 5.10), the three subjects correspond to distinct levels of governance - institutional, participatory, operational - from which separate tasks and activities descend as outlined below. The correct functioning of governance is made possible by two mechanisms of interrelation between the bodies:
· plenary meetings, in which the three bodies take part, every six months;
· one to one meetings between the Steering Committee and the Management Plan Coordinator team, on a quarterly basis.

STEERING COMMITTEE (INSTITUTIONAL LEVEL)	TECHNICAL ADVISORY BOARD (PARTECIPATORY)	MANAGEMENT PLAN COORDINATOR (OPERATIONAL LEVEL)
NUMBER OF MEMBERS	NUMBER OF MEMBERS	NUMBER OF MEMBERS
· Lazio Region · Ministry of Cultural Heritage and Activities and Tourism · Unione dei Comuni della Teverina (Municipality of Bagnoregio, Municipality of Castiglione in Teverina, Municipality of Civitella D'Agliano, Municipality of Graffignano, Municipality of Lubriano, Municipality of Celleno) · (….)	· Experts from Territorial Offices of the MiBACT · Universities: - Università degli Studi di Perugia - Pharmaceutical Science Department - IUAV University - Department of Architecture - Università degli Studi della Tuscia · The Civita Institute · The Geological Museum of the Landslide · (...)	· Casa Civita srl

STEERING COMMITTEE (INSTITUTIONAL LEVEL)	TECHNICAL ADVISORY BOARD (PARTECIPATORY)	MANAGEMENT PLAN COORDINATOR (OPERATIONAL LEVEL)
· Coordination and addressing the implementation phases · Appointing the Management Plan Coordinator and assigning responsibilities · Collecting and evaluating requests from the Technical Advisory Board in relation to current and future measures · Monitoring and Evaluation Evaluationof the progress of the Action Plan · Fundraising	· Support for the strategy setting and re-orientation phases · Support in the evaluation of results and in the monitoring · Providing indications and recommendations · Support in the resolution of critical issues in implementation	· Relations with the UNESCO Office of MiBACT (Focal Point) and when requested with World Heritage Center · Relations with external bodies · Community Engagement · Coordinating of Operational Secretariat · Coordinating with all stakeholders involved in the implementation of the project of the Management Plan · Managing the budget of the Management Plan · Monitoring and evaluating the progress of the Management Plan · Updating of the Management Plan · Periodic Reporting

TAB. 5.10 Composition of the bodies
TAB. 5.11 Definition of the tasks

Finally, stakeholder participation in the decision-making and implementation processes of the Management Plan is guaranteed through the project 4.2 (see the Annex A – Action Plan) which, in the broader framework of the Action Plan dedicated to Community Engagement, is focused on the objective of promoting a participatory governance of the Cultural Landscape of Civita di Bagnoregio.



129 Function chart

5.f SOURCES AND LEVELS OF FINANCE

SOME KEY DATA		
COSTS FOR THE PREPARATION OF THE NOMINATION OF THE PROPERTY IN WHL	COSTS FOR THE PROMOTION OF THE NOMINATION	COSTS FOR THE MANAGEMENT PLAN IMPLEMENTATION
€ 190.000,00	**€ 1.554.626,71**	**€ 8.997.000,00**

TAB. 5.12 Key data

The majority of the funding for the conservation of the Italian cultural heritage comes from the State (through the Ministry for Cultural Heritage and Activities and for Tourism), Regions and Municipalities. Within the ambit of territorial organisations, the Regions own the widest available funds which they share between the various relevant sectors.

Medium-long term public policies are financed through four main sources: (i) free budget resources; (ii) current state transfers to support regional policies in the fields of health, transport, welfare and education; (iii) EU and national co-financing of plans and programmes for the completion of the 2014-2020 cycle and for the launch of the new 2021-2027 cycle; (iv) state co-financing to support regional policies on red infrastructure, environment, economic development, tourism and culture.

Culture, tourism, environment and territory are among the key points of the vision and mission of Lazio Region for the medium and long term. Particularly binding in terms of strategy for the protection and promotion of the Cultural Landscape of Civita di Bagnoregio are the guidelines contained in the Strategic Planning Document 2018 -Years 2018-2023 of Lazio Region which identifies as its priorities the promotion of places of culture, dissemination of the culture of places, support for the economic sector of culture, taking as a red thread the link between culture and technology and the development of cinema and audiovisual.

The projects included in the Management Plan and of which the Lazio Region proposes itself as owner are, therefore, consistent with these strategic lines and with the categories of interventions that derive from them: creation of a network of cultural spaces and services in the peripheral municipalities, far from the economic centres; support for municipalities hosting WH sites; signing of agreements with cultural institutions for the development of the offer in the provinces; creation of music festivals and festivals to enhance all contemporary art forms; dissemination of works of art on the territory. In the four-year period 2016 - 2019 Lazio Region has already allocated € 1.554.626,71 for the promotion of the Cultural Landscape of Civita di Bagnoregio and for for the preparation of the nomination of the property in WHL. Among the most important initiatives, the opening in Palazzo Alemanni of the Atelier Art Beauty and Culture "Creative Signs (Segni Creativi)" dedicated to SMEs and professional training within the European multi-fund strategic action which absorbed € 661.289,56 funds ERDF, € 165.000 ESF funds for business training and € 38.373,54 of regional funds for space adaptation works.

TOTAL AMMOUNT OF FUNDING FROM LAZIO REGION			
€ 1.485.000,00			
BY THE END OF **2021**	BY THE END OF **2022**	BY THE END OF **2023**	BY THE END OF **2024**
€ 1.807.500,00	**€ 127.500,00**	**€ 127.500,00**	**€ 142.500,00**

TAB. 5.13 Ammount of funding from Lazio Region

For the future protection and enhancement of the Landscape of Civita di Bagnoregio as a WH site, the Lazio Region garantisce ulteriori fondi, covering 5 projects provided in the Management Plan.

Among the Local Authorities, all the Municipalities directly involved in the application process also have a leading position in covering the costs for the protection and enhancement of the Cultural Landscape of Bagnoregio. The three-year plan of the Municipalities contains, in numerical and descriptive terms, all the activities carried out by institutions located in the territory covered by the application, highlighting the expenditure planned to support strategies of economic, cultural, social and environmental development of the territory. The following table shows a summary of expenditure in several municipalities for 2019, 2020, 2021 in the areas of greatest interest for the protection and promotion of the cultural landscape of Civita.

Estimated budget. Expenditure for 2019-2021 Municipalities of Bagnoregio, Lubriano, Civitella D'Agliano, Castiglione in Teverina	
2019 - 2021	
€ 413.786,00	Protection and valorisation of cultural heritage and activities
€ 305.596,00	Youth policies, sport and leisure activities
€ 2.142.479,00	Activities related to tourism
€ 10.860.512,00	Sustainable development and protection of the territory and the environment
€ 3.772.164,00	Transport and right to mobility

TAB. 5.14 Estimated budget. Expenditure for 2019-2021. Municipalities of Bagnoregio, Lubriano, Civitella D'Agliano, Castiglione in Teverina, Graffignano

Moreover, the so-called Progetto Bellezza@. Let's recover forgotten places promoted in 2016 by the Presidency of the Council of Ministers, has turned out to be particularly important for the municipalities included in the territory of the Cultural Landscape of Civita di Bagnoregio, bringing new economic resources for restoration projects of sites linked to the historical memory and the identity of the places. Thanks to these allocations, the Municipalities of Bagnoregio, Castiglione in Teverina, Civitella d'Agliano, Graffignano and Lubriano are the owners of 11 projects included in the Management Plan.

TOTAL AMMOUNT OF FUNDING FROM MUNICIPALITIES			
€ 5.739.000,00			
BY THE END OF **2021**	BY THE END OF **2022**	BY THE END OF **2023**	BY THE END OF **2024**
€ 3.445.00,00	**€ 854.00,00**	**€ 5.000,00**	**€ 1.435.00,00**

Profits generated by admission tickets to the village of Civita and by car park management can also make a significant contribution in terms of sustainable strategy for protecting and promoting the universal values of the site. As a result of the considerable increase

TAB. 5.15 Ammount of funding from the municipalities

in the number of visitors to Civita, revenues in 2018 rose to around €800,000.00, with a forecast increase of the 25% in three years. The budget of Casa Civita srl[4] provides for an overall collection of € 7,506,411 (mainly from ticketing) between 2021 and 2023. A significant part of these revenues is allocated from the budget to the management of cultural and tourist services, setting a sum of approximately € 390,000 each year, which includes staff, specialist consultancy and participation in events for the promotion of the property. Thanks to these funds, Casa Civita srl is able to offer coverage to the costs of 32 projects included in the Management Plan.

TOTAL AMMOUNT OF FUNDING FROM CASA CIVITA SRL			
€ 1.374.000,00			
BY THE END OF **2021**	BY THE END OF **2022**	BY THE END OF **2023**	BY THE END OF **2024**
€ 234.000,00	€ 380.000,00	€ 115.000,00	€ 645.000,00

Lazio Region, Municipalities and Casa Civita srl do not cover the entire framework of owners of the projects included in the Management Plan for the Cultural landscape of Civita di Bagnoregio. Other cultural operators at a regional or local level have in fact decided to take on a leading role in the implementation of the Action Plan. These subjects refer to 4 projects, for a total cost of € 509,000 already allocated. In this context, it is worth noting that in Italy, there is specific funding for WH sites. In 2006, within the framework of policies of regulatory updating on the protection and valorisation of existing cultural

TAB. 5.16 Ammount of funding from Casa Civita srl

heritage and after the adoption of the above mentioned Legislative Decree No. 42 of 22 January 2004, known as Code of Cultural and Landscape Heritage, Law No. 77 of 20 February 2006 was promulgated, under which resources are allocated in order to support the adoption of "special measures for the protection and use of Italian sites of cultural, landscape and environmental interest, included in the 'World Heritage List', placed under the protection of UNESCO". In order to ensure the preservation of Italian Sites included in the List and to guarantee appropriate conditions for their promotion, the law finances, among other interventions, the adoption of Management Plans and the implementation of the related interventions.

[4] Conscious of the inestimable value of its natural and cultural heritage and aware of the need for an effective management and valorisation of the area, the Municipality of Bagnoregio has decided, with Resolution no. 2 of 16 February 2019, to establish a joint-stock in house company called "Casa Civita S.r.l", which is 100% owned by the Municipality.

5.g SOURCES OF EXPERTISE AND TRAINING IN CONSERVATION AND MANAGEMENT TECHNIQUES

Overall, the Italian system offers an excellent availability of skills, especially with regard to the protection and conservation of cultural heritage in general. Italy is a country that boasts a considerable number of professional figures expert in the field of conservation and technical management of architectural and landscape assets, such as architects, urban planners, art and architecture historians, archivists, managers of cultural heritage and others specialized technicians. The institutions dedicated to the training of such expertise (at internationa, national, regional and local levels) are numerous and can ensure the skills and qualifications needed for the good management of the property.

INTERNATIONAL LEVEL

Of particular importance is the presence in the national territory of **ICCROM**, an intergovernmental organization working in service to its Member States to promote the conservation of all forms of cultural heritage, in every region of the world. At the same time, as an intergovernmental organization with a vast network of conservation experts, ICCROM relies on formal institutional collaborations with organizations such as UNESCO, both Headquarters and Regional Offices together with its World Heritage Committee to which ICCROM is an Advisory Body; non-governmental organizations such as ICOMOS, ICOM, ICA and IIC; and scientific institutes and universities in Member States. Those working on the front lines of heritage preservation, including scientists, conservators, museum curators, site managers, archivists, researchers and archaeologists rely on ICCROM for its world-class initiatives in conservation training, information, research, cooperation and advocacy.

