
STATE PARTY: Republic of Panamá

DATE: January 22nd, 2016
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The Country Report: State of Conservation of the World Heritage Property, "Fortifications on the Caribbean Side of Panama: Portobelo – San Lorenzo (Panama) (C 135)", represents the State Party's commitment and constitutes a new step on the improvement of the optimal conservation of the UNESCO Sites and its Universal Outstanding Values that has been promoted by the Government of Panama.

The State Party draws up a strategy, with detailed work plans, timeframes and budgets for the full implementation of the corrective measures within a three-year period.

The actions necessary to implement the corrective measures assigned by Decision 36 COM 7B.102, have been reorganized and complemented with related tasks, and proposed on a three year long time frame for their implementation, as:

- Emergency Plan
- National Laws and Policies
- Management Plan / Master Plan
- Operational and Participatory Management System
- Parallel Tasks

The submission of the document will serve to establish concrete action and future commitments necessary for the preservation of this area and its exceptional values, which were crucial for the inclusion of these sites in the World Heritage List.

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Executive Summary

The World Heritage Property “Fortifications on the Caribbean Side of Panama: Portobelo – San Lorenzo (Panama) (C 135)”, is located in the Caribbean coast of the Province of Colón, Republic of Panamá, nearest to the geographic coordinate N9 33 14 W79 39 21. The property has two components: the fortifications of Portobelo forming a line of defense around the Bay of Portobelo, and the Castle of San Lorenzo, guarding the mouth of the Chagres River. Both components are separated by an approximate distance of 45 kilometers. The entity responsible for the world heritage property is the National Institute of Culture (INAC), through its National Directorate of Historic Heritage, and the property’s management is entrusted to the Patronato de Portobelo y San Lorenzo.

The Fortifications on the Caribbean Side of Panama: Portobelo – San Lorenzo were inscribed on the World Heritage List in 1980, and were inscribed on the World Heritage List in Danger in 2012 by Decision 39 COM 7B.102, which also adopts the Desired State of Conservation and Corrective Measures for the property. The time frame adopted for the Corrective Measures covered three years from 2012 to 2015. Due to the delay in the implementation of the Corrective Measures by the State Party, the World Heritage Committee by means of Decision 39 COM 7A.46 (2015), requested the State Party to draw up a strategy, detailed work plans, timeframes and budgets for the full implementation of the corrective measures within a three-year period, with due consideration to the set of recommendations of the 2014 Advisory Mission, and to take all the necessary legal, managerial and budgetary provisions for their implementation and requested to submit these documents by 1 February 2016 for review by the World Heritage Centre and the Advisory Bodies.

In order to fulfill the requests made by the World Heritage Committee on aforementioned Decision 39 COM 7A.46 (2015), this report addresses the State of Conservation of the World Heritage Property, “Fortifications on the Caribbean Side of Panama: Portobelo – San Lorenzo” from the baseline set by the Retrospective Statement of Outstanding Universal Value adopted by Decision 38 COM 8E (2014), focusing on the attributes of Outstanding Universal Value and taking into account other related elements protected under Panamanian legislation as national heritage that are key to comprehend the relationships between the world heritage property and its immediate setting. These other key elements were considered in order to contribute to conveying and expressing the Outstanding Universal Value of the property and its conditions of integrity and authenticity, as part of the context of the world heritage property. It was found that the factors affecting the property have not varied significantly, as well as the current status of the threats remains stable. Thus was found that the Desired State of Conservation assigned by Decision 36 COM 7B.102 remains accurate, but in order to accomplish its goals, the Corrective Measures needed to be complemented with related actions. The Corrective Measures have been reorganized and complemented with related tasks, on a three year long time frame from 2016 to 2019 for their implementation, organized under: Emergency Plan, National Laws and Policies, Management Plan / Master Plan, Operational and Participatory Management System and Parallel Tasks.

It’s worth mentioning that the fortifications of Portobelo have inscribed on the Watch List of the World Monuments Fund 2016, and the advantages of this inscription include opportunities to raise public awareness.
Introduction

The following report on the State of Conservation regarding the “Fortifications of the Caribbean Side of Panama: Portobelo – San Lorenzo (C135)”, for the 2015/2016 cycle, was prepared in response to the request by the World Heritage Committee in Decision 39 COM 7A.46 (2015) as an update of the general conservation situation of the site and its management implementation.

The site, included in the World Heritage List, has 2 components (one Portobelo and the other one San Lorenzo) located along the Caribbean coast of the Province of Colón, Republic of Panama. The said property was inscribed on the List in 1980, at request by the State Party of Panama, due to the importance at the national, regional and worldwide scales of the transcontinental route across the Isthmus of Panama that had eased world trade and cultural exchange during the modern era. Subsequently, as will be described in Section 1 of this report, by means of the Decision 36 COM 7B.102 (2012) the property was inscribed in the World Heritage List in Danger.

This report is composed of an Executive Summary, 6 Sections and 4 annexes. It summarizes all conservation, protection and management activities that were performed during the year 2015. Those activities are in direct line with the corrective measures outlined in the Desired State of Conservation that set forth in Decision 36COM 7B.102 (2012). Since the said corrective measures are not completely implemented, this report also contains the continued implementation, of the pending corrective measures proposed for the 2016-2019 cycle with a view to removing the property, from the List of World Heritage in Danger, by the year 2019.

- State Party: The Republic of Panama
- Name of the World Heritage Property: Fortifications on the Caribbean Side of Panama: Portobelo – San Lorenzo
- Geographical coordinates to the nearest second: N9 33 14 W79 39 21
- Date of inscription on the World Heritage List: 1980
- Date of inscription on the World Heritage List in Danger: 2012.
- Organization(s) or entity(ies) responsible for the preparation of the report: National Directorate of Historic Heritage, of the National Institute of Culture.
- Date of the report: 22nd of January, 2016.
- Signature on behalf of the State Party: This Report is signed by the Focal Point Ms. María Isabel Arrocha. Telephone number +507 (228) 3986, email address marrocha@inac.gob.pa
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ABBREVIATIONS

ATP: Autoridad de Turismo de Panamá = Tourism Authority of Panamá
INAC: Instituto Nacional de Cultura = National Institute of Culture
DNPH: Dirección Nacional de Patrimonio Histórico = National Directorate of Historic Heritage
ICOMOS: International Council of Monuments and Sites
MIAMBIENTE: Ministerio de Ambiente = Ministry of the Environment
USMA: Universidad Santa María La Antigua = University of Santa María La Antigua


The Fortifications on the Caribbean side of Panamá: Portobelo and San Lorenzo were inscribed on the World Heritage List in 1980, under criteria I and IV. Back then, as outlined by ICOMOS, it was established that the site represented a: “A group of XVIIth and XVIIIth century fortifications, the historic sites of Portobelo and San Lorenzo are outstanding examples of Spanish colonial military architecture of this period. The forts, castles, barracks and batteries of Portobelo created a defensive line around the Bay and protected the harbour: the works at San Lorenzo guarded the mouth of the Chagres. Conquered by Henry Morgan in 1668 and by Admiral Edward Vernon in 1739, these fortifications were continuously rebuilt because they command the access to the Panamanian Isthmus which has always been of the outmost importance for Europe’s commerce with its colonies. Antonelli’s Spanish military architecture characterizes the first construction period (1596-1599) and the neo-classical style of Salas and Hernandez (1753-1760) dominated afterwards.”. Due to the fact that it took place back in 1980, the original inscription did not include an statement of Outstanding Universal Value. However, in regards to authenticity, integrity and state of conservation, ICOMOS briefly stated that: “…The government of the Republic of Panama owns the nominated properties. The forts are in a poor state of preservation. Their conservation, restoration and development, rest on the Historical Heritage authority of the Panamanian State. Both the Portobelo and the San Lorenzo fortifications are included in the cultural Development Plan of the province of Colon.” On the other hand, the original nomination Dossier stated that: “…The forts are in poor state of preservation owing to factors such as the erosion of time and damage caused by occupants. Some of the outer structures such as the sentry boxes, walls and ramparts, are still standing and some of the defensive weapons, such as cannons, have also been preserved”. Furthermore, regarding protection and management, the original nomination underscored that Portobelo and San Lorenzo were scheduled under the provisions of Law 61 of 31 Dec. 1908. In addition, the Portobelo component is protected by Law 91 of 1976, with the National Directorate for the Historical Heritage (now the National Directorate of Historic Heritage) as main responsible for the law’s implementation. Finally, it was noted that the San Lorenzo component, which was under United States jurisdiction (from 1911 to 1979), had reverted back to Panama on 1979 and, ever since, has also been designated under the management of the National Directorate of Historic Heritage. In any case, back then there was no management plan in place whatsoever.

Subsequently, as stated before, by means of the Decision 36COM 8C.1 (2012) the property is inscribed in the World Heritage List in Danger. In the following years, several additional developments took place including the Decision 37COM 7A.36 - Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo (Panama) (C 135) – 2013 and the reactive monitoring mission (as requested by Decision 36COM 8C.1 – 2012), which resulted in a mission report submitted to the World Heritage Center in 2014. In that same year, the Decision 38COM 7A.20 - Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo (Panama) (C 135) took place along with the official adoption of the Retrospective Statement of Outstanding Universal Value (which will be described in the detail in section 1.1.1 of this report). As can be noted when comparing the original inscription text with Retrospective Statement, the latter complements and enhances the first one in regards to the description of the cultural components and the physical attributes that sustain their Outstanding Universal Value.

Finally, last year (2015), the World Heritage Committee adopted the most recent Decision, that is the 39COM 7A.46 - Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo (Panama) (C 135).


<table>
<thead>
<tr>
<th>State Party: Property</th>
<th>Panama: Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo</th>
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<td>Id. N°</td>
<td>135</td>
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Brief synthesis

The Fortifications on the Caribbean side of Panamá: Portobelo and San Lorenzo are located along the coast of the Province of Colón. There are diverse fortification sites around...
the Bay of Portobelo, denominated San Fernando fortifications: Lower Battery, Upper Battery and Hilltop Stronghold; San Jerónimo Battery Fort; Santiago fortifications: Castle of Santiago de la Gloria, Battery and Hilltop Stronghold; the old Santiago Fortress; ruins of Fort Farnese; the La Trinchera site; the Buenaventura Battery; and the San Cristóbal site. Forty-three kilometers away, at the mouth the Chagres River stands the San Lorenzo Castle (originally “San Lorenzo el Real del Chagre”) with its Upper Battery as a separate structure.

The component parts of the property represent characteristic examples of military architecture developed by the Spanish Empire in its New World territories largely between the 17th and the 18th centuries. The first plans for fortifying the entrance to the Bay of Portobelo and the mouth of the Chagres River were prepared in 1586 by Bautista Antonelli. Following his recommendations, the first fortifications in Portobelo were begun in the 1590’s. As a whole, these structures comprised a defensive line to protect Portobelo’s harbour and the mouth of the Chagres River, which were the Caribbean terminals of the transcontinental route across the Isthmus of Panama. The defensive system includes fortifications in different styles, some of them skillfully integrated into the natural landscape as part of its military defensive design. They were also adapted to the changing needs of defensive technologies in the course of three centuries in order to protect the capital resources sent from colonial America to Spain after crossing the Isthmus of Panama. In the earliest constructions, a military style with mediaeval features prevailed, while in the eighteenth century the structures were rebuilt in the neo-classical style, which can be observed at the forts of Santiago, San Jerónimo and San Fernando, and also at San Lorenzo.

On the regional scale, these military compounds belonged to a larger defensive system, including Veracruz (Mexico), Cartagena (Colombia), and Havana (Cuba), to protect the route of commercial trade between the Americas and Spain. Portobelo, where the famous fairs were held, was one of the principal Caribbean ports and played a leading role controlling the imperial trade in the Americas.

The site is a key element to the understanding of the adaptation of European building models and their impact on the New World transformation during the modern era. This property demonstrates the strategic organization of the territory and represents an important concept of defense and technology development mainly between the 17th and 18th centuries.

The town of San Felipe de Portobelo was founded in March 20th, 1597, as a Caribbean Terminal of the trail through the Isthmus of Panama, to replace Nombre de Dios as a port of transit and trans-shipment. The need to ease the overland path along the Isthmus during the rainy season called for an alternative route. The Chagres River-Cruces path, a mixed fluvial and land trail, was the counterpart of Camino Real from Panama City to Portobelo, built as a response to this need.

**Criterion (i):** The Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo are a masterpiece of human creative genius. Portobelo is a remarkable example of an open fortified town, destroyed and built several times. San Lorenzo underwent the same process of renovations along the colonial era.
Criterion (iv): The Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo, a group of late 16th, 17th and 18th century fortifications, are among the most characteristic adaptations of Spanish military architecture to tropical climate and landscape features, and represent the structural and technological development of military structures in the Caribbean.

Integrity

The key elements that convey the Outstanding Universal Value of the property are located within the original boundaries. These features still illustrate the evolution of military architecture developed by the Spanish colonial empire to protect the commerce route which connected South America with Spain across the Isthmus of Panama. The major components of the fortified system are still visible at Portobelo, where most colonial fortresses continue to be a resemblance of the original; the same applies to the bay, where the forts are emplaced. Likewise, at San Lorenzo the fort and the Chagres river mouth have been maintained.

However, the integrity of the property has been compromised to different degrees by environmental factors, by uncontrolled urban sprawl and development and by the lack of maintenance and management. A number of measures, including conservation works, enforcement of regulations and the operation of a site management unit, will need to be implemented in a sustained manner to prevent the further erosion of the conditions of integrity, particularly at the component parts located in Portobelo.

Authenticity

In terms of form, design, material and setting the components of the property have remained mostly unchanged through time, expressing the essence of the fortified system and the evolution of European models of military architecture from the late 16th to the 18th century in the Americas. The military structures have largely retained the overall original form, although most architectural finishes, decorative elements and some wall sections have been lost as a result of decay. The vulnerability to decay factors will need to be addressed through sustained conservation actions, carried out in accordance with scientific conservation principles and standards.

Protection and management requirements


Existing legislation underscores the protection of Portobelo (Law 91/1976 and Executive Decree 43/1999). Municipal Ordinance 32/2005 addresses long-standing land ownership issues in Portobelo’s historic core and surrounding National Park. On December 27, 2011, the National Heritage Directorate established new guidelines for architectural projects in...
monuments and historic sites in the entire country, which also apply to the Fortifications on the Caribbean side of Panama (Resolution 172-11/DNPH). In the case of San Lorenzo, protection is granted by Law 61/1908, Law 68/1941, and the general heritage legislation mentioned above. However, due to its recent incorporation to the Panamanian administration after 83 years under United States government management, protection policies need to be strengthened.

The Protection and Development Plan for the Interoceanic Region approved by Law 21/1997 also includes conservation norms for San Lorenzo. In April, 2005, the National Environment Authority (ANAM) published a Management Plan for Chagres National Park which includes conservation measures for San Lorenzo.

Both fortified compounds are under the administration of the National Institute of Culture (Instituto Nacional de Cultura - INAC) through the National Heritage Directorate and since 2007 also by the Patronato Portobelo San Lorenzo, a mixed public-private organization currently responsible for management, conservation, and community outreach and fundraising. Its primary goals are protecting the architectural remains and making this heritage accessible to national and international communities.

Among the requirements identified for the proper protection of the property is the creation of a Master Plan to guide all short- and long-term actions and strategies at both sites. Protection mechanisms at San Lorenzo need to be updated in the form of a specific site law (including detailed protective measurements and the enlargement of boundaries and a buffer zone creation); the San Lorenzo component has recently been segregated from Chagres National Park and is in the process of being transferred to INAC’s custody. At Portobelo, designation and effective protection and management of buffer zones for each fortified structure, is mandatory to guarantee its protection from the pressures of urban growth.

1.1.2. Key elements to be preserved in order to maintain the Outstanding Universal Value

The key elements to be preserved are the monuments included in the inscription on the World Heritage List of the property “Fortifications on the Caribbean Side of Panama: Portobelo – San Lorenzo”:

A. World Heritage Property Component: Portobelo.
   - San Fernando Fortifications: Lower Battery, Upper Battery and Hilltop Stronghold;
   - San Jerónimo Battery Fort;
   - Santiago fortifications: Castle of Santiago de la Gloria, Battery and Hilltop Stronghold;
   - The old Santiago Fortress;
   - Ruins of Fort Farnese;
   - La Trinchera site;
   - The Buenaventura Battery;
• The San Cristóbal site. [fortifications of the New City of Portobelo]

B. World Heritage Property Component: San Lorenzo

• San Lorenzo Castle (originally “San Lorenzo el Real del Chagre”) with its Upper Battery as a separate structure.

Considering that this world heritage property “is a key element to the understanding of the adaptation of European building models and their impact on the New World transformation during the modern Era”, and it “demonstrates the strategic organization of the territory and represents an important concept of defense and technology development mainly between the 17th and 18th centuries” (WHC, 2014: 189), and taking into account that “as a whole, these structures comprised a defensive line to protect Portobelo’s harbour and the mouth of the Chagres River as a defensive system including fortifications of different styles skillfully integrated into the natural landscape as part of their design, changing and adapting to it over the course of three centuries in order to protect the terminal on the Caribbean to the trails through the Isthmus of Panama as part of vital communication routes, and also taking into account the property’s relationship with the larger defensive system of the Caribbean (WHC, 2014: 189), other key elements are considered in order to contribute to conveying and expressing the Outstanding Universal Value of the property and its conditions of integrity and authenticity as elements of the context of the world heritage property, detailed as follows:

A. World Heritage Property Component: Portobelo

Inside the perimeter of the Historic Monuments Group of Portobelo (Conjunto Monumental Histórico, Law 91/1976):

• The wider setting: The natural environs of the Portobelo Harbour, related brooks and mountain chain face towards Portobelo around the harbour.
• The Church of San Felipe de Portobelo (*).
• Church Hospital San Juan de Dios (local Museum for the Cristo Negro; *)
• The Aduana Building (former Royal Customs facilities; *)
• Three colonial bridges (*).
• Patio de Mulas (Mules Courtyard; *)
• Tres Cruces (Three Crosses; *)
• Casa Rodríguez (Tourists Center of the Tourism Authority of Panama – ATP; *)

Outside the perimeter of the Historic Monuments Group of Portobelo:

• The National Park of Portobelo (Law 91/1976) which envelops the Historic Monuments Group of Portobelo by land and sea.

B. World Heritage Property Component: San Lorenzo

- The Protection Forest and Protected Landscape of San Lorenzo (Law 21/1997), part of the National System of Protected Areas (SINAP) which envelopes the Historic Monument of Castle San Lorenzo El Real de Chagre by land and sea.

1.2. Factors affecting the property identified in previous reports by UNESCO and updated by Panamá

As described on section 1.1 of this Report, the property “Fortifications on the Caribbean Side of Panama: Portobelo – San Lorenzo” presented a poor state of conservation at the time of their inscription on the World Heritage List in 1980. Even though a number of conservation plans have been prepared taking the property into account for its preservation, the present factors that affect the property have not substantially varied since its inscription on the World Heritage List in Danger, in 2012, as follows.

