



United Nations
Educational, Scientific and
Cultural Organization

Venetian Works of Defence
between 16th and 17th centuries:
Stato da Terra – western Stato da Mar
inscribed on the World Heritage List in 2017

Subject: State of conservation of the ‘Venetian Works of Defence between the 16th and 17th centuries: Stato da Terra - Western Stato da Mar’ World Heritage site. Response to the memorandum from Mechtild Rössler, Director of the World Heritage Centre, to Massimo Riccardo, Permanent Deputy Ambassador of Italy to UNESCO - Ref. CLT/WHC/EUR/12412

Executive Summary

In response to the *ICOMOS Technical Review*, which was sent by the World Heritage Centre along with note CLT/WHC/EUR/20/12412 on 8 January 2020 and received through the Italian Representative in Paris; considering the steps highlighted therein, which expand upon and systematise matters that were already the subject of letters and memorandums sent starting in November 2018 and during the meeting held in Paris in the presence of Director Mechtild Rössler; and in order to provide additional elements in relation to the final considerations included in the note, we report the following:

1. The underground car park project in Via della Fara in Bergamo, which includes updated structural and engineering choices comprehensive of orographic and landscape solutions that will harmoniously adapt to the layout of the slope that surrounds the already-excavated area and which will help reconnect the Venetian walls with the old town of Bergamo, ensures the stability of the soil and simultaneously is part of the redevelopment of the area. This will help conserve its OUV, recognized with the addition of the Bergamo component to the *Venetian Works of Defence between the 16th and 17th centuries: Stato da Terra - Western Stato da Mar* site in 2017.

Moreover, it should be noted that the work done to create the car park undoubtedly helps reinforce the escarpment and therefore ensure its long-term stability, as the top fill layers, set atop a rather poor-quality rocky mass, have been definitively strengthened and will no longer be subject to landslides, as happened in December 2008.

The interventions planned for the creation of a public green space above the reinforced concrete car park structure will help redevelop this slope, restoring a large natural area to local residents. As an additional indication of the desire to help improve the current situation, it should be mentioned that the design of the surface area of the car park has been entrusted to one of the world’s most famous landscape architects, Joao Nunez, meeting the requirements of ICOMOS and the local offices of the Ministry of Cultural Heritage and Tourism (MIBACT). The project will be evaluated by advisory bodies, pursuant to paragraph 172 of the Operational Guidelines of the *Agreement*.

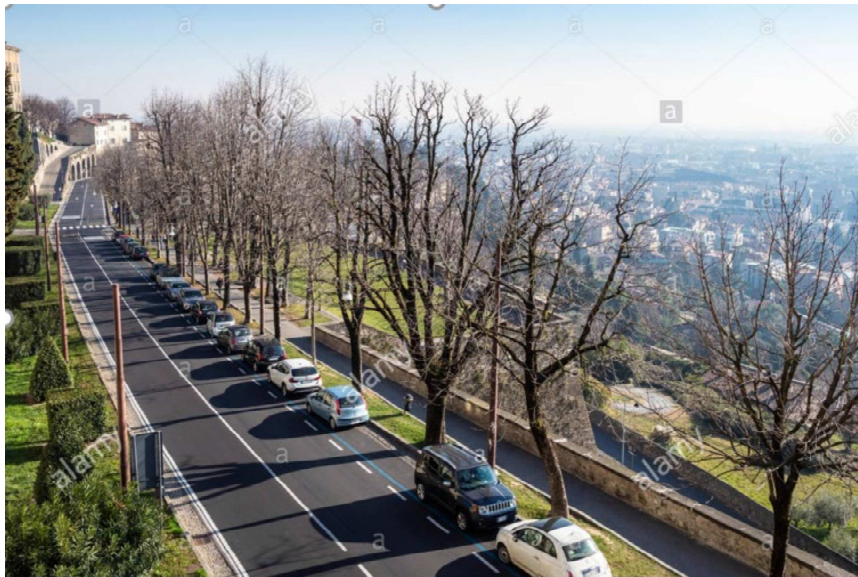
The underground car park will also help limit above-ground roadside parking, improving look of the general setting and even its safety.