It also worth of importance the activities of the ***European Heritage Heads Forum*** (EHHF), an informal, professional and expert network for national heritage heads (built heritage, landscapes and archaeology) of the countries of the European Union, the European Economic Area and the member-states of the Council of Europe. It provides a forum for information and experience exchange about the management of the historic environment in the 21st century. The Heads are mostly the directors-general of national administrations or departments, agencies or institutes in charge of the conservation and the protection of cultural heritage within the national relevant ministries or institutions.

NATIONAL LEVEL

The **MiBACT** *(Ministry for Cultural Heritage and Activities and for Tourism)* is the dicastery of the Italian Government responsible for the protection, use and conservation of the national artistic, cultural and landscape heritage as well as policies relating to tourism. It performs the functions of national coordination regarding the implementation of the Convention on the protection of the UNESCO World Heritage. The UNESCO Office of **MiBACT**, which depends on the General Secretariat, coordinates the activities of all the Italian UNESCO sites, provides technical and scientific support in the preparation of the candidacy dossiers and management plans, carries out monitoring functions on UNESCO sites and information on issues of transversal relevance. It assists sites in dialogue with UNESCO structures both in terms of new applications and the conservation status of sites already registered in the World Heritage List.

Of particular importance is the activity of the **General Directorate for Fine Arts and Landscape**, which carries out the functions and tasks relating to the protection of architectural and landscape assets, as well as of historical, artistic and ethno-anthropological assets.

To the activities of these structures must be added the professional skills within the peripheral offices of MiBACT. These include the work of the **Regional Secretariats** and the **Superintendencies** which play a role of protection and high surveillance of the territorial cultural and landscape assets.

The national **University system**, together with other public and private institutions, promotes three-year and specialist degree courses, designed to train experts in the conservation of cultural heritage and landscape, their management, architecture and urban and territorial planning, to which they add up the numerous first and second level university masters and the various specialization schools in the themes of both cultural heritage conservation and urban planning, dedicated to the further specialization of professionals already operating in the fields indicated.

Universities, through the UNESCO Network, pool their human and material resources to address the most critical current challenges and contribute to the development of society. The **Network of UNESCO** Chairs provides experts and mediators from academia, civil society, local communities and research and policy, demonstrating its effectiveness in establishing new educational initiatives, producing innovation through research and contributing to the development of existing university programmes while promoting cultural diversity. Taking into account the specificities of the property, the competences developed by the following UNESCO Chair Programmes are strategic:

- **Prevention and management of geo-hydrogeological risk (University of Florence)**

The Chair promotes the development of innovative technologies for the prevention and mitigation of hydrogeological hazards; Develops tools and procedures to support policies aimed at reducing risks and managing emergencies for the safety of human life; Promotes the protection of cultural heritage threatened by hydrogeological hazards.

- **New paradigms and instruments for bio-cultural landscape management (LINKS Foundation)**

The Chair aims to develop reflection on the complex nature of the theme "landscape", through the development of innovative methods and tools to support management policies, in particular, for cultural landscapes. The objective is pursued through an integrated and multidisciplinary approach that takes into account the social, economic, cultural and environmental aspects of the development of the territory.

- **Sustainable development and land management (University of Turin)**

The Chair promotes an integrated system of research, training, information and documentation in terms of sustainable development and land management. It promotes environmental and social quality of life monitoring, the biocultural diversity and supports ecological transition at social, economic and productive levels.

- **Architectural Preservation and Planning in World Heritage Cities (Polytechnic University of Milan- Mantua)**

The Chair aims to combine different disciplines and technologies in order to efficiently manage complex and multi-scale issues of planning and architectural and environmental protection in contemporary cities.

• **Landscape cultural heritage and territorial governance**
(BENECON Centre of Competence, Caserta)
The Chair is equipped with cutting-edge technological equipment for all types of aerial, terrestrial, underground and underwater surveys of tangible and intangible heritage, on all scales of representation. The scientific methodology underpinning all applied research activities is the so-called Multicriteria/Multidimensional Analysis, capable of combining university scientific expertise, new technologies and the analysis of sources.

• **Intersectoral Safety for Disaster Risk Reduction and Resilience**
(University of Udine)
The Chair draws attention to the theme of intersectoral security as an emerging and interdisciplinary field of investigation that represents an important and effective "tool of knowledge" for the definition and implementation of comprehensive and multidisciplinary strategies for disaster risk reduction.

At national level, other institutes involved in protection and applied research worth of consideration for the specifities of the property are:

- The **Higher Institute for Conservation and Restoration** (ISCR), an agency of the Ministry for Cultural Heritage and Activities and for Tourism and one of the most famous and prestigious institutions in the field of restoration and the teaching of restoration;

- The **Italian Institute for Environmental Protection and Research** (ISPRA), an Italian public research body subject to the supervision of the Ministry of the Environment, Land and Sea Protection. The institute deals with environmental protection, including marine protection, environmental emergencies and research;

- The **ENEA - National Agency for New Technologies, Energy and Sustainable Economic Development**, a public-law institution for research, technological innovation and the provision of advanced services to businesses, public administrations and citizens in the fields of energy, environment and sustainable economic development. ENEA areas of specialisation include technologies for the preservation of cultural heritage, seismic protection, life sciences, strategic raw materials, and climate change. ENEA has implemented the project IUGS - UNESCO n. 425 "Landslide Hazard Assessment and Mitigation for Cultural Heritage Sites and Other Locations of High Societal Value" developing the "Guidelines for the Safeguard of Cultural Heritage against Natural Risk". The project aimed at the development and validation of new technologies and methodologies for the protection of cultural heritage from damage caused following the occurrence of catastrophic events with a focus on the consolidation of the cliff and the slopes of Civita di Bagnoregio.

REGIONAL LEVEL

Lazio Region has within its structures technical personnel experienced in the field of promotion and conservation of cultural heritage, including architectural and landscape emergencies. To the activities of these structures must be added the professional skills within the peripheral offices of **MiBACT** *(Ministry for Cultural Heritage and Activities and for Tourism)*. These include the work of the **Regional Secretariat of Lazio** and the **Superintendence of Archeology, Fine Arts and Landscape for the metropolitan area of Rome, the province of Viterbo and southern Etruria.**

Significant is the activities carries out by **DTC Lazio** is a centre of aggregation and integration of technological skills for the conservation, valorisation and promotion

of the historical, artistic and cultural heritage of Lazio. The objectives of the Centre of Excellence of DTC Lazio are to plan and implement a series of strategic actions in the closely integrated areas of education, research and technology transfer in order to strengthen and relaunch the cultural and creative entrepreneurial system.

The regional university system has numerous faculties and departments dedicated to education and research on subjects related to the protection and preservation of the cultural landscape. Taking into account the specificities of the property, the competences developed by the following regional Universities are strategic:

- Department of Earth Sciences - Sapienza University of Rome
Actively involved in the field of geo-science and related disciplines, focuses on the territory and the environment in relation to interaction with anthropic activities;

- Department of Civil, Building and Environmental Engineering - Sapienza University of Rome Focuses on the complex and multifaceted issues of architectural and urban planning, civil engineering and environmental engineering and is characterized by a broad spectrum of disciplines. In 2017 it signed a collaboration agreement with the Municipality of Bagnoregio with the aim of developing and promoting the study and research on issues of common interest such as the history, geo- environmental characteristics and architectural heritage of Bagnoregio (City Council Resolution n. 140 of 28 November 2017);

- Department of Humanities, Communication and Tourism – Tuscia
Promotes interaction between the humanities, archaeological, historical and artistic heritage and digital communication, with a strong orientation towards the territory and its cultural and tourist vocation;

- Department of Agricultural and Forestry Sciences - University of Tuscia
Carries out intense research activity mainly aimed at promotion and protection of agro-forestry and environmental ecosystems, sustainable energy and biotechnology, prevention of geological risk.

LOCAL LEVEL

The **Technical Office of the Municipality of Bagnoregio**, under the responsibility of a licensed architect, has direct competence over the municipal heritage and takes care of its extraordinary and ordinary maintenance.

Locally, the **Museum of Geology and Landslides** of Bagnoregio promotes scientific research and study in order to contribute, through the use of expert assistance, to the valorisation of the cultural, geological, environmental and architectural heritage of Civita. The main activities of the Museum include the study, protection and promotion of the territory as well as the diffusion of scientific knowledge, by focusing on the importance of knowledge for prevention purposes.

The **Naturalistic Museum of Lubriano**, instead, promotes scientific research on the protection of endangered species, cultivation techniques and erosion of ravines. It also offers an innovative educational approach based on excursions, bike rides and workshops focusing on the valley and ravine habitat "***Valle dei Calanchi***".

Significant is also the activities of **The Civita Institute** (incorporated as the Northwest Institute for Architecture and Urban Studies in Italy, or NIAUSI), co-founded by Astra Zarina in 1981. Through its educational programs, residencies and fellowships, the nonprofit organization focuses on promoting and inspiring design excellence through

education and cultural exchange between the United States and Italy, with a particular focus on the study and research into Italian hill towns and their lessons of design, historic preservation and environmental sustainability. The organization is based in Seattle (USA) and at its historic facilities in Civita di Bagnoregio, Italy, where its library and archives are housed, all of which were donated in 2013 by the estate of Astra Zarina and by Anthony Costa Heywood to The Civita Institute and are maintained by the support of members of The Civita Institute.

5.h VISITOR FACILITIES AND INFRASTRUCTURE

Tourism is a central sector in the economy of the territory covered by the nomination process. For this reason, in recent years, administrations, together with operators, have encouraged a process of service reorganization with the aim of increasing quality and sustainability. The objective of the actions already implemented aims to consider Civita as a key-player able to generate integrations and synergies with other resources and assets in the area – including cultural, landscape-naturalistic, economic and social aspects – and, therefore, to redistribute tourist flows both in space and time.

The objective of establishing Civita di Bagnoregio as a model of sustainable tourism did not fail following the sharp contraction in demand and the profound changes in tourist behavior induced by the Covid 19 pandemic. With the affirmation of proximity tourism, in the summer of 2020 in fact, the entrances to the fortress of Civita di Bagnoregio recorded a significant increase compared to the previous year, supported by a strong expansion of domestic demand: between June and August 2020, 60% more Italians compared to the previous year chosen to visit the village. This figure keeps the governance and redistribution strategies outlined in the pre-Covid phase decidedly topical.

