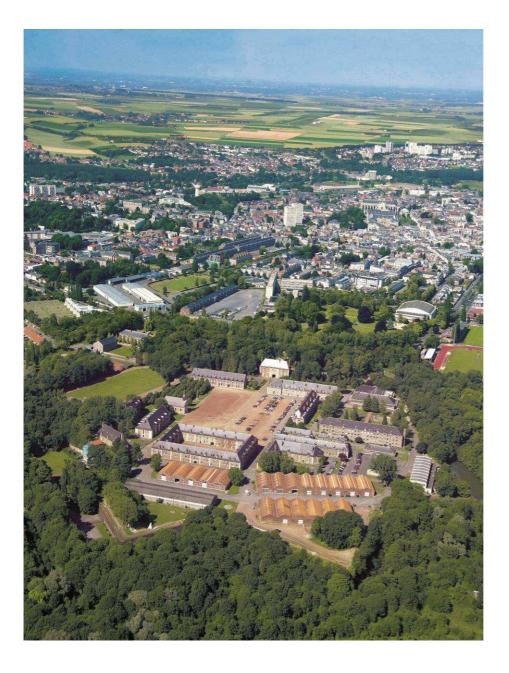
# BEST PRACTICES IN THE REDEVELOPMENT OF FORTIFIED HERITAGE Self-Analysis Report



At Fort Réseau des sites majeurs de Vauban (Network of Vauban's major sites)

25 September 2012

This assessment was prepared by the Vauban Network in conjunction with the urban community of Arras, the towns of Briançon and Longwy, the Besançon World Heritage Citadel-Public Institution and the Guillestre area Community of Communes.

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#### INTRODUCTION

#### The Network of Vauban's major sites

The Vauban network is a non profit association which has been created in January 2005 by a group of towns fortified by Vauban in order to prepare a World heritage nomination. Of the fifteen towns initially concerned, thirteen were World heritage listed in July 2008, as a serial property. These towns, which represent in reality twelve sites, continue cooperating through the Vauban network which has three main objectives:

- To coordinate the actions of each site related to the management of the World heritage property;
- To develop a highly performing network of exchange of experiences concerning maintenance, restoration, conservation, enhancement, governance and promotion of Vauban's fortifications;
- To develop a resource center of international importance for the management of fortified heritage.

The President of the Vauban Network is Jean-Louis Fousseret, mayor of Besançon and President of the Greater Besançon area. The association is based in the Besançon citadel.

The network meets thrice a year in a board meeting, in Paris or on site. Moreover, several steering committees gather representatives of each member site on a regular basis:

- Committee for promotion and enhancement;
- Committee for the management plans and the WH periodical report (see Good pratices, management of a fortified serial WH property);

The network has its own scientific committee which meets twice a year and which has an advisory function. Specialists of military architecture, of Vauban, of tourism, enhancement, vegetation, restoration and maintenance are thus regularly associated at the association's projects.

The Vauban network is one of the two French members of Icofort. It has a partnership agreement with the Paris Belleville national school of architecture (see Good practices).

#### The World Heritage serial property

Vauban, general commissioner of fortifications for Louis XIV from 1653 till 1706, built or completed about 160 sites, located today mainly in France, but also in Belgium, Luxemburg, Germany,

Switzerland, Italy and Spain. Twelve of them, all French, have been added to the World Heritage list as a serial property (named Vauban's fortifications), representing all the different characteristics of Vauban's works (towers, town walls, forts, citadels, new towns) in different geographical settings. They are globally very well conserved and express mainly Vauban's project. Built up by local materials, their aspect is quite different from one region to another (marble stone, bricks, limestone or granite).

Although many factors differ between the twelve sites, they have many others in common: the search for new uses compatible with this type of architecture, their nearness to the city (if not embracing it), the combination of stone and other



natural construction materials (earthen constructions and vegetation were part of the defence system!) and thus the challenge of maintenance of walls as well as of vegetation, ... Other main challenges resulting from the opening of the sites to the public are the management of traffic,

designing public safety measures and access facilities for people with disabilities, the combining of different uses in the same fortified area, the use of renewable energy in these protected sites... all with the highest respect regarding to the WH status.

Furthermore the Vauban network, responsible authority for the WH property as a whole, developed a methodology for management plans which could possibly be interesting for At Fort partners working on WH nomination files.

#### Methodology for the Self analysis report / regional stakeholder group

As one of the main objectives of the Vauban network is to encourage exchange knowledge and experience related to the management of fortified heritage, between it's members as well as at a larger scale, a virtual platform has been created in order to make such information available as widely as possible: http://sites-vauban.org/Resource-center (see also the good practice described in this SAR).

The good practices described in this SAR all follow the format used in the resource centre for sharing good practices. Thus, the information gathered through the SAR of the Vauban network has been made available online as well. Every good practice described in the SAR can be found here: http://sites-vauban.org/Online-documentation. The format used is the following:

- Title of the good practice
- Themes
- Contracting authority
- Project manager
- Partners
- Date/duration
- Location
- Summary (brief description)
- Evaluation (lessons learned, results...)
- Contact details for further information

A special committee has been created in order to prepare the Vauban's networks contributions to At Fort. Coordination is done by the Vauban Network Mission, members are project managers of Besançon, Arras, Longwy, Briançon and Mont-Dauphin. Together they agreed on the themes to be discussed in the SAR and on their contributions to the report.

Once the good practices were gathered in a draft SAR, the first meeting of the Regional Steering Group was held on 27 June in Paris. Seventeen people, representing the twelve member sites of the Vauban network, attended. Several topics were discussed on the basis of the various contributions made by those mentioned above, namely: the Arras redevelopment model, the Besançon study on vegetation maintenance and landscaping, safeguarding measures for the Briançon barracks, the redevelopment model with social housing societies in Longwy. The general elements of the At Fort project were explained and important questions and expectations formulated (see pages 10 and 58). All emphasized the need and the importance of exchange of experiences.

#### Brief description of the sites discussed in the SAR

#### Arras citadel: 72 hectares of fortified heritage under redevelopment

The citadel of Arras is located right next to the historical city centre of Arras (45000 inhabitants), in Northern France (close to Lille). The French Ministry of Defence sold the site to the Arras urban community (CUA). The CUA thus has the opportunity to redevelop a large area, covering 72 hectares, on a very strategic position. A general redevelopment scheme (sort of Master plan) has been defined

in order to determine its future functions and a time path. The overall approach is to transform the citadel, a "former hidden space" into a sustainable part of the city. Questions to be tackled are: how to preserve the outstanding universal value whilst introducing new functions, how to introduce renewable energy into the redevelopment project, how to attract the right private or public partners...



#### Besançon citadel and fortified town: an integrated approach of management

The citadel of Besançon (121 000 inhabitants) has become public property by the end of the 1950's. Since that time, this monument, covering 11 hectares and dominating the historical city centre comprised by the river Doubs, has become the most important tourist site of the Franche-Comté region, with about 270 000 visitors per year. Three museums (Museum d'Histoire Naturelle, museum of deportation and the ethnological museum) and a rich programme of cultural activities contribute to its renown. Regularly, rooms or buildings are rented for private occasions. The combination of all these activities and of the ten strategic guidelines needs a fine coordination and good knowledge of the opportunities and physical or historical limits of the site, to which access can be difficult in summer period when it's crowded.



#### Briançon town walls and mountain forts: conservation through development?

The site of Briançon covers the historical city, fortified by Vauban, as well as four other forts and two other fortified works situated in a spectacular mountain setting under quite extreme climate conditions (very high, very dry except for the snow between November and March) which contribute to the rapid deterioration of the forts for which no new functions have been found yet since the army left the place (progressively since the 1950's, one fort is still property of the Ministry of Defence). How to find private (or public) investors for these spaces of which only a small percentage of the total surface can effectively be re-used and to which acceding is a challenge for itself?



Longwy fortified town built from scratch: redevelopment through the "Tour de ville" approach

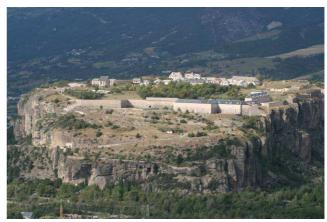
Longwy (14 000 inhabitants) is situated in a region suffering from the industrial decline and from its proximity to Luxembourg. In this economically difficult context, heritage is considered as the engine for redevelopment. The "Tour de ville" approach, developed to use the original and partially disappeared pattern of the town walls and its urban grid as the basis for an integrated approach of urban development, gives to this town built from scratch by Vauban the keys for combining



social housing with heritage conservation, the opening strategic viewpoints with social rehabilitation initiatives, etc.

Mont-Dauphin: a development strategy combined to WH-management

Situated at 30 km from Briançon, at an altitude of 1050 m., this new town of Vauban has never been entirely built; half of the inner part of this particular stronghold is thus conserved as open space. The site is shared property of the commune, the ministry of Culture, the ministry of Defence and private owners (about 150 people permanently live in Mont-Dauphin). Within the Vauban network, it is the site which best gave shape to the "cultural and spatial project", expressing its specific characteristics which distinguish Mont-Dauphin from the other WH-listed Vauban sites. This



development strategy, associating as many local stakeholders as possible, is called "Tending Vauban's garden today".

#### PERSPECTIVE OF THE GOOD PRACTICES ENGINEERING WORKSHOP AND OF THE ATELIERS

#### Possible subjects to be discussed (see also: Questions and queries p.58)

- Renewable energy in fortified sites: which technical measures, which arguments were convincing conservators of historical monuments?
- Solutions for accessibility (reducing private cars, access for people with disabilities)
- Safety measures
- Fundraising and public-private partnerships for redevelopment
- Modern and less expensive conservation techniques respecting the monument
- Combining different types of uses in the same area
- Involving the general public in conservation or development projects
- Educational projects (how to hand over the values of this heritage to new generations, but also how to establish sustainable and win-win partnerships with universities)
- Interpretation centres
- Digital applications to promote or enhance the fortified sites
- Ecological, efficient and low cost maintenance solutions for vegetation

#### Contributions

Amongst the twenty-four good practices presented in the SAR, the main contributions will concern the following topics:

- Development strategy
- Governance models / Site management
- World heritage management and compiling a nomination file
- Landscaping (conservational and enhancement measures)
- Various partnerships for maintenance

#### Possible subjects for an atelier hosted by the Vauban Network

All listed contributions can possibly be subject of the atelier organized by the Vauban Network in Besançon, end of May or June 2013, in combination with the Midterm event.