Factors affecting the property:

a) Fragile state of the property and accelerated degradation by environmental factors, lack of maintenance and limited conservation planning;

b) Erosion

c) Lack of established boundaries and buffer zone;

d) Absence of a conservation and management plan;

e) Encroachments and urban pressure;

f) Tourism pressure (particularly at Portobelo)

g) Insufficient legislation for the preservation of built heritage and regulations combining the two components of the property

Concerning specifically point (d), an Emergency Plan has been formulated and its draft has been submitted to the World Heritage Centre, as a first assessment phase for effective conservation planning of the two components of the property. “A first assessment phase is thereby developed with regard to the risks which may affect the heritage in tandem with the joint application of adequate systems, techniques and regulations so as to deal with said risks, preventing the deterioration, destruction, and, ultimately, disappearance of the Fortifications.” (Emergency Plan for Property C 135, page 8). As this Report describes, some of the first steps to achieve the Desired State of Conservation is to clarify borders and buffer zones, and to further develop precise Emergency Plans, detailed Management and Conservation Plans for the fortifications, and to establish legislative measures of protection for them integrated with territorial land planning.
1.3. Current status of the threats for which the property was inscribed on the List of World Heritage in Danger

Protection measures for both components of the world heritage property “Fortifications on the Caribbean Side of Panama: Portobelo – San Lorenzo” are gradually being implemented at immediate consolidation, maintenance and cleaning work. The threats for which the property was inscribed on the List of World Heritage in Danger do not yet present significant changes starting on 2014, and remain as follows.

Threats for which the property was inscribed on the List of World Heritage in Danger

a) Fragile state of the property and accelerated degradation by environmental factors, lack of maintenance and limited conservation planning
b) Erosion
c) Lack of established boundaries and buffer zone
d) Absence of a conservation and management plan
e) Encroachments and urban pressure
f) Tourism pressure (particularly at Portobelo)
g) Insufficient legislation for the preservation of built heritage and regulations combining the two components of the property.

2.1. Desired State of Conservation and Corrective Measures assigned to the property for removal from the World Heritage List in Danger


Owing to diverse difficulties, the time frame assigned by to the State Party to implement the Corrective Measures was not sufficient to fulfill all measures, and the time frame expired in September of 2015. The World Heritage Committee, by means of Decision 39 COM 7A.46 regretted the very serious delay in the implementation of the Corrective Measures, essential to achieve the Desired State of Conservation, and urged the State Party to draw up a strategy, detailed work plans, timeframes and budgets for the full implementation of the corrective measures within a three-year period, with due consideration of the set of recommendations of the 2014 Advisory Mission, and to take all the necessary legal, managerial and budgetary provisions for their implementation and requests it to submit these documents by 1 February 2016 for review by the World Heritage Centre and the Advisory Bodies.

The Desired State of Conservation for the Fortifications on the Caribbean Side of Panamá: Portobelo – San Lorenzo, in 2012 adopted by the World Heritage Committee, by means of Decision 36 COM 7B.102, was the following:

**DSOC (a).** The approval and full implementation of an emergency plan, a comprehensive assessment of structural and mechanical risks, preventative conservation strategy and maintenance measures at San Lorenzo and Portobelo,

**DSOC (b).** National laws and policies for the conservation of built heritage at San Lorenzo and Portobelo defined and in place,

**DSOC (c).** Long-term consolidation and conservation through annual plans for the components of the inscribed property ensured,

**DSOC (d).** The operational and participatory management system, including its related public use plan, approved and implemented,

**DSOC (e).** The Management Plan fully integrated within territorial and urban development plans,

**DSOC (f).** Encroachments and urban pressure adequately controlled,
The boundaries and buffer zone of all component parts of the World Heritage property precisely clarified,

Budgets for the preparation, implementation and follow-up of the management structures and conservation measures secured.

The Corrective Measures and the three year long timeframe from 2013 to 2015 for their implementation adopted by Decision 36 COM 7B.102 were the following:

a) To be carried out immediately (by September 2012-March 2013)

(i) Risk assessment completed for all structures and built materials, and an Emergency Plan for all the components of the property in coherence with the recommendations of the reactive monitoring mission and defined timeframe and phasing for their implementation finalized,

(ii) Operational management arrangements and budgets for its implementation ensured,

(iii) Budgets for the implementation of the Emergency Plan (first stage) secured,

(iv) Encroachments and urban pressure adequately controlled and reforestation undertaken,

(v) Technical Office in Portobelo to secure the implementation of the conservation measures and management arrangements set up and functioning,

b) To be carried out within one year (by September 2013)

First phase of the Emergency Plan implemented:

Protection

(i) Boundaries and buffer zones for each of the component parts of the property defined,

(ii) Regulatory measures for the established buffer zones for controlling development and addressing existing threats finalized and approved,

(iii) Monitoring indicators as a tool to assess the state of conservation of the fortified built heritage put in place,

Management and Planning

(iv) Development of a Management Plan begun,

(v) Awareness raising activities within the local communities to identify opportunities for eco and cultural tourism to contribute to the improvement of living conditions of the surrounding communities undertaken in full coherence with the conservation measures for the property,

c) To be carried out within two years (by September 2014):

Second Phase of the Emergency Plan implemented
Protection

(i) National laws and policies for the conservation of built heritage at San Lorenzo and Portobelo developed,

Management and planning

(i) Management Plan for the property, including scheduled and costed provisions for conservation, preventative conservation and maintenance of built heritage, public use, and risk management finalized, approved and adopted,

(ii) Management, territorial and urban development plans integrated,

(iii) Annual conservation plans for each of the components of the inscribed property developed and in place,

d) To be carried out within two-three years (by September 2015):

(i) Implementation of the Emergency Plan completed,

(ii) Operational management arrangements and budgets for the continued implementation of the approved Management Plan secured;

The World Heritage Committee also requested Panama as State Party, to submit to the World Heritage Centre a financial estimation of the costs associated with the implementation of each of the corrective measures, and invites the State Party to consider a request for international assistance from the World Heritage Fund for technical support. The full text of Decision 36 COM 7B.102 may be consulted in the Annex 2.1 of this Report.

2.2. Items accomplished by Panama from the Desired State of Conservation and Corrective Measures

Upon notification of the report of the Reactive Monitoring Mission’s Report, the Panamanian National Government has commenced a series of limited actions, mainly due to lack of budget, in order to address points and actions raised in the said report.

The following are among the actions that have already been accomplished by Panama:

a) An Emergency Plan was developed and presented on January 2014.

The formulation of the Emergency Plan is part of the protection process of the heritage of Portobelo and San Lorenzo and, in turn, it is also part of the development of the actions contained in the Management Plan of the UNESCO Management Plan approved by Resolution 186/DNPH of 2013. The Emergency Plan submitted to the World Heritage Centre in 2014 is a first assessment phase developed to address the risks that may affect the heritage in tandem with the joint application of adequate systems, techniques and regulations as to deal with said risks, preventing further deterioration of the fortifications, including mitigation and halting of deterioration causes. The Emergency Plan was initiated in order to
address DSOC (a), “The approval and full implementation of an emergency plan, a comprehensive assessment of structural and mechanical risks, preventative conservation strategy and maintenance measures at San Lorenzo and Portobelo” (Decision 36 COM 7B.102)


b) New Law 30 of November 18th, 2014, that allocates state funds to Patronato de Portobelo y San Lorenzo:

A new law that grants economic resources from the National Government to the Patronato de Portobelo y San Lorenzo, has been approved, in order to guarantee the financing and management of the site: Law 30 of November 18th, 2014, that allocates state funds to Patronato de Portobelo y San Lorenzo for maintenance, conservation and restoration works to be done at the Historic Monuments Complex (CMH) of Portobelo and Castle of San Lorenzo El Real de Chagre. This law establishes that the use given to state funds to be allocated annually to the Patronato de Portobelo y San Lorenzo shall be monitored by the Comptroller General of Panama, and the Patronato must submit an annual financial report on the use of the state funds, to the National Institute of Culture (INAC). The allocation of state funds shall be included in the National General Budget and presented to this end to the National Budget Commission of the National Assembly, by the National Institute of Culture.

This new law was created to further actions to fulfill the DSOC (b) and (h).

c) The works of measuring and inscription of the borders of both property’s components have begun.

2.3. Proposed Timeframe to accomplish the Corrective Measures and other identified issues.

Based on the Desired State of Conservation approved by Decision 36 COM 7B.102, the following list was made in order to organize the contents of the Desired State of Conservation (DSOC) for the purposes of its implementation in Panama.

The Desired State of Conservation items have been classified in four groups: I) Emergency Plan, II) National Laws and Policies, III) Management Plan/Master Plans, and IV) Operational and Participatory Management System. The corrective measures to achieve the DSOC will be distributed under each group on the proposed three year time frame.
2.3.1. Desired State of Conservation (reorganized):

I. Emergency Plan. DSOC (a).

(a). Emergency Plan on the key elements of the OUV:

- **Emergency Action Plan** approved and fully implemented, which must include a comprehensive assessment of structural and mechanical risks

- **Conservation and maintenance Action Plan**, which must include a preventative conservation strategy and maintenance measures at San Lorenzo and Portobelo.

II. National Laws and Policies. DSOC (b)

(b). National laws and policies for the conservation of built heritage at San Lorenzo and Portobelo defined and in place:

- National law regulation containing the key following issues:
  
  **Protection of key elements (attributes of OUV):**
  
  - Adoption of the full text of the (Retrospective) Statement Outstanding Universal Value.
  
  - At Portobelo: Boundaries of each fortification and related structures, and buffer zone for each one.
  
  - At San Lorenzo: Boundaries of the core zones and buffer zone.

  **Manual of Normative applicable to Portobelo and San Lorenzo:**
  
  - Compilation of normative from all governmental agencies applicable on both property components, including the National Institute of Culture (INAC), the Ministry of Environment (MIAMBIENTE), the Ministry of Housing (MIVIOT), the Ministry of Public Works (MOP), the National Institute of Aqueduct and Sewage (IDAAN); the National Authority of Aquatic Resources (ARAP); Maritime Authority of Panama (AMP); the Municipality of Portobelo; others.

  Legal background to be considered shall include:

  - General Panamanian legislation on heritage (Law 14/1982, updated by Law 58/2003)


  - Existing regulations for Portobelo: Law 91/1976 and Executive Decree 43/1999; Municipal Ordinance 32/2005 on land ownership issues in
Portobelo’s historic core and surrounding National Park; Resolution 172-11/DNPH establishing guidelines for architectural projects in monuments and historic sites in the nationwide; and others.

- Existing regulations for San Lorenzo: Law 61/1908, Law 68/1941, and the general Panamanian legislation on heritage; Law 21/1997 that approved the Protection and Development Plan for the Interoceanic Region, including conservation norms for San Lorenzo; Management Plan for Chagres National Park (April, 2005), the National Environment Authority (ANAM), which includes conservation measures for San Lorenzo.

- Additional National laws focused on the property components and their wider setting.

- Plan of Land Planning (POT) by the Ministry of Housing (MIVIOT), approved.

III. Management Plan / Master Plans. DSOC (c), (e), (g), (h),

(c). Management Plan specific to each component of the world heritage property. It shall include/exist related to the Emergency Plan and measures for long-term consolidation and conservation through annual plans for the components of the inscribed property ensured. See, DSOC (c).

(d). The Management Plan fully integrated within territorial and urban development plans (see point 2.3.b and point 2.3.c. as a directly related tasks). It shall include the Public Use Plan. See, DSOC (e).

(e). Budgets (on the Management Plan) for the preparation, implementation and follow-up of the management structures and conservation measures secured. See, DSOC (h).

(f). Partial Plan of Land Planning (by the Ministry of Housing and Land Planning – MIVIOT): Encroachments and urban pressure adequately controlled (see point 2.3.b), by means of the enforcement of a new Partial Plan of Land Planning that integrates heritage conservation criteria shared by the Management Plan. See, DSOC (f).

(g). Boundaries and buffer zone: The boundaries and buffer zone of all component parts of the World Heritage property precisely clarified (see point 2.3.b). See, DSOC (g).

IV. Operational and Participatory Management System. DSOC (d)

(h). Reactivation of the National Committee of World Heritage Cultural and Natural, as the channel to implement the operational and participatory management system nationwide, including the implementation of its related public use plan, approved and implemented. See, DSOC (d).
2.3.2. Corrective Measures required to accomplish the Desired State of Conservation (reorganized and updated)

According to the Desired State of Conservation as described above, the actions necessary to implement the corrective measures assigned by Decision 36 COM 7B.102, have been reorganized and complemented with related tasks, and proposed on a three year long time frame for their implementation, as:

- Emergency Plan
- National Laws and Policies
- Management Plan / Master Plan
- Operational and Participatory Management System
- Parallel Tasks

The corrective measures presented by Decision 36 COM 7B.102 were divided in years from September to September, with the first year divided in two parts. In order to fit the corrective measures in a timeframe closer to Panamanian fiscal year, the proposed time frame is divided as follows:

- Preliminary stage (January 2016 – June 2016)
- Phase I (September 2016 – September 2017), which is year one, divided in quarters.
- Phase II (September 2017 – September 2018), which is year two, divided in quarters.
- Phase III (September 2018 – June 2019), which is year three, also divided in quarters.

For each year, the 1st Quarter is from July to September; the 2nd Quarter is from October to December; the 3rd Quarter is from January to March; and the 4th Quarter is from April to June.

Each September, a Status Report on the Implementation of the Corrective Measures will be prepared by the Patronato de Portobelo y San Lorenzo, in coordination with the National Directorate of Historic Heritage.
A. Proposed Time Frame to accomplish the Corrective Measures (2016 – 2019)

Preliminary Stage (January 2016 – June 2016)

National Laws and Policies

(i). Buffer zone (macro) for component “Portobelo” described by a DNPH Resolution, based on Law 91/1976.

(ii). National law to establish the boundary and buffer zone of all component parts of the world heritage property, begun (February 2016).

Management Plan / Master Plan

(i). Preliminary Studies to update the Management Plan (January 2016), begun.

(ii). Budget allocation project to be submitted to the Ministry of Finance (MEF), draft begun (January 2016)


(iv). Budget allocation project submitted to the Ministry of Finance (MEF), finalized. (June 2016).

Operational and Participatory Management System

(i). Reactivation of the National Commission of World Cultural and Natural Heritage. (January – June, 2016).

(ii). Inter-agency coordination for the territorial and urban development plan (POT for Portobelo), begun (January 2016)

Parallel Tasks

(i). Operational management arrangements and budgets for its implementation ensured. (January – June, 2016).

(ii). Site Museum’s new museography (Old Customs building), begun (January 2016)

(iii). Educational Project for Portobelo and San Lorenzo, begun (January 2016)

(iv). Visitors Center of San Lorenzo (drafting construction plans), begun (January 2016)

(v). Visitors Center of San Lorenzo (drafting construction plans), finalized (June 2016)

(vi). Visitors Center of San Lorenzo (construction), begun (August 2016)
Phase I (September 2016 – September 2017)

a) To be carried out immediately (by September 2016 – March 2017)

1st Quarter 2016 – July, August, September.

Emergency Plan

(i). San Lorenzo Castle and its Upper Battery (June 2016), begun

(ii). Conservation project on Santiago Fortifications (Castle, battery and hilltop stronghold), begun (June 2016)

(iii). San Jerónimo Battery Fort (July 2016), begun.

Management Plan / Master Plan

(i). Preliminary Studies to update the Management Plan (September 2016), finalized.

2nd Quarter 2016 – October, November, December.

Management Plan / Master Plan


Operational and Participatory Management System

(i). Inter-agency coordination for the territorial and urban development plan (POT for Portobelo), finalized (December 2016).

Parallel Tasks

(i). Site Museum’s new museography (Old Customs building), finalized (December 2016).


Emergency Plan

(i). Budgets for the implementation of the Emergency Plan (first stage) secured by approval of the Commission of National Budget at the National Assembly (January to February).

(ii). San Fernando Fortifications (lower battery, upper battery and hilltop stronghold), begun (January 2017).

(iii). Conservation project for Old Santiago Fortress (February 2017), begun

(iv). Conservation project for Santiago Fortifications (Castle, battery and hilltop stronghold), begun (February 2017).
Management Plan / Master Plan

(i). Budget allocation project to be submitted to the Ministry of Finance (MEF), draft begun (January 2017).


Operational and Participatory Management System

(i). Approval process by the National Assembly for the territorial and urban development plan (POT for Portobelo), begun (January 2017).

b) To be carried out within one year (by September 2017)

4th Quarter 2017 – April, May, June.

Emergency Plan

(i). Conservation project on Santiago Fortifications (Castle, battery and hilltop stronghold), begun (May 2017)

(ii). Conservation project San Lorenzo Castle and its Upper Battery (May 2017), finalized.

(iii). San Jerónimo Battery Fort (July 2017), finalized.

Management Plan / Master Plan

(i). Long term consolidation and conservation annual plans (included in the Management Plan) San Lorenzo Castle and its Upper Battery (June 2017), start.

(ii). Budget allocation project submitted to the Ministry of Finance (MEF), finalized. (June 2017).

1st Quarter 2017 – July, August, September.

Emergency Plan

(i). San Fernando Fortifications (lower battery, upper battery and hilltop stronghold), finalized (September 2017).

Management Plan / Master Plan

(i). Long term consolidation and conservation annual plans (included in the Management Plan) San Jerónimo Battery Fort (August 2017), start.
Phase II (September 2017 – September 2018)

2nd Quarter 2017 – October, November, December.

Emergency Plan

(i). Conservation project for Old Santiago Fortress (October 2017), finalized.

Management Plan / Master Plan

(i). Long term consolidation and conservation annual plans (included in the Management Plan) San Fernando Fortifications (lower battery, upper battery and hilltop stronghold) (oct. 2017), start.


Operational and Participatory Management System

(i). Approval by the National Assembly for the territorial and urban development plan (POT for Portobelo), finalized (October 2017).

(ii). Budget allocation by the National Budget Committee of the National Assembly for the implementation of the territorial and urban development plan (POT for Portobelo), begun (October 2017).

(iii). Budget allocation by the National Budget Committee of the National Assembly for the implementation of the territorial and urban development plan (POT for Portobelo), finalized (December 2017).

Parallel Tasks

(i). Visitors Center of San Lorenzo (construction), finalized (December 2018).


Emergency Plan

(i). Preliminary studies for Ruins of Fort Farnese, La Trinchera Site, Buenaventura Battery and San Cristóbal Site (New City of Portobelo Fortification), begun (January 2018).

(ii). Preliminary studies for the bay of Portobelo (bathymetry and archeological studies), begun (January 2018), begun.

Management Plan / Master Plan

(i). Implementation of Phase 1 of the Management Plan (San Lorenzo, San Jerónimo Battery Fort, San Fernando Fortifications, Santiago Fortifications, Old Santiago Fortress), start.
(ii). Budget allocation project to be submitted to the Ministry of Finance (MEF), draft begun (January 2018).

**Operational and Participatory Management System**

(i). Implementation of the territorial and urban development plan (POT for Portobelo), start (January 2018).