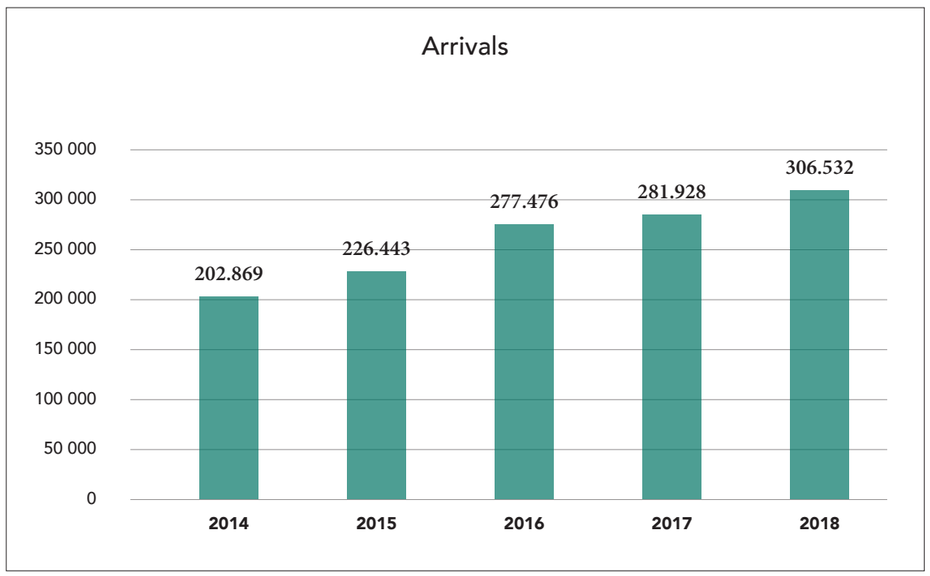
TOURIST FLOWS

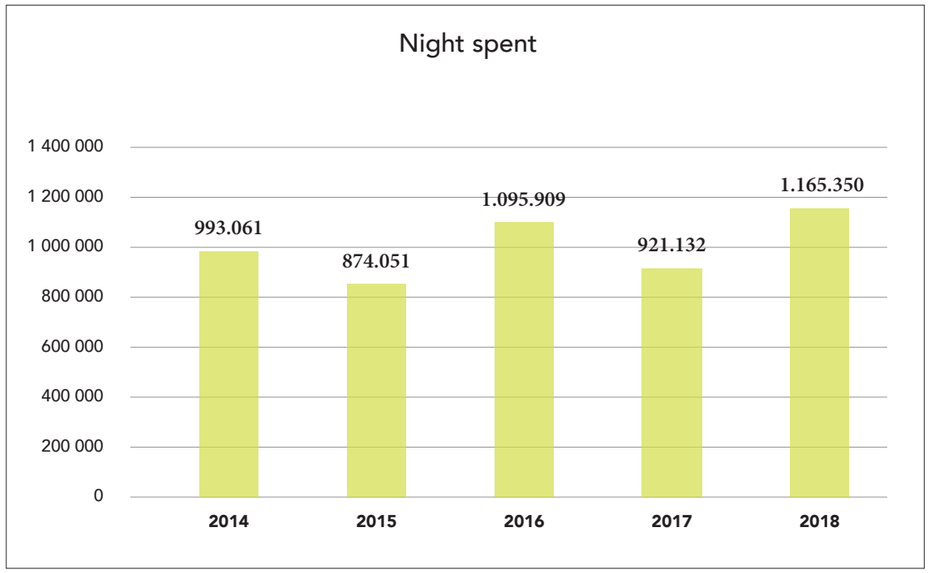
Over the last five years, Bagnoregio and the surrounding area have registered significant growth in tourist flows. Although this trend has not always been constant, it has led to an increase in both day-visit tourism and tourism involving more time, with a tendency towards longer stays aimed at exploring the area. In the last decade Bagnoregio has spontaneously assumed the role of catalyst and driving force in the process of placing the Tuscia region in the sector of small-town tourism. As a result, Bagnoregio has succeeded in suggesting an alternative way of visiting the region, something which struggled to

take hold in the Viterbo area, historically based on seaside tourism and, on a smaller scale, archaeological tourism. The importance of Bagnoregio is demonstrated, among other things, by the high visibility of the town in national and international tour operator catalogues: today Civita is a main attraction, able to redirect and redistribute tourist flows towards more mature destinations such as Viterbo and Orvieto.

From 2014 to 2018, an increase in both arrivals and nights spent was registered at the provincial level; arrivals rose by 51%, with an increase of 8.7% between 2017 and 2018 alone. In 2018 total arrivals were 306,532. The number of nights spent was also up and increased by 17.35% over the same period. Between 2017 and 2018 the number of nights spent rose by 26.5%, exceeding the threshold of one million in the last year, with a total of 1,165,350 nights spent.

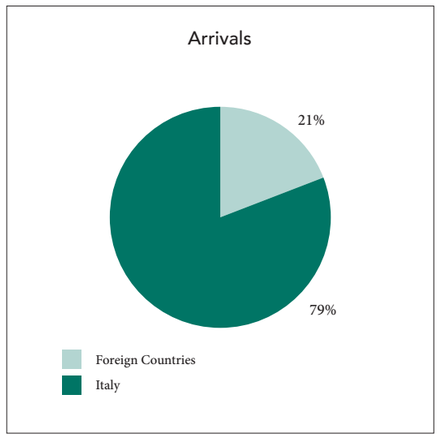
The average stay is 3.8 nights, higher than the national average of 2.9 nights per tourist. It is worth noting that domestic tourism is more important than foreign tourism: in 2018, about 80% of tourists who visited the area or stayed overnight came from Italy. This figure is in line with the previous four- year period and indicates that positioning on the international market is difficult.

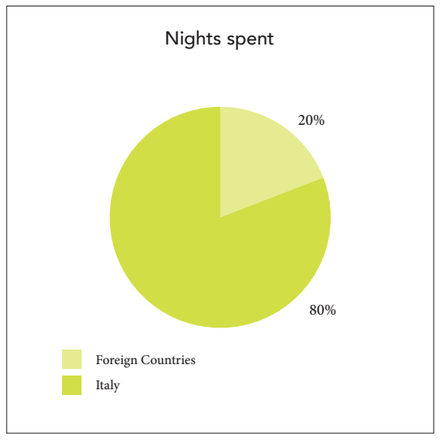




[130] Arrivals and nights spent in the province of Viterbo in the period 2014-2018, (©LINKS Foundation elaboration of ISTAT data)

From a dynamic point of view, however, the most significant increase registered in 2018 compared to the previous one concerns the arrivals of foreigners, which rose by 17%, compared to an increase of 6.6% for Italians. Even more marked is the growth in foreign visitors who stayed overnight, which accounted for over 46%, while the number of Italian visitors increased by 22.24%.

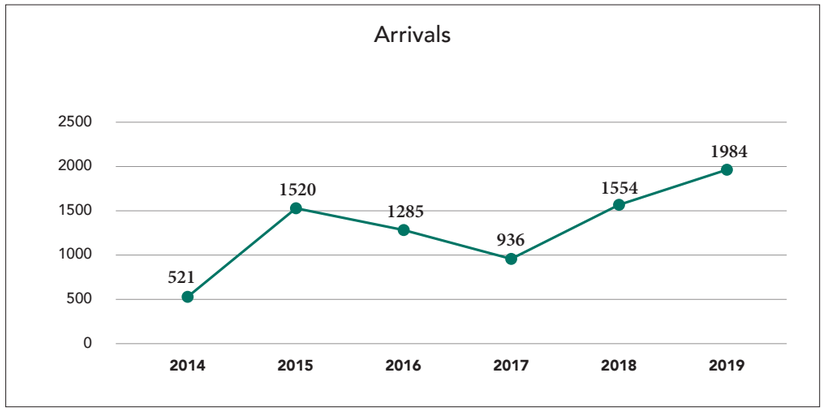


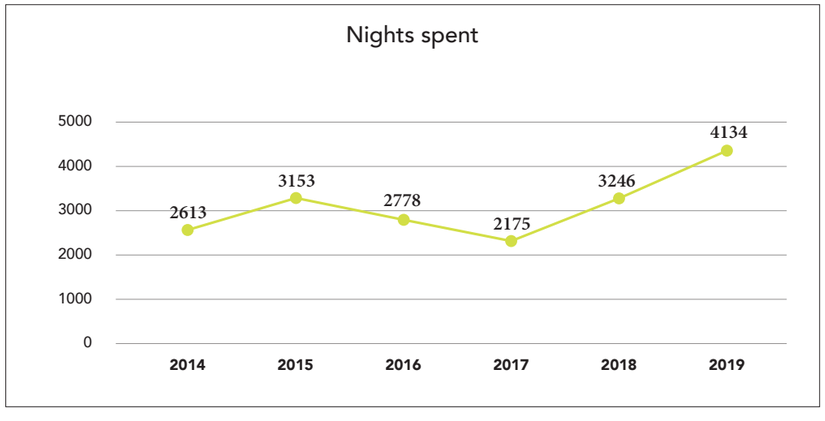


By restricting the analysis to the area concerned by the application, 4 tourist arrivals show a markedly positive trend: in the six-year period 2014-2019 arrivals grew by 281%. The number of nights spent in local accommodation also registered a fairly positive trend, with an increase of 58% for Bagnoregio. Data on the average stay in the area of the application is more critical, remaining at 2.08 days, much lower, therefore, than both the provincial

[131] Arrivals and nights spent in the province of Viterbo – 2018. (©LINKS Foundation elaboration of ISTAT data)

data, which is approximately 4 days, and the specific data on small-town tourism, which has risen to 3.8 days (source Association I Borghi più belli d'Italia).

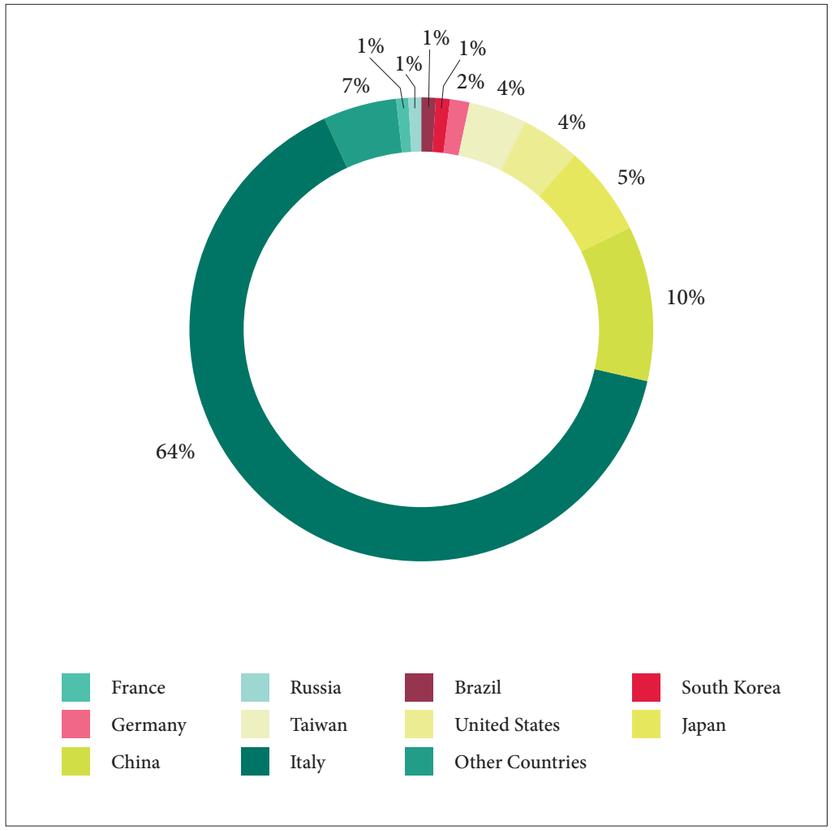




[132] Data relating to arrivals and nights spent in Bagnoregio from 2014 to 2020. (©LINKS Foundation elaboration of ISTAT data) It shows the data on arrivals and nights spent in the municipalities of Bagnoregio, Civitella d'Agliano and Lubriano. It should be noted that an estimate was necessary for Civitella d'Agliano for the years 2017 and 2018 due to a lack of ISTAT data. For the same reason, no data could be processed for Castiglione in Teverina

Type of visitors

The presence of an electronic ticket office, activated in July 2017, for the sale of admission tickets to Civita, makes it possible to monitor tourist flow trend in real time and therefore to obtain a partial profiling of visitors.