**GOOD PRACTICES** 

# Restoration of the fort du Randouillet barrack's roofs, Briançon

#### Theme: restoration, maintenance and use

**Contracting authority** 

Town of Briançon

**Project manager** Head architect for Historic monuments

#### Partners

French government/department and region

# Date/duration

2012-2014

#### Location

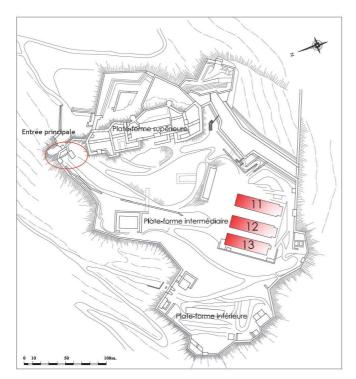
Fort du Randouillet, Briançon (French Alps)

#### **Background information**

The Fort du Randouillet is located on a steep and narrow rocky mound, distinguished by its vast size spread over a slope of 100 metres. The various buildings that make up this site were constructed to meet the requirements of military architecture of the time, and to adapt to the constraints of the site.

This results in a complex layout on three levels, similar to that of a medieval castle with its keep and inner bailey.

#### The barracks



Each of the three barracks is a rectangular volume measuring 54 m x 14.50 m and 9 m high, with a slate roof with a 45 degree pitch. Evidence shows that most of the original roof covering was of locallysourced slate which was therefore perfectly adapted to withstanding local climatic conditions. This slate was comparable to "lauze" (local roofing stone) because it was of a similar size and laid in the same way. However, in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, the local slates were replaced by slates from Angers, which were not thick enough to withstand the weather conditions, and therefore caused the roofs to deteriorate rapidly.

The appearance of the roof was changed by the different size and thickness of the slates and the way they were laid.



#### The rescue project

Work was urgently required as roofs had fallen in, chimney stacks were threatening to collapse and water infiltration posed a real danger to the immediate preservation of the buildings. Therefore, to render the buildings water-tight, the decision was taken to level the chimney stacks and cover the framework with corrugated iron sheets. This simple and cost-efficient solution is viable in the long-term, without comprising any future solutions and ensures that the buildings are made water tight immediately.

As the building methods for the roof structure have been properly documented, restoring it to its original state remains a possibility in the future.

#### **Evaluation**

Slate-coloured iron was chosen for its ease of application.

Leveling off the chimney stacks reduces the cost of restoration and in addition means that expensive and complex chimney flashing work is no longer required.

The general outline of the barracks will be retained as the overall relations of mass remain the same.

#### Contact details for further information

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April 2012

The site on 25/05/2012



The site on 19/06/2012

# Redevelopment of the parade ground, Briançon

#### Theme : restoration, maintenance and use

**Contracting authority** 

Town of Briançon

**Project manager** Head architect of historical monuments

#### Partners

French government/Department and Region

# Date/duration

2011-2012

#### Location

Briançon, within the walled town

#### Summary

Redevelopment of the parade ground to enhance a historic part of the town and revitalise an area for day to day use. Reconstruction of the stone walls of the well to Vauban's original design. Restoration of the parade ground- demolition – site preparation; repairs – cleaning; access; drainage; concrete structure; masonry- dressed stone; metal and iron-work; electricity.

Construction of the superstructure of the well - masonry – dressed stone; carpentry; roofing; metal and iron-work ; electricity.

#### Evaluation

Qualitatively: an important historic area in the centre of the old town of Briançon was revitalised, to encourage local pride in the area. Indeed, to this end, local inhabitants, and especially children, are already making good use of the square.

Quantitatively: a number of features designed by Vauban were restored, thereby ensuring the sustainability of the site.

#### Contact details for further information

Pierre Luc Montigny, manager of Briançon's local maintenance department

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# Restoration of the ravelin bridge at the France gate, Longwy

#### Theme: restoration, maintenance and use

#### **Contracting authority**

Town of Longwy

#### Partners

Project manager: Pierre-Yves Caillault, Head architect for historic monuments, Funding: French government, the Regional Council, the Local Council, the Community of communes (Grouping of Local authorities), the town

#### Date/Duration

2007 - chief architect's report 2008 - commencement of work 2011 - completion of work

#### Location

The thoroughfare which gives access to the fortified town located above the France gate .

#### Summary

Reconstruction of the fixed bridge; restoration of the drawbridge, the mechanism, the gate and the vaulted passageway.

Currently, there is no reason for the drawbridge to be raised. However, it is important that all parts of the mechanism are kept in good working order both to preserve historic knowledge and in case this situation should change in the future. By understanding how the drawbridge works, it can be released and raised again when desired.

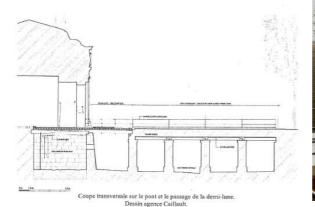
The drawbridge was raised by pulling on chains attached to the back of the counterweight framework. During the manoeuvre, the men had to work around the bascule and push it up until it was vertical. As the drawbridge could move when vehicles passed over it, a locking system composed of an iron bracket was added and is still in place today. As this type of system was not reliable, a fixed plank was placed over the bascule which allowed vehicles to cross in safety.

#### **Evaluation**

The drawbridge was raised much to the appreciation of all. Everyone, whether experts in the field or not, was interested in the method whereby a drawbridge weighing several tons is raised.

#### Contact

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# Besançon, Study of landscaping to enhance Vauban's fortifications

Theme : vegetation (conservation, maintenance and landscaping)

**Contracting authority** 

Town of Besançon

Partnes Aline Cœur Consultancy – landscape architects

Date/duration

12 months (July 2009 to June2010)

#### Localisation

Besançon - the town walls of the "Boucle du Doubs" a meander in the Doubs river encircling the historic centre, comprising the ramparts, bastioned towers and Corps de Garde; the town walls of Battant comprising Fort Griffon, the ramparts, and the medieval tower that Vauban incorporated into his defensive plan; the Citadel comprising the glacis of the Saint Etienne Front and the "buffer zone", namely Fort de Beauregard, Fort de Bregille and Fort de Chaudanne.

#### A unique, natural setting

Besançon enjoys a rare and distinctive geographical setting with a chain of hills along the River Doubs that are part of the last anticlinal fold of the western limit of the Jura mountain range. The strategic importance of the site was noticed at an early date. The Citadel was constructed on part of the anticline isolated from the rest of the fold by two magnificent transverse valleys resulting from the river eroding the limestone rock. A third of the land in the Besançon region consists of forest, unspoiled natural areas and parkland.

#### A comprehensive landscaping project

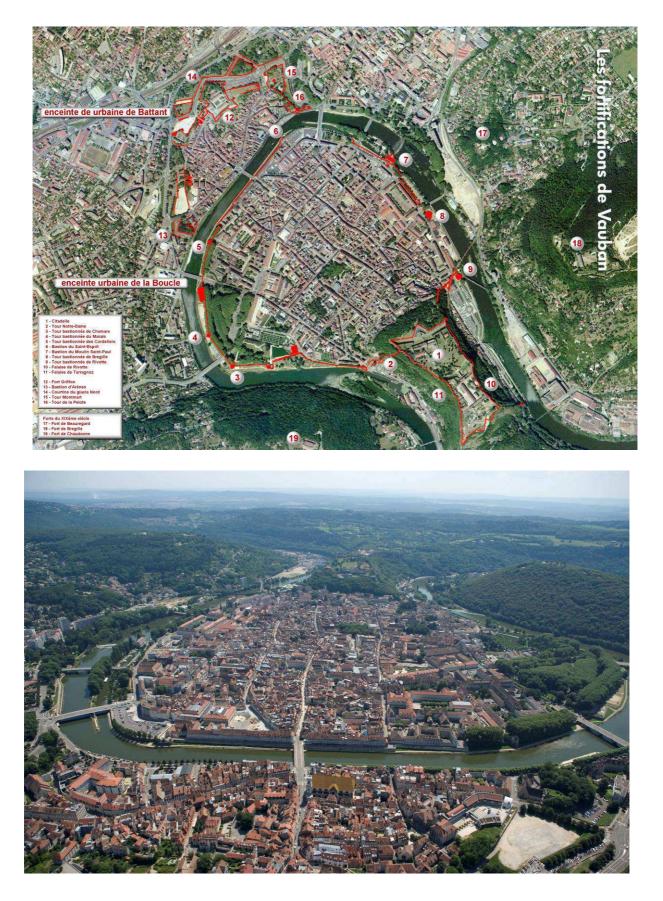
Because of this specific setting, it is essential to consider the complexities arising from the juxtaposition of fortified heritage and natural landscape. Therefore, vegetation was removed from the outset in order to open up the view over the Besançon landscape in a reciprocal way, creating mutual visibility. This vegetation clearing is now underpinned by a framework of coherent landscape development with different goals and other modes of action.

#### The landscaping study

These different goals are based on the study of landscaping to enhance the fortifications of Vauban carried out from July 2009 to June 2010 by the Aline Le Coeur Landscape Architects at the request of the town of Besançon.

The Study covered the Citadel, the urban areas of the Boucle and the Battant quarters and the "buffer zone". On completion of the survey, the Town was presented with a two- part document comprising an analytic assessment and different proposals for solutions, namely:

- controlling vegetation in the vicinity of the fortifications conservation,
- improving the legibility of the fortifications view points, a high walkway,
- problem areas whose current form and use spoil the enhancement of the buildings the place of the car and pedestrians,
- • controlling urbanization cone-shaped vistas, land issues.



# Measures carried out under the landscaping project are as follows:

# > Exposing outstanding architectural features

Location	Objective	Type of work carried out	Date	
CITADEL				
Saint-Etienne Park	To improve visibility of the Roi Tower and the fortifications	Selective felling of trees	early 2012	
Front de Secours	To improve visibility of parts of the fortifications	Clearing land below the fortifications	winter 2010 / 2011	
LA BOUCLE URBAN AI	REA			
Tarragnoz rampart	To improve visibility of the ramparts and Notre Dame Tower	Clearing the surrounding area	2007 to 2009	
Curtain Wall between the Marais bastioned tower and Cordeliers bastioned tower	To improve visibility of the rampart	Pruning low branches on the row of plane trees in the upper part	2008 and 2010	
Cordeliers Tower	To improve visibility of the eastern part of the tower	Felling of a young tree and removal of a small car park	2006 and 2007	
Rivotte gate	To improve visibility of the Rivotte gate , the adjoining rampart and the rocky strata of the anticline	Felling of trees	early 2012	
BATTANT URBAN ARE	Ā			
Battant Bastion	To improve visibility of the bastion and the Montmart Tower	Selective felling of trees	early 2012	
la Pelote Tower	To improve visibility of the tower	Selective felling of trees	early 2012	
BUFFER ZONE				
Fort de Chaudanne	To improve visibility of the ditches	Clearing the land	2011	