Lastly, based on the indications in the *ICOMOS Technical Review* and upon consultation of other regulatory documents, an initial table of index for the drafting of the *Heritage Impact Assessment* (HIA) was created, with the goal of documenting the car park's compatibility with the Bergamo component of the *Venetian Works of Defence between the 16th and 17th centuries: Stato da Terra - Western Stato da Mar* site.

2. The car park in Via della Fara, the construction of which was already included in the planning tools from 2000 (the General Master Plan approved with Resolution n. 43 Reg/19235 of 29 February 2000),¹ later confirmed by the detailed plan for the restoration of Città Alta and Borgo Canale areas in 2005, and ultimately approved with the Local Zoning Plan in 2010, is part of the broader overall strategy concerning

¹ October 2018 Report

the accessibility of Città Alta and illustrated in the Sustainable Mobility Plan (PUMS) adopted by the Municipality of Bergamo on 16 May 2019. That strategy also includes an integrated consideration of the topics of residents, commerce and tourism. It is aimed at reducing traffic in Città Alta through the measures listed below, while simultaneously allowing for the continuation of activities that meet the needs of residents. More specifically, the creation of the car park will make it possible to concentrate parking areas, which are currently spread out in various places, all street-level, in a single structure. In addition, we would also like to note that the availability of parking spaces within the underground car park will make it possible to create pedestrian areas in a few historical squares in Città Alta (e.g. Piazza Cittadella and Piazza Angelini, which are currently used by residents to park in) and to expand current restricted traffic areas. To reach this goal, considering the existing restraints, it is necessary to maintain the parking spaces along Viale delle Mura, which are of little visual impact, as can be seen in the picture below. These spaces will be exclusively used by residents.



Lastly, the underground car park will make it possible to block the construction of other car parks in Città Alta and its surroundings (aside from small car parks benefiting residents, already provided for by current urban planning tools, subject to an assessment of their compatibility with the conservation of cultural heritage by the Ministry of Cultural Heritage and Tourism).

3. We confirm that, as part of the Sustainable Mobility Plan (PUMS) adopted by the Municipality of Bergamo, a programme to reduce traffic in Città Alta has been developed. It is to be implemented through a series of actions: the expansion of public transport, i.e. both of the bus lines and the historical funicular that connects Città Bassa and Città Alta; an extension of current restricted traffic zones; the pedestrianisation of areas and squares in Città Alta which today are used as car parks; the implementation of mechanisms to discourage non-residents from parking within the city walls, such as having to pay to park 24 hours a day² and increased hourly rates; and further integration of regional mobility systems with the car parks in

² August 2019 Report

Città Bassa to encourage people to take public transport and reduce the number of private vehicles in circulation. One of the efforts that has already been implemented is the upgrade of the historical funicular and of the bus Line 1, the latter being a strategic route connecting the airport/centre of Città Bassa/Città Alta, increasing its frequency and extending its hours of operation.

Report

Having noted the above, and having considered the detailed comments in the *ICOMOS Technical Review*, the paragraphs below will help provide additional detailed information on the matter.

In relation to the risk of **damaging the monumental Rocca and Monastero di San Francesco structures**, the ICOMOS Review highlights that:

“the monastery of Saint Francis and medieval Rocca (...) are located within the zone of the influence of the excavation (estimated at 30 – 50 metres from the excavation front). Therefore, they are prone to damage by the excavation induced settlements. In return, this could impact the conditions of integrity and authenticity of these structures which convey the OUV on a wider setting. The installation of a monitoring system equipped with various sensors (e.g. load cells, strain gauges, inclinometers, LVDTs), will help to understand the extent of this damage, as well as provide alerts related to the excavation safety. There are no data from the monitoring system (e.g. graphs) in the submitted documents, but only a few statements/comments regarding its performance. In particular, it is stated that the monitoring system shows no movements, which is not reliable when within the same submitted documents (e.g. in structural analysis computations) the calculated displacements are in the range of 12 – 25 mm. As demonstrated by many scientific studies, this range of settlements, although of small entity, is enough to cause damage in historical masonry buildings, as well as incur long-term damage to the affected structures.”

[...]

“The adverse impact on key attributes of this component of the serial World Heritage property is not acceptable”

[...]

“The submitted documents provide enough evidence to support the global safety of the structures in the vicinity of the excavation (e.g. the Rocca or the St. Francis monastery). However, this does not exclude the possibility of induced local damage (i.e. cracks). Hence, the fact that the monitoring system shows no active displacements nor developments in the existing crack patterns is not reliable. It is suggested to develop a mitigation strategy to reduce the potential damage in the structures considering short-term and long-term effects.”