[133] Type of visitors in 2019. (©LINKS Foundation elaboration of data provided by Casa Civita srl)

In 2019, out of a total of around 1 million admissions, around half were paying visitors. As percentages, visitor countries of origin were: Italy (63.9%), China (10.2%), Japan (4.7%), the USA (4. 3%), Taiwan (3.8%), Germany (1.5%), South Korea (1.4%), Brazil (1.1%), Russia (1.0%) and France (0.9%).

Therefore, 36% of visitors are foreigners. The most important figure is undoubtedly that of Asian tourism, which, including Chinese, Japanese, Korean, Taiwanese and Singaporean, accounts for 21% of the total, in particular thanks to the fascination exercised by the animated film Castle in the sky by Hayao Miyazaki, the greatest living animator and scriptwriter of anime. Europeans are less well represented, with a total of 8%, in particular, Germans and French, followed by USA (4,3%) and Central and South Americans -in particular Argentineans, Brazilians and Chileans (1%) – and Russian (1%). The remaining share is fragmented among countries that do not express a characterizing trend.

According to a research published by La Sapienza University in 2018, there are clear differences between foreigners and Italians in the way they travel. Italians reach the village on their own (62.60%) or with friends and family (74%), while foreigners reach the village in organized groups (71%) and with work colleagues (23.8%).

The average time spent by visitors in Civita di Bagnoregio is two hours (46.80%), four hours (25.30%), six hours (8.9%) and more than six hours (19%).

CASA CIVITA SRL: TECHNICAL MANAGEMENT FOR THE VALORISATION OF CIVITA DI BAGNOREGIO

For several years now, the Municipality of Bagnoregio has identified cultural tourism as its institutional mission. Conscious of the inestimable value of its natural and cultural heritage and aware of the need for an effective management and valorisation of the area, the Municipality of Bagnoregio has decided, with Resolution no. 2 of 16 February 2019, to establish a joint-stock in house company[3] called "Casa Civita S.r.l", which is 100% owned by the Municipality. Therefore, the establishment of "Casa Civita S.r.l." gives the Municipality the necessary managerial flexibility to guarantee professionalism and administrative versatility to the city's municipal cultural services.

The company will be responsible for managing cultural tourism services and, more specifically, will deal with:

- The management of areas of environmental interest for the study and conservation of flora and fauna, related to tourist and recreational activities;
- The management and valorisation of the assets and areas of landscape, artistic, historical, archaeological and tourist interest entrusted to the Municipality;
- The organisation and the management of information centres, multi-purpose congress centres, accommodation facilities and tourist travel services (tourist shuttles);
- The management of services relating to the reservation, pre-sale and sale of admission tickets to the Village (with particular attention to ensuring affordable prices for all visitors);
- The management of services relating to the management, protection, surveillance and reception of tourists to the city museums (the Museum of Landslides).

Resources necessary to implement the cultural services described above will be ensured by the reinvestment of proceeds generated by admission tickets to Civita di Bagnoregio.

[3] The incorporation of the 'in house company' is provided for in the Single Programming Document (Documento Unico di programazione - DUP) attached to the budget for 2019-2021

FACILITIES AND INFRASTRUCTURE FOR THE RECEPTION OF TOURISTS: A GROWING SECTOR

At a regional level, Viterbo is the second province in terms of accommodation capacity, with 1.089 accommodation structures, 10.47% of which are represented by hotels and 89.53% by complementary accommodation.

Bagnoregio, in particular, is a municipality with a high level of specialist tourism. The increasing number of visitors and day-trippers has led over time to an adaptation, both quantitative and qualitative, of available services and infrastructure. This positive trend is confirmed by the fact that on the Booking.com website, the largest e-commerce platform dedicated to tourist accommodation bookings, all registered structures have an average score of 9.4 out of 10. In 2018, 45 accommodation facilities were registered in Bagnoregio. Moreover, in the six-year period 2014- 2019 the total number of accommodation facilities increased by 52.46%.

Consistently with the rest of the province of Viterbo, in the area under consideration, the prevalent type of accommodation is represented by non-hotel facilities, accounting for 98.92% of accommodation facilities. Only Bagnoregio has a 3-star hotel, while agriturismi (rural hotels) and bed & breakfasts jointly account for 66.30% of non-hotel accommodation and 65.59% of total accommodation facilities. If we take a broader look at municipalities close to the buffer zone – which have a tourist offer comparable to and integrated with that of Bagnoregio, namely Graffignano, Celleno, Montefiascone, Bolsena, Bomarzo and Orvieto – we can count a further 296 accommodation facilities for a total of 8,815 beds.

A web marketing campaign for the territory funded by the Municipality of Bagnoregio, respectively in October and November 2016, includes a dedicated website **www.**

civitadibagnoregio.cloud (available in more than 10 languages thanks to automatic translation) and an Android app (later released as an iOS version in July 2017) about Civita di Bagnoregio. Both platforms contain convenient and useful information, including timetables, prices and services as well as historical news, attractions to visit and events that can be used as virtual info points for tourists. A fundamental and exclusive feature is the online purchase of admission tickets to the village.

This table shows some data about the website access from its opening until today:

Total number of impressions	**1 million**
Total number of visitors to date	Approximately 140,000
Total number of reads	Approximately 24,000
Average number of visitors per month	8,000
Average number of reads per month	17,000

The app dedicated to Civita di Bagnoregio is available in English and Italian (Japanese and Chinese are currently being developed) and is 90% offline (no Internet connection required), designed to be used actively in the area. In addition to general tourist information, a live chat with a virtual assistant is available for users with any further questions and needs.

[134] Click tracking on the website and smartphone apps. (©LINKS Foundation elaboration of data provided by the Municipality of Bagnoregio)

THE ACCESS GATES TO THE CULTURAL LANDSCAPE OF CIVITA

The accessibility of Bagnoregio has been analysed taking into account the two main means of transport used by tourists in Italy: train and car.

Bagnoregio, although it does not have its own railway station, is located near some of central Italy's main junctions: Viterbo (27.5km), Orte (51.4 km) and Orvieto (18.5km). From the railway hubs there are several daily bus services run by the operator of the regional suburban and interurban public transport service. Through the train station of Sipicciano (24.4 km), located in the municipality of Graffignano, Bagnoregio is also connected to Viterbo and the railway junction of Attigliano-Bomarzo. Below, the table shows the minimum journey times estimated by the Italian state-owned company managing the Italian rail network (Ferrovie dello Stato) to these train stations from the three main Italian tourist hubs, namely Rome, Florence and Milan.

TO/FROM	ROME	FLORENCE	MILAN
Viterbo	1 h 40 min	2 h 55 min	5 h 15 min
Orte	45 min	2 h 50 min	4 h
Orvieto	1 h 5 min	1h 30 min	4 h

[135] Accessibility by train. (Data extracted from www.lefrecce.it)

Connection to the motorway network is guaranteed by the tollgates of Orvieto (20km) and, further away, Attigliano (30 km) and Orte (49 km), located along the A1, the most important motorway in Italy. The table shows the distances in km and the minimum journey times necessary to reach Bagnoregio via the motorway network.

TOWN	DISTANCE IN KM	MINIMUM JOURNEY TIME
Milan	476 km	4 h 39 min
Florence	177 km	1 h 56 min
Rome	126 km	1 h 48 min
Orte	48,1 km	47 min
Viterbo	29 km	37 min
Orvieto	21,2 km	28 min

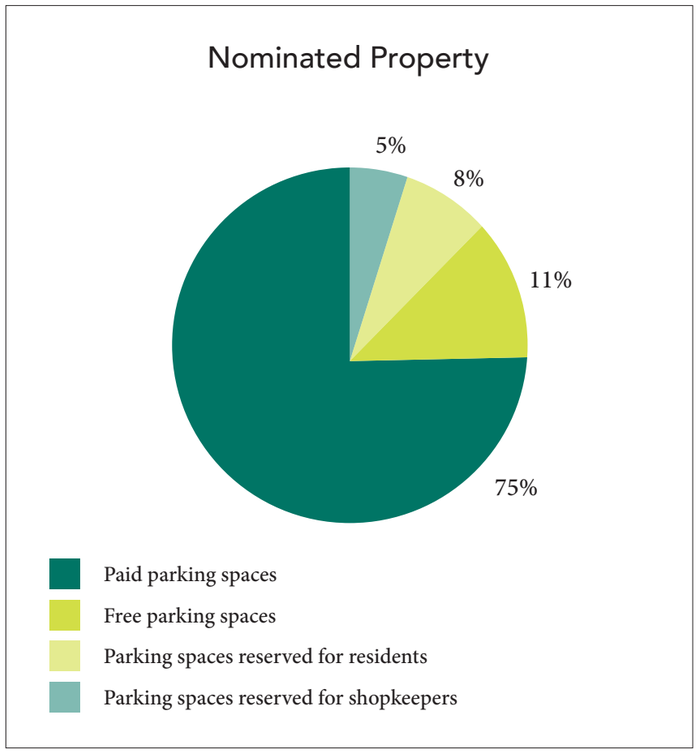
Finally, in view of the expansion of incoming tourist flows, the proximity of the multi-functional, commercial and tourist port of Civitavecchia, which is located about 86 km from Bagnoregio, is relevant for the Viterbo area.

In this context, the Management Plan for Civita di Bagnoregio (see paragraph 5.e) identifies the primary need for the connection of the area to the so-called "long networks", as well as the creation of a public transport system to access the site of Civita di Bagnoregio and to directly connect Bagnoregio to neighbouring municipalities.

[136] Accessibility by car. (Data extracted from www.viamichelin.it)

CAR PARKS AS A TOOL FOR THE MANAGEMENT AND DISTRIBUTION OF FLOWS

In the management of flows, the parking system plays a fundamental role since an organic, orderly and secure access to the site depends on the location and capacity of the parking system, as well as on the related parking discipline. In Bagnoregio there are several parking spaces. The total number of parking spaces is 1.470, divided as shown in the following graph:



[137] Parking spaces in the Municipality of Bagnoregio. (Elaboration of data provided by the Municipality of Bagnoregio)

The largest number of parking spots are located in Piazzale del Belvedere, at the entrance to the walkway leading to the bridge of Civita, and in Piazza Battaglini, at the entrance to Bagnoregio, about 25 minutes away from the village, but served by a shuttle bus.

Furthermore, when events with a large number of tourists are organised, the Municipality will make available a number of roads providing a total of 600 parking spaces (including Via Monarchi, Via Agostini, Via Pulicari, Via Mantes la Jolie and Località Pienzi).

The overall strategy of managing visitor flows in the core zone is obviously also based on the reorganisation of the car parks. Since profits generated by paid car parks, in accordance with the provisions of Art. 7 of Legislative Decree 285/1992, are used to install, build, manage and improve car parks, as well as to finance local public transport and improve urban mobility, the Municipal Council, with Resolution no. 168 of 18 December 2018, established that a portion of the revenues derived from paid car parks for the year 2019 will be allocated to the purchase and installation of a plot of land which will be used as a surface car park and to cover related operating expenses.

ACCESSIBILITY POLICIES FOR PEOPLE WITH DISABILITIES

Accessibility to the Village and elimination of barriers have been defined as top priorities by the municipal administration, and this is the reason why several policies are in place to ensure that people with disabilities can visit places of interest, including:

- people with 100% disability are entitled to a free admission ticket to Civita di Bagnoregio;
- any accompanying person is also exempt from the payment of the admission ticket;
- a transport service is available for people with severe motor impairment;
- disabled people are guaranteed free parking and access to urban limited traffic areas.

Furthermore, in 2018 the Municipality of Bagnoregio became a cardio-protected location, thanks to the project that made it possible to install, at the points of greatest influx, as many as six public-access cardio- protection units, equipped with defibrillator and emergency push-button panel for contact with first-aid services.