**4th Quarter 2018 – April, May, June.**

**Emergency Plan**

(i). Preliminary studies for Ruins of Fort Farnese, La Trinchera Site, Buenaventura Battery and San Cristóbal Site (New City of Portobelo Fortification), finalized (June 2018).

(ii). Preliminary studies for the bay of Portobelo (bathymetry and archeological studies), finalized (June 2018).

**Management Plan / Master Plan**

(i). Budget allocation project submitted to the Ministry of Finance (MEF), finalized. (June 2018).

**1st Quarter 2018 – July, August, September.**

**Emergency Plan**

(i). Conservation project for Ruins of Fort Farnese, La Trinchera Site, Buenaventura Battery and San Cristóbal Site (New City of Portobelo Fortification), begun (July 2018).

**Management Plan / Master Plan**

(i). Implementation of Phase 2 of the Management Plan (Ruins of Fort Farnese, La Trinchera Site, Buenaventura Battery and San Cristóbal Site), start on July 2018.

**Phase III (September 2018 – September 2019)**

**2nd Quarter 2018 – October, November, December.**

**National Laws and Policies**

(i). National law to establish the boundary and buffer zone of all component parts of the world heritage property, finalized and approved by the National Assembly (October 2018).

Emergency Plan

(i). Conservation project for Ruins of Fort Farnese, La Trinchera Site, Buenaventura Battery and San Cristóbal Site (New City of Portobelo Fortification), finalized (January 2019).

Management Plan / Master Plan

(i). Budget allocation project to be submitted to the Ministry of Finance (MEF), draft begun (January 2019).

(ii). Long term consolidation and conservation annual plans (included in the Management Plan) Ruins of Fort Farnese, La Trinchera Site, Buenaventura Battery and San Cristóbal Site (New City of Portobelo Fortification) (February 2019), start.

4th Quarter 2019 – April, May, June.

Management Plan / Master Plan

(i). Budget allocation project submitted to the Ministry of Finance (MEF), finalized. (June 2019).


(iii). Long term consolidation and conservation annual plans (included in the Management Plan) San Jerónimo Battery Fort (June 2019), end and review.

(iv). Long term consolidation and conservation annual plans (included in the Management Plan) San Fernando Fortifications (lower battery, upper battery and hilltop stronghold) (June 2019), end and review.

(v). Implementation of Phase 1 of the Management Plan (San Lorenzo, San Jerónimo Battery Fort, San Fernando Fortifications, Santiago Fortifications, Old Santiago Fortress), (June 2019) end and review.

(vi). Implementation of Phase 2 of the Management Plan (Ruins of Fort Farnese, La Trinchera Site, Buenaventura Battery and San Cristóbal Site), (June 2019) end and review.

(vii). Long term consolidation and conservation annual plans (included in the Management Plan) Ruins of Fort Farnese, La Trinchera Site, Buenaventura Battery and San Cristóbal Site (New City of Portobelo Fortification) (June 2019) end and review.
Operational and Participatory Management System

(i). Implementation of the territorial and urban development plan (POT for Portobelo), status assessment and review (June 2019)

Parallel Tasks

(i). Educational Project for Portobelo and San Lorenzo, finalized (June 2019).

B. On the following page: Proposed Time Frame to accomplish the Corrective Measures 2016 – 2019, as a Gantt Chart
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22nd of January, 2016  
Página 31
3. International assistance for divulgation: Inscription on the list of World Monuments Watch

3.1. Nomination to the World Monuments Watch List

On February of 2015, following a message of information about the World Monuments Watch inviting Panama to nominate the Panamanian fortifications on the Caribbean coast to the World Monuments Watch List kindly sent by the World Monuments Fund to the Permanent Embassy of Panama to UNESCO, the Ambassador informed to the Ministry of Foreign Affairs and National Directorate of Historic Heritage of the opportunity posed by a potential inscription of Panamanian world heritage sites on the World Monuments Watch List of the World Monuments Fund.

The nomination was submitted to the World Monuments Watch List on February of 2015, prepared by Ms. Julieta de Arango as nominator in coordination with staff of the National Directorate of Historic Heritage, restoration architect Ms. Itzela Quirós and accompanied by letters of endorsement prepared by the National Director a.i. Dr. Katti Osorio of the National Directorate of Historic Heritage. The fortifications of Portobelo and the fortifications of San Lorenzo Castle were nominated separately.

Concerning the fortifications at Portobelo, its nomination described the most urgent intervention projects, all related to the first phase of the Emergency Plan. These intervention projects prepared by Global Engineering, Inc. (INTOSA, for its acronym in Spanish) are engineering solutions complete with drafted plans, geophysics survey studies, budget calculations and time frames, in order to address mechanical risks at each fortification on the southern side of Portobelo Bay, especially those presenting risk of collapse at some of their structures and complemented with consolidation and reinforcement measures.

Concerning the fortifications at San Lorenzo, its separate nomination described as well, the most urgent intervention projects based on the works of INTOSA.

The nominator Ms. Julieta de Arango received the congratulations letter addressed by Ms. Stephanie Ortiz, Programme Associate at the World Monuments Fund, announcing that the nomination concerning the fortifications of Portobelo had been approved, thus welcoming the Fortifications of Portobelo on the World Monuments Watch List 2016. The letter included the Watch Communications Guidelines. The nomination for San Lorenzo Castle was not approved.

Ms. Julieta de Arango passed on to the National Director of the National Directorate of Heritage, the post as responsible for the inscribed Fortifications of Portobelo, for coordination and communications with the Watch. New National Director Ms. Maria Isabel Arrocha as Focal Point, and Deputy Director Dr. Katti Osorio held a meeting via Skype with Programme Specialist Stephanie Ortiz on the 14th of January for the purposes of exchanging information about the best opportunities posed by the inscription on the World Monuments Watch List to publicize the importance, beauty and needs open to international assistance at the Fortifications of Portobelo. As a result of this meeting, tentative dates for Watch Day and Site of the Week were discussed,
along with the Panamanian calendar of cultural events and festivals focused on the cultural scope of the Portobelo Bay.

3.2. Advantages of the inscription on the World Monuments Watch List 2016 - 2018

Yet the authorities at the World Monuments Fund have made known that the inscription on the Watch 2016 does not necessarily include allocation of funds for inscribed sites, they have also pointed out the possibility. For this reason, the advantages of the inscription on the Watch 2016 for the Fortifications of Portobelo will be focusing on publicity opportunities, enhanced visibility of the fortifications and their historic and cultural relevance for the world, and cultural activities such as the Congo traditions, the pilgrimage to the Church of San Felipe of Portobelo in worship of the Black Christ (Cristo Negro de Portobelo) and related festivals. The National Directorate of Historic Heritage is already in coordination with the Patronato de Portobelo y San Lorenzo in order to prepare a calendar of activities to be publicized with photos and videos on the World Monuments Fund’s Watch List in 2016 and 2017. The divulgation efforts supported by the inscription on the Watch 2016 are also directed to attract and encourage international assistance for the successful implementation of the most urgent intervention projects describe on the nomination documentation to the Watch, all related to the first phase of the Emergency Plan. As previously described, these intervention projects prepared by Global Engineering, Inc. (INTOSA, for its acronym in Spanish) are engineering solutions complete with drafted plans, geophysics survey studies, budget calculations and time frames, in order to address mechanical risks at each fortification on the southern side of Portobelo Bay, especially those presenting risk of collapse at some of their structures and complemented with consolidation and reinforcement measures.
4. Final Remarks

As described above and in previous State of Conservation reports, the adoption of the Management Plan (September 2013) as well as the Emergency Plan (March 2014) have proven to be crucial steps forward as they constitute appropriate frameworks for all planned actions. Likewise, the endorsements of these plans by the current administration and our assurance to their full implementation remain among our top priorities. Further, we are working restlessly in the continued implementation of all the corrective measures adopted by the World Heritage Committee at its 36th session (Saint-Petersburg, 2012) over a new proposed extended timeframe (2016-2019). Furthermore, we continue to work in securing the funding for the implementation of these measures, including the continued implementation of the Emergency Plan as well as the Management Plan and its update.

As has been described, the National Institute for Culture (INAC) continues to be responsible for the national cultural heritage (Law 14, 1982), but the management of the site continues to be entrusted to the Patronato de Portobelo y San Lorenzo (PPSL). However, the INAC currently has a stronger and more active leading role, within the PPSL, so as to ensure that all corrective measures remain at the top of their priorities. In this sense, with the help of the Law 30-2014, that defines that a yearly budget will be allocated to the PPSL for its administration, operation and activities, we are securing annual funds in order for the PPSL to improve and strengthen its technical department and staff. By this action, we have updated the legislative and regulatory measures and definitions of the functions of the Patronato.

Likewise, the Patronato has already made progress regarding the improvement of its technical staff and has even hired an architectural conservator as their Project Manager. The plans include establishing a technical office with adequate capacities, at the site level. Therefore, the strengthening of management arrangements and the creation of a technical office are well underway.

In addition, several other relevant measures have already begun to take place. The definition of the boundaries and buffer zone are already in process. On the other hand, the first draft for the Territorial Plan for Portobelo, by the Ministry of Housing (MIVIOT) is already done and the National Directorate of Historic Heritage is currently in process of reviewing and commenting on it. The analysis of that plan will be undertaken in order to ensure that it meets the requirements defined in the Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR). Further, the said analysis will bear in mind that the Plan must directly respond to the recommendations regarding environmental degradation and deficiencies in infrastructure services that are impacting cultural and natural heritage assets.

Likewise, this report presents detailed accounts on the activities for conservation, stabilization and consolidation and for the maintenance of the fortifications and green areas undertaken in 2015, as well as detailed stabilization and consolidation plans and timeframes for the implementation of the corrective measures adopted by the World Heritage Committee at the time of the inscription of the site on the List of World Heritage in Danger and the 2014 Advisory Mission’s recommendations, especially in regards to the stabilization and consolidation of all cultural forts, fortifications and cultural components of the property.
In closing, this report contains the strategies, detailed work plans, timeframes and budget allocation plans, for the full implementation of the remaining corrective measures within an extended three-year period (2016-2019), including the set of recommendations of the 2014 Advisory Mission. By these means we plan to implement aggressive plans, actions and strategies in order to preserve the integrity and authenticity of the attributes that convey the Outstanding Universal Value (OUV).

5. References


Annex

Annex 1. Curriculum vitae of the members of the working group and experts

**Julieta de Arango, Bachelor in Fine Arts**

*Executive Director to the Patronato Panamá Viejo*

Ms. Julieta de Arango holds over 35 years of working experience concerning management, administration, protection and preservation of cultural heritage in Panamá. She’s been Deputy Director of the National Institute of Culture (INAC), National Director of Historic Heritage of INAC and she has been administrator of several museums in Panama City. Her experience also includes perfecting legal instruments for the protection of cultural heritage, as well as development of practical proposals for use planning for historic monuments groups and she has collaborated on the formulation of nomination dossiers to the World Heritage List of the Archaeological Site of Panamá Viejo, and for the Historic District (Casco Antiguo) of Panamá City. Ms. Arango is the Executive Director to the Board of Patronato Panamá Viejo from the year 2000. Patronato Panamá Viejo is a non-profit organization focused on the conservation and enhancement of value of the Archaeological Site of Panamá Viejo, and it integrates stakeholders from public and private sectors. The Archaeological Site of Panamá Viejo was inscribed on the World Heritage List in 2003, as an extension of the World Heritage Property, “Historic District of Panama with the Salon Bolívar – C 790”, to integrate the property now called, “Archaeological Site of Panama Viejo and Historic District of Panama – C 790bis”. As Executive Director of Patronato Panamá Viejo, Ms. Arango is in charge of the implementation of the site’s Master Plan, whose actions are based on conservation criteria, authenticity, research, divulgation, capacity building, community participation, sustainable development and maintenance. Under her administration of the Patronato Panamá Viejo, important projects have been undertaken such as, the recovery of the colonial urban layout, the intervention project on the La Concepción Convent, the conservation project on the Cathedral and its rehabilitation as a lookout, the construction of a Visitors Center and the creation of a site museum concerning the evolution of the Archaeological Site of Panamá Viejo, research on the Cathedral, the San Juan de Dios Hospital, the Convent of La Concepción, Morelos Park, Main Square (Plaza Mayor), amongst other important projects. Her publications include, *El Sitio de Panamá Viejo, un ejemplo de gestión patrimonial* (the Site of Panamá Viejo, an example of heritage management). In Revista Canto Rodado, No1. 2006, pp. 1 -15; and, *Panamá Viejo, una experiencia exitosa en gestión patrimonial* (Panamá Viejo, a successful experience in heritage management), jointly published with Dr. Juan Guillermo Martín Rincón in Revista de Estudios Sociales No. 45, Universidad de los Andes, Colombia, january – april 2013, pp. 158 -169.
**María Isabel Arrocha, Architect and M.A. in Restoration**  
*National Director to the National Directorate of Historic Heritage and Focal Point*

Ms. María Isabel Arrocha obtained her Bachelor Degree in Structural Architecture at the Universidad de Santa María La Antigua. She successfully completed her Master Degree in Restoration of Architectural Monuments as well as a Master in “Project: An Approach to Architecture from the Historical and Social Environment”, at the Universidad Politécnica de Catalunya. She a member of the College of Architects (COARQ) of the Panamanian Society of Engineers and Architects (SPIA). Ms. Arrocha has contributed to various architectural projects throughout her career in Barcelona and Panama, and she’s been awarded an Honorable Mention by the Best Works of Architecture (MOA) contest held by COARQ of SPIA in 2015. At present, Ms. Arrocha is the National Director of Historic Heritage at the National Institute of Culture - INAC. She speaks Spanish, English and Catalanian.

**Wilhelm Franqueza Knopke, Architect and M.A. in Restoration**  
*Project Manager for the Patronato de Portobelo y San Lorenzo*

Mr. Wilhelm Franqueza obtained his Bachelor Degree in Structural Architecture at the Universidad de Santa María La Antigua. He successfully completed his Postgraduate Degree in Investment Projects Planning, Review and Management as well as the Comprehensive Course on Inspection, Safety and Quality Control for Construction Projects at the Universidad Tecnológica de Panamá (UTP). Mr. Franqueza obtained his Master Degree in Restoration and Rehabilitation of Historic Monuments at the University of Alcalá de Henares (Spain) under the auspices of the Scholarship of the Agencia Española de Cooperación Internacional (AECI), BECAS MAE (2005). He has taught Architectural Design as professor for the Universidad Santa María La Antigua, and he’s been National Director of the National Directorate of Historic Heritage of the National Institute of Culture – INAC. He is a member of the College of Architects (COARQ) of the Panamanian Society of Engineers and Architects (SPIA), which he represented at the Board of Planning of the Municipality of Balboa in 2008, 2009 and 2010. He’s currently a member of ICOMOS Panamá, for which he was Secretary General from 2006 to 2014. On his private practice, he has rehabilitated various historic buildings at the Historic District of Panamá and he collaborated on the restoration of the national monument “Cristo a Orillas del Mar” Episcopal Church at the historic centre of Colón City, and he’s been a project manager for urban projects since the year 1998. At present, Mr. Franqueza is Project Manager for the Patronato de Portobelo y San Lorenzo. He speaks Spanish and English.
Katti Osorio Ugarte, Architect and Ph.D. in World Heritage Studies, 
Expert

National Deputy Director to the National Directorate of Historic Heritage

Dr. Katti Osorio Ugarte was born in Panama City, Panamá. She studied at the University of Panama, where she earned her degree in Architecture. She has been twice awarded the Mombukagakusho Scholarship (MEXT) for higher studies in Japan by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), successfully completing her Master degree (M.A.) in Conservation of Cultural Property with an specialization in Buildings and Districts, by the Tokyo University of the Arts, and her Degree as Doctor of Philosophy (Ph.D.) in World Heritage Studies by the University of Tsukuba. Her doctoral dissertation was titled, “Comparative Study on Conservation of Timber Frame and Mixed Construction Buildings of Cultural Interest in Panama and Japan”. Dr. Osorio has been Director a.i. of the National Institute of Culture - INAC, Director a.i. of the Oficina del Casco Antiguo de la Ciudad de Panamá (Historic District’s Office), Consultant ad honorem to the Patronato de Portobelo y San Lorenzo, and Architect for the Urban Planning Section of the Mayor’s Office of Panama, among other occupations. She a member of the College of Architects (COARQ) of the Panamanian Society of Engineers and Architects (SPIA), member of ICOMOS Panamá, and a former member of ICOMOS Japan. Dr. Osorio is also a former member of the Architectural Institute of Japan (AIJ). She is the author of several papers and articles such as, "The attributes of Outstanding Universal Value of a World Heritage Property - The case of Archaeological Site of Panama Viejo and Historic District of Panama" Canto Rodado Vol.7 (1-27 pp.) 2012, and “Research on timber frame buildings in Panama City”, Journal of Architecture and Planning (Transactions of AIJ), 75 (650). pp. 989-995. She has contributed as peer reviewer of scholarly articles. Her main interests are the protection and preservation of historical heritage, monuments and historic towns, their management and legal protection framework, with emphasis on the research of related theoretical aspects. At present, Dr. Osorio is the National Deputy Director of Historic Heritage at the National Institute of Culture - INAC. She speaks Spanish, English and Japanese.