# Landscaping

#### The creation of view-points and two-way cone-shaped vistas

location	objective	Type of work carried out	Date
CITADEL			
Glacis Saint- Etienne	To clear the view of the old centre from the eastern terrace of the Saint Etienne front	Selective felling of trees	2009
bottom of the wall of the Tarragnoz escarpment	To clear the viewpoint	Selective felling of trees with log skidding by horses	2009
Buffer zone			

location	objective	Type of work carried out	Date
Fort Chaudanne	to clear the view of the old centre and the Citadel from the esplanade below the fort Chaudanne	clearing and selective felling of trees	Winter 2004/2005 and winter 2006/2007
Fort Chaudanne	to clear the view of the Anticline, on the Tarragnoz side and the Citadel from the area around the fort	clearing and selective felling of trees	Winter 2004/2005 and winter 2006/2007
Fort Beauregard	to clear the view of the old centre and the Citadel	selective felling of trees	Winter 2004/2005 and winter 2006/2007
Fort de Bregille	to clear the view of fort Griffon and the Battant urban area from the fort esplanade	Selective felling of trees	Spring 2011
Fort de Bregille	to clear the view of the Citadel from the fort esplanade	Selective felling of trees	Winter 2004/2005 and winter 2005/2006, summer/autumn 2007
Fort de l'Est des Buis	to clear the view of the town, the citadel and the front de secours from the esplanade of the monument de la Libération	Selective tree felling and log skidding by horses restoring the belvedere	Summer 2011

# Outstanding geological features

Location	objective	type of work carried out	Date
the Anticlinal cliff, Rivotte side, Porte Taillée gate	to improve visibility of the rocky ridge of Rivotte , and the Porte Taillée gate	selective clearing and felling of trees	Summer 2005 and autumn2007
the Anticlinal cliff, Tarragnoz side	to improve visibility of the rock strata	selective clearing	2008 and 2009

# > Enhancing the approaches to the fortifications

Location	Objective	Type of work carried out	Date
CITADEL			
Glacis Saint-Etienne	to improve pedestrian access to the Citadel	Development of the pedestrian stairway across the Saint-Etienne glacis	2007
LA BOUCLE URBAN AREA			

# **II. REDEVELOPMENT MODELS**

Tarragnoz Rampart	to rehabilitate the pedestrian access up to the Citadel To expose the shooting gallery To enhance the surrounding area	Development of the "du chapitre" square and the pedestrian walkway running along the ramparts	2010
Chamars Promenade	to improve legibility and link different buildings in the fortifications by creating a high walkway	Rehabilitation of a plant- lined pathway	2011

#### Contact

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# Longwy, conservation and landscaping mesures

### Theme : Vegetation (conservation, maintenance, landscaping)

#### **Contracting authority**

Town of Longwy

#### Partners

Consultants, Office Nationale de Forêts (Forestry Commission)

#### Date/Duration

Annual conservation measures:

- clearing vegetation from the walls of the ramparts and repointing by area.
- 2009 A survey of Safety and recommending means of controlling vegetation on the fortifications.

Landscaping measures:

- 2009 A Study by the Philippe Prost Architecture Practice: "Plantlife and the environment".
- 2009 2012 implementation

#### Location

Throughout the enceinte

#### Summary

A woodland management plan enhances fortified heritage and leads to its long-term viability; equally it preserves and enhances woodland slopes, whilst ensuring a number of objectives, namely :

that the ramparts can be seen from the valley,

that the Valley can be seen from the ramparts.

To this end, the choice was made to open up cone-shaped vistas at strategic locations.

#### **Evaluation**

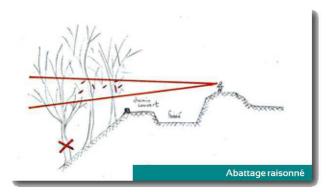
Poisitive results - clearing the walls annually helps control vegetation throughout the fortified enceinte.

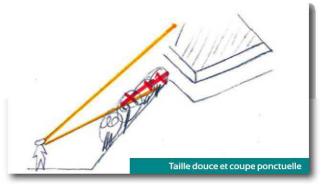
Work carried out following the safety assessment helped to strengthen the protection of the works and also ensure visitor safety.

Enhancement following the study by Philippe Prost made the site and its surroundings more attractive, thus rekindling interest and restoring the importance of the fortifications.

#### Contact

Longwy Town Council , Pascale GUSTIN, project executive : pascale.gustin@mairie-longwy.fr / +33 (0)3 82 44 54 10









# Briançon, stabilising the bedrock of the Fort des Têtes by injecting reinforced concrete

#### Theme : contemporary restoration techniques

**Contracting authority** 

Ministry of Defence

Partners Head architect for historical monuments

Date/duration 2011

**Localisation** Fort des Têtes, Briançon

#### Summary

Although the sites are located in different settings, deterioration processes are generally the same for all. Lack of maintenance is the trigger for damage due to the following natural causes:

- the geographical and geological setting, and the climate.
- water, which is the major cause of problems such as:-
- blocking of rain water drainage systems; water seepage causing saturation and leaching of mortar; the effects of hydrostatic pressure; and alternate cycles of freezing and thawing.
- The growth of vegetation; 🛛
- The weathering of the bedrock.

Deterioration of the exposed bedrock, often poor quality and subject to the same damage as masonry when protective topsoil has eroded away, plays a part in general wear and tear, and at times is the reason for the destruction of superstructure works.

The condition of the Briançon forts demonstrates the gradual deterioration of the defensive works and buildings. However, stabilising the bedrock is major work for specialised enterprises and generally beyond the scope of municipal workers.

As well as stabilising the bedrock, the facings also need to be repaired. There are several different solutions available, namely:

- o to continue using stone masonry in keeping with old repair work,
- $\circ$   $\;$  to construct reinforced concrete blocks anchored in the sound rock.

#### Contact

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# Architecture studios In partnership with the Paris-Belleville school of architecture (ENSA-PB)

#### Theme : new uses

#### Objective

Explorer le potentiel de redéveloppement d'un site fortifié et contribuer à la préparation des futurs architectes à ce type de mission.

#### **Contracting authority**

Network of Vauban's major sites

#### Partners

The Paris-Belleville School of Architecture and participating sites.

#### Date/duration

1st semester of the academic year from October to the end of January

#### Location

Introductory course at the school of architecture, two to three days on site, then development of the project at the school.

#### Summary

Since 2009, the Vauban network and the School of Architecture, ENSA-PB, have been striving together towards a better

study and develop proposals that meet the reality of the issue at hand.

understanding of the potential of fortified heritage redevelopment. The main focus of this work is the organisation of an annual 'architecture studio' based on a genuine redevelopment problem on one of the Vauban network sites. The programme is put forward by teachers who supervise around 20 students during their visit to the site and help with the development of their projects back at the school. The projects may contain proposals for building new constructions, modifying existing buildings, or even demolition, and are presented before two juries made up of architects, teachers and professionals, and local councillors from the sites and the Vauban network respectively. The results are then published and displayed in an exhibition.

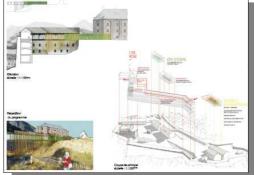
#### **Evaluation**

The School of Architecture, the Vauban Network and participating sites all consider that these Studios are a worthwhile and positive experience. The students bring new perspectives to the issues studied and their innovative approach gives rise to a number of interesting solutions. For the students, the fortified sites are a little-known field of study with their own specific complexities. Hence, the Studios cover practical and theoretical aspects of their training. The students need to be well-prepared in their subject matter beforehand to help strengthen the potential of their projects, and enough time needs to be allocated to allow them to familiarise themselves with the field of

#### Contact

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# Besançon, feasability/advisability study of acces to the citadel

#### Theme: traffic reduction

#### **Contracting authority**

Greater Besançon council

#### Partners

Town of Besançon, World Heritage Citadel – Public Institution, the Prefecture of Doubs

#### Date/ Duration

June 2011 / September 2012

#### Location

The study covers the meander of the Doubs.

#### Summary

The Citadel of Besançon is built on top of a rock closing the neck of the oxbow formed by the River Doubs. This steep-sided plateau covers an area 11.2 hectares and is located approximately 120 metres above the level of the river and town centre, and 371 metres above sea level.

More than 230 000 visitors visit the Citadel annually. The topography of the site and its highly seasonal attendance generate problems of access, especially as the capacity of parking close to the entrance of the site is not sufficient to meet the needs of visitors in high season. Thus, the Greater Besançon council, which is in charge of public transport, decided to carry out a survey on access to the Citadel.

The n ° 17 bus service runs to the Citadel all year round using standard 70-seater vehicles departing from the Chamars car park (at the Saint-Jacques transit hub). Although this service is invaluable, it depends on people arriving by car and is badly co-ordinated with other public transport. In addition, this bus service can only meet part of the demand during the high season.

To boost this service, the CAGB would like to implement a new, more environmentally-friendly means of access which is both innovative and attractive, and which would help make Besançon more popular nationally and even on a European level.

The CITEC Engineering Consultants (Ingénieurs Conseils) (Geneva - Switzerland) is currently carrying out an advisability and feasibility study for a relevant mode of transport for both visitors and employees to access the site.. An analysis of different modes of transport gave the following results:

The car (46.1%) is the most widely used means of transport to the Citadel, followed by bus (29.9%) and on foot (22.7%). Not many people come by bike or motorbike. As the visit of the Citadel takes an average of 3 to 4 hours, there is a very low turnover rate of cars in the Citadel car park.

The CITEC consultancy has put forward proposals for new means of public transport. Local councilors are currently interested in three of the suggestions, namely:-

- 1. an interior lift with double horizontal access from the river canal tunnel,
- 2. an exterior lift connecting the Rivotte Gate to the Rue des Fusillés, then escalators taking you up to the Citadel,
- 3. an automatic cable car connecting the Rivotte Gate to the Saint-Étienne Front.

Accurate financial estimates (investment and operating costs) are currently under development and will enable local councillors to select a potential mode of transport.

# Evaluation

A new means of access to the site would help enhance the attractiveness of the Citadel of Besançon. However, the problem is very complex - accessibility has been a recurrent issue for several decades now.

#### Contact

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# Restoration of the breaches, Longwy

#### Theme: sustainable development / waste reduction

#### **Contracting authority**

Town of Longwy

#### Partners

Pierre Bortolussi, Head architect of historical monuments Funding : French government, regional council, general council, the town général, ville

#### **Date/Duration**

2012 – 2015

#### Location

Throughout the fortified enceinte

#### Summary

The fortifications suffered extensive damage during sieges in 1792, 1815, and 1871 and severe destruction during bombardments in August 1914.

The popular choice for restoration is to preserve the current layout of the fortifications.

The facings have been damaged on several occasions, at times severely, since they were constructed by Vauban.

The stronghold has thus had to adapt to both good and bad developments in the art of war, from the campaigns of Louis 14<sup>th</sup> up to the Second World War. Therefore, the problem that arises is how to retain all of these layers of history whilst ensuring strict conservation of the ramparts.

Hence, the bossed facings that disappeared when the breaches collapsed will be restored to their original state.

The dressed stone which was heavily damaged by pieces of shrapnel will either be replaced entirely or in part by inserting plugs. Stones that can be conserved with no risk will be kept in their current condition thus serving as evidence but will be returned to their original position. Areas of repair following sieges or more recent restoration work will be conserved if their current condition allows.