5.i POLICIES AND PROGRAMMES RELATED TO THE PRESENTATION AND PROMOTION OF THE PROPERTY

The Lazio Region and the Municipality of Bagnoregio, promoters of the UNESCO candidacy of the Cultural Landscape of Civita have started since 2015 a calendar of initiatives to support the designation of the Lazio village.

From the appeal in favor of safeguarding Civita di Bagnoregio and the entire ***Valle dei Calanchi*** launched by the Italian Pavilion of Expo, which marked, in fact, the start of the application process, the petition signed by over 4,500 citizens, personalities of the world of culture, art, entertainment, intellectual and liberal professions, journalism, science, public events, lectio magistralis, projects for schools, international meetings have gradually attracted the attention of a growing number of people and allowed the small center to develop international relations even overseas.

In the wake of this result, as reported in the Management Plan in paragraph 5.e, the promoters undertake to stimulate a great mobilization, to show that the candidacy of Civita is supported by the community (and not only by the inhabitants of Bagnoregio) and by the different sectors of civil society.

Interventions included in the management plan of the site and its buffer zone, as described in paragraph 5.e, have been selected because they have a high potential to convey the universal values of the site.

The set of actions provided for in the Communication Plan, as we have already observed, aims at creating for Civita di Bagnoregio and the surrounding areas an image-bank of impressions which is quite different from the "dying territory" stereotype which has unfortunately developed over the past few years through negative word of mouth. The value to be conveyed is the commitment of a community able to respond in a positive way to the evident vulnerability of the environment in which they live, positively reorganizing its social structure and dynamics while preserving all its identitary values.

This is a message also addressed to the citizens and residents of Bagnoregio itself, with the aim of boosting their confidence and strength regarding the role of leadership in the territory that Civita di Bagnoregio is about to assume.

In addition to the activities of the Communication Plan, the "Atelier ABC – Arte Bellezza Cultura/Art Beauty Culture" project, promoted by the Lazio Region with Roma Capitale, in collaboration and partnership with public and private bodies and institutions, has a particular importance for the promotion of the universal values of the site, with the aim of improving the cultural offer and making it broader and more effective in order to meet the expectations of different publics and users. Art, Cinema, Photography, Literature and Theatre, Palaces, Villages, Museums, Theatres, Auditoriums, Gardens, Parks, Nature Reserves, Roads, Streets, Walkways, Paths, Historical sites of value are brought back to life and transformed into centres of artistic and cultural excellence.

ABC projects have always been focused on Civita di Bagnoregio.
The international meeting of eco-conscious cartoonists, comic book illustrators, street artists, and visual artists called ***Meeting Internazionale dei disegnatori che salvano il mondo*** (The international meeting of artists who will save the world) and entitled **La città incantata ("The Enchanted City")** was created in, and for, Civita di Bagnoregio. This meeting is one of the main initiatives promoted by ABC during a three-day festival that brings together the most talented cartoonists at both national and international levels.

An intense program of events, workshops, projections of films and short films, previews, exhibitions and meetings that takes place in the streets of the village and is focused on cartoonists. In three years, the festival has brought together more than 150 artists and has organized over 100 meetings and 200 film projections, with the participation of 12,000 people. Why is the Meeting held in Civita? Because Civita is the "imaginary city" that inspired the creative and inventive genius of Japanese filmmaker Hayao Miyazaki and his famous Studio Ghibli. Taking inspiration from this ancient Etruscan village in Tuscia, in 1986 Miyazaki made the short film "Laputa: the Castle in the Sky", as effectively documented by the images and contents of the film made about the Ghibli Art Museum in 2005 by the filmmaker Isao Takahata.

The success of the International Meeting has encouraged the Lazio Region to further explore the potential of comics as a tool for the promotion and valorisation of Civita di Bagnoregio. Cartoonists have thus stepped up to the front of the class and comics have become a subject of study: the Enchanted City has become an experimental project for schools on comics, illustration, street art, graphic novels and animated films – those immortal and universal forms of communication, in other words, that are able to recount the present and imagine the future, and that, at the moment, thanks to their communicative impact, have a strong potential for expansion in terms of culture, communication and even work. This offers a tangible opportunity to enhance and broaden the cultural aspect of the territory.

"***Atelier Arte Bellezza Cultura/Art Beauty Culture***" means places and workshops created to encourage the development of cultural enterprises and to generate the necessary profit to support creative industries in creating new business models. "Atelier ABC" supports

investment projects dedicated to the promotion of historical and artistic heritage, artists and specialists related to artistic craftsmanship and specific production and artistic performances, as well as the training of new professions for the valorisation of sites and historical heritage, landscape, museum and local culture. Taking into account different target audiences, especially the young and the elderly, and with the aim of establishing a dialogue between generations, the "Atelier Segni creativi/Creative signs" in Bagnoregio, inaugurated at Palazzo Alemanni in March 2019, has been made possible thanks to an initiative co-financed by the European funds ROP ERDF-ESF and regional funds.

There are seven thematic areas in which companies have chosen to participate:
- Digital Memorialization;
- Storytelling for Cultural Heritage;
- Comics, Animation, Writing and Landscape;
- Creativity;
- Theatre, Music and Artistic Languages;
- Plastics, technologies of embossing, modelling and printing;
- Marketing and Production of handcrafted merchandising.

The latest ABC project, called A Spasso ("Wandering"), is centred around Civita di Bagnoregio and aims to be a way of educating people to see what is around us. This involves the assistance of tourist guides and the help of narrative contributions from local experts, who aim not only to convey specific artistic and historical information, but also to lead students to appreciate the spirit of the place above and beyond its own peculiar geomorphological structure. The visit is enlivened by actors and writers performing texts from Italo Calvino's "Invisible Cities".

5.j STAFFING LEVELS AND EXPERTISE (PROFESSIONAL, TECHNICAL, MAINTENANCE)

As highlighted in paragraph 5.g, at national and local level there is an organised high-level system of skills capable of dealing with the protection, conservation and valorisation of the Cultural Landscape of Civita di Bagnoregio. Moreover, as we have seen, an important part of the territory involved in the application is included in a system of architectural and landscape constraints through which protection is exercised by the Italian State.

The branch offices of the ***Ministry for Cultural Heritage and Activities and for Tourism*** and the ***Directorate for Housing Policies and Territorial, Landscape and Urban Planning of the Lazio Region*** guarantee appropriate technical and scientific skills and instrumental resources and provide a necessary distinction between activities for the protection of the landscape and the exercise of administrative functions in the field of urban planning and construction required by the Code of Cultural Heritage.

The Superintendence of Archeology, Fine Arts and Landscape for the metropolitan area of Rome, the province of Viterbo and southern Etruria (local detachments of the Ministry for Cultural Heritage and Activities and for Tourism) play a role of protection and high surveillance of the territorial cultural and landscape assets. Local Superintendence has in fact the function to authorize, supervise and monitor all the works of conservative rehabilitation, restoration and extraordinary maintenance that concern the assets liable to preservation restrictions, ensuring the use of materials and techniques consistent with the recommendations of restoration charters as wewll as of national and international conservation principles.

Other staff resources required to manage the nominated site will come from subjects included in the governance of the site.

First of all, the **Site Manager "Casa Civita S.r.l"** ensures through its own professionals the necessary managerial flexibility to guarantee professionalism and administrative versatility to the city's municipal cultural services.

However, it is not possible to give precise numbers of staffing levels and areas of expertise for all partners, since the governance model described in paragraph 5.e establishes the presence of participatory bodies that extend the opportunities for dialogue with a wide variety of expertise. Ideally, participation in these advisory bodies will be extended to subjects described in paragraph 5.g, which can be consulted for a description of the levels of expertise.

In addition, it is worth highlighting the contribution that may be offered by certain **Directorates of the Lazio Region** that are particularly competent for the protection and valorisation of the area covered by the application, namely the **Directorate for Culture, the Directorate for Environment and Natural Systems, the Directorate for Housing Policies and Territorial, Landscape and Urban Planning of the Lazio Region.**

Below is a summary of the expertise and current staffing level of the Directorates:

CULTURE DIRECTORATE

This promotes the valorisation of the heritage and values represented by culture and entertainment, seen as inestimable resources to raise citizen awareness and to promote economic and employment development. It establishes and adopts development plans focused on the promotion of local identities and on the valorisation of traditions, cultural and environmental heritage as elements of territorial competitiveness also in relation to the development of cultural tourism. In accordance with local authorities, it ensures effective development of the integrated territorial valorisation of cultural heritage. It ensures the implementation of regional legislation on youth policies, promoting the socio-economic, cultural, artistic and creative development of new generations, in line with the strategic guidelines of the European Union. It promotes cultural marketing and fundraising and projects financed with EU resources, including Structural Funds, for areas falling within its competence.

Areas of interest:

- figurative, cinematic and audiovisual arts
- youth policies
- cultural services and the promotion of reading
- live performances
- cultural marketing and European funds
- information, image and culture website
- figurative, cinematic and audiovisual arts and multimediality
- valorisation of cultural heritage

DIRECTORATE FOR THE ENVIRONMENT AND NATURAL SYSTEMS

This is responsible for the planning and protection of natural and environmental resources, for the preservation of biodiversity of species and habitats, according to the principles of sustainable development, with particular reference to the identification of measures to safeguard the Natura 2000 network (SCIs and SPAs). It coordinates the activities of the regional system of protected natural areas, with particular maintenance of the relations of the system with the protected areas belonging to the State. In accordance with current legislation, reference to procedures for the creation of parks, reserves and natural monuments, to the and to the organisation and planning of environmental education and information activities. It adopts technical and administrative procedures for the approval of planning and programming tools for protected natural areas. It promotes the regional natural heritage in order to develop a greater knowledge of protected areas, by strengthening skills in the field of communication and information as well as the system of territorial networks of protected areas.

Areas of interest:

- education, information, social involvement in matters of the environment and sustainability
- protection and valorisation of natural landscapes and geodiversity
- ustainable valorisation of the environmental heritage

Offices of the municipalities responsible for the territory included in the 'nominated property' and 'buffer zone' can also ensure the successful implementation of specialist activities in the following sectors: culture (with particular reference to the area of ethno-anthropological and landscape heritage and social history), study, research, development of plans and programs requiring high professional expertise, as well as verification of achieved results. Professionally qualified personnel represent a high level of knowledge and/or specialist and multi-specialist knowledge in the fields of culture, cultural heritage, landscape, live performance and social history, making it possible to effectively interpret cultural needs and resources for the development of specific initiatives.

It should also be remembered the presence of the ***Museum of Geology and Landslides of Bagnoregio***, which with its staff specialized in geology is able to guarantee an important constant monitoring unit on the site (see chapter 6 for further details).

MONITORING

6 MONITORING

6.a Key indicators for measuring state of conservation

6.b Administrative arrangements for monitoring property

6.c Results of previous reporting exercises

6. MONITORING

The monitoring is the moment of verification of the effectiveness of the conservation policies and management of the site with the aim to safeguard the OUV.

In order to make the monitoring program as operational as possible, it is important to work with two complementary tools:
· the monitoring programme in the Nomination Form, featured by a closely vision related to the good itself, its intrinsic characteristics and its OUV;
· the monitoring programme in the Management Plan, in which the individual projects are evaluated, with a particular attention to outputs, outcomes and the impacts with respect to the sustainable development policies summarized in the framework Culture 2030 | Indicators of the World Heritage Center.

The purpose of the monitoring is to analyze how the value of the site is maintained over time and how the various planned actions are able to meet the needs of protection and conservation of the value itself.