Daniel Young-Torquemada, Architect and M.A. in Restoration, Expert

Advisor to the National Directorate of Historic Heritage

Mr. Daniel Young-Torquemada studied architecture in Panamá, Buenos Aires and New York. Under the auspices of the Fulbright Scholarship by the Embassy of the United States in Panama, he obtained his Master Degree in Restoration by the University of Tulane, New Orleans. He has over 15 years of working experience in dozens of projects of restoration and rehabilitation of buildings at national and international level. He’s been chosen by UNESCO’s Advisory Bodies to integrate the “Network of Experts on World Heritage for Latin America”, and has carried out international missions on site and technical evaluations by distance in Nicaragua, Honduras, Colombia, Guatemala and Chile by means of consultancies at the request...
of the World Heritage Centre, the International Council of Monuments and Sites (ICOMOS) and the World Monuments Fund (WMF). Mr. Young-Torquemada has addressed conferences on heritage issues in Spain, Mexico, the United States of America, Costa Rica and Panamá. He is a member of the College of Architects (COARQ) of the Panamanian Society of Engineers and Architects (SPIA), member of ICOMOS Panamá and he is a member of the “ICOMOS Academy”, for which he has been a member of its Executive Board and of its Working Group for World Heritage (2011 – 2014). At present, he is an Advisor to the National Directorate of Historic Heritage. He speaks Spanish and English.
Annex 2. Decisions adopted for the property


The World Heritage Committee,

1. Having examined Document WHC-12/36.COM/7B,

2. Recalling Decision 35 COM 7B.129, adopted at its 35th session (UNESCO, 2010),

3. Notes the limited implementation of activities being carried out by the State Party with regards to the fragile state of conservation of the property;

4. Reiterates its deep concern regarding the state of conservation of the property, in particular the significant and accelerated degradation of the historic fabric which directly impacts its Outstanding Universal Value, and the lack of significant progress made in addressing the decay conditions of the property;

5. Urges the State Party to finalize the processes related to the establishment of boundaries, buffer zones and the related regulations of the two components of the inscribed property, and to submit them within the Retrospective Inventory process of the Periodic Reporting exercise in the Latin America and the Caribbean region;

6. Considers that the State Party has not complied with all the requests expressed by previous World Heritage Committee Decisions, and that therefore the property is in danger in conformity with Chapter IV.B of the Operational Guidelines and decides to inscribe the Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo (Panama) on the List of World Heritage in Danger;

7. Adopts the following Desired state of conservation for the property, for its future removal from the List of World Heritage in Danger:

   a) The approval and full implementation of an emergency plan, a comprehensive assessment of structural and mechanical risks, preventative conservation strategy and maintenance measures at San Lorenzo and Portobelo,

   b) National laws and policies for the conservation of built heritage at San Lorenzo and Portobelo defined and in place,

   c) Long-term consolidation and conservation through annual plans for the components of the inscribed property ensured,

   d) The operational and participatory management system, including its related public use plan, approved and implemented,

   e) The Management Plan fully integrated within territorial and urban development plans,

   f) Encroachments and urban pressure adequately controlled,

   g) The boundaries and buffer zone of all component parts of the World Heritage property precisely clarified,
h) Budgets for the preparation, implementation and follow-up of the management structures and conservation measures secured;

8. Also adopts the following corrective measures and the timeframe for their implementation:

a) To be carried out immediately (by September 2012-March 2013)

(i) Risk assessment completed for all structures and built materials, and an Emergency Plan for all the components of the property in coherence with the recommendations of the reactive monitoring mission and defined timeframe and phasing for their implementation finalized,

(ii) Operational management arrangements and budgets for its implementation ensured,

(iii) Budgets for the implementation of the Emergency Plan (first stage) secured,

(iv) Encroachments and urban pressure adequately controlled and reforestation undertaken,

(v) Technical Office in Portobelo to secure the implementation of the conservation measures and management arrangements set up and functioning,

b) To be carried out within one year (by September 2013)

First phase of the Emergency Plan implemented:

Protection

(i) Boundaries and buffer zones for each of the component parts of the property defined,

(ii) Regulatory measures for the established buffer zones for controlling development and addressing existing threats finalized and approved,

(iii) Monitoring indicators as a tool to assess the state of conservation of the fortified built heritage put in place,

Management and Planning

(iv) Development of a Management Plan begun,

(v) Awareness raising activities within the local communities to identify opportunities for eco and cultural tourism to contribute to the improvement of living conditions of the surrounding communities undertaken in full coherence with the conservation measures for the property,

c) To be carried out within two years (by September 2014):

Second Phase of the Emergency Plan implemented

Protection
(i) National laws and policies for the conservation of built heritage at San Lorenzo and Portobelo developed,

Management and planning

(i) Management Plan for the property, including scheduled and costed provisions for conservation, preventative conservation and maintenance of built heritage, public use, and risk management finalized, approved and adopted,

(ii) Management, territorial and urban development plans integrated,

(iii) Annual conservation plans for each of the components of the inscribed property developed and in place,

d) To be carried out within two-three years (by September 2015):

(i) **Implementation of the Emergency Plan completed.**

(ii) Operational management arrangements and budgets for the continued implementation of the approved Management Plan secured;

9. **Requests** the State Party to submit to the World Heritage Centre a financial estimation of the costs associated with the implementation of each of the corrective measures, and invites the State Party to consider a request for international assistance from the World Heritage Fund for technical support;

10. **Also urges** the World Heritage Centre and the Advisory Bodies, as well as other relevant bodies, to cooperate with the State Party to implement the adopted corrective measures;

11. **Also requests** the State Party to submit to the World Heritage Centre, by 1 February 2013, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 37th session in 2013.


The World Heritage Committee,

1. Following the examination of the state of conservation reports of properties inscribed on the World Heritage List (WHC-12/36.COM/7B and WHC-12/36.COM/7B.Add) and of proposals for inscription of properties on the World Heritage List (WHC-12/36.COM/8B and WHC-12/36.COM/8B.Add),

2. Decides to inscribe the following properties on the List of World Heritage in Danger:

- Mali, Timbuktu (Decision 36 COM 7B.106)
- Mali, Tomb of Askia (Decision 36 COM 7B.106)
- Palestine, Birthplace of Jesus: Church of the Nativity and the Pilgrimage Route, Bethlehem (Decision 36 COM 8B.5)
Annex 2.3. Decision 37 COM 7A.36 (2013)

The World Heritage Committee,

1. Having examined Document WHC-13/37.COM/7A,

2. Recalling Decision 36 COM 7B.102, adopted at its 36th session (Saint-Petersburg, 2012),

3. Takes note of the information provided by the State Party on the conditions at the property and the actions implemented and regrets that the report did not specifically relate information to the adopted corrective measures;

4. Expresses its serious concern for the limited progress that has been achieved in the execution of the corrective measures and urges the State Party to implement them within the approved timeframe, with particular attention to:

   a) Formulation of a budgeted Emergency Plan that includes the identification of priority interventions for stabilization, conservation and protection with timeframes and priority interventions for implementation,

   b) Ensuring that operational conservation arrangements are in place and that budgets have been secured for the implementation of the Emergency Plan,

   c) Identification of measures to address encroachments and urban pressure;

5. Requests the State Party to submit comprehensive technical and graphic information on the planned construction of a retaining wall at the Santiago de la Gloria fort in Portobelo by 30 October 2013, and to halt the interventions until the evaluation of the World Heritage Centre and the Advisory Bodies is submitted to the State Party;

6. Also requests the State Party to submit clear information on the role of the Patronato de Portobelo for the conservation of the property within the framework of a collective Management Plan for this property and the Archaeological Site of Panamá Viejo and Historic District of Panamá;

7. Further requests the State Party to invite an advisory mission to support the State Party in providing guidelines to finalize the diagnosis and to prepare a comprehensive conservation Emergency Plan as soon as possible;

8. Requests furthermore the State Party to submit to the World Heritage Centre, by 1 February 2014, an updated report on the state of conservation of the property.
and the implementation of the above, for examination by the World Heritage Committee at its 38th session in 2014;

9. **Decides to retain Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo (Panama) on the List of World Heritage in Danger.**


The World Heritage Committee,

1. Having examined the state of conservation reports of properties inscribed on the List of World Heritage in Danger (WHC-13/37.COM/7A, WHC-13/37.COM/7A.Add and WHC-13/37.COM/7A.Add.);

2. Decides to maintain the following properties on the List of World Heritage in Danger:

   - Afghanistan, Minaret and Archaeological Remains of Jam (Decision 37 COM 7A.29 )
   - Afghanistan, Cultural Landscape and Archaeological Remains of the Bamiyan Valley (Decision 37 COM 7A.30 )
   - Belize, Belize Barrier Reef Reserve System (Decision 37 COM 7A.16 )
   - Central African Republic, Manovo-Gounda St Floris National Park (Decision 37 COM 7A.1)
   - Chile, Humberstone and Santa Laura Salt peter Works (Decision 37 COM 7A.37 )
   - Colombia, Los Katíos National Park (Decision 37 COM 7A.17 )
   - Côte d'Ivoire, Comoé National Park (Decision 37 COM 7A .2 )
   - Côte d'Ivoire / Guinea, Mount Nimba Strict Nature Reserve (Decision 37 COM 7A .3 )
   - Democratic Rep. of the Congo, Virunga National Park (Decision 37 COM 7A.4 )
   - Democratic Rep. of the Congo, Kahuzi-Biega National Park (Decision 37 COM 7A.5 )
   - Democratic Rep. of the Congo, Garamba National Park (Decision 37 COM 7A.6 )
   - Democratic Rep. of the Congo, Salonga National Park (Decision 37 COM 7A.7 )
   - Democratic Rep. of the Congo, Okapi Wildlife Reserve (Decision 37 COM 7A.8 )
   - Egypt, Abu Mena (Decision 37 COM 7A.23 )
   - Ethiopia, Simien National Park (Decision 37 COM 7A .10 )
   - Georgia, Bagrati Cathedral and Gelati Monastery (Decision 37 COM 7A.32 )
   - Georgia, Historical Monuments of Mtskheta (Decision 37 COM 7A.33 )
   - Honduras, Rio Plátano Biosphere Reserve (Decision 37 COM 7A.18 )

The World Heritage Committee,

1. Having examined Document WHC-14/38.COM/7A.Add,

2. Recalling Decision 37 COM 7A.36 adopted at its 37th session (Phnom Penh, 2013),

3. Appreciates the efforts made by the State Party to fund and organize the advisory mission conducted in 2014 and encourages it to implement the recommendations contained in the mission report;

4. Welcomes the development and adoption of the Emergency Plan for the property and urges the State Party to secure the necessary resources to commence the immediate implementation of the identified priority conservation and stabilisation measures;

5. Expresses its concern about the findings of the mission regarding the continuing deterioration of the historic fabric and erosion of the conditions of authenticity and integrity and also urges the State Party to prioritise implementation of the following
provisions of the UNESCO World Heritage Management Plan and of the Emergency Plan for the property:

a) Update the legislative and regulatory measures to ensure the protection of the property and its terrestrial and maritime setting and to legally define the functions of the Patronato Portobelo-San Lorenzo,

b) Strengthen management arrangements and establish a technical office for conservation, with specialised staff, at the local level to guarantee high quality interventions at the component parts,

c) Define the boundaries of the component parts of the property and their buffer zones, including regulatory measures for their management and submit the revised boundaries as a minor boundary modification for consideration by the World Heritage Committee,

d) Develop a land use plan for Portobelo and San Lorenzo and include provisions and measures to control urban development and relocation of families occupying the inscribed property;

e) Promote international and interdisciplinary collaboration for the implementation of conservation actions and define a capacity building strategy to ensure the sustainability of conservation efforts,

f) Define, in collaboration with local authorities, measures to address environmental degradation and deficiencies in infrastructure services that are impacting cultural and natural heritage assets and constitute public health concerns,

g) Carry out the necessary scientific studies in relation to deterioration processes to better inform decision-making regarding conservation options;

6. Requests that technical details of proposed major interventions be submitted to the World Heritage Centre for review prior to making commitments to their implementation;

7. Also requests the State Party to submit to the World Heritage Centre, by 1 February 2015, an updated report, including a 1-page executive summary, on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 39th session in 2015.

8. Decides to retain Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo (Panama) on the List of World Heritage in Danger.


The World Heritage Committee,
1. Having examined the state of conservation reports of properties inscribed on the List of World Heritage in Danger (WHC-14/38.COM/7A and WHC-14/38.COM/7A.Add),

2. Decides to retain the following properties on the List of World Heritage in Danger:

- Afghanistan, Minaret and Archaeological Remains of Jam (Decision 38 COM 7A.14)
- Afghanistan, Cultural Landscape and Archaeological Remains of the Bamiyan Valley (Decision 38 COM 7A.15)
- Belize, Belize Barrier Reef Reserve System (Decision 38 COM 7A.31)
- Central African Republic, Manovo-Gounda St Floris National Park (Decision 38 COM 7A.34)
- Chile, Humberstone and Santa Laura Salt peter Works (Decision 38 COM 21)
- Colombia, Los Katíos National Park (Decision 38 COM 7A.32)
- Côte d'Ivoire, Comoé National Park (Decision 38 COM 7A.35)
- Côte d'Ivoire / Guinea, Mount Nimba Strict Nature Reserve (Decision 38 COM 7A.36)
- Democratic Republic of the Congo, Virunga National Park (Decision 38 COM 37)
- Democratic Republic of the Congo, Kahuzi-Biega National Park (Decision 38 COM 38)
- Democratic Republic of the Congo, Garamba National Park (Decision 38 COM 39)
- Democratic Republic of the Congo, Salonga National Park (Decision 38 COM 40)
- Democratic Republic of the Congo, Okapi Wildlife Reserve (Decision 38 COM 41)
- Egypt, Abu Mena (Decision 38 COM 1)
- Ethiopia, Simien National Park (Decision 38 COM 7A.43)
- Georgia, Bagrati Cathedral and Gelati Monastery (Decision 38 COM 7A.16)
- Georgia, Historical Monuments of Mtskheta (Decision 38 COM 7A.17)
- Honduras, Rio Plátano Biosphere Reserve (Decision 38 COM 7A.33)
- Indonesia, Tropical Rainforest Heritage of Sumatra (Decision 38 COM 7A.28)
- Iraq, Ashur (Qal'at Sherqat) (Decision 38 COM 2)
- Iraq, Samarra Archaeological City (Decision 38 COM 3)
- Jerusalem, Old City of Jerusalem and its Walls (Decision 38 COM 4)
- Madagascar, Rainforests of the Atsinanana (Decision 38 COM 44)
- Mali, Timbuktu (Decision 38 COM 7A.24)
- Mali, Tomb of Askia (Decision 38 COM 7A.25)
- Niger, Air and Ténéré Natural Reserves (Decision 38 COM 7A.45)
- Palestine, Birthplace of Jesus: Church of the Nativity and the Pilgrimage Route, Bethlehem (Decision 38 COM 7A.5)
- Panama, Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo (Decision 38 COM 7A.20)

The World Heritage Committee,

1. Having examined Document WHC-14/38.COM/8E,

2. Congratulates the States Parties for the excellent work accomplished in the elaboration of retrospective Statements of Outstanding Universal Value for World Heritage properties in their territories;

3. Adopts the retrospective Statements of Outstanding Universal Value, as presented in the Annex of Document WHC-14/38.COM/8E, for the following World Heritage properties:

ASIA AND THE PACIFIC:

- China: Wulingyuan Scenic and Historic Interest Area;
- Japan: Gusuku Sites and Related Properties of the Kingdom of Ryukyu; Historic Monuments of Ancient Nara; Historic Villages of Shirakawa-go and Gokayama; The Hiroshima Peace Memorial (Genbaku Dome);
- Sri Lanka: Sinharaja Forest;
- Vietnam: Hoi An Ancient Town; Complex of Huế Monuments;

EUROPE AND NORTH AMERICA:

- Albania: Butrint;
- Armenia: Monastery of Geghard and the Upper Azat Valley;
- Austria: Semmering Railway; Wachau Cultural Landscape;
- Azerbaijan: Walled City of Baku with the Shirvanshah’s Palace and Maiden Tower;
- Belarus / Estonia / Finland / Latvia / Lithuania / Moldova / Norway / Russian Federation / Sweden / Ukraine: Struve Geodetic Arc;
- Belgium: Major Town Houses of the Architect Victor Horta (Brussels); Neolithic Flint Mines at Spieennes (Mons); Notre-Dame Cathedral in Tournai; Plantin-Moretus House-Workshops-Museum Complex;
- Bosnia and Herzegovina: Old Bridge Area of the Old City of Mostar;
- Cyprus: Paphos;
- Denmark: Ilulissat Icefjord;
- Finland: Bronze Age Burial Site of Sammallahdenmäki; Fortress of Suomenlinna; Old Rauma; Petäjävesi Old Church; Verla Groundwood and Board Mill;
- Georgia: Historical Monuments of Mtskheta; Upper Svaneti;
- Germany / Poland: Muskauer Park / Park Mużakowski;
- Germany: Abbey and Altenmünster of Lorsch; Bauhaus and its Sites in Weimar and Dessau; Castles of Augustusburg and Falkenlust at Brühl; Collegiate Church, Castle and Old Town of Quedlinburg; Garden Kingdom of Dessau-Wörlitz; Luther Memorials in Eisleben and Wittenberg; Monastic Island of Reichenau; Palaces and Parks of Potsdam and Berlin; Pilgrimage Church of Wies; St Mary’s Cathedral and St Michael’s Church at Hildesheim; Völklingen Ironworks; Wartburg Castle; Würzburg Residence with the Court Gardens and Residence Square; Zollverein Coal Mine Industrial Complex in Essen;
- Holy See / Italy: Historic Centre of Rome, the Properties of the Holy See in that City Enjoying Extraterritorial Rights and San Paolo Fuori le Mura;
- Holy See: Vatican City;
- Iceland: Pingvellir National Park;
- Italy: Botanical Garden (Orto Botanico), Padua; Ferrara, City of the Renaissance, and its Po Delta; Historic Centre of Florence; Historic Centre of Naples;
- Lithuania / Russian Federation: Curonian Spit;
- Lithuania: Kernavė Archaeological Site (Cultural Reserve of Kernavė);
- Malta: City of Valletta; Hal Saflieni Hypogeum; Megalithic Temples of Malta;
- Mongolia / Russian Federation: Uvs Nuur Basin;
- Montenegro: Natural and Culturo-Historical Region of Kotor;
- Netherlands: Historic Area of Willemstad, Inner City and Harbour, Curaçao;
- Norway: Vegaøyan -- The Vega Archipelago; West Norwegian Fjords – Geirangerfjord and Naeroyfjord;
- Poland: Centennial Hall in Wrocław; Historic Centre of Warsaw;
- Portugal: Historic Centre of Évora; Landscape of the Pico Island Vineyard Culture; Monastery of Alcobaça; Monastery of the Hieronymites and Tower of Belém in Lisbon;
• Russian Federation: Church of the Ascension, Kolomenskoye; Historical Centre of the City of Yaroslavl; Kizhi Pogost;
• Slovakia: Bardejov Town Conservation Reserve; Vlkolinec;
• Slovenia: Škocjan Caves;
• Spain: Archaeological Ensemble of Mérida; Burgos Cathedral; Historic Centre of Cordoba; Monastery and Site of the Escorial, Madrid; Monuments of Oviedo and the Kingdom of the Asturias; Mudéjar Architecture of Aragon; Old City of Salamanca; Old Town of Ávila with its Extra-Muros Churches; Old Town of Cáceres; Old Town of Segovia and its Aqueduct; Poblet Monastery; Route of Santiago de Compostela; Royal Monastery of Santa María de Guadalupe; San Cristóbal de La Laguna; Santiago de Compostela (Old Town); Works of Antoni Gaudi;
• Turkey: Archaeological Site of Troy; City of Safranbolu; Hattusha: the Hittite Capital; Xanthos–Letoon;
• Ukraine: Kiev: Saint-Sophia Cathedral and Related Monastic Buildings, Kiev-Pechersk Lavra;
• United Kingdom: Gough and Inaccessible Islands; Henderson Island; Historic Town of St George and Related Fortifications, Bermuda;
• United States of America: Cahokia Mounds State Historic Site; Chaco Culture; Independence Hall; Mesa Verde National Park; Monticello and the University of Virginia in Charlottesville; Statue of Liberty;

LATIN AMERICA AND THE CARRIBBEANS:

• Argentina: Ischigualasto / Talampaya Natural Parks; Los Glaciares; Península Valdés;
• Belize: Belize Barrier Reef Reserve System;
• Bolivia: City of Potosí;
• Brazil: Brasilia; Historic Centre of Salvador de Bahia; Historic Centre of São Luís; Historic Centre of the Town of Diamantina; Historic Centre of the Town of Goiás; Historic Centre of the Town of Olinda; Historic Town of Ouro Preto; Sanctuary of Bom Jesus do Congonhas;
• Colombia: Los Katíos National Park;
• Costa Rica / Panama: Talamanca Range-La Amistad Reserves / La Amistad National Park;
• Cuba: Archaeological Landscape of the First Coffee Plantations in the South-East of Cuba; San Pedro de la Roca Castle, Santiago de Cuba; Urban Historic Centre of Cienfuegos; Viñales Valley;
• Dominican Republic: Colonial City of Santo Domingo;
• Guatemala: Tikal National Park;
• Panama: Colba National Park and its Special Zone of Marine Protection; Fortifications on the Caribbean Side, Portobelo and San Lorenzo;
• Suriname: Central Suriname Nature Reserve; Historic Inner City of Paramaribo;
4. Decides that retrospective Statements of Outstanding Universal Value for World Heritage properties in Danger will be reviewed by the Advisory Bodies in priority;

5. Further decides that, considering the high number of retrospective Statements of Outstanding Universal Value to be examined, the order in which they will be reviewed by the Advisory Bodies will follow the Second Cycle of Periodic Reporting, namely:

- World Heritage properties in the Arab States;
- World Heritage properties in Africa;
- World Heritage properties in Asia and the Pacific;
- World Heritage properties in Latin America and the Caribbean;
- World Heritage properties in Europe and North America;

6. Takes note that the World Heritage Centre is in the process of harmonising all sub-headings in the adopted Statements of Outstanding Universal Value and, as appropriate, reflects name changes of World Heritage properties throughout the text of the Statements as requested by the Committee at its 37th session, and requests the World Heritage Centre to also update the size of the property and/or its buffer zone, as appropriate, following subsequent Decisions of the World Heritage Committee concerning Minor Boundary Modifications.