#### Contact

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#### **II. REDEVELOPMENT MODELS**



# Citadel of Arras, land management in the framework of the Urban Community redevelopment project

#### Theme: public-private organisation

#### **Contracting authority**

Arras Urban Community

#### Partners

The town of Arras, by the loan of equipment, staff, communications and press for the organization of events and activities such as the Main Square Festival, a horse competition, a 'petanque' tournament, and 'Heart of the Town' tour.

#### Date/duration of work

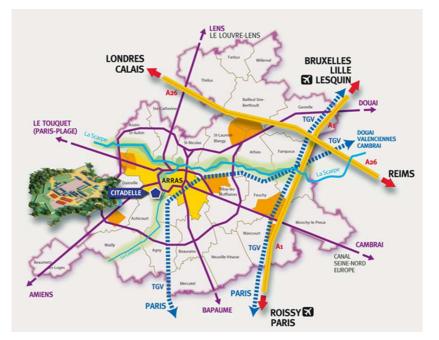
The Citadel of Arras was transferred to the Arras Urban Community (CUA) in June 2010.

The Citadel was open to the public on Saturdays and Sundays only between 2 April and 16 October 2011with access to a limited area around the parade ground.

However, the Citadel has been open to the public daily since the end of April 2012.

There will be several different phases of conversion of the citadel, expected to take up to approximately 2030 to complete.

#### Location



#### Summary

The CUA, owner of the Citadel since 2010, is now responsible for managing all aspects of the site including development, maintenance of public spaces and communications. The Citadel is a private property belonging to the urban community of Arras, and is open to the public. The CUA, limited by time and the sheer extent of this heritage (72 hectares of military wasteland,... of square meters of useful surface area), intends to implement the master development plan by putting some buildings and land up for sale or rental, with the long-term objective of transforming the Citadel into a distinct neighbourhood in the town.

It has developed a comprehensive communication campaign regarding the future of the site targeting promoters, local stakeholders and the general public as evidenced by the meeting of consultation held on the weekend of 24 and 25 April 2010 which attracted 9 000 participants. 5,000 questionnaires were duly returned.

The Urban Community has started off the conversion process by redeveloping a block of flats into offices to house all its departments.

As it is important to ensure that the neighbourhood functions smoothly and harmoniously in the long-term, that is in about 15 years time, some means were drawn up to this end:

- a set of specifications for the transfer of buildings and land,
- a local development plan (PLU) by CUA departments,
- sets of specifications related to the development of the Citadel
- a set of regulations for the use of the Citadel.

#### **Evaluation**

Local inhabitants have been encouraged to take an interest in the site through open days and events. The Authority has also managed to create favourable conditions for investment, and to sell and rent buildings or land, while ensuring the coherence of the project in the long term.

#### Contact details for further information

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Cf bibliographic references for a brochure for potential entrepreneurs

# Arras citadel, redevelopment project with connexion to the historical city centre

#### Theme: defining and carrying out the development strategy

#### Objectives

To transform the 72 hectares of military wasteland near the historic centre- of Arras (45 000 inhabitants), recently transferred to the community, into a distinct neighbourhood in the town.

#### **Contracting authority**

Arras Urban Community

#### Date/duration of work

Town planning and investment projects are selected by a Steering Committee (made up of the town of Arras, the Prefecture, the Arras urban community, STAP, and the tourist office).

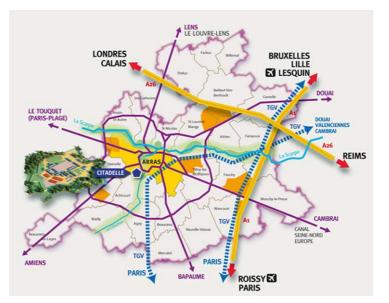
They are then studied by the Philippe Prost architecture agency in conjunction with the CUA technical departments and the final selection is made depending on both the relevance of the programme and if investors or developers can implement renovation respecting the principles of sustainable development.

#### Date/duration

The army left the Citadel in July 2009 and it was transferred to the CUA in June 2010. A master development plan was drawn up between September 2009 and June 2011.

The implementation of this project requires different phases of work scheduled over the short-term (2012-2014), mid-term (2015-2020) and long-term (after 2020).

#### Location



#### Summary

An extensive programme for converting the Citadel and its surroundings has been underway since September 2009 to transform this former military site (with 330 years of military occupation) into a genuine neighbourhood in the town of Arras, full of life and culture and with a diversity of functions including offices, housing, shops, leisure activities and local services. A master development plan was presented at public meetings on the 22 and 24 June 2011 to collect comments and to interest local inhabitants in the project. The local urban planning scheme (PLU) is currently being revised so that the Citadel can accommodate the new uses that are planned.

Since late April 2012, the Citadel site has become an open area in the immediate vicinity of the town centre. The first occupants are beginning to make themselves at home including the local CUA departments, and the 'acrobranche' (Tree top adventure park). Traffic and car parking are an integral part of planning.

One of the most important features of this master plan is the creation of a green and vibrant square, "echoing" the architectural squares in the town centre.

#### Evaluation

Most of the existing buildings have been preserved (and safeguarded as historical monuments) and are subject to extensive studies by one or more investors or developers.

The marketing of some buildings will contribute to funding structuring facilities and allow in the short term to:

- enhance heritage by making the work of Vauban more legible and easier to understand,
- enhance the ramparts and make the surroundings much safer,
- create urban public spaces in keeping with the woods and town centre of Arras,
- encourage access to the citadel using alternative means of transport.

The CUA is converting a block of flats, built in 1998, with a surface area of 2600m2, into a business centre, thus meeting demand for rental offices of sizes ranging from 50m2 up to 400m2. As well as income generated for the CUA within the next 5 years, mixed use is encouraged with the offices accommodating businesses, associations and governmental organisations such as PFM radio, Youth Protection and the regional centre for books and letters. The offices are due to be completed in July 2013.

#### Contact

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# Besançon, strategic planning and citadel management

# Theme: strategy and development

#### **Contracting authority**

World Heritage Citadel - Public Institution

#### Partners

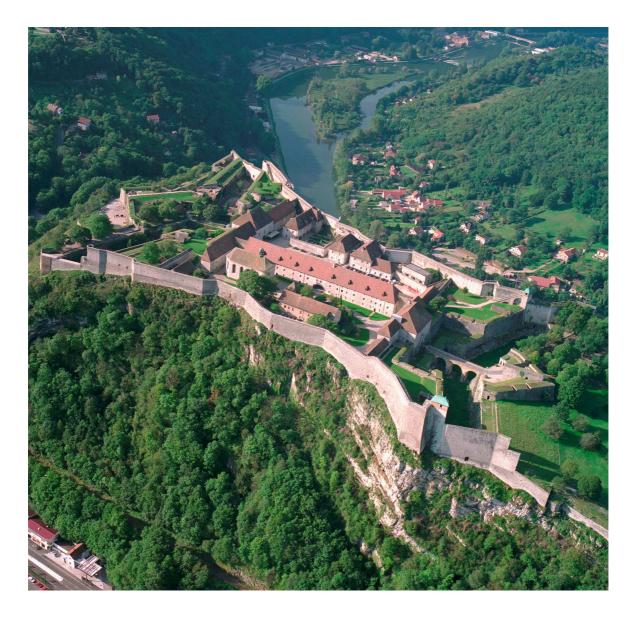
The town, the French government, Department, Region, Geater Besançon area and a number of private partners

# Date/duration of work

2011-2015

#### Location

The Citadel (primarily) and other Vauban fortifications in the town



#### Summary

After several studies and many themed working group meetings held from 2008 to 2010, a scientific, cultural and tourism project was defined and a new way of governance established.

A dual perspective was drawn out, namely to strengthen the balance between historic heritage and natural heritage and develop a policy of events organization on one hand, and to consider the UNESCO world heritage fortifications in Besançon globally on the other hand.

In September 2010, the Municipal council decided to create a public institution chaired by the mayor in order to bestow a scientific, cultural, heritage and administrative unity to this ensemble. Since 1 January 2011, all 76 members of staff, and their projects, from the three previously distinct structures have joined forces, namely the municipal management of Citadel museums, the Citadel semi-public company and the municipal Mission Vauban.

This institution has the following tasks:

- $\circ$   $\;$  To define and implement the scientific, cultural and tourism project,
- To manage the site and the three museums that are housed there (the Resistance and Deportation museum, the County museum, and the zoo, insectarium and aquarium,
- To ensure day to day operations of tourist facilities such as the ticket office, shops and restaurants; visitor reception, safety, maintenance and upkeep,
- o To organise cultural, educational and tourism activities and events,
- o To enhance the site and the museums, ☑
- $\circ\,$  To monitor restoration work of the buildings and the Vauban fortifications commissioned by the Town,
- To provide communications and promote the site.

As owner of the premises and museum collections, the town is responsible for all related charges.

The agreement of means and objectives signed for five years between the town and the public institution provides ten strategic guidelines, including:

- preserving and enhancing the UNESCO World Heritage site;
- ensuring coherency of the site based on three themes related to the priorities of UNESCO (history and society, biodiversity and preservation of rare and endangered species, and the relationship between the arts and heritage);
- establishing an interpretation trail in the Citadel and historic town and developing tourism.

The strategic project 2011-2015, adopted in March 2011 by the Board of Directors of the Public Institution, sets out these guidelines in 31 areas of work.

#### **Evaluation**

The first results arising from the coherency of management and the project could be seen as early as 2011, when the number of visitors to the Citadel increased by 10% to 283 000 entries, including 257 000 visitors in the part of the site with an admission fee.

#### Contact

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# Longwy, 'Tour de ville' project

#### Theme: organization of the redevelopment project

#### **Contracting authority**

Longwy Town Council

#### Date/duration of work

Phase 1 (April-May 2009): inventory and stakes Phase 2 (July 2009): projects to enhance a strategy. Phase 3 (October 2009): from concept to action: a master plan for a comprehensive project.

#### Location

The fortified upper town, the fortified town walls, that are visible and hidden to view.

#### Summary

Starting from the observation that only half of Vauban's hexagonal enceinte is still standing, the



other half being buried under rubble and now urbanized, the municipality launched a study in 2009, called the "Tour de Ville" or "tour of the town" consigned to the Philippe PROST Architecture Practice.

Made up of fortifications, woodland, roads, private housing and social housing estates, the tour of Vauban's town today resembles a circuit of places, in varying states of repair, just strung together with nothing in common.

How can we design an urban and landscape route that will give the upper town of Longwy a sense of purpose again? How can we preserve the part that still exists and explain the missing part? The town we can see and the town that is hidden to view gives rise to a whole series of issues that are discussed in phase 1" inventory and stakes", with solutions to the problems presented in phase 2 "projects to enhance a strategy'. A proposal for a management plan has been drawn up, where each problem is associated with one or more objectives and the means to attain these objectives, ranging from urban landscaping or architectural enhancement to the scale of a whole district. It is a question of considering what already exists and to enhance it by finding out what used to exist.