This "double check" (in the Nomination Form and in the Management Plan) aims to provide updated data on the progress of strategies and on deviations from expectations, so as to allow the modification of any strategies, if necessary. In addition, the monitoring plan aims to evaluate the trend of the resources present in the site so as to ensure its conservation and protection over time and to mitigate any negative impacts. The information collected during the monitoring phase can also become useful material for stakeholders, thanks to which they can have an updated picture of the situation.

However, for a monitoring programme in order to be truly capable of fulfilling the functions set out above, it is essential that it respects these characteristics:
· it must be repeated over time, so as to be able to make a comparison year after year of the different phenomena analyzed and thus allowing to give rise to a trend that analyzed over time provides information about the changes that have occurred in the territory;
· each chosen indicator must be associated with a so-called "zero point", against which to assess changes over time and significant trends; this reference value derives from on-site evaluations or from the analysis of data collected for the compilation of official reports, sector documentation, etc.;
· the priority should be given to assessments produced by the checking and monitoring systems that the authorities have established over time, in order to be able to count on data that is as reliable as possible.

The territory of Civita di Bagnoregio, as we have seen in paragraph 4.b Factors affecting the property, is subject to numerous activities of monitoring and control of the impacts on the territory borne by agencies and institutions, a factor that preludes an effective and useful monitoring program of the dossier. For example, the presence of ARPA Lazio (Regional Agency for Environmental Protection), which deals, among other activities, with environmental prevention and control and with the organization and management of the regional information system for environmental monitoring in relation to environmental factors, can only be a fundamental support for data collection and interpretation.

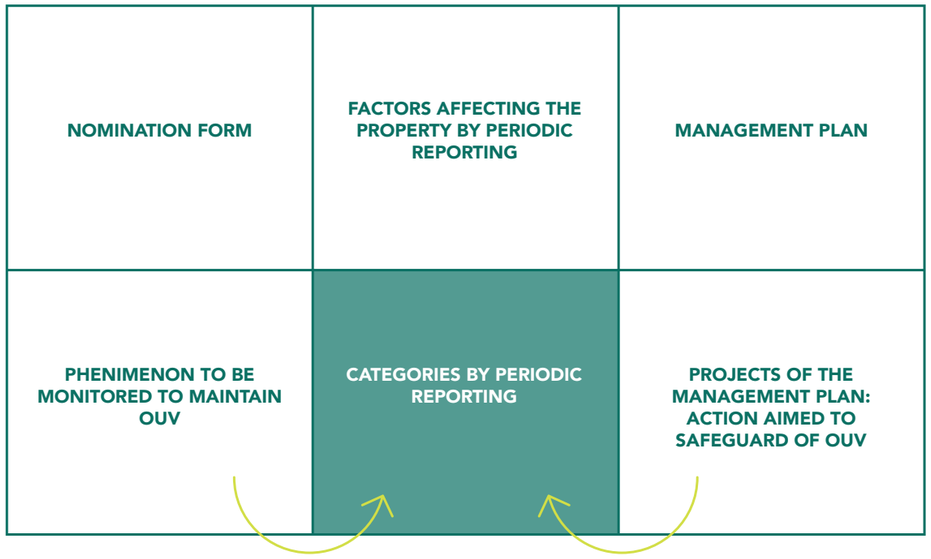
The monitoring programme proposed for the site is based on the Periodic Reporting. In particular, the choice of the phenomena to be monitored and the indicators to be used was made by referring to the indication of the paragraph 4 of the Periodic Reporting, "Factors Affecting the Property".

The factors are grouped into 14 headings:

1. Buildings and Development
2. Transportation Infrastructure
3. Services Infrastructures
4. Pollution
5. Biological resource use/modification
6. Physical resource extraction
7. Local conditions affecting physical fabric
8. Social/Cultural uses of heritage
9. Other human activities
10. Climate change and severe weather events
11. Sudden ecological or geological events
12. Invasive/alien species or hyper-abundant species
13. Management and institutional factors
14. Other Factors

These 14 categories constitute the link between the monitoring of the Nomination Form and the monitoring of the Management Plan, as highlighted in the diagram below.

The methodology for choosing the indicators to be used is simple and it is consist of the selection of the factors relevant for the site (state of conservation of historic buildings and historic village, state of conservation of the landscape, state of conservation of the cliff and the surrounding land, authenticity and integrity), and of the definition of the indicators able to monitor the factors selected. As already mentioned, for these specific aspects related to the projects on the site, please refer to the Monitoring Plan included in the Management Plan.



6.a KEY INDICATORS FOR MEASURING STATE OF CONSERVATION

Starting from the aspects defined in the previous paragraph, the Key Indicators proposed for monitoring the Nomination Form are shown below. These indicators, together with a description of them in terms of periodicity and location of records, constitute the central element of the monitoring programme.

Phenomenon to be monitored	Factors Affecting the Property by Periodic Reporting	Specific pressure/ aspect	Indicator	Location of Records	Periodicity	Scale for the evaluation
1. STATE OF CONSERVATION OF HISTORIC BUILDINGS AND HISTORIC VILLAGE	Building and development	Restoration	Number of historic buildings in need of restoration	Soprintendenza	Annual	Property
	Building and development	Restoration	Number of restoration interventions	Soprintendenza	Annual	Property
	Building and development	Tren in the stat of conservation of property	Comparison of the state of preservation over time	State of conservation described in paragraph 4.a	Annual	Property

Phenomenon to be monitored	Factors Affecting the Property by Periodic Reporting	Specific pressure/ aspect	Indicator	Location of Records	Periodicity	Scale for the evaluation
2. STATE OF CONSERVATION OF THE LANDSCAPE	Transportation and infrastructure	Accessibility to the property of Civita di Bagnoregio	Number of actions/ incentives for sustainable mobility	Actions foreseen by the "Piano della Mobilità Sostenibile"	Annual	Municipal territory of Civita di Bagnoregio
	Transportation and infrastructure	Parking availability outside the Cliff of Civita di Bagnoregio	Number of parking available	Actions foreseen by the "Piano della Mobilità Sostenibile"	Annual	Municipal territory of Civita di Bagnoregio
	Biological esource use/ modification	Protection of natural value	Comparison of the state of preservation of ZPS and SIC Calanchi di Civita di Bagnoregio over time	Management Plan of SIC and ZPS	Annual	SIC and ZPS
	Other elements: safeguard of OUV	Maintaining the OUV over time - perceptual value	Comparison of the Carta degli Aspetti Percettivi over time	State of conservation described in paragraph 4.a; "Piano Territoriale Paesistico"	Annual	Property

Not all the 14 factors listed above were considered significant for the Civita di Bagnoregio case study (8 factors by Periodic Reporting were considered); the Key Indicators selected meet the following characteristics:

- they are simple, clear, controllable and verifiable;
- they are representative of the phenomenon to which they refer;
- where possible, the indicator chosen are quantitative;
- they are repeatable in space and time;
- where possible, they are part of existing databases.

In particular, an overall reading of the results achieved on the various fronts will lead to a picture of the trend in the state of conservation of the asset, the identification of the strengths and weaknesses of the system and the definition of possible solutions.

Phenomenon to be monitored	Factors Affecting the Property by Periodic Reporting	Specific pressure/ aspect	Indicator	Location of Records	Periodicity	Scale for the evaluation
3. STATE OF CONSERVATION OF THE CLIFF AND THE SURROUNDING LAND	Local condition affecting physical fabric	Soil erosion (by wind, rain)	Soil loss	High precision satellite images to quantify the soil loss	Annual	Badlands Valley
		Earthquakes	Ground acceleration	Seismograph in the town (INGV)	Continuous measurements	Badlands Valley
		Landslides	Opening of fractures and joint	Database of the active landslides, satellite images, update of the geomorphological map	Annual	Municipal territory of Civita di Bagnoregio and badlands valley
	Climate chang and severe weather events	Flooding	Hydrometric level in the rivers	Hydrometric stations at Torbido river and Lubriano river	Continuous	Municipal territory of Civita di Bagnoregio
	Sudden ecological or geological events	Earthquake	Number of seismic events	Data collected by "Istituto Nazionale di Geofisica e Vulcanologia"	Annual	Municipal territory of Civita di Bagnoregio

Phenomenon to be monitored	Factors Affecting the Property by Periodic Reporting	Specific pressure/ aspect	Indicator	Location of Records	Periodicity	Scale for the evaluation
4. AUTHENTICITY AND INTEGRITY	Social and cultural uses of heritage	Community involvement and awareness of heritage	Number of local, public and private associations involved in the nomination process	Modalities of involvement described in Nomination Form	Annual	Municipal territory of Civita di Bagnoregio
			Number of local, public and private associations involved in the nomination process	Management Plan	Annual	Municipal territory of Civita di Bagnoregio
		Tourism	Satisfaction of the tourist following the visit	Data to be collected by surveys	Biennal	Municipal territory of Civita di Bagnoregio
			Number of tourists compared to residents	Infoviterbo.it, Agenzia Regionale per il Turismo	Annual	Municipal territory of Civita di Bagnoregio
			Variation of tourist flows over time	Infoviterbo.it, Agenzia Regionale per il Turismo	Annual	Municipal territory of Civita di Bagnoregio
		Depopulation	Variation of residents over time	Data by ISTAT	Annual	Municipal territory of Civita di Bagnoregio

6.b ADMINISTRATIVE ARRANGEMENTS FOR MONITORING PROPERTY

The setting up of the monitoring program envisaged in the dossier is an integral part of the application procedures and will become a fundamental action for the maintenance of the OUV over time at the time when Civita di Bagnoregio will became a UNESCO site. The structure that will take care of the monitoring is the same identified as responsible for the management of the UNESCO site itself.

Once the application procedure is completed, the first action in terms of monitoring will be the definition of the “zero point” of all the indicators; to follow will be necessary to provide a data collection over time and a comparison of the performances achieved.

6.c RESULTS OF PREVIOUS REPORTING EXERCISES

"The Cultural Landscape of Civita di Bagnoregio" is not yet a UNESCO site, so there are still no monitoring reports explicitly focused on the maintenance over time of the OUV. Having said that, as highlighted in the dossier itself, there are numerous institutions and bodies that deal with collecting and evaluating data relating to the territory of Viterbo in general and to the specific system of Bagnoregio.

It therefore follows that the bases exist both in terms of available data and skills to hypothesize an effective performance of the planned monitoring program. From the environmental point of view, for example, the Regione Lazio collects data relative to the geomorphology, water resources and ground use in its own Environmental Information System (SITIR) (*http://www.regione.lazio.it/rl_sitr/*). Moreover, ARPA Lazio (Regional Agency for the Protection of the Environment) continuously gathers and annually elaborates data relative to the environmental (air, water and soils), acoustical components, and to electromagnetism (*http://www.arpalazio.gov.it/*). Furthermore, the Italian Institute for Environmental Protection and Research (ISPRA) has established the “Portale del Servizio Geologico d'Italia” with the aim to collect geological data in order to monitoring the territory.