7. Requests the States Parties to provide support to the World Heritage Centre for translation of the adopted Statements of Outstanding Universal Value into English or French respectively, and finally requests the Centre to upload the two language versions on its website.


The World Heritage Committee,

1. Having examined Document WHC-15/39.COM/7A,

2. Recalling Decision 38 COM 7A.20, adopted at its 38th session (Doha, 2014),

3. Appreciates the endorsement by the new administration of previous approaches and recommendations to reach the Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR) and welcomes its commitment to its implementation;

4. Recalls that the timely implementation of the corrective measures defined at the time of inscription of the property on the List of World Heritage in Danger is an essential requirement for achieving the DSOCR;

5. Regrets the very serious delays in the implementation of the recommendations expressed in Decision 38 COM 7A.20 and of the corrective measures referred to above and expresses its very serious concern that this may cause irreparable
damage to the property and the attributes that sustain the Outstanding Universal Value (OUV);

6. **Urges** the State Party to draw up a strategy, detailed work plans, timeframes and budgets for the full implementation of the corrective measures within a three-year period, with due consideration of the set of recommendations of the 2014 Advisory Mission, and to take all the necessary legal, managerial and budgetary provisions for their implementation and requests it to submit these documents by **1 February 2016** for review by the World Heritage Centre and the Advisory Bodies;

7. **Also requests** the State Party to submit to the World Heritage Centre, by **1 February 2016**, an updated report, including a 1-page executive summary, on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 40th session in 2016;

8. **Decides to retain the Fortifications on the Caribbean Side of Panama: Portobelo–San Lorenzo (Panama) on the List of World Heritage in Danger.**


The World Heritage Committee,

1. Having examined the state of conservation reports of properties inscribed on the List of World Heritage in Danger (WHC-15/39.COM/7A and WHC-15/39.COM/7A.Add),

2. Decides to retain the following properties on the List of World Heritage in Danger:

- Afghanistan, Minaret and Archaeological Remains of Jam (Decision 39 COM 7A.38)
- Afghanistan, Cultural Landscape and Archaeological Remains of the Bamiyan Valley (Decision 39 COM 7A.39)
- Belize, Belize Barrier Reef Reserve System (Decision 39 COM 7A.18)
- Bolivia (Plurinational State of), City of Potosí (Decision 39 COM 7A.44)
- Central African Republic, Manovo-Gounda St Floris National Park (Decision 39 COM 7A.1)
- Chile, Humberstone and Santa Laura Salt peter Works (Decision 39 COM 7A.45)
- Côte d'Ivoire, Comoé National Park (Decision 39 COM 7A.2)
- Côte d'Ivoire / Guinea, Mount Nimba Strict Nature Reserve (Decision 39 COM 7A.3)
- Democratic Republic of the Congo, Virunga National Park (Decision 39 COM 7A.4)
- Democratic Republic of the Congo, Kahuzi-Biega National Park (Decision 39 COM 7A.5)
- Democratic Republic of the Congo, Garamba National Park (Decision 39 COM 7A.6)
- Democratic Republic of the Congo, Salonga National Park (Decision 39 COM 7A.7)
- Democratic Republic of the Congo, Okapi Wildlife Reserve (Decision 39 COM 7A.8)
- Egypt, Abu Mena (Decision 39 COM 7A.24)
- Ethiopia, Simien National Park (Decision 39 COM 7A.10)
- Georgia, Bagrati Cathedral and Gelati Monastery (Decision 39 COM 7A.40)
- Georgia, Historical Monuments of Mtskheta (Decision 39 COM 7A.41)
- Honduras, Rio Plátano Biosphere Reserve (Decision 39 COM 7A.20)
- Indonesia, Tropical Rainforest Heritage of Sumatra (Decision 39 COM 7A.15)
- Iraq, Ashur (Qal'at Sherqat) (Decision 39 COM 7A.25)
- Iraq, Samarra Archaeological City (Decision 39 COM 7A.26)
- Jerusalem, Old City of Jerusalem and its Walls (site proposed by Jordan) (Decision 39 COM 7A.27)
- Madagascar, Rainforests of the Atsinanana (Decision 39 COM 7A.11)
- Mali, Timbuktu (Decision 39 COM 7A.21)
- Mali, Tomb of Askia (Decision 39 COM 7A.22)
- Niger, Air and Ténéré Natural Reserves (Decision 39 COM 7A.12)
- Palestine, Birthplace of Jesus: Church of the Nativity and the Pilgrimage Route, Bethlehem (Decision 39 COM 7A.28)
- Palestine, Palestine: Land of Olives and Vines – Cultural Landscape of Southern Jerusalem, Battir (Decision 39 COM 7A.29)
- Panama, Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo (Decision 39 COM 7A.46)
- Peru, Chan Chan Archaeological Zone (Decision 39 COM 7A.47)
- Senegal, Niokolo-Koba National Park (Decision 39 COM 7A.13)
- Serbia, Medieval Monuments in Kosovo (Decision 39 COM 7A.42)
- Solomon Islands, East Rennell (Decision 38 COM 7B.16)
- Syrian Arab Republic, Ancient City of Damascus (Decision 39 COM 7A.30)
- Syrian Arab Republic, Ancient City of Bosra (Decision 39 COM 7A.31)
- Syrian Arab Republic, Site of Palmyra (Decision 39 COM 7A.32)
- Syrian Arab Republic, Ancient City of Aleppo (Decision 39 COM 7A.33)
- Syrian Arab Republic, Crac des Chevaliers and Qal'at Salah El-Din (Decision 39 COM 7A.34)
- Syrian Arab Republic, Ancient Villages of Northern Syria (Decision 39 COM 7A.35)
- Uganda, Tombs of Buganda Kings at Kasubi (Decision 39 COM 7A.23)
- United Kingdom of Great Britain and Northern Ireland, Liverpool – Maritime Mercantile City (Decision 39 COM 7A.43)
- United Republic of Tanzania, Selous Game Reserve (Decision 39 COM 7A.14)
- United States of America, Everglades National Park (Decision 39 COM 7A.17)
- Venezuela, Coro and its Port (Decision 39 COM 7A.48)
• Yemen, Historic Town of Zabid (Decision 39 COM 7A.37)
EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS

The fortifications on the Caribbean side of Panama: Portobelo-San Lorenzo was inscribed on the List of World Heritage in Danger at the 36th session of the World Heritage Committee (Saint Petersburg, 2012). At its 37th session, the World Heritage Committee (Phnom Penh, 2013), expressed serious concern about the limited progress achieved in the implementation of the corrective measures and requested the State Party to formulate a costed Emergency Plan, to put in place operational conservation arrangements and to identify measures to address encroachments and urban pressure. It also requested that the State Party invite an Advisory Mission to provide guidelines to finalise the diagnosis and to prepare a comprehensive conservation emergency Plan. The ICOMOS advisory mission was carried out from February 25th to March 1st 2014.

The mission found that the UNESCO World Heritage Management Plan in Panama has only been partially implemented throughout 2013. The Emergency Plan has been completed and sent to the World Heritage Centre but it has yet to be internally approved which hinders the possibility to commence the implementation of actions. The mission also found that the boundaries of the property and the buffer zones have neither been defined nor approved and that control of urban growth and occupation of land is still lacking. Deterioration of built fabric continues at a fast rate as well as environmental degradation and limited scientific studies on conservation and restoration have been carried out. Institutional arrangements continue to be deficient as a technical office with a qualified staff is still lacking and resources have not been secured for full operation to implement sustained actions.

In light of these considerations, the mission recommends the following:

1. Urgently finalise the process to adopt the Emergency Plan, through a resolution from the National Historic Heritage Office.

2. Commence the systematic implementation of actions identified in the Emergency Plan to ensure that the current progressive state of deterioration of the Portobelo-San Lorenzo property is adequately addressed. Conclude its implementation by September 2015 in accordance to the adopted timeframe for corrective measures.

3. Continue with the implementation of urgent actions included in the Conservation and Protection Plan established by the UNESCO World Heritage Management Plan for the Portobelo-San Lorenzo property in Panama. Priority should be placed on:
a) Updating of the UNESCO protective regulations through a project for a law to protect the property and its terrestrial and maritime buffer zones.

b) Updating of the technical and regulating framework by concluding the elaboration of a law on the functions and self-finance of the Patronato Portobelo-San Lorenzo.

c) Reorganization of the working framework related to heritage in order for it to be more simple and to achieve more efficiency: revision of the administrative responsibilities; elaboration of norms to guarantee an efficient protection of the property and its Outstanding Universal Value; enforcement of INAC’s and the Patronato’s managerial capacity; the Patronato’s plan on self - sustainability; establishment of a technical office for conservation with a specialized staff;

d) Rehabilitation of endangered or neglected historic buildings in Portobelo and San Lorenzo: integral studies on structural and mechanical risks; emergency plan for the protection and conservation of the fortifications; urgent consolidation of elements threatened of loss; immediate consolidation interventions and prevention of risks; general cleansing and treatment of macro and micro flora;

e) Rehabilitation and environmental preservation of the properties’ surroundings plan for the control of pressures from urban growth; elaboration of a Plan on the interpretation and protection of the complex of fortifications including Portobelo Bay and the access to Chagres River as defensive spaces, allowing the rehabilitation of both the historic and the natural patrimony; fences to avoid vandalism.

4. Conclude the definition and legal approval of the boundaries and the buffer zone of each component of the World Heritage property to control urban development pressures and encroachment to ensure the protection of the property. The established boundaries for the property and buffer zone need to be submitted as a minor boundary modification for consideration by the World Heritage Committee as requested in 2012.

5. Develop and enforce adequate regulatory measures and legislative arrangements to manage the proposed buffer zones. These should include clear protection arrangements, delimitation and, in the case of San Lorenzo, an extension to the buffer zone.

6. Apply a rigorous plan for surveying, for study and for archaeological mapping before interventions are undertaken in order to safeguard the conditions of authenticity and integrity of the property and to ensure the conservation of attributes that convey Outstanding Universal Value.

7. Establish collaboration between international interdisciplinary experts for the preservation works in fortifications taking into consideration that the State Party has limited capacities in these fields.
8. Collaboration efforts should be geared toward capacity building to strengthen capabilities and therefore the sustainability of efforts. The mission recommends that a Capacity building programme on preservation, maintenance and cultural tourism be formulated. The programme should consider the support of Panamanian universities and international institutions specialized in these disciplines.

9. Take urgent measures together with local authorities to rehabilitate the natural setting and environment. The current situation has caused a negative and direct impact on the structures of Santiago, Santiago de Gloria and more particularly in San Jerónimo due to the Guinea Brook (quebrada) that has caused the erosion and collapse of a large section of the wall located next to the bank. In addition, urgent sanitizing measures in the village (damaged sewage system, waste waters, solid waste on the Quebrada de Guinea or the Bay) are also needed not only because of public health concerns but also because they are factors that also contribute to the further decay of the foundations of those fortifications built on the seabed.

10. Expedite the relocation of families occupying the inner areas of the Santiago de Gloria Castle – and, if possible, of those who live next to the Guinea brook – to new houses currently under construction.

11. Prospect and study the San Lorenzo Castle from the geological and ecological point of view, particularly where the Chagres River and the Caribbean Sea converge. In this place, two vaults have been affected and constitute a risk area at present.

12. Carry out a study on the corrosion of foundations in direct contact with the sea as the battery of San Jerónimo and undertake research about the actions undertaken in other fortifications of the Caribbean region that have the same problem as, for example, the battery of San Fernando in Cartagena de Indias and San Juan de Ulúa Castle in Mexico, among others, to inform potential conservation options.

13. Carry out studies on the environmental threats to the bay of Portobelo Bay in order to find solutions. Pending results from these studies, the use of the Bay by tourism and navigation, through maritime and tourist authorities and the INAC, should be limited.

14. Find funding for the creation of the Technical Bureau in Portobelo, with specialized technicians and qualified staff in conservation, urban regulation and territorial planning in order to have adequate response capabilities at the local level.

15. Promote the creation of “Heritage Guardians” with high school students. A proposed programme would entail training on conservation of cultural heritage and on Portobelo and its fortifications and securing employment as site guardians and guides. Depending on skills, trainees could also assist in archaeological and conservation works. For the case of San Lorenzo, possibilities for involving youth beyond high school students could be explored. Such a programme would incorporate youth in heritage endeavours and could eventually lead to further conservation training.
16. Promote the creation of the Crafts School in order to train young people in crafts related to conservation and restoration of built heritage: stonework, woodwork, building work, maintenance and control of vegetation and ironwork, etc., using the methods already developed by the Spanish Agency for International Co-operation (AECI) and models implemented in Cartagena de Indias, Colombia and Havana, Cuba.

17. Undertake a petrographic study of the Portobelo and San Lorenzo fortifications to understand mineralogy and pathologies of building materials to better inform conservation decisions regarding interventions. Mortars, renders and bricks will be also included in this petrographic study.

18. Organize and/or promote a congress or expert meeting to evaluate the main problems affecting of Portobelo and San Lorenzo fortifications. For example, Panama could offer to be the venue of annual meetings of the next meeting for the ICOMOS International Scientific Committees on Fortification and Military Heritage or on the Committee on Stone and organize some working sessions on Portobelo and San Lorenzo fortifications.

The mission considers that the property is still faced with considerable threats and should remain on the List of World Heritage in Danger until the corrective measures and the above recommendations are fully implemented.
PORTOBELO AND SAN LORENZO PATRONAGE

EXECUTION AND FORMULATION OF PROJECTS REPORT

2015

December 2015
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1. Introduction.

This report is a summary of the projects and activities executed by the Portobelo and San Lorenzo Patronage (PPSL) in the year 2015 as part of the effort of consolidation, restoration and recuperation of the forts of the Historic Monumental Complex (CMH) of Portobelo and the Castle of San Lorenzo El Real de Chagres.

The activities of conservation that were realized throughout the year are described in the fortifications of Portobelo and the Castle of San Lorenzo, and the projects that have been formulated for this period of execution corresponding the year 2016 are numbered.

This year the Board of Directors held six meetings and three cooperation agreements were approved, two out of which were held with the National Institute of Culture (INAC) and one with the Tourism Authority of Panama (ATP) for the execution of on-site conservation projects.
2. Background:

The PPSL is a nonprofit organization, of mixed nature conformed by governmental entities and private enterprises under the Legal Identity No. 581-279 from November 1st 2007; with the fundamental objective of contributing to enhancing the value, preservation, conservation, protection and restoration of the Panamanian Forts at the Caribbean, made up by the CMH of Portobelo and the Castle of San Lorenzo El Real de Chagres.

**Portobelo.**

On March 20th 1597, the city was founded by Francisco Velarde y Mercado, with its original name being San Felipe de Portobelo, in honor of Felipe II. During the XVI and XVIII centuries the city was one of the most important ports for the export of silver from la Nueva Granada, and one of the ports of departure of the Spanish Treasure Fleet (Flota de Indias).

In the year 1601, Portobelo was attacked and sacked by the buccaneer William Parker; in 1688 the city is attacked again by the corsair Sir Henry Morgan, who was in charge of a fleet of 9 boats and 460 corsairs. The siege lasted 14 days. Later, in 1739, the port was captured once again by the English admiral Edward Vernon. Finally, in 1744, the city was bombarded by the pirate William Drake and with the original functions of the Customs suppressed, the activities of the fairs declined.

In 1976, through Law 91, the CMH of Portobelo is delimitated. It encompasses the area of the old city of Portobelo, the ruins of the castle Santiago de la Gloria, the castle of San Felipe, The Battery Fort of San Jerónimo, the Battery Fort and the House Fort of Santiago, the Batteries of High and Low and the House Fort of Fernando, the ruins of the Trench Fort of the primitive Santiago, the battery of Buenaventura, the ruins of the Fort of Farnesio, of the Trench of the Gun Powder House, the Customs, the bastion of the walled compound called San Cristóbal, and other ruins that exist within and in the vicinity of the city.

In 1980, the ruins of the forts, along with the neighboring Fort of San Lorenzo were declared World Heritage Site, by UNESCO, under the name: “Fortifications on the Caribbean Side of Panama: Portobelo - San Lorenzo.”

**Castle of San Lorenzo El Real de Chagres.**

The Castle of San Lorenzo, El Real, was erected on the rugged skirt of an elevated rock over the sea level, facing the mouth of the Chagres River, constructed by the military engineer Bautista Antonelli. The current Fort, a XVIII century building, was later erected by the
military engineer Manuel Hernández, occupying the ridge of “Marco de Castilla”, a cliff located in the northern border of the mouth of the Chagres River.

At the beginning, the actual Castle never had the shape of proportions of the actual Factory, and therefore the facts that took place during its time, were not conducted under a warlike scenario in the existing buildings. In other words, the events of the pirate incursions of Francis Drake (1595-1596), Henry Morgan (1668 y 1670-1671), or of Edward Vernon (1739, 1740-1742), did not occur in the actual fort.

Subsequently, the Fort was declared a National Historic Monument through the Law Nº 68 of June 11, 1941. Again, as stated before, in 1980, the Castle of San Lorenzo, along with the fortifications of Portobelo, was declared World Heritage by UNESCO under the name: “Fortifications on the Caribbean Side of Panama: Portobelo - San Lorenzo. In 2012 the site was added to UNESCO’s List of World Heritage in Danger.
3. Aide Memoire.

Localization:

Situated in the districts of Portobelo and Cristobal, province of Colon.