#### **Evaluation**

The results of the study conducted by Philippe PROST in collaboration with councillors and council departments were presented to local inhabitants during the heritage days on the 19 and 20 September 2009 in the form of canvases (3x4m) hung up in the town. The councillors provided a commentary and discussed what the town would be like in twenty years time with the inhabitants. Philippe PROST also gave an opening lecture at the heritage days. Local inhabitants were very interested in the study.

#### Contact

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# Longwy, collaborating with social housing authorities

#### Theme: development strategy

#### **Contracting authority**

Longwy Town council

#### Partners

Consultants MMH social landlords (local authority housing)

#### Date/Duration of work

2009 - Phillipe Prost Study 2012 - guideline plan 2012 - archaeological survey 2013 -2023 –work carried out

#### Location

North-eastern and south-western districts of the fortified town

#### Summary

Voltaire, the district to the east of Longwy, is built on the remains of two ravelins and a bastion. It is difficult today to guess the outline of the fortifications because of damage and destruction from the First World War and the reconstructions of the 1960s. However, there is no doubt that a good part of these fortifications remain beneath the blocks of flats. The architect, Philippe Prost,



has put forward a proposal to redesign the stronghold of Longwy through landscaping and urban development thus restoring its identity. It also aims to improve the quality of this district, to create an authentic urban environment and to refurbish the areas that have been left to abandon.

The objectives to redevelop social housing, to encourage mixed use in the town centre, to enhance the fortified heritage and to mitigate social divide all converge through the implementation of this initiative which consists in a common definition of demolition and reconstruction policies between the town and the social landlords.

Through the choice of the location and orientation of the new constructions, the original outline of the ramparts will once again become legible in the urban fabric.

#### **Evaluation**

Positive results; the local inhabitants were clearly very interested in the project. They are devoted to their home neighbourhood and will now also learn about the history that links them to Vauban's fortifications.

#### Contact

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# Mont-Dauphin, Tending Vauban's garden today

# Theme: development strategy

# **Contracting authority**

Mont-Dauphin Town Council

# Partners

Technical partners: jardin de salagon (Salagon garden) , conservatoire national botanique alpin de Gap-Charance

(the Gap Charance National Conservatory Alpine Botanic Garden), jardin alpin du Lautaret (Lautaret Alpine Garden), the Pays Guillestrin association for research into diet.

Financial partners: the Region of Provence-Alpes-Côte d'Azur, FEDER, the Community of Communes of the Guillestre area (CCG).

#### Date/duration

September 2011 to August 2013: launch of the project

#### Location

Commune of Mont-Dauphin, Hautes-Alpes, France

#### Summary

The stronghold of Mont-Dauphin, together with 11 other sites, has been a UNESCO World Heritage Site since July 7, 2008, for the fortifications of Vauban and as such, has a commitment to preserving and enhancing its heritage including developing a local cultural project. The Mont Dauphin cultural project has the theme of 'food and supply in a mountain stronghold'.

The project currently underway is the creation of a historical and cultural garden:

- 1 The preservation and cultivation of "Hautes-Alpes" plants and ancient varieties of cereals and pulses (research into diet in the Hautes-Alpes during the 17<sup>th</sup> and 18<sup>th</sup> centuries );
- 1. 2. Economic development of the stronghold including baking a 'Vauban' loaf of bread, opening a visitor centre all year round with cultural events and activities, and setting up a money-making venture in the future namely a kitchen for preparing produce from the garden.
- 2. Support for the creation of closed loop economy based on cultivating ancient varieties (more varieties of seeds in the garden, teaching local farmers, preparing produce and selling it at the stronghold).

Measures carried out:

- research into diet
- a study for the design and development of the garden
- construction of the garden at the former Rectory (terrassing, cutting down trees, etc.)
- hiring a full-time horticulturist
- refurbishment of part of the former Campana barracks (accommodation, workshop, soldier's room and cultural visitor's centre)
- test of recultivating an ancient variety of rye from the Queyras and making it into bread

#### Contact

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# Besançon, partnership with the 19th engineering regiment for control and maintenance of vegetation

### *Theme: modes of maintenance*

Contracting authority

World Heritage Citadel-public institution

Partners Town of Besançon

#### Date/duration of work

Renewable annually by tacit agreement

#### Location

The citadel of Besançon

#### Summary

The town of Besançon, the Citadel and the 19th Engineering Regiment have forged and maintained strong ties for many years. 20 years ago, on 8 June 1991, they signed a twinning agreement. Thus, in view of the testimonies and links of friendship that have always existed between the local inhabitants and the soldiers of the garrison, the town of Besançon, the world heritage Citadel-public institution and the 19th Engineering regiment have signed a partnership convention to develop conservation and enhancement measures of the heritage bequeathed by Vauban, creator of military engineering.



The overall objectives of the convention are to: -

- support the conservation and enhancement of the UNESCO World Heritage site .
- maintain the technical skills of the military personnel of the regiment and improve their sports training,
- develop cultural, heritage and historic collaboration with the 19<sup>th</sup> Engineering Regiment's traditions unit.
- make the knowledge of military heritage more accessible to the general public through enhancement measures such as lectures and exhibitions and conservation initiatives such as exchanges of best practice.

In terms of the convention, the 19<sup>th</sup> Engineering regiment agrees to :

- 1. provide a team to carry out maintenance work and clean up the ramparts and fortifications once or twice per year by clearing vegetation and removing weeds, scrub and undergrowth etc. to thereby help conserve and enhance the ramparts and fortifications,
- 2. provide the World Heritage Citadel-public institution with a projected schedule for these maintenance measures at the beginning of each year where possible,
- 2 coverany costs for equipment and military personnel needed for carrying out these measures.
- 3 provide he necessary skilled supervision to ensure that these maintenance measures in conjunction with the World Heritage Citadel-public institution are carried out properly.

A plan of the location of the measures, on the site of the Citadel, is developed with the General Manager of the Citadel, or his representative, and meets the constraints of national and prefectorial regulations and inspection of work for the Citadel (decrees for the protection of historical monuments and the site; decree for the protection of the habitat of the Peregrine Falcon; and prior declaration of any work on all of the outer walls of the enceinte of the ramparts).

In return for services rendered, the Public Institution grants all Regiment personnel and their families (spouse + minors) a free guided visit of the Citadel annually.

The institution also undertakes to study, pursue and implement joint cultural, historic and heritage enhancing measures each year, in collaboration with the 19th Engineering regiment's traditions unit.

#### Contact details for further information

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# Besançon, young international volonteers initiative

Themes: voluntary work, development and enhancement

#### **Contracting authority**

Town of Besançon

#### Partners

The Solidarités Jeunesse (youth solidarity) Association represented in the Franche-Comté region by the Beaumotte Centre.

#### Date/ Duration of work

4 to 25 July 2009

#### Location

Fort de Chaudanne, bastioned fortification located to the south-west of the Citadel of Besançon.

#### Summary

The Fort de Chaudanne was listed as a Historical Monument on the 30<sup>th</sup> May 1996 and is one of the elements in the defensive system that protects the Besançon citadel rock bar.

This bastioned work was the subject of restoration for three weeks when some twenty young voluntary workers from 8 different countries (South Korea, Serbia, Armenia, Japan, Ukraine, Spain, USA, and France) carried out improvements to the fort by repairing the walls, clearing vegetation, securing the ditches and building steps. Work resulted in the creation of a discovery trail and a panoramic vista of the old centre of Besançon.

The town of Besançon signed a partnership with the Solidarités Jeunesse Association and allocated a budget of  $\leq 20\,000$ , to help welcome these young volunteers. All public stakeholders in the town of Besançon were involved to ensure that the international volunteers' stay was a success - the army lent them camp beds, the Greater Besançon Community organized a shuttle service, and the National Police let them use their showers. Visits to local museums such as the Museum of Time or the Museum of Fine Arts and Archaeology also allowed the young volunteers to discover the cultural wealth of the Doubs department.

#### **Evaluation**

This international initiative generated a lot of media interest and also a cultural exchange between the local inhabitants and the foreign volunteers. The presence of the young voluntary workers from three different continents gave an international dimension to the architectural heritage of the town. Finally, it added to the enhancement of all of the Vauban fortifications inscribed on UNESCO world heritage.

#### Contact

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# Besançon, educational rehabilitation initiative

Themes: daily maintenance work, social rehabilitation

#### **Contracting authority**

World Heritage Citadel – Public Institution

Partners

The town of Besançon

#### Date /duration of work

2011 to 2013 This contract may be renewed twice for the duration of one year each time.

#### Location

Citadel of Besançon

#### Summary

During spring 2011, the World Heritage Citadel -Public institution launched a public service contract for cleaning, vegetation clearing, goods handling and minor everyday jobs. The aim of this initiative is to foster employment opportunities for people with social and professional difficulties, by application of article 14 of the public procurement Code. (Code des Marchés Publics).

The "Association Départementale du Doubs de Sauvegarde de l'Enfant à l'Adulte" (ADDSEA) (the Doubs Save the Children and Adults Association) responded positively to this offer by enhancing its educational rehabilitation initiatives. ADDSEA is a private legal association for social welfare, and helps young people of 18 to 25 years who are experiencing particular difficulties in rehabilitation or access to employment; namely long-term unemployed young people, young disabled workers who have been unemployed for longer than a year, young people who have been in trouble with the police, or have social work involvement.

These initiatives aim to help improve self-esteem and give access to training leading to qualifications.. Every year, 42 young people sign a 6-month contract that can be renewed once, in view of rehabilitation through paid employment.. This may often be their first real work experience that they can later justify on their curriculum vitae.

Three days a week, a team of six youths, supervised by a specialized technical facilitator, works at the Citadel of Besançon where they gain experience in different maintenance trades namely: cleaning, painting, moving, and carrying out repairs, etc. There is a weekly programme of work which helps the young workers to restructure their lives -they learn to get up in the morning and arrive on time, they learn how to work as a team and how to be organized, to follow instructions and gain skills.

A social worker supports these young people with problems on other days of the week to help them start making plans for their future such as obtaining housing or passing their driving license, looking for a training course or a job, etc. Assessments are also conducted every two months to determine progress made and awareness of how much effort has been put in.

Each youngster writes a self-assessment report of the tasks performed during his stay and at the end of his contract is issued with a certificate of skills achieved.

#### Assessment

This partnership between the ADDSEA and the Citadel is mutually beneficial. The Citadel benefits from a revitalization of its green spaces. The young workers from ADDSEA acquire their first professional experience in an important environment that has enhanced their self-esteem- a cultural

World Heritage site. The work at the Citadel allows them to gain self confidence and develop their professional skills.