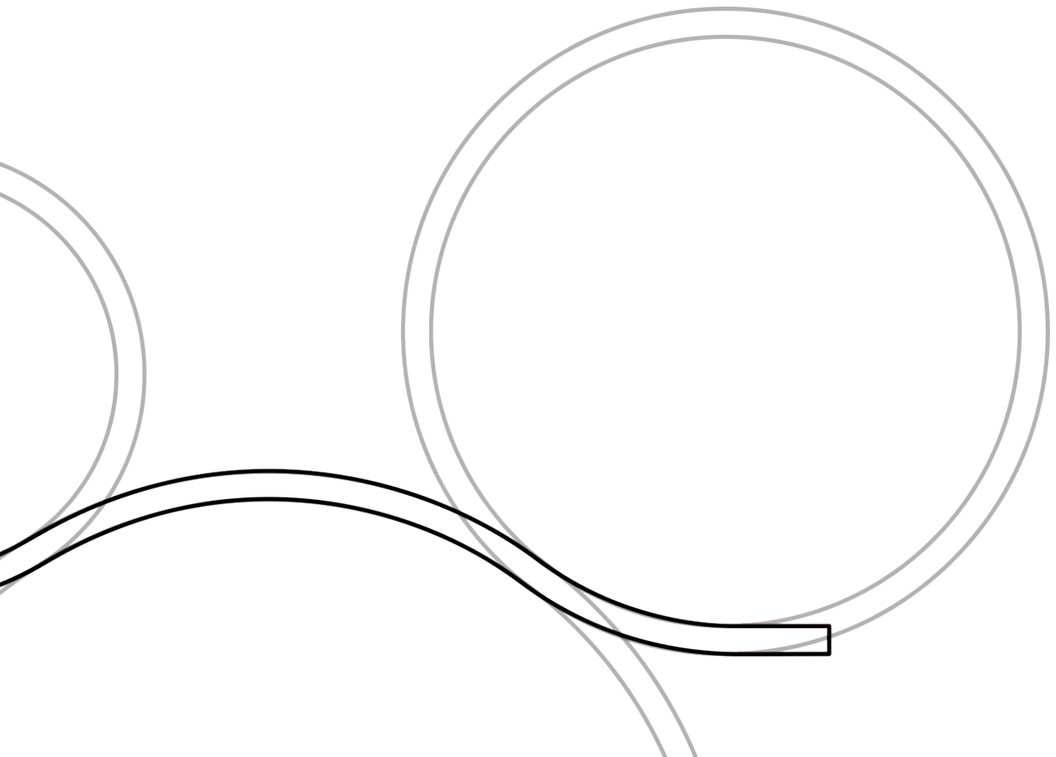
Lazio is also involved with the Osservatorio dei Paesaggi Mediterranei (Mediterranean Landscape Observatory), which was set up as part of the PAYS.DOC project and is coordinated by the Andalusia region. This organisation has the role of recognising and observing characteristic landscapes in the Mediterranean area (*http://www.paysmed.net/*). The Observatory has the purpose of creating a shared method to use for the identification and observation of the landscapes, to extrapolate the identifying characteristics and point out the evolutionary processes and tendencies that act on their transformation.

The landscape of Calanchi in Civita di Bagnoregio is a part of the project PAYS.DOC (*http://www.paysmed.net/pays-doc/osservatorio/punti/6-154-paesaggio_dei_calanchi_civita_di.html*)

Another key instrument that ensures the conservation of the candidate site is the system of the territorial plans. All the government and management plans of the territory, from the strategic regional development plans to the PRCG – Urban Development Plans – are periodically examined and implemented. The Municipalities in particular carry out monitoring activities on specific components of the territory.

The "Museo Geologico e delle Frane" and the "La Sapienza" University give an important contribution to land maintenance with data collection and sector studies. Every year, the "Museo Geologico e delle Frane" publishes the "Teverina geological bulletin", in which the results of the several geological analysis are published.

DOCUMENTATION



7 DOCUMENTATION

7.a **Photographs and audiovisual image inventory and authorization form**

7.b **Texts relating to protective designation, copies of property management plans or documented management systems and extracts of other plans relevant to the property**

7.c **Form and date of most recent records or inventory of property**

7.d **Address where inventory, records and archives are held**

7.e **Bibliography**

7. DOCUMENTATION

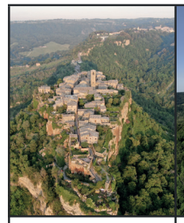
7.a PHOTOGRAPHS AND AUDIOVISUAL IMAGE INVENTORY AND AUTHORIZATION FORM

Thumbnail										
Id. (No)	01	02	03	04	05	06	07	08	09	10
Format (slide/ print/ video)	photo	photo	photo	photo	photo	photo	photo	photo	photo	photo
Caption	Civita and the sunshine	Civita and snow	Traditional Tonna of Civita	Sunshine	First light of the morning	Cloudy day	Night of light	Fog in the valley	Sunrise	Civita and the fog
Date of Photo (mo/yr)	10/2016	19/2019	12/2013	10/2016	03/2004	11/2006	08/2019	10/2013	06/2014	12/2014
Photographer/ Director of the video	Matteo Angeloni	Andrea Prosperoni	Casa Civita srl	Matteo Angeloni	Casa Civita srl	Casa Civita srl	Matteo Angeloni	David Petretti	David Petretti	David Petretti
Copyright owner (if different than photographer director of video)	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl
Contact details of copyright owner (Name, address, tel/fax, and e-mail)	Casa Civita srl Via Roma, 28 - Bagnoregio (VT) - 01022 - casacivita2019@gmail.com									
Non-exclusive cession of rights	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Thumbnail				
Id. (No)	11	12	13	14
Format (slide/ print/ video)	photo	photo	photo	photo
Caption	Sunbeam	Tightrope walker	Bagnoregio	Calanchi
Date of Photo (mo/yr)	12/2019	07/2019	07/2018	07/2018
Photographer/ Director of the video	Comune di Bagnoregio	Comune di Bagnoregio	Croce Rossa Bagnoregio	Comune di Bagnoregio
Copyright owner (if different than photographer director of video)	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl
Contact details of copyright owner (Name, address, tel/fax, and e-mail)	Casa Civita srl Via Roma, 28 - Bagnoregio (VT) - 01022 - casacivita2019@gmail.com			
Non-exclusive cession of rights	yes	yes	yes	yes

Thumbnail						
Id. (No)	15	16	17	18	19	20
Format (slide/ print/ video)	photo	photo	photo	photo	photo	photo
Caption	Civita and the donkey	Civita in color	Belvedere Falcone-Borsellino	Rainbow	Civita and Calanchi	A look from above
Date of Photo (mo/yr)	12/2013	11/2020	02/2017	02/2017	06/2017	12/2014
Photographer/ Director of the video	Comune di Bagnoregio	Comune di Bagnoregio	Comune di Bagnoregio	Comune di Bagnoregio	Croce Rossa Bagnoregio	Croce Rossa Bagnoregio
Copyright owner (if different than photographer director of video)	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl
Non-exclusive cession of rights	yes	yes	yes	yes	yes	yes

Thumbnail				
Id. (No)	21	22	23	24
Format (slide/ print/ video)	photo	photo	photo	photo
Caption	Perspective	Icon	Light and shadow	Spur_01
Date of Photo (mo/yr)	06/2017	06/2017	09/2018	06/2019
Photographer/ Director of the video	Croce Rossa Bagnoregio	Croce Rossa Bagnoregio	Croce Rossa Bagnoregio	Croce Rossa Bagnoregio
Copyright owner (if different than photographer director of video)	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl
Contact details of copyright owner (Name, address, tel/fax, and e-mail)	Casa Civita srl Via Roma, 28 - Bagnoregio (VT) - 01022 - casacivita2019@gmail.com			
Non-exclusive cession of rights	yes	yes	yes	yes

Thumbnail						
Id. (No)	25	26	27	28	29	30
Format (slide/ print/ video)	photo	photo	photo	photo	photo	photo
Caption	Spur_02	Civita and its valley_01	Civita and its valley_02	San Donato Church	Like an island	Badlands seen up close
Date of Photo (mo/yr)	06/2019	06/2019	06/2019	12/2018	12/2018	02/2017
Photographer/ Director of the video	Croce Rossa Bagnoregio	Croce Rossa Bagnoregio	Croce Rossa Bagnoregio	Croce Rossa Bagnoregio	Croce Rossa Bagnoregio	Croce Rossa Bagnoregio
Copyright owner (if different than photographer director of video)	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl	Casa Civita srl
Non-exclusive cession of rights	yes	yes	yes	yes	yes	yes

7.b TEXT RELATING TO PROTECTIVE DESIGNATION, COPIES OF PROPERTY MANAGEMENT PLANS OR DOCUMENTED MANAGEMENT SYSTEMS AND EXTRACTS OF OTHER PLANS RELEVANT TO THE PROPERTY

The following document and rules mentioned are attached in digital format on the CD-ROM enclosed.

EUROPEAN UNION LAW RELATED TO ENVIRONMENT AND LANDSCAPE (see Chapter 5.b.2):

· Management plan of the Site of Community Interest (SIC)/Special Protection Area (ZPS) "Calanchi di Civita di Bagnoregio";

NATIONAL AND REGIONAL LEGISLATION PROTECTING CULTURAL HERITAGE AND LANDSCAPE (see Chapter 5.b.3):

· Cultural Heritage and Landscape Code, Legislative Decree nr. 42 of 22nd January 2004. (Codice dei Beni Culturali e del Paesaggio, Decreto Legislativo 42/2004);

REGIONAL, PROVINCIAL AND MUNICIPAL INSTRUMENTS OF TERRITORIAL GOVERNMENT (see Chapter 5.d):

- Regional Territorial Landscape Plan of Lazio Region (Piano Territoriale Paesistico Regionale della Regione Lazio);
- Plan for the Regional Hydrogeological Structure (Piano per l'Assetto Idrogeologio Regionale);
- Fabrication Program (Programma di Fabbricazione) of Bagnoregio;
- Building Regulation (Regolamento edilizio) of Bagnoregio;
- Regulations for identifying forms of support for the monumental complex of Civita di Bagnoregio (Regolamento per individuazione forme di sostegno del complesso monumentale di Civita di Bagnoregio);
- Regulations for the granting of special conditions to promote the old town centres of Bagnoregio, Vetriolo and Castel Cellesi (Regolamento per la concessione di agevolazioni per la valorizzazione dei centri storici di Bagnoregio, Vetriolo e Castel Cellesi);
- Measures for the preservation of the cultural heritage of the site of Civita di Bagnoregio;
- Civil Protection Municipal Emergency Plan (Piano comunale di protezione civile);

PROPERTY MANAGEMENT PLAN (see Chapter 5.e):

- Management Plan for the Cultural Landscape of Civita di Bagnoregio

7.c FORM AND DATE OF THE MOST RECENT RECORDS OR INVENTORY OF PROPERTY

The site has been object subject of numerous studies and publications, as you can see from the substantial bibliography (7.e).

The Superintendence of Archeology, Fine Arts and Landscape for the metropolitan area of Rome, the province of Viterbo and southern Etruria (local detachments of the Ministry for Cultural Heritage and Activities and for Tourism) has papers and digital inventories related to movable and immovable property under constraint protection.

The record cards, differently structured according to the different types of assets, are processed in line with the national standards defined by the Central Institute for Cataloguing and Documentation of the Ministry (http://www.iccd.beniculturali.it).
There are also many national and regional databases that contain information on the nominated property.

Noteworthy is the National Archivist System "*SAN - Sistema Archivistico Nazionale*" (http://san.beniculturali.it/web/san/home) coordinated by the *Central Institute for Archives of the Ministry for Cultural Heritage and Activities and for Tourism* which allows access to the network of the *National Archival System*.

Lots of documents and data are available to the *Lazio Region - Planning and Urbanism Office/ Environment Office, as well as to ARPA Lazio - Regional Environmental Protection Agency* that ensures the availability of information and environmental data. Documents and data are also available by the *Province of Viterbo - Territorial Planning Office, Land Protection Project Unit / Environment Office*. Noteworthy are the documents provided by the *State Archives of Viterbo* (http://www.archiviodistatoviterbo.beniculturali.it/) in which

is also archived the cadastral documentation of the territory. The entire documentation, cartographic (maps) and descriptive (ledger registers, matrices) was acquired by the Technical Tax Office (and *Ufficio Tecnico Erariale*) and by the District II Office. DD. of Viterbo (*Ufficio Distrettuale II. DD.*), and is the updating (1855-1875) of the Gregorian Cadastre.