Property Conditions:

Several decades after being declared a World Heritage Site and in the light of its state of deterioration and lack of a management plan, proposed by the Republic of Panama; in 2010 a Reactive Monitoring mission visits our country in order to determine the state of conservation of the site, and so the said the mission made the following decisions:

Decision 36 COM 7B.102 of the World Heritage Committee of UNESCO

Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo (Panama) (C 135)

The World Heritage Committee,

1. Having examined Document WHC-12/36.COM/7B,

2. Recalling Decision 35 COM 7B.129, adopted at its 35th session (UNESCO, 2010),

3. Notes the limited implementation of activities being carried out by the State Party with regards to the fragile state of conservation of the property;

4. Reiterates its deep concern regarding the state of conservation of the property, in particular the significant and accelerated degradation of the historic fabric which directly impacts its Outstanding Universal Value, and the lack of significant progress made in addressing the decay conditions of the property;

5. Urges the State Party to finalize the processes related to the establishment of boundaries, buffer zones and the related regulations of the two components of the inscribed property, and to submit them within the Retrospective Inventory process of the Periodic Reporting exercise in the Latin America and the Caribbean region;

6. Considers that the State Party has not complied with all the requests expressed by previous World Heritage Committee Decisions, and that therefore the property is in danger in conformity with Chapter IV.B of the Operational Guidelines and decides to inscribe the Fortifications on the Caribbean Side of Panama: Portobelo-San Lorenzo (Panama) on the List of World Heritage in Danger;

7. Adopts the following Desired state of conservation for the property, for its future
removal from the List of World Heritage in Danger:

a) The approval and full implementation of an emergency plan, a comprehensive assessment of structural and mechanical risks, preventative conservation strategy and maintenance measures at San Lorenzo and Portobelo,

b) National laws and policies for the conservation of built heritage at San Lorenzo and Portobelo defined and in place,

c) Long-term consolidation and conservation through annual plans for the components of the inscribed property ensured,

d) The operational and participatory management system, including its related public use plan, approved and implemented,

e) The Management Plan fully integrated within territorial and urban development plans,

f) Encroachments and urban pressure adequately controlled,

g) The boundaries and buffer zone of all component parts of the World Heritage property precisely clarified,

h) Budgets for the preparation, implementation and follow-up of the management structures and conservation measures secured;

8. Also adopts the following corrective measures and the timeframe for their implementation:

a) To be carried out immediately (by September 2012-March 2013)

(i) Risk assessment completed for all structures and built materials, and an Emergency Plan for all the components of the property in coherence with the recommendations of the reactive monitoring mission and defined timeframe and phasing for their implementation finalized,

(ii) Operational management arrangements and budgets for its implementation ensured,

(iii) Budgets for the implementation of the Emergency Plan (first stage) secured,

(iv) Encroachments and urban pressure adequately controlled and reforestation undertaken,
(v) Technical Office in Portobelo to secure the implementation of the conservation measures and management arrangements set up and functioning,

b) To be carried out within one year (by September 2013)

First phase of the Emergency Plan implemented:

Protection

(i) Boundaries and buffer zones for each of the component parts of the property defined,

(ii) Regulatory measures for the established buffer zones for controlling development and addressing existing threats finalized and approved,

(iii) Monitoring indicators as a tool to assess the state of conservation of the fortified built heritage put in place,

Management and Planning

(iv) Development of a Management Plan begun,

(v) Awareness raising activities within the local communities to identify opportunities for eco and cultural tourism to contribute to the improvement of living conditions of the surrounding communities undertaken in full coherence with the conservation measures for the property,

c) To be carried out within two years (by September 2014):

Second Phase of the Emergency Plan implemented

Protection

(i) National laws and policies for the conservation of built heritage at San Lorenzo and Portobelo developed,

Management and planning

(i) Management Plan for the property, including scheduled and costed provisions for conservation, preventative conservation and maintenance of built heritage, public use, and risk management finalized, approved and adopted,

(ii) Management, territorial and urban development plans integrated,

(iii) Annual conservation plans for each of the components of the inscribed property
developed and in place,

d) To be carried out within two-three years (by September 2015):

(i) Implementation of the Emergency Plan completed,

(ii) Operational management arrangements and budgets for the continued implementation of the approved Management Plan secured;

9. Requests the State Party to submit to the World Heritage Centre a financial estimation of the costs associated with the implementation of each of the corrective measures, and invites the State Party to consider a request for international assistance from the World Heritage Fund for technical support;

10. Also urges the World Heritage Centre and the Advisory Bodies, as well as other relevant bodies, to cooperate with the State Party to implement the adopted corrective measures;

11. Also requests the State Party to submit to the World Heritage Centre, by 1 February 2013, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 37th session in 2013.

Initiated actions to date:

Upon notification of the report of the Reactive Monitoring Mission’s Report, the Panamanian National Government has commenced a series of limited actions, mainly due to lack of budget, in order to address points and actions raised in the said report.

The following are among the actions that have already been accomplished by Panama:

a. An Emergency Plan was developed and finalized on January 2014.

b. A new law that grants economic resources from the National Government to the PPSL has been approved, in order to guarantee the financing and management of the site.

c. The works of measuring and inscription of the confinements of both property`s components have begun.
4. Project Execution – 2015

In 2015 the PPSL executed the cleaning and consolidation works, mainly at the Portobelo Fortifications. On the other hand, in the Castle of San Lorenzo the works were limited to the trimming the grass and control of green areas.

4.1. Execution Budget

For 2015, the PPSL received from the National Government for the management of the site 200,000.00 USD from the INAC, under the compromise stipulated in Law 30 from the 18th of November 2014 which annually assigns funds from the National Government budget to the management of the site. Additional to this grant, the PPSL managed a cooperation agreement with the INAC, which assigns a grant of 100,000.00 USD, for the improvement of the on-site museum, which is located at the historical Customs House of Portobelo. It must be noted that these funds are still in process for their assignation.

On behalf of the ATP, a technical cooperation agreement was accomplished for the execution of a conservation Project in the Castle of San Lorenzo, for 400,000.00 USD, which is currently going through the endorsement process in order to be assigned.

Further, the PPSL receives 115,000.00 USD from the Company Manzanillo International Terminal (MIT), a local Company that conforms the board of Directors, for the elaboration of the constructive blueprints of the new Visitor Center for the Fort of San Lorenzo, an initiative of the Patronage along with private enterprises.

Finally, in addition to the economic contributions, the PPSL managed a donation of a piece of land of 3,500.00 sq. m., in the sector of Fort Sherman (a former US Military complex), next to the Fort of San Lorenzo, for the specific construction of the Visitor’s Center.

4.2. Team work

During the year 2015, the technical team of the PPSL was formed by a workforce of 12 people, plus a field Architect and 11 technicians and helpers in restoration. The need to increase the PPSL’s workforce is evident as well as the need to incorporate more technical personnel specialized on restoration works. For this reason it is imperative to secure more economical resources in order to hire the required personnel for the property’s management.

Likewise, for the year 2016 the plan is to conduct several Capacity Building programs for the personnel, as well as incrementing the personnel for the conservation that needs to be undertaken at the Castle of San Lorenzo.
4.3. Accomplished Interventions

Due to the limited budget for executions assigned in 2015, and the lack of personal at the PPSL, the consolidation works at the site have been limited and very specific, taking place mainly at the Battery of Santiago de la Gloria, and including the cleaning and maintenance of green areas in the rest of the fortifications.

Annex 1 of this report summarizes the breakdown of the activities done by the PPSL throughout the year 2015. In addition, Annex 7 summarizes the technical information (developed by Eng. Heriberto Rojas) regarding the mechanical and structural diagnosis and structural corrective/stabilization/consolidation measures design for the various forts and fortifications at Portobelo.

- **Santiago de la Gloria Battery:**
  - Consolidation of the domes of the gatehouses.
  - Consolidation of the merlones, loopholes, benches and Wall crowning’s.
  - Removal of mud and debris of the land slide.
  - Canalization of rain water.

- **Fort of San Fernando:**
  - Maintenance and adornment of the green areas.

- **Fort of San Jerónimo:**
  - Maintenance and adornment of the green areas.

- **El Farnesio Platform:**
  - Maintenance and adornment of the green areas.

- **Castle of Santiago:**
  - Maintenance and adornment of the green areas.

- **Mercado de la Negrería:**
  - Cleaning and adornment of the green areas.

- **Baluarte de San Carlos:**
  - Cleaning and adornment of the green areas.

- **Castillo de San Lorenzo:**
  - Maintenance and adornment of the green areas.

4.4. Executed Projects.

- **The Design for the new Visitor`s Center of the Castle of San Lorenzo.**
  Project that is being financed with funds from the MIT Company. It comprises the construction of a new Visitor’s Center for the attention of tourists that come to the site. The Center is expected to have an interpretation hall, an auditorium, capacity building rooms, cafeteria, gift
shop, toilets and administrative offices.
The Center will be located at Fort Sherman (a former US Military complex), four kilometers away from the Castle of San Lorenzo, thus outside of its perimeter.
This Project is currently at the stage of the development of constructive blueprints. For the construction stage an additional investment of 2,500,000.00 USD is needed.
The PPSL is coordinating and working towards obtaining the funds from international financing entities. In August 2015, the Project was presented to the Cooperation Forum between Latin America and Central Asia, an event that took place in San José, Costa Rica. Annex 2 of this report includes some architectural plans of this project.

- **Capacity building**
  In September 2015, the technical team of the PPSL took several Capacity building trainings, for the application of glazes, delivered by the Spanish ceramic’s expert Mrs. Lourdes Rodríguez.

5. **Projects for 2016.**

For the year 2016, taking into consideration of both sites and the investment budget cuts, the Board of Directors of the Patronage of Portobelo and San Lorenzo, approved a series of projects to be developed with the budgets assigned for 2016 by the National Institute of Culture and the National Tourism Authority of Panama; as well as funds managed by the company Manzanillo International Terminal (MIT).

**Projects for 2016:**

1. Conservation Project for the Castle of San Lorenzo.
2. Project for the Visitor’s Center at the Castle of San Lorenzo.
3. Educational Project for the Monumental Complex of Historic Portobelo.
4. Preliminary study for updating the Management Plan for the Fortifications for the Caribbean Coast.
5. Renovation Project for the Exhibit of the Customs Museum in Portobelo.
7. Geophysical restoration of the Castle of San Lorenzo.
5.1. Conservation Projects in the Castle of San Lorenzo.

Managed by the PPSL through the funds given by the ATP to be developed through an agreement between both parties, this project has four components:

a. **Construction of installations for the visitor’s center.**
   This component comprises the construction of a reception station for visitors, W/Cs, billboard installation, vigilance and information post, the creation of a museum script and habilitating trails and security rails.

b. **Habilitating basic infrastructure.**
   This component includes the equipment of basic necessary services for the functioning of the installations for the visitors. The construction of a water treatment plant, water bombing system, water storage tanks, and an electric energy plant.

c. **Conservation plan, habilitation and interpretation of the site.**
   This component includes the studies of previous conservation of the monuments, the complete survey plans of the fortress, the stronghold, the existing vegetation and the topography. In the same manner studies will be realized with respect to the concentration of humidity in the walls of the castle and the evaluation of the loss of stone material.

   The studies will include the historical research and its technical specifications are included. This section includes the participation of a forestry engineer, a sanitary engineer and a civil engineer as a complement to the team of architects and restorers.

d. **Consolidation and conservation works of the Castle of San Lorenzo.**
   This component comprises the supervision, materials and equipment’s for the realization of the works of consolidation of the structures of the House of the Castellano and the House for the Troops; as well as the habilitation of the basic installations necessary for the field team (W/C for workers, deposits, field offices).
   For the execution of these works we count with a budget for the Project of 400,000.00 USD, granted by ATP through the agreement signed by the PPSL. These funds are expected to be given to the PPSL in the month of January 2016.

Annex 3 of this report includes some general information related to this particular project.
5.2. Visitor’s Center Project for the Castle of San Lorenzo.

Project developed by the PPSL with funds managed by the company MIT; currently in the development stage for the constructive blue prints. This project is to be developed in four stages:

a. Development of conceptual plans and final/construction plans

This stage, financed with the funds from the Company MIT, is being developed by the local architecture firm Mallol & Mallol. It is currently in the face of approval of the conceptual plans, and it is estimated to be concluded in March 2016. Once this stage is finalized a detailed budget regarding the cost for the construction of the project will be needed. Again, Annex 2 of this report includes some architectural plans of this project.

b. Construction of the Visitor’s Center.

This stage of construction of the project has an estimated cost of around 2,500,000.00 USD, executed in an estimated time of 18 months. Currently we do not have the funds for its execution; the PPSL through its Board of Directors is promoting the project in order to collect the necessary funds.

c. Equipment and Museography.

This stage, should take place in parallel with the construction of the building, and has an approximated cost of 1,000,000.00 USD, and it entails equipping the building with the necessary air conditioning systems, audio, video, vigilance, and data; as well as the pieces that conform the collection and the elaboration of the educational program and the training of the guides.

d. Setting operations.

This stage comprises the elaboration of a plan of promotions for the site, as well as the Budget of operation for the center for the first years of operations, the time that is estimated for the center to be self-sustaining. This cost is still to be determined.

5.3. Educational Project of the Historic Monumentsal Complex (CMH) of Portobelo.

We are proposing the design of an Educational Project to be executed in two years in the Historical Monumentsal Complex of Portobelo, in which the Forts will be used and the renovated Customs Museum will be opened to the public in mid-2016. Annex 4 of this report includes some general information related to this Educational Project.

6,000 kids from the schools of the District of Portobelo will be directly benefited with free
visits, 210 teachers will cultivate their knowledge about the site and will learn how to use
the didactic material that will be handed to them, 30 teachers will be trained in the topic
for 40 hours, books will be given to all of the visiting children and the guides (of the PPSL
and others that will work in the attention of the site, with up to 10 guides) will be trained in
the arts of dealing with the general public and school oriented public.

The products that will be given are didactic activities for each school grade from preschool
to sixth grade, this includes workshop material previous and prior to the visit, a text for the
young public with respect to Portobelo, inductions with regards to the visit in each one of
the schools and preliminary and final evaluations that will permit to measure the level of
impact achieved with the programs.

The cost of the program is of 97,300.00 USD for the first year and 100,000.00 USD for the
second year. This covers the honoraria of the consultants and the operational costs of the
project. The funds for the development of this Project will be managed by the private
Company and government institutions like the Colon Free Zone and the Caja de Ahorros.

5.4. Preliminary study for Updating the Management Plan of the
Fortifications of the Caribbean Coast.

The greatest deficiency that we currently face at the PPSL is the lack of an update of the
Management Plan. With this preliminary study we expect to be able to analyze the following
necessary details in order for the site to be adequately managed:

- Specify the objectives of updating the Management Plan, meaning the reason why
  this update is being elaborated. In this way a sketch of the mission and vision for
  the fortifications can be developed.

- Coordinate with the PPSL, including its administrative and technical personnel, in
  order to address how will information management take place? how the
  management will be developed and what will be the implementation method?

- Study the legislation of Portobelo and San Lorenzo in order to know in detail its level
  of protection that they count on to this date, and its limits and specifications
  regarding its conservation, among other things.

- Review previous studies and take into consideration the aspects that they have in
  common in the areas of diagnosis and planning in order to include them in the new
  management plan. Just to mention a few recent ones, the works of Architect Almyr
  Alba and the plan elaborated by José María Ezquiaga should be taken into
  consideration. In this way one can have an idea of the topics to cover in such a plan.
- Create a working chronogram in the short, medium and long term for the realization of the management plan.

- In all moments include the planned projects by the PPSL in the management plan.

- Add in the preliminary study a budget or total amount of the works of the management plan.

The execution time for all these studies is of six months, and has a cost of 4,500.05 USD. The studies will be done by Architect Silvia Arroyo, a specialist in the management of historical sites. Annex 5 of this report includes some general information related to this preliminary study.

5.5. Renovation Project of the Exhibition for the Portobelo Customs Museum.

This Project emerges from the necessity to review the museography of the Custom’s House of Portobelo, and to re-direct it to the objectives and ends traced by the plans of the PPSL. The idea is to focus this alternative more towards the comprehension of the defense system, its architecture and political, social and economic context of the time, but at the same time, rescuing the main architects of these buildings by putting them in the spotlight that they deserve in the history of Hispanic American architecture.

The objectives of the exhibition focus on the following:

a. Present to the national and international public the history of commerce and the fortifications of Portobelo, adjusting to the most recent museographic tendencies through attractive resources, in addition to the traditional presentations of material content.

b. Demonstrate to the local and national community, the commitment of the PPSL as manager of the human, investigative, touristic and social development as actions worth focusing on.

c. Offer an exhibition that can serve as an anchor for the visitors of the CMH of Portobelo in order to provide an introductory visit of each ancient edification and to facilitate their interpretation.

d. Extend the scope of the exhibition for a better management and distribution of the contents of the sample.

e. Enlarge and enhance the activities proposed for tourists that visit Portobelo every year.

f. Update the contents of the exhibition.
This first stage of the Project, which consists on the design of the script, production and design of the interiors and the museography, would be in the hands of local Architect Reinier Rodriguez, who originally designed the museum a couple of years ago.

The cost of this consultancy sums up to a total of 35,845.00 USD. These funds will be obtained from the budget of the INAC, managed through the agreement that was signed by both parties. Annex 6 of this report includes some general information related to this renovation project.

5.6. Stone Wall Restoration workshop.

This workshop is focused on techniques of restoration of stone masonry walls and structures, to be dictated by the Spanish expert master mason with vast experience, which has intervened many projects of great importance in more than 20 cathedrals, castles and ancient structures. The workshop is organized in two stages:

First Stage: Theory.

It will last one week in which all of the theory and technical information will be addressed:

- Technical and photographic documentation about various topics like, historical visions, constructive and restauration processes, material analysis and types of stone.
- Stone as a constructive material, limestone and sandstone, extraction methods, carving and collocation, technical characteristics of the stones, lime mortars, historical overview, how to obtain calcination, additives, times of lime, etc.
- Decomposition and reposition stone mortars, pathologies, exposed zones in which edifications, micro fissure, salt attacks, humidity, contamination, inadequate interventions, cleaning, consolidations, water repellence, etc.

Second Stage: Practice.

- It will last three weeks where the material taught on the field will be put into practice.

The spirit of the course is for the participants to become familiar with the world of restoration having very clear that it is an old practice in the construction world, and to have knowledge of techniques and know how to take advantage of the existing materials.

All of this is conceived with a view to procuring a Panamanian restoration team, capacitated in order to properly start the consolidation and restoration of our heritage.
The course will have an approximated cost of 17,500.00 USD. This cost includes the honoraria of the technical expert, flight ticket, accommodations and other costs.

5.7. Geophysical prospection for the Castle of San Lorenzo.

During the month of March 2016 and in collaboration with the Investigation in Engineering and Applied Sciences Laboratory (of the Experimental Engineering Center of the Technological University of Panama - UTP) and the Sorbonne University of Paris (UPS), the noninvasive geophysical prospection of the high battery of the Castle of San Lorenzo will be performed.

The prospection works will be directed by Dr. Louis Pastor of the UPS, and Dr. Alexis Mojica from the UTP, in coordination with the National Directorate of Historic Heritage.

5.8. Publication of the book about the history Portobelo.

During the month of April we hope to count with the manuscript of the new publication about the commercial history of San Felipe de Portobelo, a new book written by the Panamanian historian Dr. Alfredo Castillero. This publication was written by the person in charge of the PPSL and sponsored by the MIT company.