### Contact

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# Besançon, maintenance carried out under the Community Service Scheme

Themes: maintenance, social rehabilitation

#### **Contracting Authority**

World Heritage Citadel – Public Institution

#### Partners

- Service de Réparation Pénale (SEREPE) (Criminal Reparation Department)

- Service membre de l'Association Départementale de la Sauvegarde de l'Enfant à l'Adulte (ADDSEA (Save the Children and Adults Association)

- Protection Judiciaire de la Jeunesse (P.J.J) (Legal Youth Protection)

- Services Pénitentiaires Insertion et Probation (S.P.I.P)(*Criminal Integration and Probation Department*)

#### Date/ Duration of Work

The citadel of Besançon, through political will, is a registered site for Community Service and has accepted young offenders on placement for over 20 years now.

Every month, an offender works at the Citadel thus benefiting society through reparation measures.

#### Location

Citadel of Besançon

#### Summary

The Citadel of Besançon accepts two types of offenders:

- **The Youth Criminal Reparation Measures**, provided for in the Act of 2 February 1945, amended on 4 January 1993, can be ordered by the Procurator of the Republic, the children's judge or the Juvenile Court. This legal measure is educational and aims to raise awareness of criminal law, the consequences for the offender of breaking this law and the consequences for society. The length of this punishment can vary between 7 and 35 hours.
- The T.I.G. or Community Service Scheme for adult offenders was introduced by the Act of 10 June 1983. Community Service is an alternative to a prison sentence and consists of non-paid public service work within an association, public authority, Public Institution, or private legal entity. The offender thereby continues to assume his parental, social and tangible responsibilities while working for the benefit of the community. In this way the Courts do not have to pronounce short prison sentences The length of Community Service may vary between 20 and 120 hours for a minor criminal offence and between 440 and 210 hours for a major misdemeanor.

The citadel of Besancon works closely with the Service de Réparation Pénale (SEREPE), (Criminal Justice department), which is a member of the "Association Départementale de sauvegarde de l'Enfant à l'Adulte" (Save the Children and Adults association), the Legal Youth Protection and « les Services Pénitentiaires Insertion et Probation » (the Penitentiary Integration and Probation department), with sentencing appropriate to the offence committed.

Work done at the Citadel varies in function with the offenders' skills and physical capacity, ranging from daily upkeep such as emptying rubbish bins, cleaning public areas and toilet facilities; cleaning the grounds and covert ways, helping with plumbing or masonry repairs, cleaning the pathways and windows in the zoo or helping the zoo keepers with their daily tasks, etc. The offenders work as part

of the teams at the Citadel thus learning how to live life in the community again, how to work in a team and to respect instructions, times and schedules.

The long-term viability of the scheme is ensured by the close involvement of Citadel personnel in the Community Service Scheme. The technical manager and head zoo keepers are in charge overall and staff members supervise the offenders and make sure that they carry out their work properly.

#### Evaluation

Despite some problems with integration and placement, accepting offenders at the Citadel of Besançon constitutes a supplementary source of labor for the maintenance of the site. For example, in 2011 the Pubic Institution received 8 adults for a total of 605 hours Community Service and 6 teenagers for 84 hours of criminal justice sanctions. Only 10% of offenders at the Citadel drop out of their work commitments within the framework of their reparation placement.

#### Contact

The General Secretary or technical, logistics, maintenance and safety manager World Heritage Citadel-Public Institution <u>contact@citadelle.besancon.fr</u> /03.81.87.83 33

# Social rehabilitation initiatives, Longwy

Themes: maintenance, social rehabilitation

# **Contracting Authority**

Longwy Town Council

### Partners

'Mission Locale', Job Centre, Regional Council, Dirrecte

# Date/Duration of Work

The town was granted an agreement for 12 people for one year starting from September 2011. A new application for 18 people is underway for the period from September 2012 to 2014.

# Location

Throughout the stronghold

#### Summary

Rehabilitation initiatives are organized by a multidisciplinary team made up of technical supervisors, a social worker and a heritage project manager.

The social worker's role is to implement actions boosting vocational and social integration. Work with partners is required to implement appropriate approaches. Workshops are set up to address the issues related to employment (such as health or managing budgets), the people work on the fortifications of Vauban on green spaces, maintenance or painting of woodwork.

#### **Evaluation**

Participants in this initiative contribute to improving the quality of living and enhancing the fortifications. They are made aware of this heritage and in turn are the link to raise awareness within their families and friends in their local area.

#### Contact

Mairie de Longwy, Pascale GUSTIN, heritage project executive pascale.gustin@mairie-longwy.fr / +33 (0)3 82 44 54 10 Coralie MONTANARI, specialized teaching assistant Coralie.montanari@mairie-longwy.fr / +33 (0)3 82 44 54 00

# Management plans/management system of a World heritage serial fortified property

#### Theme: world heritage management

#### Objective

To ensure the preservation of the outstanding universal value (including authenticity and integrity) for future generations and anticipate and supervise the development of sites. In the case of serial properties, all components must meet the same requirements (the failure of one may cause them all to lose their status as a World Heritage site). The Vauban network management system and the management plans each of the twelve sites must strive together towards these same objectives.

#### **Contracting authority**

Network of major Vauban sites

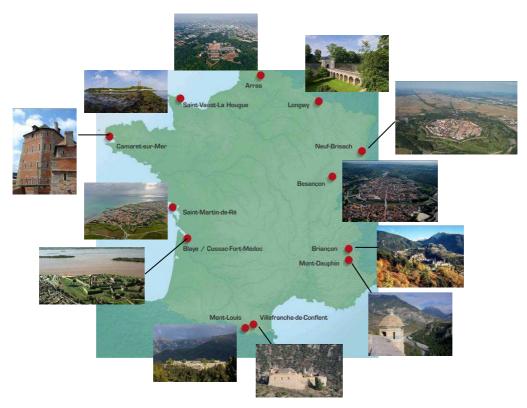
#### Partners

The member sites of the Vauban Network and their public and private partners.

#### Date/duration of work

The fortifications of Vauban became a world heritage site in 2008. As soon as the Association was set up in 2005, a management system for all of the sites and management plans for each site for future World Heritage inclusion were drawn up (approved in 2007). These plans are currently being revised.

#### Location



# Summary

The Major Vauban sites management plans were developed between February and July 2007. They were approved by the Municipal Council and by the Board of Directors of the Vauban network.

The management plan is considered a tool of work and a guideline for stakeholders and partners of the Vauban site and for this reason has to be clear and practical. Each site is committed to sustainable management in consultation with local stakeholders and adapted to its particular environment. These are documents that combine a programme of measures both short-term for a period of six years and long-term (in 20 to 40 years time) to ensure that the property is handed down to future generations. A cross-sector approach is advocated; any measures undertaken on the site must comply with the objectives set by the Manager who developed the management plan in consultation with all the stakeholders concerned.

# Evaluation

The management plans developed in 2007 have fostered new partnerships, collaborations and alliances and often facilitate the co-funding of operations that are listed in them. They serve as a real reference and can justify, or at times adjust, decisions taken with reference to the general objectives. At times more research into the cross-sector scope and the involvement of the surrounding territory needs to be carried out. Indeed, the redevelopment of a fortified site does not just stop at its ramparts.

It is essential for interested parties to work together, and enough time needs to be allocated to this effect thus gaining time and means in the long run.

The development of the management plan should not be given to an external party but co-ordination of the process and drafting in governance should be preferred for more scope (and in the long run a better implementation) of the management plan. The organization of stakeholders should include the definition of the roles of each party -associate experts, relevant departments, associations, companies and other related agencies, and legislative consulting.

#### Contact details for further information

Methodology, co-ordination: Mission Réseau Vauban, Marieke Steenbergen. Marieke.steenbergen@besancon.fr / +33 (0)3 81 41 53 95 Management plan design and implementation: Communauté de communes du Guillestrois, Claire-Marie Collin. vauban@guillestrois.com / 06 28 42 67 77

Cf.Bibliographical references for the serial property methodological guide

# Creation of an interpretation centre for architecture and heritage, Briançon

# Themes : communication/public outreach, interpretation

### **Contracting authority**

The town of Briançon

# Partners

French government/ Department/Region/sponsorship patrons

# Date/duration of work

2012-2015, call for tender for the project manager in progress

#### Location

Briancon, the old walled town/the old Eglise des Cordeliers (Cordeliers Church)

# Summary

Renovation of a monument dating from the late 14th century and creation of a new cultural facility.

#### Evaluation

Participation in the redevelopment of an area that has been somewhat left to abandon within the conservation area.

Creation of new facilities that will be included on the visitor circuit. The approach taken follows the methodology laid down for a "Ville d'art et d'histoire" (Art and History Town – Briançon has been awarded this label). (Ministry of culture and communication)

# Contact details for further information:

Isabelle Fouilloy Jullien : Conservateur en chef du Patrimoine de la Ville de Briançon (head curator for heritage for the town of Briançon). i.fouilloy@mairie-briancon.fr / +33 (0)4 92 50 27 25

Instructions for use online : <u>http://www.vpah.culture.fr/publi/ciap-</u> 2007.pdf







15th century wall paintings

# Mont-Dauphin, digital enhancement of heritage

# Themes : communication/promotion, digital applications

#### **Contracting authority**

Guillestre area Community of Communes

#### Partners

Technical partners:

- Pays Guillestrin Association for heritage information.
- Vars Association 'au fil du temps' (over time) (heritage information)
- tourist information facilities in the area (loan of Tablet) , namely- Vars, Guillestre, and Risoul Tourist Offices and the "Maison du Tourisme du Guillestrois" (Guillestre area tourist office).

Financial partners: Provence Alpes Côte Azur Region, ERDF, Regional eServices and Territories Plan.

#### Date/duration of work

January 1, 2011 to December 31, 2012: implementation of the project. This project needs long term co-ordinating to ensure sustainability (one day full-time employment per week).

#### Location

Community of communes of the Guillestre area, Hautes-Alpes Department (05) France

#### Summary

#### The objectives

To preserve and enhance the architectural heritage of the Community of communes of the Guillestre area which forms local identity:

- **To preserve** heritage through the creation of a data base containing a description of each historic site referenced, with photos, old documents, and oral/video testimonies.
- **To enhance** heritage through the creation of a discovery tour via multimedia content and nomadic tools for a new and innovative approach to the local area (mobile application and Web site).

All the information will be accessible on the website www.baroulade.fr

#### "Les Baroulades"

A few keywords:

- tours for families
- intangible heritage (practices, stories, crafts, skills etc.) and "small" architectural heritage (oven, canals, fortifications, churches, etc.),
- learn through play Scenario (tell a story, journey through time, fun for all regardless of age),
- uniformity (differences in heritage and numbers of tourists)
- 2 points of access (by commune and by group of communes/circuits)

#### circuits:

75 sites along the following 3 routes

A: Risoul, Saint-Clément and Réotier

B : Vars et Guillestre

C : Saint-Crépin, Eygliers et Mont-Dauphin

The choice of heritage sites according to the recurrent themes of water and stone.