The cadastre, created as a tool for ascertaining ownership for tax purposes, has undoubtedly become a very rich source of data over time. This documentation is essential for the study of the territory, seen in a more general context linked to all those components that characterize the structure of the territory as a whole, from the political-economic to the urban-environmental one.

Many documents on the nominated property can be found in the *Historical Archive of the Municipality of Bagnoregio and in the Technical Office of the Municipality of Bagnoregio* as well, that allow an exhaustive survey of all the buildings and their transformations.

A collection of texts related to the property is also available to the *municipal library*. A large amount of documents is also kept in the headquarters of *Casa Civita Srl* (a 100% company owned by the Municipality of Bagnoregio) called to deal with tourism development and entrusted with the mapping of the territory, with the collection of quantitative and qualitative data.

An interesting miscellaneous of documents can be found to *The Civita Institute - The Northwest Institute for Architecture & Urban Studies in Italy* (NIAUSI) that collects regional Maps, Art and Posters, Civita di Bagnoregio Plans and Maps, Student Work.

Documents about all the aspects of the nominated property related with the strong geomorphological activity, with the antifragility of the urban-architectural features, with the temporal continuity of hydrogeological risk mitigation actions from natural hazards, with the resilience of community and with a more naturalistic focus, are kept in the *Geological and Landslides Museum of Civita di Bagnoregio and in the Naturalistic Museum of Lubriano* as well.

Cinematography can offer a lot of valuable opportunities in order to study city and landscape transformations.

The *Historical Archive LUCE* (Website: http://www.archivioluce.com), the audiovisual memory of the '900 Italian and Mediterranean, kept a vast collection consists of film funds, photos and documentaries. A time span that covers the entire twentieth century: newsreels, documentaries, directories, photographs, an archive of contemporary life. A set of documentary production that represents the Cultural Landscape of Civita di Bagnoregio is available (from 1951 to 1974) useful to study the changing of the place over the years.

Due to its unique characteristics and genius loci, Civita lends its views and streets to creating special atmospheres for many different movies. Numerous movies that have caught the beauty of the site are repositories for the iconic value of the nominated property and archived by *The Italian National Film Library* (https://www.fondazionecsc.it/cineteca-nazionale/).

The film productions shooted in the nominated property are (see Chapter 2):

- 1957, Il medico e lo stregone (by Mario Monicelli);
- 1963, I due colonnelli (by Steno);
- 1970, Contestazione Generale, (by Luigi Zampa);
- 1986, Laputa: Castle in the Sky (Animation by Hayao Miyazaki);
- 2000, Terra nostra 2 (Soap Opera by Emilio di Biasi and Marcelo Travesso);
- 2004, Love's Brother (by Jon Sardi);
- 2009, Pinocchio (by Alberto Sironi);
- 2015, Civita the film: Enchanted city in the sky. The dying city (Documentary by Natalie Reuss);
- 2017, Questione di Karma (by Edoardo Falcone);
- 2018, Puoi baciare lo sposo (by Alessandro Genovesi);
- 2018, Lazzaro felice (by Alice Rohrwacher).

7.d ADDRESS WHERE INVENTORY, RECORDS AND ARCHIVES ARE HELD

Soprintendenza Archeologia, Belle Arti e Paesaggio per l'area Metropolitana di Roma, la Provincia di Viterbo e l'Etruria Meridionale
Superintendence of Archeology, Fine Arts and Landscape for the metropolitan area of Rome, the province of Viterbo and southern Etruria
Via Cavalletti, 2 - 00186 Roma (RM).
Website: http://www.sabap-rm-met.beniculturali.it/

Repository of papers and digital inventories related to movable and immovable property under constraint protection.

Regione Lazio - Ufficio Pianificazione e Urbanistica / Ufficio Ambiente
Lazio Region - Planning and Urbanism Office/ Environment Office
Via R. Raimondi Garibaldi, 7 - 00145 Roma (RM).
Website: http://www.regione.lazio.it/

Repository of documents and data.

ARPA Lazio - Agenzia Regionale Protezione Ambientale
ARPA Lazio - Regional Environmental Protection Agency
Via Garibaldi, 114 - 02100 Rieti (RI)
Website: http://www.arpalazio.it/

Repository of documents and environmental data.

Provincia di Viterbo - Ufficio Pianificazione Territoriale, Unità di Progetto Tutela del Territorio / Ufficio Ambiente
Province of Viterbo - Territorial Planning Office, Land Protection Project Unit / Environment Office
Via Saffi, 49 - 01100 Viterbo (VT)
Website: https://www.provincia.viterbo.gov.it/

Archivio di Stato di Viterbo
State Archives of Viterbo
Via Vincenzo Cardarelli, 18 - 01100 Viterbo (VT)
Website: http://www.archiviodistatoviterbo.beniculturali.it/

Repository of documents and maps including the cadastral documentation of the territory.

Comune di Bagnoregio – Ufficio Tecnico & Archivio Storico
Municipality of Bagnoregio - Technical Office & Historical Archive
Piazza S. Agostino, 21 - 01022 Bagnoregio (VT)
Website: http://www.comune.bagnoregio.vt.it/

Repository of a historical archive, data and documents related to the tourism and all relevant legislative, regulatory, contractual, planning, institutional acts.

Biblioteca Comunale "Elena Maria Coppa"
Municipal Library "Elena Maria Coppa"
Casa del Vento - Corso Giuseppe Mazzini, 641 - 01022 Bagnoregio (VT)

Repository of a collection of texts related to the property.

Casa Civita Srl
Palazzo Petrangeli, Via Roma 28 - 01022 Bagnoregio (VT)
Website: https://www.casacivitabagnoregio.it/

Repository of quantitative and qualitative data related to the Tourism in the nominated property.

The Civita Institute - The Northwest Institute for Architecture & Urban Studies in Italy (NIAUSI)
USA: 1326 Fifth Avenue, Suite 650, Seattle, WA 98101
ITALY: Via della Maestà Civita di Bagnoregio (VT) 01022
Website: https://www.civitainstitute.org/

Repository of the Zarina-Heywood Library (with the significant Civita Collection).

Museo Geologico e delle Frane
The Geological and Landslides Museum
Palazzo Alemanni, Piazza San Donato, Civita di Bagnoregio (VT).
Website: http://www.museogeologicoedellefrane.it/

Shows the history and struggle of Civita to survive to a wild and implacable nature, the characteristics and evolution of the territory, the landslides, monitoring and stabilization works on the slopes.

Museo Naturalistico di Lubriano
Naturalistic Museum of Lubriano
Piazza Col di Lana, 12 - 01020 Lubriano (VT)
Website: http://www.museolubriano.com

Shows the natural scenery, its evolution and related anthropological aspects.

Istituto Luce - Cinecittà s.r.l. ARCHIVIO STORICO LUCE
Historical Archive LUCE
Via Tuscolana 1055, Roma (RM)0 0173
Website: http://www.archivioluce.com

A set of documentary production that represents the Cultural Landscape of Civita di Bagnoregio is available (from 1951 to 1974) useful to study the changing of the place over the years.

Cineteca Nazionale - Centro Sperimentale di Cinematografia
The Italian National Film Library
Via Tuscolana, 1520 - 00173 Roma (RM)
Website: https://www.fondazionecsc.it/cineteca-nazionale/

The film archive preserves films from all over the world, from silent films to the present day, embracing the entire history of Italian cinema. There is also a large collection of national and international newsreels and documentaries production as well as a photographic archive.

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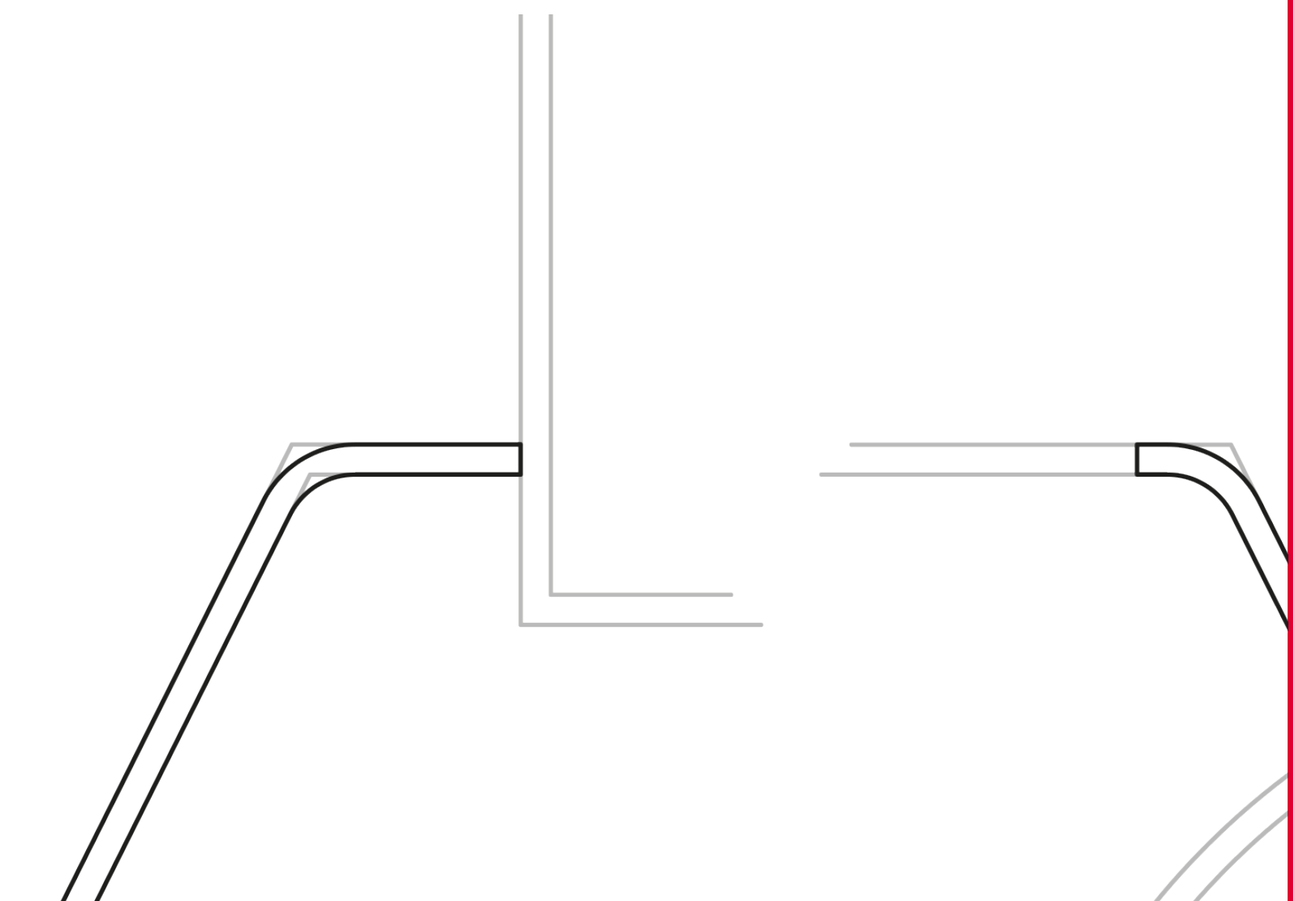
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9. SIGNATURE ON BEHALF OF THE STATE PARTY

credits

credits

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