To start, it is important to present a short summary of the most significant aspects of the plan, along with a **timeline of the main phases of the intervention**.

2004

- Execution of the first phase, consisting of diagnostic surveys (5 continuous core drilling and geophysical surveys) and the drafting of the Geological-Geotechnical Report. Based on this report, the rock mass involved in the dig was divided into two layers:

- A surface layer with rather poor characteristics covered by anthropic fill material that varies from 5 to 10 m in depth; the depth of this surface layer, including the fill material, is equal to about 1/3 of the total depth of the excavation site;
- Below the top layer is a 'fair-to-good' rock mass that extends down to the bottom of the excavation site.

The report includes the following recommended interventions to stabilise the excavation face:

- A bulkhead with mini piles and tie rods, completed by netting and shotcrete, for the outer layer and the fill material
- simple soil nailing of the underlying 'fair-to-good' layer.

2008

Excavation work began in October 2008. The executive plan for the excavation did not consider the indications found in the geological report and swapped out the bulkhead with tie rods (recommended for the upper layer) for soil nailing and the application of a layer of shotcrete with wire mesh (15 cm thick) to the excavation face. During excavation, some portions of the upper layer were strengthened exclusively with wire mesh and shotcrete (less than 15 cm thick), without the soil nailing included in the plan.

On 29.12.2008, a landslide in the upper layer of the rocky mass occurred. This landslide spread as far as the overlying fill layer and caused the work to be halted.

The excavation was thus conducted mainly from October to December 2008.

2009

- work to stabilise the site and prevent landslides;
- accumulation of inert material to stabilise the base of the wall below the landslide area;
- work to protect the base of the wall in stone that supports the terreplein of the Parco della Rocca. A reinforced concrete beam with mini piles and tie rods was made.

In addition, a new geological-geotechnical survey campaign was carried out (6 continuous core drilling surveys in addition to a new, more extensive geophysical survey campaign). The new planning phase for the excavation work also began.

2011

On 20.10.2011, the executive plan for the dig was concluded and the calculation models to design the support works was developed. The solution adopted according to the results of the diagnostic studies is precautionary and includes the creation of containing walls with mini piles supported by a series of horizontal beams in reinforced concrete, including active tie rods. Since the interventions to support the excavation face are permanent and the rock mass involved in the excavation is highly heterogeneous, the engineers decided to adopt safety factors that are much higher than those required by current regulations. They also decided to operate by following the procedures included in the '**Observational Method**', entrusting monitoring of the structural behaviour of the excavation site's supporting structure to an efficient **Monitoring System** made mainly of load cells on the heads of the tie rods and of strain gauges inserted within the rock mass. The Observational Method is based on a continuous comparison of the data generated by the calculation model and the actual behaviour of the structure being monitored. The plan was designed to keep the excavation face entirely detached from the reinforced concrete structure of the car park, thereby avoiding interference and 'hammering' phenomena between the two structures in case of an earthquake. This solution will make it possible to constantly monitor the excavation face and implement additional reinforcements as necessary.

2017

On 12.09.2017, excavation began again, faithfully adhering to the implementation methods included in the plan.

The Observational Method has proven to be a good choice as, during the excavation work, experts at the site came across a poor-quality portion of the rock mass, with characteristics that notably increased the deformations of the rock mass itself and the loads on the heads of the tie rods. In order to keep the chosen safety factors constant, the excavation safety works were strengthened using geotechnical models prepared in the planning phase.

2020

On 15.01.2020, the excavation was completed, including work to support the walls.

The Monitoring System, which made it possible to guide this delicate intervention, was progressively implemented during the subsequent excavation phases. Upon completion of the excavation phase, the following tools had been installed:

- 26 load cells installed on the anchor heads
- 24 strain gauges inserted within the rock mass
- 7 multi-base strain gauges within the rock mass
- 5 seismic detection units to monitor the vibrations caused by the work being on the houses near the work site and in the supporting wall of the terreplein of the Parco della Rocca
- 3 crack gauges in the supporting wall of the terreplein of the Parco della Rocca
- 4 crack gauges in the buildings around the work site
- 1 inclinometer in the supporting wall of the terreplein of the Parco della Rocca
- 1 rain gauge
- 53 targets for topographical surveys to detect movement of the excavation face
- 3 targets to monitor the movement of the supporting wall of the terreplein of Parco della Rocca.