Scenario: Find Guilhem's hand



Saint Guilhem is an important local figure whose legend is deeply rooted in the local area. The Chapel, which is dedicated to him, was a popular meeting-place which brought together all the inhabitants from the Guillestre area. The gist of the story is that Guilhem , a shepherd ,has travelled through time to find his hand. The visitor has to help him in his quest. Guilhem is neither a saint nor a medieval character, but a type of 'visitor', a shepherd who has landed in the middle of the 21st century. The challenge is to make visitors want to help Guilhem find his hand as they travel over the local area.

The circuits have different points of interest (POI) throughout with either a video or sound recording, and sometimes even a game on offer for the visitor.

#### The Website: www.baroulade.fr

is aimed at two different types public, namely:

- Visitors, who can:
  - prepare their visit : locate maps of the area, find out about the Baroulades and the app, download a roadbook, watch local events and find out how to get there and useful information,
  - -interact during or after their visit : send photos, ask questions, reply to comments and share info via social networks.
- Heritage enthusiasts, who can:
  - access the database and carry out research
  - discover or rediscover heritage through a monthly focus on the blog, interact by posting comments, info etc.

#### The Iphone/Android application and its features

- access: free download or loan of a digital Tablet; -
- three languages available: French, English and Italian.
- access via circuits or commune with the choice available at each POI. -
- location by GPS on site or alternatively with a map;
- at each POI, audio and video commentary, activities or games are available -
- possibility of posting your visitor satisfaction rating with a note/star at each POI;
- opportunity to contribute during the visit if 3 G accessible.

The French application will be available on 15 July, 2012, the Italian and English versions by-15 August at the latest.

#### The Tablets

Plus points:-

- The screen is larger than a Smartphone and easy to carry
- It can be shared during a family walk

Tablets: 40 ARCHOS G9ARCHOS 80 G9 tablets available.

Loan system

- available for visitors who do not have a Smartphone and for foreign visitors
- the tourist offices and or other professionals have to create a network over the local area.
- offers an additional service to the visitor.

Equipment provided by the Guillestre area community of communes.

#### Questions arising / difficulties in setting up the loan system

- What about the Deposit? A French visitor can leave a cheque as a deposit with a signed loan agreement form such as the example attached. However, the loan to foreign visitors is more difficult. Is it better if they leave proof of identification such as a passport, or a cash deposit which means the Tourist Offices concerned has to deal with the cash?
- How long is the loan for?

- What about cost? should it be free of charge, or do they have to pay for it?
- Where do they have to return the Tablet?
- What explanations and instructions do the visitors need?
- What about maintenance?

#### **Evaluation**

- assessment of the length of time required to work on the project as developing a database, referencing the photos and illustrations and writing descriptions of the heritage all requires a lot of time and skills (research for information, check its authenticity, etc.).
- time taken for reflection about the project: what are the reasons for developing an application (is it just a tourist attraction or a real objective for preserving and enhancing heritage?) What kind of heritage? The project requires a maximum of interested and involved participants who have to meet in advance to discuss the details.
- the management of different providers and creation of a space for dialogue and coordination- personnel are required for communication, the creation of scenarios and contents (videos, etc.) for the application, and to design the Web site and application, etc.
- good advertising and communications about the launch of the project are needed several months in advance.
- the project can involve the local population through collecting testimonies, meetings etc and hand down heritage even making it a means of offering services to tourists.

#### Contact

Guillestre area community of communes, project executive, Claire-Marie Collin, vauban@guillestrois.com / +33 (0)6 28 42 67 77

# Resource management for the management of fortified heritage

#### Theme : storing and disseminating information

### Objectives

To make information and useful references accessible for anyone interested in the management, coordination, or development of fortified heritage. Through this project, the Vauban network aim to become a true national and international reference in the matter following a recommendation made by the Committee of World Heritage who wished that "exchanges in the management of the fortifications of Vauban were strengthened ". A virtual platform was preferred to a physical resource centre in order to provide more accessible content.



www.sites-vauban.org/resource-center

#### **Contracting authority**

The Network of Major Vauban Sites

#### Partners

Working group uniting project executives from the major Vauban sites. Several project managers to prepare contents (inventory of the Vauban sites, illustrated glossary of bastioned fortification) and a documentalist who worked full-time for a period of ten months on the bibliographic references.

#### Date/duration of work

The first version-was put on line on 7 July, 2010. The preparatory phase took about one year, followed by several corrections and supplementary work:

- additional features (including search engines and access management)
- The English version was put on line in late May 2012.

#### Summary

The resource centre for the management of fortified heritage allows anyone interested in this topic to find documents, references and experiences that may be useful to their activity. An online database allows you to download studies, specifications, project documents and management plans The platform for pooling experiences gives you the opportunity to review good practices elsewhere and enhance your own experience by proposing a project for publication. Finally, professionals can promote their activities and skills by enrolling in the online directory.

#### **Evaluation**

Both positive and negative points. Administration of the website takes a lot of time and effort. The contents are always changing and thus require constant attention. The collaborative features (such as the platform for pooling experiences and the directory) are not particularly dynamic and without incentive measures they do not evolve much. The targeted audience, English- speaking in particular, is not yet sufficiently aware of the existence of the tool.

#### Contact

Mission Réseau Vauban, Marie Mongin, project executive : <u>marie.mongin@besancon.fr</u>, +33 (0)3 81 87 82 18

REFERENCES

# La Marie-Thérèse redoubt at Avrieux (Barrière de l'Esseillon)

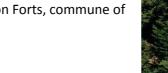
# Theme : interpretation of fortified heritage

#### **Contracting authority**

Commune of Avrieux

#### Location

Maria Thérèse redoubt, the Esseillon Forts, commune of Avrieux (73500, France)



#### Summary

The objective of this interpretation centre is to render the history of the art of fortifications more accessible, and to relate its adaptation to the mountains and the history of Alpine fortifications in its European dimension. You approach the Redoubt via an interpretation course, an outdoor journey of discovery. This educational and entertaining journey leads the visitor into the fort, and provides a comprehensive vision of the site of the Barrière de l'Esseillon and its history. Inside the Redoubt, a permanent museum with exhibits in both French and Italian has been installed, using different tools such as models, audio and video devices, interpretation panels, and touch terminals. A number of activities and facilities are also available such as guided visits, temporary exhibitions, lectures, educational workshops, a book shop,and snack bar.

#### **Evaluation**

This is a most successful example of a fortified site interpretation centre, taking into consideration the constraints linked to the development of Historical Monuments. There is an interesting link between an outdoor discovery trail and a museum inside the Redoubt. The setting is attractive for tourists with sports activities nearby (via ferrata) thus ensuring a significant number of potential visitors. A debate took place about the siting of the visitor centre for the interpretation centre. The project manager wanted to create a centre to be shared with the sports activities. However, this option was refused by the commune and the visitor centre was installed at the entrance to the Redoubt. Therefore, the problem arising today is that the visitors to the interpretation centre and people who come for the sports activities are completely separate.

#### Contacts

Mairie d'Avrieux, +33 (0)4 79 20 33 16 / www.redoutemarietherese.fr









# **BIBLIOGRAPHY** / WEBOGRAPHY

# **Enabling conditions / vegetation**

# > Atelier Aline Le Cœur, Ville de Besançon, Etude et mise en valeur paysagère des fortifications de Vauban. Phase 2, Propositions, Lille, avril 2012.

This document presents the general principles of landscaping that are applied to enhance and to make legible the fortifications of Vauban in Besançon by controlling vegetation in the surrounding area, limiting the impact of the car and finding new attractive uses. It also questions the town's choices of urban planning. The second part deals with proposed measures for the areas of the Citadel, the Boucle and the Battant enceinte.

The question is to find a harmonic balance between the logic of the Vauban fortifications in all dimensions and our current lifestyles and uses that together create a new landscape.

# Ouvrage collectif sous la direction de Philippe Bragard. Aménagements paysagers de la fortification bastionnée. Réseau des sites majeurs de Vauban, Besançon, novembre 2011.

This publication collects communications and debates from the International Round Table which took place in Longwy, France in April 2008. Researchers, specialised practices and local authorities have combined different points of view on three main themes namely, historical aspects; ecological, landscape and functional values; landscaping and restoration of the fortifications, drafts of guidelines.

Fortified space is the place where nature and culture come together. Designed to take the contours of the land, natural materials available on site and climatic conditions into account, the fortified area has now been become a place for walkers, wildlife and plants again. This heritage has become a breath of fresh air in the heart of the city, and the new vocations necessitate considering contemporary requirements.

The book gives some answers to questions such as: what tree species were originally used? How was an earth rampart built? What new uses can be housed in fortified spaces? How can we use vegetation to enhance fortified heritage?

#### Enabling conditions / signage, urban furniture

# Réseau culturel terre catalane, Etude signalétique patrimoine Vauban Mont-Louis et Villefranche-de-Conflent, Perpignan, octobre 2009

The study puts forward solutions for four types of signage (heritage, directional, tourism and information) for two Vauban World Heritage sites. It gives guidelines for the location and sense of the visit, materials and urban property, themes, graphic design (cumulated charters) and an operational phasing.

#### **Redevelopment models**

# > Agence d'architecture Philippe Prost, Longwy, Etude tour de ville. Phase 2, des projets au service d'une stratégie, Paris, juillet 2009.

The document is the 2nd phase of the study' tour of the town' requested by the town of Longwy with the aim of using its fortified heritage to initiate a future project for the city. It is

not a project of archaeological restitution or historic reminiscence, but a project for the town of tomorrow which knows how to protect, enhance and build on the inherited wealth of yesteryear. The aim of the 2nd phase is to put forward plans to provide solutions to the issues identified in the first phase. These proposals are grouped into 6 different categories namely urban, heritage, links and travel, landscape, the environment, tourism and economic solutions.

These projects have different levels of priority for implementation, depending on the amount of work required and the length of time needed to carry out the work and will be ordered, scheduled and costed according to these criteria in a 3rd phase.

# Agence d'architecture Philippe Prost, La reconversion des sites de défense d'Arras. Phase 3, du concept à l'action, Paris, juillet 2010

The study, commissioned by the Ministry of Defense's Mission for the Sale of Real Estate Assets (MRAI), was carried out in three phases. The final phase led to a development plan for the Citadel of Arras by 2030. It specifies the main principles to respect, proposes measures to be implemented in the short, medium and long term and concludes with operational guidelines.

# Ecole nationale supérieure d'architecture de Nancy, Semaine patrimoine en projet, Longwy-Vauban-Unesco, Nancy, 2009

Longwy was fortified by Vauban but today is partially destroyed. The town was the subject of study by students from the Nancy National School of Architecture. This document sets out their thoughts and plans. Four different places were particularly targeted- the France gate, and the Voltaire, Bourgogne and 8.5.45 districts.