On October 15 we were notified of the inclusion of Fortifications of Portobelo on the 2016 Watch List of the World Monuments Fund.

With this designation which serves as a window to promote the site at an international level, we are seeking to generate attention from the international community and the business international world in order to contribute to improving of the state of conservation of the site.

For the year 2016, various events will be organized in order to promote and spread the word about the importance of Portobelo in regards to its history, as its role as witness of an important time for Panama and the Americas.

6. Conclusions

- In the year 2015, we worked with a tight budget, a situation that reflected itself in a lack of an integral program of interventions for the Fortifications.
• For the year 2016, we expect to be able to count with larger budgets that will allow the PPSL to implement the emergency measures needed for the conservation of the site, and to start a short term strategy to execute the emergency measures listed in the World Heritage's Committee in order to remove the site from the List of World Heritage in Danger.

• It is imperative that the site updates and continues to implement its short term management plan, and to execute the emergency plan in the next two years because if significant actions are not taken we will face the risk of even more deterioration of the built fabric of the forts and fortifications.

• With the resources attained from the National Government for the year 2016, a technical team has to be put together in order to work in the elaboration of the investment projects, as well as the improvement of the technical equipment and the capacity building of the members and staff of the field team.

Report prepared by,

[Signature]

Architect Wilhelm Franqueza
Project Manager
Patronage of Portobelo and San Lorenzo
8. Abbreviations:

- **PPSL**: Portobelo and San Lorenzo Patronage
- **CMH**: Historic Monumental Complex
- **INAC**: National Institute of Culture
- **ATP**: Tourism Authority of Panama
- **MIT**: Manzanillo International Terminal
- **UTP**: Technological University of Panama
- **UPS**: Sorbonne University of Paris


**Annex 1**: Report of on the field activities of the Patronage of Portobelo and San Lorenzo (PPSL) – October 2015.

**Annex 2**: Project for the Visitor Center of the Castle of San Lorenzo.

**Annex 3**: Conservation Project for the Castle of San Lorenzo.

**Annex 4**: Educational Project of the Historical Monumental Complex (CMH) of Portobelo.

**Annex 5**: Preliminary study for updating the Management Plan for the Fortifications of the Caribbean Coast.

**Annex 6**: Renovation Project for the Exhibition of the Customs Museum in Portobelo.

**Annex 7**: Technical information (developed by Eng. Heriberto Rojas) regarding the mechanical and structural diagnosis and structural corrective/stabilization/consolidation measures design for the various forts and fortifications at Portobelo.
“Reports of on the field activities of the Patronage of Portobelo and San Lorenzo (PPSL) – October 2015”

Annex 1: This field report describes consolidation works done on Santiago Battery Fort, as well as maintenance works regarding lawn maintenance after the pilgrimage to honor the Cristo Negro de Portobelo (Black Christ of Portobelo), took place drawing thousands of devotees to the immediate setting of the fortification. The contents of this Annex are presented in Spanish.
PATRONATO DE PORTOBELO Y SAN LORENZO
INFORME DE ACTIVIDADES DE CAMPO MENSUAL.
OCTUBRE DE 2015.

COMENTARIO.

Durante Octubre los trabajos de consolidación en la Batería de Santiago de la Gloria han avanzado, esto tanto en las troneras, los coronamientos de merlones y muros, esto según lo planeado.

Se realizaron trabajos de mantenimiento y ornato en las zonas de césped de la batería de Santiago de La Gloria, esto durante todo el mes, pero muy especialmente en la semana del 19 al 23 de octubre, durante la que se realizó la mayor cantidad de visitas de peregrinos devotos al Cristo Negro. También se realizó la visita mensual al Fuerte de San Lorenzo el Real del Chagres, durante las que se efectuaron los trabajos de recorte y control de las áreas verdes. Finalmente, y en este orden, se efectuó también obra de control de malezas en los alrededores e interior de la Muralla de San Cristóbal, esto en Portobelo.

Arq. Rodolfo Alejandro Suñé Martínez.

Arquitecto de Campo –PPSL.
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<tr>
<th>FOTOGRAFÍA.</th>
<th>MONUMENTO</th>
<th>ESTADO ACTUAL</th>
<th>TRABAJOS REALIZADOS</th>
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</thead>
<tbody>
<tr>
<td><strong>Merlón No. 2 – Vertido de Inyección en espacio de roca de arenisca nueva.</strong></td>
<td>Batería de Santiago de La Gloria.</td>
<td>Restos del derrumbe llenan la zanja que separaba a la carretera y a la Batería en su muro sur, desdibujando los límites de la fortaleza. Se ha decidido no retirarlos por seguridad del propio monumento. Se han retirado las rocas, el lodo y escombros dentro del Patio en un 100 %. Se consolidaron las cúpulas de sus garitas. Desde abril de 2014 se ha permitido a PPSL intervenir en la consolidación y restauración de elementos constructivos de la fortaleza como merlones, troneras, banquetas, coronamiento.</td>
<td>Se consolidaron las cúpulas de sus garitas. Se retiraron las rocas, el lodo y escombros dentro del Patio en un 100 %. Se tiene en planos un proyecto de consolidación de su muro marino mediante inyección de polímeros. Hacen dos años y medio se hicieron las primeras limpiezas generales y la eliminación de micro flora usando Amonio Cuaternario al 1 %.</td>
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<tr>
<td></td>
<td>Izquierda arriba y abajo: Creación de mortero pigmentado para sillar roto.</td>
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<tr>
<td></td>
<td>Abajo en esta columna: Eliminación de micro flora muerta en cara derecha del merlón.</td>
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</table>
PROYECTO DE RESTITUCIÓN DE SILLAR DE ARENISCA FALTANTE EN EL MERLÓN No. 02

Desde izquierda superior y en sentido de las manecillas del reloj:
A y B – Selección y transporte de piedras de arenisca extraídas de la cantera en San Lorenzo en julio pasado.
C – Punto en el merlón No. 02 en donde se habrá de colocar el sillar nuevo recién labrado.
D y E – Recorte y moldeo de la roca escogida usando una flexible con disco de diamante.
PROYECTO DE RESTITUCIÓN DE SILLAR DE ARENISCA FALTANTE EN EL MERLÓN No. 02

Desde izquierda superior y en sentido de las manecillas del reloj:
A – Espacio vacío en el muro de la tronera derecha del merlón dos.
B – Roca tallada ya colocada.
C – Espacio para mortero de inyección tras el sillar recién colocado.
D y E – El empleo de distintas planimetrías asegura que se diferencien, en campo, los materiales originales del monumento de aquellos recién colocados.
| FOTOGRAFÍA. | MONUMENTO.  
Batería de Santiago. | ESTADO ACTUAL | TRABAJOS REALIZADOS |
|------------|-----------------|-----------------|-------------------|
| Merlón N0. 3. – Coronamiento y caras del merlón.  
- Izquierda arriba y abajo: Se vierte y distribuye el mortero cuando los segmentos de piso remanentes están fijados en su punto.  
- Abajo en esta casilla: Aspecto del mortero vertido recibiendo luz solar para su secado. | Restos del derrumbe llenan la zanja que separaba a la carretera y a la Batería en su muro sur, desdibujando los límites de la fortaleza. Se ha decidido no retirarlos por seguridad del propio monumento. Se han retirado las rocas, el lodo y escombros dentro del Patio en un 100 %. Se consolidaron las cúpulas de sus garitas. Desde abril de 2014 se ha permitido a PPSL intervenir en la consolidación y restauración de elementos constructivos de la fortaleza como merlones, troneras, banquetas, coronamiento. | Se consolidaron las cúpulas de sus garitas. Se retiraron las rocas, el lodo y escombros dentro del Patio en un 100 %. Se tiene en planos un proyecto de consolidación de su muro marino mediante inyección de polímeros. Hacen dos años y medio se hicieron las primeras limpiezas generales y la eliminación de micro flora usando Amonio Cuaternario al 1 %. |
OBRAS EN EL PISO DE LA TRONERA DERECHA DEL MERLÓN No.3

El vertido de mortero, su distribución sobre el área a cubrir, su pulido posterior, garantizan un mejor acabado en el que el contraste entre el material histórico original y el nuevo permiten una separación visual y táctil al visitante. En estas secuencias se ve el proceso de pulido del piso nuevo en una de las troneras y el agregado de mortero en las juntas de los sillares al borde de la escarpa.
<table>
<thead>
<tr>
<th>FOTOGRAFÍA.</th>
<th>MONUMENTO. Batería de Santiago.</th>
<th>ESTADO ACTUAL</th>
<th>TRABAJO REALIZADOS</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Coronamiento del Merlón No. 6 (Sección de la Escarpa del Foso.):</td>
<td>Restos del derrumbe llenan la zanja que separaba a la carretera y a la Batería en su muro sur, desdibujando los límites de la fortaleza. Se ha decidido no retirarlos por seguridad del propio monumento. Se han retirado las rocas, el lodo y escombros dentro del Patio en un 100 %. Se han consolidado las cúpulas de sus garitas. Desde abril de 2014 se ha permitido a PPSL intervenir en la consolidación y restauración de elementos constructivos de la fortaleza como merlones, troneras, banquetas, coronamiento.</td>
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<td></td>
<td>Izquierda arriba: Aspecto de la barrea y la inyección de mortero necesaria para rellenar ausencia de material original en la parte central del muro.</td>
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<tr>
<td></td>
<td>Izquierda abajo: Se inicia colocación del mortero en puntos trabajables.</td>
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<tr>
<td></td>
<td>En esta casilla, abajo: Se “pule” el mortero colocado, aún fresco, usando una esponja.</td>
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</table>
La combinación no proporcionada de ciertos compuestos, al momento de elaborar el mortero para trabajos de conservación, puede acarrear sorpresas como tonos inconexos entre morteros nuevos pero con distinta fecha de colocación Por ello, a veces se hace necesario emprender la corrección (eliminación) de trabajos realizados que no se ajustan a esa búsqueda de la armonía visual en la obra.

A – Izquierda arriba: Mortero amarillento. Posiblemente a causa de exceso en el agregado del EUCON.
B – Derecha: Mortero amarillento eliminado por raspado.
C – Izquierda abajo: Enjuague de la superficie para recolocar mortero con tono adecuado.
<table>
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<tr>
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<th>TRABAJOS REALIZADOS</th>
</tr>
</thead>
</table>
| ![Coronamiento del Merlón No. 8.](image1) | **Coronamiento del Merlón No. 8.** – Trabajo en el coronamiento del muro en la tronera.  
- **A la izquierda arriba y abajo.** Vista del coronamiento a trabajar con sus cuatro baños de cal.  
- **En esta casilla, abajo:** Paulatinamente se llenan las juntas vacías con mortero y se fijan elementos sueltos, tales como esta cuña de coral. | Restos del derrumbe llenan la zanja que separaba a la carretera y a la Batería en su muro sur, desdibujando los límites de la fortaleza. Se ha decidido no retirarlos por seguridad del propio monumento. Se han retirado las rocas, el lodo y escombros dentro del Patio en un 100 %. Se ha consolidado las cúpulas de sus garitas. Desde abril de 2014 se ha permitido a PPSL intervenir en la consolidación y restauración de elementos constructivos de la fortaleza como merlones, troneras, banquetas, coronamiento. | Se consolidaron las cúpulas de sus garitas. Se retiraron las rocas, el lodo y escombros dentro del Patio en un 100 %. Se tiene en planos un proyecto de consolidación de su muro marino mediante inyección de polímeros. Hacen dos años y medio se hicieron las primeras limpiezas generales y la eliminación de micro flora usando Amonio Cuaternario al 1 %. |
| ![Coronamiento del Merlón No. 8.](image2) |  |  |  |
TRABAJOS DE MAPOSTERIA EN EL MERLÓN No. 08.

Desde izquierda superior y en el sentido de las manecillas del reloj:

A, B y C: En el coronamiento del merlón se vuelve a integrar una piedra original desprendida marcando su lugar fotográficamente. Luego de secados los baños de cal se fija definitivamente el elemento con mortero.

D Y E: Consolidación de sillar en la esquina del merlón.
### FOTOGRAFÍA.

#### MONUMENTO
**Batería de Santiago de La Gloria.**

- **Coronamientos del Muro Este – Intervención en el alfeizar de la Ventana del Cobertizo.**
  - A la izquierda arriba y abajo. Con ayuda de fotografías en las que quedó registrada su posición en el alfeizar, se recolocan y consolidan elementos de mampostería que se habían desprendidos.
  - Abajo en esta casilla: Junta de mortero terminada.

- **Restos del derrumbe llenan la zanja que separaba a la carretera y a la Batería en su muro sur, desdibujando los límites de la fortaleza. Se ha decidido no retirarlos por seguridad del propio monumento. Se han retirado las rocas, el lodo y escombros dentro del Patio en un 100 %. Se consolidaron las cúpulas de sus garitas. Desde abril de 2014 se ha permitido a PPSL intervenir en la consolidación y restauración de elementos constructivos de la fortaleza como merlones, troneras, banquetas y coronamiento.**

### ESTADO ACTUAL

- Restos del derrumbe llenan la zanja que separaba a la carretera y a la Batería en su muro sur, desdibujando los límites de la fortaleza. Se ha decidido no retirarlos por seguridad del propio monumento.

### TRABAJOS REALIZADOS

- Se consolidaron las cúpulas de sus garitas. Se retiraron las rocas, el lodo y escombros dentro del Patio en un 100 %.
- Se tiene en planos un proyecto de consolidación de su muro marino mediante inyección de polímeros.
- Hacen dos años y medio se hicieron las primeras limpiezas generales y la eliminación de micro flora usando Amonio Cuaternario al 1 %. 
TRABAJO DE MANTENIMIENTO DE AREAS VERDES EN EL CASTILLO DE SAN LORENZO EL REAL DEL CHAGRES.

Desde izquierda superior y en el sentido de las manecillas del reloj:
A y B: Recorte en la ladera Sur de la Batería Exterior.
C y D: Se aplica aceite quemado a plantones de guayabo en la Batería Exterior y en el Baluarte Norte del Castillo, respectivamente.
E: Se aplica una capa de cal sobre el terreno húmedo y resbaloso de la escalera de la Batería Exterior para estabilizar el suelo y permitir el ascenso seguro de visitantes.
TRABAJO DE MANTENIMIENTO DE AREAS VERDES EN EL CASTILLO DE SAN LORENZO EL REAL DEL CHAGRES.

Desde izquierda superior y en sentido de las manecillas del reloj:
A y B: Recorte en la ladera Sur del Glacis, antes y durante el proceso.
C: Recorte con machete en el camino a la Playita. Ladera Norte del Glacis.
D: Recorte en la Luneta de Ingreso...
E: Recorte en el Adarve, ubicado en el Norte de la Plataforma.
TRABAJO DE MANTENIMIENTO DE AREAS VERDES EN EL CASTILLO DE SAN LORENZO EL REAL DEL CHAGRES.

Proceso de eliminación de ramas caídas en el área de estacionamiento y recorte en Ladera sur del Castillo:

A: Vista de las ramas caídas.
B: Troncos colocados sobre el camión.
C: Área limpia.
D y E: Se recorta la maleza en la Ladera Sur a orillas del Muro del Castillo.
PROCESO DE LIMPIEZA, PREPARACION Y MANTENIMIENTO DE AREAS VERDES EN BATERIA DE SANTIAGO Y EN FUERTE SAN JERÓNIMO DURANTE LA SEMANA DE LAS PATRONALES DEL CRISTO NAZARENO DE PORTOBELO (Del lunes 19 al viernes 23 de octubre.)

PROCESO DE LIMPIEZA, PREPARACION Y MANTENIMIENTO DE AREAS VERDES EN BATERIA DE SANTIAGO Y EN FUERTE SAN JERÓNIMO DURANTE LA SEMANA DE LAS PATRONALES DEL CRISTO NAZARENO DE PORTOBELO (Del lunes 19 al viernes.)

Desde la izquierda superior y en dirección a las manecillas del reloj:

A – Recorte de maleza en el glacis.
B – Se recorta la maleza a orillas de la playa.
C y D - Antes y después del corte en las inmediaciones de la playa.
RECORTE DE MALEZA EN SAN CRISTOBAL.

Desde izquierda superior y según manecillas del reloj: A, B y C: Antes, durante y después del corte en el perímetro externo del muro.
D: Corte de hierbas de hoja lanceolada sobre el muro. E: Uso de güiras en el Patio Central del Baluarte. F: Un obrero afila su machete.
Annex 2: “Visitors Center for the Castle of San Lorenzo”

Project will be funded by Manzanillo International Terminal Company (MIT). The project includes the construction of a new Visitor’s Center for national and international tourists that visit this heritage site. The Center’s design includes an interpretation hall, an auditorium, capacity building rooms, cafeteria, gift shop, toilettes and administrative offices.

The Center will be located at Fort Sherman (a former US Military complex), four kilometers away from the Castle of San Lorenzo, thus outside of its perimeter.

This Project is currently at the stage of the development of constructive blueprints, which are the contents of this Annex.
“Conservation Project for the Castle of San Lorenz"o

Annex 3: Managed by the PPSL through the funds given by the ATP to be developed through an agreement between both parties, this project has four components:

a. Construction of installations for the visitor´s center.

b. Habilitating basic infrastructure.

c. Conservation plan, habilitation and interpretation of the site.

d. Consolidation and conservation works of the Castle of San Lorenzo.

For the execution of these works we count with a budget for the Project of 400,000.00 USD, granted by ATP through the agreement signed by the PPSL. These funds are expected to be given to the PPSL in the month of January 2016.. The contents of this Annex are presented in Spanish.
PROPUESTA PARA LA CONSERVACIÓN DEL CASTILLO DE SAN LORENZO

1. Instalaciones para la atención al visitante
Este apartado contempla la construcción de estructuras destinadas a brindar el confort y la orientación que necesita el visitante al llegar al Castillo de San Lorenzo. Se contempla lo siguiente.

1.1 Estación de recepción con terraza y gazebo.
Estructura de 150m², en madera y acero, destinada a albergar a los visitantes a su llegada al sitio, en el se instalarán bancas, papeleras y cartelería con información del lugar. Se pretende que esta estructura se encuentre oculta entre la vegetación que rodea el punto de entrada a la fortaleza en el sector este.

1.2 Servicios sanitarios.
Consiste en una batería de servicios sanitarios ubicada dentro de una estructura de acero tipo contenedor, prefabricada y habilitada con todo el equipamiento necesario para su función. Esta estructura será tratada en su exterior con materiales que la hagan acorde con su entorno monumental.

1.3 Instalación de Cartelería
Consiste en la instalación de 15 carteles de acero de 0.65 x 1.50 metros sobre una base de hormigón armado.

1.4 Estación de vigilancia / información
Consiste en la habilitación de una caseta destinada a albergar la boletería del sitio y a la vez funcione como punto de información para la atención de los visitantes.

1.5 Guión Museográfico, textos y diseño gráfico
Guión y textos que aparecerán en la cartelería propuesta, incluye diseño gráfico y traducción al inglés.