Once excavation was completed, it can rightly be said that the most delicate part of the process was done in a completely satisfactory manner. Increasing the supporting works with respect to the initial plan has ensured that the safety factor value established at the start of the dig has been upheld. The unexpected geological issue encountered during excavation led to an increase in expenses and time required, but it did not, in any way, diminish the safety and security of the work.

Once the excavation was completed, all instruments began the adjustment and settlement phase, which should presumably conclude 80-90 days from the end of excavation.

IMPACT ON CULTURAL HERITAGE STRUCTURES

Supporting wall of the terreplein of Parco della Rocca

This ancient stone wall, found above the excavation face, is the only historical structure found near the excavation site. The wall has been monitored with particular attention during all phases of the works. In addition, its base was bolstered with a reinforced concrete beam with micro piles and tie rods. The wall does not show any signs of instability and the cracks which exist are directly related to its age.



United Nations
Educational, Scientific and
Cultural Organization

- Venetian Works of Defence
• between 16th and 17th centuries:
• Stato da Terra – western Stato da Mar
• inscribed on the World Heritage List in 2017

In particular, there is a crack on the section of wall that runs parallel to the excavation face. The varying measurements and the path of this crack have been monitored since the start of the project through two crack gauges, neither of which have detected any changes throughout the excavation process. Even the inclinometer installed on the wall to measure potential rotations did not detect any movements, just like the topographical targets that measure the horizontal and vertical shifts of the top of the wall. The seismic detection units installed on the base and top of the wall have made it possible to note that the vibrations caused within the wall by the excavation were negligible. This leads us to believe that the wall in question does not have any stability issues as a result of the excavation. It should be noted that the instruments mounted on the wall will be monitored throughout the lifespan of the car park, along with all other instruments installed on the excavation face.

The walls in Parco della Rocca, on the other hand, are quite far from the excavation site and thus are not at all impacted by it.

Monastero di S. Francesco

The Monastery of Saint Francis (Monastero di S. Francesco) is near the western side of the car park, where the excavation face is much lower in comparison to the central part. Its distance from the excavation face is such that there is very little concern as to potential damages resulting from the excavation work. The walls of the monastery were inspected carefully before and after the excavation, and no structural gaps or cracks were found in the walls closest to the excavation face.

Mura Veneziane

The Venetian Walls (Mura Veneziane) are located on the valley side of Via Fara and are thus quite far from the excavation site. Any type of structural interference between the excavation works and the Venetian Walls can thus be excluded. Even hydrogeological interference can be excluded, as the car park excavation site has not changed the hydrogeological properties of the area in any way. Even the visual impact of the car park will be mitigated after the construction of its covering is completed, so that only the entry door to the car park will be visible from the Venetian Walls.

In conclusion, the monumental structures of Parco della Rocca and the Monastery of San Francisco are not susceptible to damages as a result of the adjustment period required by the excavation, and their structural integrity and authenticity have not been altered by the excavation.

In relation to the observations made by ICOMOS regarding the monitoring system, please note the following:

Aside from the instruments installed on and in the supporting wall of the terreplein of Parco della Rocca, for which no movements have been detected (as previously observed), all other instruments installed on the excavation face while the work was being done (strain gauges and load cells) have detected variations of different amounts, depending on their position (i.e. on the floor plan/their height). In the initial excavation phase, the variations were less than expected when compared to the calculation models. When the excavation work reached the most-deformable rock, the variations exceeded the expected values, which resulted in a redesign and increase of supporting elements. Only via an analysis of the measurement variations was it possible to apply the Observational Method described above. The monitoring system is permanent precisely to ensure that the necessary security and safety conditions are consistently upheld. It should be noted that the Works Manager sends the data provided by the monitoring system to all engineers involved in the project. Each instrument includes a warning threshold and a subsequent alarm threshold.

Seeing as this monitoring system will be active for the entire lifespan of the car park, it will be possible to quickly detect any issues and respond accordingly.