In their work, the students were faced with many different issues. How can we design an urban and landscape route that takes the town that is visible and the town that is hidden to view into account, thus rendering the upper town of Longwy important again? How can we preserve the part that still exists and explain the missing part? Other important Issues were also addressed, namely the walled town and the town outwith the walls, architecture of yesterday and of today, landscape, natural and artificial topography.

The publication is also available in English.

# Réseau des sites majeurs de Vauban, Sites fortifiés, territoires de projets. Besançon, novembre 2011

This publication is the second in a series of books published by the network of major Vauban sites. It collects communications and debates from the Symposium organised with the support of the Paris-Belleville National School of Architecture in July 2010. Over and above their heritage value, fortified sites are high stakes both in terms of landscape and urban planning issues as well as architecture. Conditioned by the structure of fortified heritage, urban spaces of today and tomorrow will have to take this heritage into account in order to evolve. It is an integral part of urban morphology.

With evidence from ten councillors and architects, urban planners and landscape architects, the book presents answers to questions such as: what are the contemporary perceptions of fortified sites? How can we enhance them? And beyond how can we build on these architectural, urban and landscape spaces to design territorial projects for tomorrow?

Two renowned architects, Philippe Prost and Dominique Perrault, have exchanged points of view on the theme of "The Wall".

#### Governance / management of a fortified world heritage property

# Réseau des sites majeurs de Vauban, Méthodologie pour l'élaboration des plans de gestion des sites majeurs de Vauban, Besançon, juillet 2007, version actualisée décembre 2011

This resource guide provides the twelve fortified sites of the serial property "Vauban's fortifications" with methodology keys for the development of their management plans, all according to the same outline to meet the outstanding universal value shared by all and recognized by the World Heritage Committee in 2008. It also sets out the cultural project of the inscribed property into twelve components namely the local cultural projects for each site . These local cultural projects help convey the different aspects of the work of Vauban, which complement each other and together justify outstanding universal value. They also provide the building blocks needed to develop the cultural message of each site in respect of its specific characteristics, and to develop links with cultural, social, economic and environmental stakeholders from the surrounding area.

The guide provides the framework that governs the management plans of the World Heritage properties, describes the stages of development, puts forward a summary organized into four parts (an inventory, the stakes, management strategy, actions, monitoring & evaluation programme), and ends with a brief bibliography.

#### **Governance / communication towards investors**

# Communauté urbaine d'Arras, La citadelle d'Arras – Une place forte pour vos investissements, Arras, s.d.

This bilingual publication (French / English) is intended for potential investors. It presents the development potential of each building and the attractiveness of the Arras region.

#### Gouvernance / heritage interpretation

# Tilden Freeman, 1957: Interpreting our Heritage. Chapel Hill: University of North Caroline: Carolina Press, 1957, 119 p.

Tilden was the first person to set down the concept of interpretation. The main Tilden principles that have defined the interpretation of heritage for more than 50 years now are explained in this work: we have to ask ourselves why are people visiting the site and what are their expectations; present a whole rather than just a part; establish a revelation within the personality of the visitors; cast the raw material in artistic forms and avoid any excess.

# Centre d'interprétation de l'architecture et du patrimoine : Édité par le ministère de la culture et de la communication, direction de l'architecture et du patrimoine. Coordination éditoriale : Odile Bousquet, rééd. 2007, 79 p.

Document for free download on the Internet: http://www.vpah.culture.fr/publi/ciap-2007.pdf

This methodological guide is a means to help implement an adapted programme which is scientific and cultural on one hand, architectural and territorial on the other hand, and describes the objectives to be attained, the stakeholders concerned and their respective responsibilities in the development, design process and creation of an architecture and heritage interpretation centre.

ICOMOS, Charte Icomos pour l'interprétation et la présentation des sites culturels patrimoniaux. ICOMOS – 16e AG / 16th GA – Québec 2008 – Interpretation and presentation of cultural Heritage Sites /Interprétation et présentation des sites culturels patrimoniaux – 8 p.

Document for free download on the Internet:

www.icomos.org/icahm/documents/Charte\_ICOMOS\_Interpretation\_FR\_10-04-07.pdf This Charter was written in 2007 by Icomos and aims to define the basic principles of interpretation and public outreach, as essential features in heritage conservation efforts and essential tools for the general public to appreciate and understand cultural heritage sites.

Espace naturel régional Nord – Pas-de-Calais, cahier technique La démarche d'interprétation du patrimoine : de la théorie à la pratique, Lille, Espace naturel Régional, oct. 1999. 62 p.

Document for free download on the Internet: http://www.enrx.fr/fr/nos\_ressources/liste\_des\_cahiers\_techniques/la\_demarche\_de\_l\_inte rpretation\_du\_patrimoine\_de\_la\_theorie\_a\_la\_pratique

Considering that to interpret heritage is to communicate, this technical guide details the main stages that let you know what to say and how to say it.

# Bringer, Jean-Pierre, Toche, J. Pratique de la signalétique d'interprétation. Montpellier, ATEN, 1996, 104 p.

After a presentation of the concept of interpretation signage, its principles and its media, this guide presents the best achievements and highlights the practical problems of interpretation panels. Lots of photos.

# Governance / storage and dissemination of information

# www.sites-vauban.org/resource-center

# An online Resource Centre for the management of fortified heritage

The Vauban Network offers an expertise zone on its website, open to all professionals interested in fortified heritage management.

Because of the distinctive architectural, functional, heritage and environmental characteristics of fortified towns, they need a special and bespoke type of management.

The Vauban Network Resource Centre provides a whole host of useful information, in both French and English, such as reference documents, an illustrated glossary, a list of specialists, operational tools (specifications and methodology) and a platform for pooling experiences etc.

The contents are regularly updated and improved, enabling heritage professionals to enhance their knowledge and know-how. The resource centre for the management of fortified heritage has thus become a benchmark in the subject.

# **QUESTIONS AND QUERIES**

Some topics briefly discussed in the atelier perspectives (p.10) are further developed here.

#### **Enabling conditions**

#### **Choices of restoration**

During the preparation of this report, the members of the Working Group discussed the choices made during restoration work.

In Briançon, corrugated iron roofing laid on an exact reproduction of the original framework safeguarded the Fort du Randouillet barracks and the injection of cement in the bedrock helped to stabilize the actual foundations of the Fort des Têtes.

Art.10 Venice Charter: "when traditional techniques prove inadequate, the consolidation of a monument can be achieved by the use of any modern techniques of conservation and construction, the efficiency of which has been shown by scientific data and proved by experience."

On the other hand, the redevelopment of the parade ground in Briançon (supported by archaeological and historical studies) and the restoration of the ravelin drawbridge mechanism at the France Gate in Longwy, favour a return to the original. The aim is not to create a museum piece, but to transmit heritage values while at the paving the way for winning back urban space.

Art.9 Venice Charter: The process of restoration is a highly –specialised operation. Its aim is to preserve and reveal the aesthetic and historic value of the monument and is based on respect for originalt materiel and authentic documents.

The Charter of Venice is the basic document which should be referred to in all cases; choices will then be made according to the location of the monument, the context, available documentation and types of use needed.

Article 5. The conservation of monuments is always facilitated by making use of them for some socially useful purpose. Such use is therefore desirable but it must not change the layout or decoration of the building. It is within these limits only that modifications demanded by a change of function should be envisaged and may be permitted.

With reference to the contents of the Charter, all decisions taken are appropriate. However are there currently any major trends in the Western world, and is this useful?

#### **Public safety**

What kind of developments ensure the visitor's safety, without prejudice to the authenticity or integrity of the site and without harming the legibility and understanding of the defensive system?

What other measures, such as landscaping, closing the site at night, surveillance or video surveillance could reasonably be introduced to contribute to public safety, what are their advantages and disadvantages and how efficient are they?

What types of safety measures are carried out elsewhere such as opening hours, surveillance staff, concierge, video surveillance, or facilities?

#### Trafic management and car parking

This issue presents a real challenge for fortified places, which are often difficult to access and at times located far from urban areas. The situation becomes even more complicated when new functions have to be found for the sites with the resulting travel problems that arise. There are several different problems to consider for the Vauban Network sites:

- if there is a lack of parking space, what means of public transport are available (taking into account the cost, efficiency and frequency of use)?
- if road access is complicated, how can a fortified site be converted in an economically viable way?
- if access to the site is easy and there is ample parking space, what incentives are there to boost alternative means of transport and how can this consideration be combined in public and private development of the site?
- what technical solutions exist for creating temporary parking spaces (for summer, or even occasional use only), so that the integrity of the fortified site is respected?

# **Redevelopment models**

#### Combining different types of use in the same area

It can be very difficult and often a source of problems to combine different uses of the same site or even the same building. Cultural, in-coming and tourism activities all have their own specific requirements and constraint. They are often not compatible with each other and not compatible with the objectives of conserving historic monuments. What solutions for optimizing use did our partners At Fort find?

#### Legislation / enabling conditions

#### Protection in respect of historic monuments and photovoltaic energy

The installation of photovoltaic panels in military sites has been the subject of discussion several times. In the following two cases, the historical monuments authorities were not in favour of installation:

- Neuf-Brisach, photovoltaic panels on the school, which is not protected as a historical monument but located in the vicinity and therefore subject to regulations.
- Briançon: when urgent solutions were being sought for making the Fort du Randouillet barracks water-tight, the local Energy Agency put forward a proposal to install photovoltaic panels on these buildings. However, this project was turned down because of the lack of an in-depth study on the feasibility, cost-effectiveness and impact on the appearance of the monument.

Are there any known cases of successful installation on fortified sites, and what were the arguments and conditions?

#### Decommissioning defence sites during transfer/ redevelopment project

When the Ministry of Defense transfers a military land, the terms of transfer are subject to negotiation on the price of sale, subsidised studies and work and decontamination. The results are set forth in a contract for the revitalisation of the defence site, signed by the Ministry of Defense's "MRAI" (mission for the sale of real estate assets) and the local authority concerned.

However, the MRAI does not consider opening the site to the public or even restoration work as being a project that justifies the expenses of decontamination. Now, this is an essential prerequisite to any development project. So what are the solutions to this dead-lock situation?

#### Legal obligations for Access for People with Disabilities

The French law of 11th February 2005 on equal rights and opportunities, the participation and citizenship of people with disabilities sets out several principles, including that of the accessibility of all Institutions that are open to the general public (ERP) whatever their disability from 1st January 2015 onwards. Exceptions do exist for three reasons, including the conservation of architectural heritage. However, we have no precise details on how to obtain these exceptions. Therefore, more and more heritage sites are making significant investments to ensure that their sites are accessible to people with disabilities.

However, by definition fortified sites are difficult to access, and this in itself poses a specific set of problems.

What is the correct position to adopt regarding this law? Are there any allowances within this legislation?

Is accessibility for people with disabilities mandatory? How can we facilitate access to the site without having to carry out extensive work or damage heritage? What tools exist to compensate for this lack of accessibility? What measures have been taken on other fortified sites faced with this same problem?