In relation to the increased traffic caused by the car park, negatively impacting the conservation of Porta S. Agostino, the ICOMOS report highlights:

“This solution might help to decrease the traffic in other parts of the Città Alta, but at the same time it could create a concentration of vehicles in the area around the car park. It is not clear how the existing historic infrastructure will respond to this new traffic pressure. In return, this could also require further interventions to the existing infrastructure.”.

[...]

“Providing parking spaces for non-residents in the Città Alta will encourage people living in the surroundings and city users to come by car, which will augment traffic”.

[...]

“This parking infrastructure will increase traffic close to the component and its main attributes, in particular the impact of traffic on the Porta di Sant’Agostino, which must be crossed to reach the Fara car park, must be assessed”.

[...]

“The large capacity of the car park could concentrate the traffic flow in the track Porta di Sant’Agostino – Fara. This could pose a significant threat to the state of conservation of structures along this track related to pollution and vibrations due to increased car traffic”.

[...]

“It is advised to prohibit car traffic nearby the Porta di Sant’Agostino to prevent it from undergoing greater adverse impacts”.

In that regard, we would like to note the following:

OVERALL STRATEGY FOR ACCESS TO CITTA’ ALTA AND TRAFFIC AROUND PORTA SANT’AGOSTINO

The car park under construction is only one part of the overall strategy concerning the issue of access to Città Alta. This strategy also considers, in an integrated way, the issues of local residents, commerce and tourism. The Sustainable Mobility Plan (PUMS, which has already been adopted), the drafting of the Detailed Plan for Città Alta, and the new Local Zoning Plan (which is being launched), all combine or will combine different solutions within a decisively more organic, multifaceted framework with respect to some of the criticisms contained in the ICOMOS report.

First and foremost, public transport continues to play a central role in these strategies. Both the old funicular and the upgraded bus Line 1 (operating between the airport/centre of Città Bassa/Città Alta) have recently been the focus of consistent investments and enhancements in terms of their timetables, vehicles, and other various improvements. Since spring 2019, the operating hours and frequency of Line 1 in particular have been expanded, unequivocally responding to the existing demand for public transport.

The adopted Sustainable Mobility Plan (PUMS) further enhances mass transport options, through the creation of a new north/south bus line that passes through Città Alta, thereby connecting one of the stations of the future Valle Brembana tramway (in the Valtesse/Conca Fiorita zone) with the Bergamo Ospedale train station, already in operation and added to the future Ponte San Pietro/Bergamo/Montello metropolitan railway line. That new service, passing by Città Alta at the base of the car park in Via Fara, will allow public transport users to take the lift within the parking garage (or the pedestrian path through the new park that it will cover) and to directly access the city at the height of Piazza Mercato del Fieno.



United Nations
Educational, Scientific and
Cultural Organization

Venetian Works of Defence
between 16th and 17th centuries:
Stato da Terra – western Stato da Mar
inscribed on the World Heritage List in 2017

The relationship between local public transport and parking areas outside the walls also establishes Città Alta as part of a much larger context, amounting to a mobility strategy that optimizes the relationship with the car park structures in Città Bassa, which are greater in number, larger and less expensive than the parking garage being built in Via Fara. The response in terms of transport options for commuters, students, occasional tourists, and city users is thus already focused primarily on public transport and connections outside Città Alta, as desired by ICOMOS.

Concerning the level of traffic near Porta Sant'Agostino, a vehicular circulation plan aimed at reducing motor traffic around the city gate will be drafted, to be prepared in light of the findings of the traffic study that will be completed in the upcoming months and which will be integrated with the Sustainable Mobility Plan. Please note that the construction of the parking lot in Via Fara is expected to reduce traffic in any case, helping conserve Porta Sant'Agostino, thanks in part to the extended days and hours of the Restricted Traffic Zone, which includes the old town (made possible by the opening of the new car park), and by the local administration's desire to inhibit motor vehicles from passing through the city, which improperly involves the Porta Sant'Agostino-Porta Garibaldi section today.

ROLE OF THE VIA FARA CAR PARK

The Via Fara car park is thus part of a larger mobility framework that does not focus on this infrastructure as the sole way to meet the demand for accessibility to the old town. To the contrary, it is quite diversified, gathering various options in a broad, organic manner. In terms of subdivision of the number of parking spaces within the facility, it should be noted that there will be 469 total parking stalls. Of that total, 10 will be for disabled users, and 64 will be leased with 90 years of surface rights, with preference being given to residents or owners of businesses in the old town. The remaining 395 will offer various pricing formulas designed mainly for residents, business owners and employees working in the old town. The car park will also be the main structure offering parking places to hospitality structures (hotels, etc.) in the old town, via specific contracts with them.

In essence, the car park will mainly serve the old town and its businesses, meeting the needs of residents, business owners and even overnight tourists, i.e. unique categories in terms of transport requirements which are more difficult to direct to external parking solutions. This point is exacerbated by the layout of Bergamo, a city that lacks nearby car parks outside the city walls and which sits atop a steep hill. They are also categories that generate few entrances and exits in/out of the car park. The parking spaces that are 'licensed' to local operators also diminishes the number of spaces available for short-term, occasional use, which thus cannot be estimated at 395 spaces, but rather half or even less (i.e. <197).

TRAFFIC

In relation to the incessant traffic through and around Porta Sant'Agostino and Via Fara, it is possible that the construction of the car park will generate traffic and congestion in that portion of Città Alta, becoming the only accessible point of arrival for non-residents. However, this choice would:

- reduce traffic in other parts of Città Alta, as recognised by ICOMOS.
- enable the inclusion of Piazza Mercato Fieno and Via San Lorenzo within the permanent Restricted Traffic Zone within the old town, given the removal of the short-term street parking spaces.
- make it possible to manage data relating to the remaining capacity of the car park in real time, with the display of that information at the end of the entry road to Città Alta (Viale Vittorio Emanuele II), well outside the perimeter of the walls, with an eye towards smart mobility. When the car park is full, that will make it possible to re-route non-residents towards the numerous car parks available in Città

Bassa, eliminating the motor traffic that currently enters Città Alta and travels repeatedly along the city wall ring in search of a parking place.

- make it possible to apply parking rates that are much higher than present rates, with a maximum fee of €2.30/hour plus VAT, 24 hours a day, compared to the current €1.80 VAT included rate, currently only applied from 9 am to 7 pm.

These elements and those mentioned in the previous paragraph will reduce motor access to the old town via Porta Sant'Agostino, both in general terms and in the area in question, with downstream benefits for the conservation of the component and other nearby buildings, starting with Porta Sant'Agostino itself. Management of access to the car park will also be accompanied by an increase in the days/hours of the Restricted Traffic Zone, covering all of Città Alta (traffic is currently prohibited only on public holidays, and Friday and Saturday evenings during daylight savings time), with a subsequent reduction in motor traffic. Even in this case, with the Restricted Traffic Zone active and electronic monitoring in place, non-residents will be allowed to enter only if there are parking spaces available to them in the car park in Via Fara (and obviously only for customers of that car park).

The impact on mobility and traffic coming from the car park structure will be one of the topics of a traffic study that will be particularly focused on Città Alta. The Municipal Administration has decided to assign this study to a leading, specialized company through its subsidiary, ATB (Azienda Trasporti Bergamaschi), to which it has allocated specific financing from the Ministry of Infrastructure and Transport. The call for tenders for the assignment of the project has already been published and the Report will be available by summer 2020, if feasible considering potential delays due to the coronavirus pandemic.

Lastly, the section of Via Fara that the car park structure will face is currently part of through traffic that, taking advantage of the Porta Garibaldi/Porta Sant'Agostino axis, bypasses the normal route in Città Bassa. As clearly stated in the recently-adopted PUMS, it is the administration's intention to inhibit that unsuitable route and thereby further reduce the number of cars that habitually cross through Porta Sant'Agostino and nearby Porta Garibaldi.

On the topic of the improper use of Viale delle Mura as an outdoor car park, the ICOMOS report highlights:

"According to the new configuration, the Venetian Walls are designated to serve as an open-air parking area for residents – the major parking area of the Città Alta. The present project clearly affects the landscape setting in general as well these two structures, and hence it has the potential to affect the OUV".

[...]

"The use of the walls for car parking is totally incongruous with the character of the property; it represents a potential danger for its OUV and hampers the possibility to understand and enjoy them fully".

[...]

"It is not acceptable that the use of the walls as a car park is a basic element of the policy of the Municipality for mobility".

[...]

"It is advised that the State Party study a solution for the future elimination of open air parking and a project for the rehabilitation of the upper part of the walls as a green belt encircling the Città Alta".

[...]

"Car parking must be eliminated from the Venetian Walls. The State Party should study a solution for the future elimination of all open air parking places and a project for the rehabilitation of the upper part of the walls as a green belt encircling the Città Alta".

In that regard, it should be noted that occasional, short-term parking is still present in about 250 stalls along Viale delle Mura (about 210) and in the heart of the old town, in Piazza Mercato Fieno (about 40). Those parking spaces are entirely dedicated to occasional, rotational use, and no leasing or parking agreements are allowed. The perimeter of the Venetian Walls has, for many decades, been the site of various parking spaces dedicated almost entirely to access from outside the city and visitors, in addition to being a through road used for public and private mobility.

With the goal of reducing the flow of motor vehicles on a large portion of the city walls, the plan concerning the car park will make it possible to offer those parking spaces entirely to authorized, monitored users. In addition, the attribution of those parking spaces to residents will make it possible to clear inappropriately parked cars from specific historical squares in the city centre (Piazza Cittadella and Piazza Angelini). Once work is completed in Via Fara, it will be possible to appreciate their beauty and fully restore their use to pedestrians.

As far as changes to the plan and alternative solutions are concerned, the ICOMOS report specifies:

“the reduction in scale of this intervention would be beneficial”.

[...]

“It is suggested to evaluate the alternative of developing multiple smaller car parks (which could be located in part also outside the Venetian Walls or in the Città Bassa or in the vicinity of the motorway junction) compared to the current project of one large car park”.

In that respect, it should be specified that the scale of the intervention was established as part of the agreement that the Municipality of Bergamo and the concessionary company (Bergamo Parcheggi) signed in 2004, and it is closely linked to the sustainability of the financing plan approved at the time by the Municipality (the changes agreed upon by the parties in 2016 have partly revised the intended use of the structure, but did not reduce its scale or correct the Economic and Financial Plan).

As for alternative solutions, it has already been shown how the car park in Via Fara is only part of a more complex plan to manage motor vehicle parking, covering tourist access to Città Alta. There are numerous parking spaces in the lower part of the city, and tourists coming to Bergamo by car are directed through an efficient, integrated smart mobility system. The strategy of the municipal administration is, in any case, aimed at increasing such ‘alternative’ parking facilities: in early 2020 a large, new, free car park was opened near the motorway toll booth, served by a public transport line. Negotiations are currently under way with the owners of a private underground car park in Piazza della Repubblica in Città Bassa to expand capacity in the coming years. The car park is near the lower funicular station and the pedestrian route to Città Alta via the Salita della Scaletta; two Line 1 bus stops that go to Città Alta; and Viale Vittorio Emanuele II, which makes it possible to reach Città Alta via Porta Sant’Agostino by foot.

In regards to the failure to signal the construction of the car park, the ICOMOS report specifies:

“It is recalled (...) here that the car park project was not brought to the attention of the technical evaluation mission during the time of the nomination of the property, despite the fact that the project was ongoing at that time. In accordance with Paragraph 172 of the Operational Guidelines for the Implementation of the World Heritage Convention, projects with the potential to affect the OUV of World Heritage properties should be submitted to the World Heritage Centre. This is helpful before any decisions are made that would be difficult to reverse”.

On this topic, it should be noted that the approval of the project and the relative contract with the concessionary company were signed in 2004, while work began in 2008. It isn't so much a matter of 'new construction', as explicitly mentioned in paragraph 172 of the Operational Guidelines for the Implementation of the WHC. Instead, it is a project approved many years prior, which was added to all urban planning documents of the Municipality of Bergamo starting in 2000. For that reason, the current administration approved the variation executive project and arranged for its completion after the suspension of work due to the landslide on 30 December 2008, under penalty of litigation with the concessionary company, compensation for damages to the counter party and any resulting penalties for fiscal damages that would impact the municipal budget. In fact, the excavation site was even visible along the route taken during the assessment visit, as evidenced by the photographs taken as of September 2017.

As regards the heritage impact assessment, the ICOMOS report specifies:

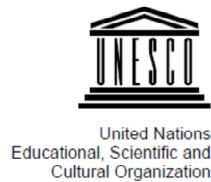
"It is necessary to perform a Heritage Impact Assessment (HIA) to study the impact of the car park project on the Bergamo component. This document is not yet available despite ICOMOS' advice in its previous Technical Review in September 2018".

In that regard, reference should be made to the note sent in July 2019, which specified: *'covering the request contained in the letter dated 7 November, the Municipality of Bergamo has started to prepare a heritage impact assessment (HIA) relative to the completion of the underground car park in Via Fara. That assessment will contain useful indications to make the project as functional as possible to effectively manage influxes of tourists and to reduce motor traffic to Città Alta, with the goal of protecting and enhancing the OUV added to the World Heritage List (WHL) as a component of the trans-national site.'* The same note also mentioned that the completion of the work was part of the larger framework of the municipal plan relating to the urban planning and mobility management aspect (Detailed Plan for Città Alta, PGT and PUMS). Lastly, the note specified: *'It is important to underscore that, due to the inevitable impact on the environment that they cause, each of these large-scale plans is subject to Strategic Environmental Evaluation (VAS), a procedure that includes many of the elements that characterise the Heritage Impact Assessment (HIA)'.*

Proposed table of contents for the Heritage Impact Assessment for the Bergamo Car Park near the 'Venetian Works of Defence between the 16th and 17th centuries: Stato da Terra - Western Stato da Mar' world heritage site.

Summary

1. Introduction
2. Assessment methodology
3. History and site description
 - 3.1 The 'Venetian Works of Defence between the 16th and 17th centuries: Stato da Terra - Western Stato da Mar' site
 - 3.2 Draft of the Statement of Outstanding Universal Value
 - 3.2 The component in Bergamo
 - 3.3 Features and context



3.4 Management

4. The Via Fara car park project

4.1 Recent evolutions

4.2 Associated developments

4.3 Compatibility assessments of the car park's construction with the historical, artistic and archaeological values of the heritage site by public authorities

5. Assessment and analysis of the impact of the car park's construction

5.1 Impact assessment on the Venetian Works of Defence and on its outstanding universal value (OUV) and other values

5.2 Public consultation

6. Mitigation measures and options

6.1 Mitigation measures

6.2 Use and destination options

7. Compliance with the Italian administrative and legal framework

8. Summary and conclusion

Attachments

9. Bibliography

10. Thanks and credits

Appendix 1: UNESCO procedures and the World Heritage Site

Appendix 2: Administrative history of the Via Fara Car Park

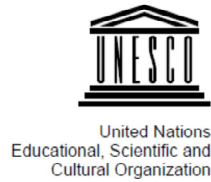
Appendix 3: Stakeholder consultation report

The Municipality has started a procedure to revise the Detailed Plan for Città Alta. In collaboration with the Centro Studi sul Territorio (Local Research Centre) at the University of Bergamo, from January 2020 to April 2020, the Municipality has engaged the residents of Città Alta in an interactive democracy project to revise the Plan. In order to get the input of different categories of inhabitants, meetings and focus groups were organized in Città Alta and other quarters, involving neighbourhood committees and associations, in addition to social networks, other associations and schools, to offer all citizens the chance to participate and express their opinions.

The Municipality is writing the revised version of the Local Zoning Plan, which covers the entire urban area within which Città Alta is found.

The Sustainable Mobility Plan was adopted on 16 May 2019 and, from that date up to 20 February 2020, every citizen could submit comments, which are a participatory tool to express proposals, suggestions and thoughts on the plan itself.

Of course, the end dates of these activities are being reviewed in light of the COVID-19 pandemic, by which Bergamo has been particularly hard hit.



• Venetian Works of Defence
• between 16th and 17th centuries:
• Stato da Terra – western Stato da Mar
• inscribed on the World Heritage List in 2017

As far as the landscape development project is concerned, the ICOMOS report specifies:

“The plan for the surface area of the underground car park under construction to be arranged as a green area, open to the public is appreciated (representing a connection between the wall and the city center), nevertheless, as high quality landscaping is crucial to complete the project, the design plans for this work is to be submitted to the World Heritage Centre before its finalization for review by the Advisory body ICOMOS.”

In that regard, we confirm the intention for the project to be assessed by the consulting bodies of the World Heritage Committee, pursuant to paragraph 172 of the Operational Guidelines of the *Agreement*.

As for the conclusions stated by ICOMOS, please refer to the paragraphs at the beginning of this report.