1.6 Rehabilitación de barandas existentes.
En este rubro se incluye la rehabilitación de las barandas existentes con el objetivo de proveer seguridad al visitante en su recorrido por la fortaleza.

2. Infraestructura básica
En este punto se incluyen los equipamientos básicos necesarios para el funcionamiento de las instalaciones.

2.1 Planta de tratamiento de aguas servidas.
Se construirá una planta de tratamiento, ubicada al este de las instalaciones de atención al visitante, destinada al tratamiento de las aguas servidas.

2.2 Sistema de bombeo.
Incluye los equipos necesarios para el suministro de agua de fuentes cercanas a las instalaciones de atención al visitantes y trabajadores.

2.3 Almacenamiento de agua
Consiste en la construcción de un tanque de reserva de agua destinado al suministro de agua a las instalaciones propuestas.

2.4 Planta de energía
Equipo necesario para el suministro de energía eléctrica, para suplir los servicios básicos propuestos.

3. Plan de Conservación, habilitación e interpretación
3.1 Estudios previos, proyecto, planos y aprobaciones
Este apartado incluye los estudios previos en conservación de monumentos, levantamiento arquitectónico completo de la fortaleza, el reducto, la vegetación existente y la topografía. De igual forma se realizarán estudios sobre la concentración de humedad en los muros del castillo y la evaluación de la pérdida de material pétreo. En el estudio se incluye la preparación de la memoria histórica y las especificaciones técnicas
Este apartado incluye la participación en el estudio de un ingeniero forestal, un ingeniero sanitario y un ingeniero civil como complemento al equipo de arquitectos restauradores.

De igual forma se incluye en este apartado el desarrollo del proyecto de conservación, el diseño de las estructuras para la atención al visitante, los cálculos de los equipamientos de la infraestructura básica y la propuesta consolidación de las estructuras monumentales.

Este punto contempla las aprobaciones ante la Dirección Nacional del Patrimonio Histórico.

3.2 Estudio de impacto ambiental
Se considera la preparación de un estudio de impacto ambiental categoría 2 debido al doble componente de patrimonio y sitio natural donde se encuentra el proyecto.

4. Trabajos de consolidación / conservación del Castillo de San Lorenzo.
4.1 Servicios sanitarios para los trabajadores
Consiste en la instalación de una batería de servicios sanitarios dentro de una estructura tipo contenedor conectado a la planta de tratamiento especificada en el punto 2.1
4.2 Depósitos
Consiste en la instalación de un contenedor destinado a depósito de materiales y equipos.
4.3 Oficina de campo
Oficina ubicada dentro de una estructura prefabricada tipo contenedor.
4.4 Materiales y equipos
Se incluyen aquí los materiales necesarios para la consolidación de las estructuras de la Casa del Castellano y la Casa de la tropa.
4.5 Supervisión técnica
Contempla la supervisión técnica de los trabajos en campo por un período de 6 meses. La supervisión será llevada a cabo por un arquitecto restaurador idóneo.
PUENTE ACCESO EXISTENTE
A DEMOLER
ESTRUCTURAS A CONSOLIDAR / CONSERVAR
BOVEDAS A RESTAURAR
ZONA DE MUSEO
PRIMERA ETAPA DE ACTUACIÓN
RAMPA DE ACCESO PROPUESTA CON PREVISION PARA DISCAPACITADOS FÍSICOS
RECORRIDO PROPUESTO CON PREVISION PARA DISCAPACITADOS FÍSICOS
BARANDALES NUEVOS
ESTACIÓN DE INFORMACIÓN / SEGURIDAD
TERRAZA Y GAZEBO PARA ATENCION A VISITANTES
SERVICIOS SANITARIOS PARA VISITANTES
DEPÓSITOS, OFICINAS Y SERVICIOS SANITARIOS - TRABAJADORES
PLANTA DE TRATAMIENTO DE AGUAS SERVIDAS Y PLANTA ELÉCTRICA

1
2
3
4
5
## PROPISTA PARA LA CONSERVACIÓN DEL CASTILLO DE SAN LORENZO
### TRABAJOS PRIORITARIOS

<table>
<thead>
<tr>
<th>TOTAL</th>
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<tbody>
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<td>INSTALACIONES PARA LA ATENCION AL VISITANTE</td>
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<tr>
<td>1.1</td>
<td>ESTACIÓN DE RECEPCIÓN / TERRAZA GAZEBO</td>
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<tr>
<td>1.2</td>
<td>SERVICIOS SANITARIOS</td>
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<td>1.3</td>
<td>INSTALACION DE CARTELERÍA (15 CARTELES)</td>
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<tr>
<td>1.4</td>
<td>ESTACIÓN DE VIGILANCIA / INFORMACION</td>
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<tr>
<td>1.5</td>
<td>GUION MUSEOGRÁFICO, TEXTOS Y DISEÑO GRÁFICO</td>
</tr>
<tr>
<td>1.6</td>
<td>REHABILITACIÓN DE BARANDAS EXISTENTES</td>
</tr>
<tr>
<td>2</td>
<td>INFRAESTRUCTURA BÁSICA</td>
</tr>
<tr>
<td>2.1</td>
<td>PLANTA DE TRATAMIENTO DE AGUAS SERVIDAS</td>
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<tr>
<td>2.2</td>
<td>SISTEMAS DE BOMBEO</td>
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<tr>
<td>2.3</td>
<td>ALMACENAMIENTO DE AGUA</td>
</tr>
<tr>
<td>2.4</td>
<td>PLANTA DE ENERGÍA ELÉCTRICA</td>
</tr>
<tr>
<td>3</td>
<td>PLAN DE CONSERVACIÓN, HABILITACIÓN E INTERPRETACION</td>
</tr>
<tr>
<td>3.1</td>
<td>ESTUDIOS PREVIOS, PROYECTO, PLANOS, APOBACIONES</td>
</tr>
<tr>
<td>3.2</td>
<td>ESTUDIO DE IMPACTO AMBIENTAL, CAT 2</td>
</tr>
<tr>
<td>4</td>
<td>TRABAJOS DE CONSOLICACIÓN / CONSERVACIÓN DEL CASTILLO DE SAN LORENZO</td>
</tr>
<tr>
<td>4.1</td>
<td>SERVICIOS SANITARIOS PARA LOS TRABAJADORES</td>
</tr>
<tr>
<td>4.2</td>
<td>DEPÓSITOS</td>
</tr>
<tr>
<td>4.3</td>
<td>OFICINA DE CAMPO</td>
</tr>
<tr>
<td>4.4</td>
<td>MATERIALES Y EQUIPOS PARA LOS TRABAJOS DE CONSERVACIÓN</td>
</tr>
<tr>
<td>4.5</td>
<td>SUPERVISION TECNICA 6 MESES</td>
</tr>
</tbody>
</table>
“Educational Project of the Historical Monumental Complex (CMH) of Portobelo”

Annex 4: The Educational Project will be executed in a two-year period in the District of Portobelo using the fortifications and renovated Old Customs Museum (2016) as the background and reference for the educational materials produced by the project. 6,000 kids from the schools of the District of Portobelo and over 210 teacher will be directly benefited from the project´s learning materials.

The cost of the program is of 97,300.00 USD for the first year and 100,000.00 USD for the second year, funded by the private sector and government institutions such as the Colon Free Zone and the Caja de Ahorros state bank. The contents of this Annex are presented in Spanish.
Resumen Ejecutivo

Se propone en este documento el diseño de un programa educativo a ejecutarse en 2 años para el Conjunto Monumental de Portobelo, en el que se hará uso de los Fuertes y el nuevo Museo de Sitio que se abrirá al público a mediados del 2016.

Se beneficiarán directamente 6,000 niños de escuelas del Distrito de Portobelo con visitas gratuitas, 210 docentes ampliarán sus conocimientos sobre el sitio y aprenderán a utilizar los materiales didácticos que se les entregarán, 30 docentes serán capacitados en la temática por 40 horas, se entregarán libros a cada uno de los niños visitantes y se capacitarán los guías (del Patronato de Portobelo y San Lorenzo y otros que trabajen en la atención del sitio, hasta 10 guías) tanto en atención a público general como enfocada a público escolar.

Como productos se obtendrán actividades didácticas para cada grado escolar de preescolar a sexto, materiales para trabajar en aula previa y posterior a las visitas, un texto para público infantil con el tema de Portobelo, inducciones sobre la visita a cada una de las escuelas y una evaluación preliminar y otra final, que permitirán medir el nivel de impacto alcanzado con los programas.

El costo del programa es de B/. 97,300.00 el primer año y B/.100,000.00 el segundo año, que cubren gastos de honorarios de consultoría y los costos operacionales del proyecto.

Introducción

Educación y patrimonio constituyen un conjunto inseparable en el sector de la gestión cultural, porque solo partiendo de la apropiación del patrimonio por parte de la ciudadanía, puede vislumbrarse un horizonte de sostenibilidad en la gestión del mismo. Por esto, porque solo se protege y conserva lo que se conoce y se valora, es por lo que las instituciones encargadas del patrimonio llevan a cabo programas de actividades destinadas a la formación de los ciudadanos.

Por otra parte, los museos y sitios arqueológicos son espacios de aprendizaje y una poderosa herramienta educativa de apoyo al sistema educativo formal. Constituyen hoy una oportunidad única ya que tienen la posibilidad de ser protagonistas importantes de la labor pedagógica que pertenece a una escuela cuyo nuevo paradigma sale del aula y sus cuatro paredes para contextualizarse en la realidad. Una oportunidad de oro para profundizar las relaciones de complementariedad que enriquecen mutuamente a estas dos instituciones. Ya contamos en todo el mundo con múltiples experiencias que demuestran cómo el museo logra ser un educador efectivo a través de un sistema comunicativo continuo y planificado; además se transforma en un apoyo a los docentes mediante herramientas educativas, didácticas y pedagógicas.

En el caso del Conjunto Monumental de Portobelo su enorme potencial como educador podrá beneficiar con mayor intensidad a la comunidad local y nacional en la medida que posea contenidos y brinde experiencias educativas complementarias a las que las escuelas ofrecen regularmente. Este proyecto además, llegará a las familias a través de los niños y ayudará a crear el entramado social necesario para permitir la conservación de los sitios patrimoniales a largo plazo, y permitirnos cuidar lo que amamos y entendemos.
La educación es la forma más efectiva para que, a mediano plazo, la salvaguarda de nuestros fuertes no sea el trabajo de unos pocos, sino que una mayor cantidad de ciudadanos conscientes lo soliciten y trabajen para conseguirlo.

**Objetivos**

*General:*
Promover el valor de Portobelo en la población local del Distrito de Portobelo.

*Específicos:*
- Establecer un programa educativo estructurado para asegurar el aprendizaje activo de los estudiantes de preescolar a sexto grado a través de visitas pedagógicas al sitio.
- Capacitar guías locales en la atención de público general y escolar.
- Crear materiales educativos que fortalezcan el conocimiento sobre el sitio tanto histórico, como cultural y natural.
- Fortalecer el vínculo con la comunidad escolar del distrito para promover la apropiación positiva del sitio.

**Productos**

1. Paquete de 7 actividades pedagógicas para las visitas escolares y materiales acompañantes para el aula
2. Inducción en las escuelas
3. Capacitación de los guías de Patronato y San Lorenzo y aquellos que deseen sumar a la capacitación (hasta 10 guías).
4. 240 visitas escolares al Conjunto Monumental distribuidas en 2 años.
5. 6,000 copias mínimo del libro infantil: “La Bella historia de Portobelo”.
6. Evaluaciones iniciales y finales que permitirán ser indicadores de avances.
7. Tres guías y una guía líder quedarán entrenados para continuar con el programa.

**Beneficiarios e Impacto Esperado**

- 2,000 estudiantes el primer año y 4,000 estudiantes el segundo año visitan y desarrollan actividades educativas sobre el sitio de manera activa y significativa.
- 80 docentes (el primer año) y 160 docentes (el segundo año) aprenden sobre el sitio y lo utilizan dentro de las planificaciones con los materiales educativos.
- 30 docentes (segundo año) son capacitados sobre el programa durante 40 horas y pueden actuar como multiplicadores.
- 3 guías locales son capacitados en técnicas de interpretación patrimonial, técnicas indagatorias de enseñanza y la historia del sitio.
- Contratación directa de servicios locales (3 vecinos del distrito).
Presupuesto

PRIMER AÑO:

Honorarios de consultoría  B/. 67,500.00

Incluyen: Diseño, implementación y seguimiento del programa por 12 meses; y 6,000 copias del libro infantil impreso.

**Forma de pago:**

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<th>Mes</th>
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<td>3 er</td>
<td>Informe inicial. Perfil de Programa</td>
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<td>Presentación Actividades</td>
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<td>Informe de inicio de programa</td>
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<tr>
<td>12vo</td>
<td>Informe Final y libro infantil</td>
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<td>6,750</td>
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</table>

Costos operativos directos para el Patronato:

- Transporte bus (80 grupos x 100)  B/. 8,000
- Guía Senior (5 meses full)  B/. 9,000
- 3 Guías (4 meses, ½ t)  B/. 9,000
- Computadora  B/. 1,000
- Cámara  B/. 300
- Uniformes  B/. 500

**TOTAL directos**  B/. 28,800

GRAN TOTAL PRIMER AÑO:  B/. 97,300  (Incluye honorarios de consultoría y costos operativos directos)

SEGUNDO AÑO

Honorarios de consultoría  B/. 31,000

Incluyen: Revisión y seguimiento de los 12 meses del proyecto; capacitaciones e informe final

**Forma de pago:**

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Costos operativos directos para el Patronato:

- Transporte bus (160 grupos x 100)  B/. 16,000
- Guía Senior (12 meses full- salario 1200)  B/. 21,600
- 3 Guías (12 meses, ½ t... salario 500)  B/. 27,000
- Materiales y uniformes  B/. 2,400

**TOTAL directos**  B/. 69,000

GRAN TOTAL SEGUNDO AÑO:  B/. 100,000  (Incluye honorarios de consultoría y costos operativos directos)
Cronograma y Plan de trabajo

Primer año

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<tr>
<td>Diseño de Programa Educativo</td>
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<tr>
<td>• Desarrollo de 7 actividades pedagógicas para las visitas (K-6to grado)</td>
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<tr>
<td>• Materiales para el aula que permitan la correlación</td>
<td></td>
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<tr>
<td>• Inducción en las escuelas</td>
<td></td>
</tr>
<tr>
<td>• Reclutamiento y Capacitación de guías</td>
<td></td>
</tr>
<tr>
<td>Primer año de ejecución del programa (un salón por día, 2,000 estudiantes en 4 meses)</td>
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<tr>
<td>Desarrollo y publicación del libro: &quot;La Bella historia de Portobelo&quot;</td>
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</tbody>
</table>

Segundo año

<table>
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<tr>
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<tbody>
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<tr>
<td>Revisión de las actividades pedagógicas</td>
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<tr>
<td>Inducción en las escuelas</td>
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<td>Visitas escolares</td>
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<tr>
<td>Evaluación e Informe final</td>
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“Preliminary study for updating the Management Plan for the Fortifications of the Caribbean Coast”

Annex 5: The contents of Annex 4 include the project profile, the curriculum vitae of the consultant and budget for the project. The contents of this Annex are presented in Spanish.
PROPUESTA DE UN ESTUDIO PRELIMINAR PARA LA REALIZACIÓN DE UN PLAN DE MANEJO DE LAS FORTIFICACIONES DE LA COSTA CARIBEÑA: PORTOBÉLO Y SAN LORENZO
Arq. Silvia I. Arroyo D.
El manejo o la gestión del patrimonio tiene sus orígenes entre finales de los ochenta y principios de los noventa. El tema se estudia a través de una visión holística e interdisciplinaria, tomando en cuenta diversos aspectos y buscando la eficiencia económica y social del patrimonio (Martínez, 2007: 97). Es la manera en que las personas responsables de una propiedad con valor patrimonial escogen como usarlo, explotarlo o conservarlo (Pearson and Sullivan, 1995: 16).

La inclusión en la lista de Patrimonio Mundial de la UNESCO es un paso importante, pero no asegura la protección, conservación y transmisión al futuro de estos bienes. A pesar de estar en la lista, muchos sitios se encuentran bajo diferentes tipos de presión. Por esa razón, la UNESCO destaca la importancia del manejo o gestión en las propiedades Patrimonio Mundial (UNESCO, 2011: Art. 8).

Desde 1997, Los Estados Partes son responsables de poner en práctica actividades de gestión eficaces para los bienes declarados Patrimonio Mundial (UNESCO, 2011: Art. 117). Esto quiere decir que a la hora de nominar un sitio, el Estado Parte debe entregar una copia del plan de manejo de la propiedad.

Además de ser solicitado por la UNESCO, de acuerdo con el artículo 132 de las ‘Directrices prácticas para la aplicación de la convención de Patrimonio Mundial’, es una herramienta que ayuda a mantener valores del sitio, a tomar decisiones y busca anticipar y manejar los cambios y/o imprevistos que se presenten.

El caso de la gestión de las Fortificaciones de la costa Caribeña es particular. Estas fortificaciones son magníficos prototipos de la arquitectura militar de los siglos XVII y XVIII y formaban parte de un sistema defensivo
creado por la Corona de España para brindar protección al comercio transatlántico. Este conjunto de fortalezas fue la primera propiedad panameña en entrar a la lista de Patrimonio Mundial en el año de 1980 (UNESCO).

Actualmente están administrados por el Patronato de Portobelo y San Lorenzo, una organización sin fines de lucro, de naturaleza mixta conformada por entidades gubernamentales y empresas con el objetivo fundamental de contribuir con la puesta en valor, mantenimiento, conservación, protección y restauración de las fortificaciones (Patronato Portobelo y San Lorenzo).

Portobelo y San Lorenzo presentan algunos problemas similares y otros completamente diferentes. Por un lado, la legislación y los linderos de ambos sitios deben ser revisados. Por otro lado, Portobelo forma parte de un núcleo urbano habitado, mientras que San Lorenzo presenta problemas inherentes al difícil acceso y el deterioro por falta de mantenimiento.

Está claro que la gestión de la propiedad debe incluir tanto a Portobelo como a San Lorenzo. El plan de manejo debe “cobijar debajo de un solo paraguas” a los dos conjuntos monumentales. Por esta razón su gestión resulta compleja y es necesario realizar un estudio preliminar para poder analizar los siguientes detalles:

- Especificar los objetivos del nuevo plan de manejo, es decir el por qué y el para qué de este plan. De esta manera se podrá esbozar un bosquejo de la misión y la visión de las fortificaciones.
- Coordinar con el Patronato Portobelo y San Lorenzo, incluyendo a su personal administrativo y técnico, cómo se realizará el manejo de la información, cómo se desarrollará el plan de manejo y cuál será el modo de su implementación.
- Estudiar la legislación tanto de Portobelo como de San Lorenzo para conocer a fondo el grado de protección que poseen a la fecha, sus
límites, y especificaciones acerca de su conservación, entre otras cosas.

- Revisar los estudios previos y tomar en cuenta los aspectos en común que tienen los diagnósticos o planes anteriores para incluirlos el nuevo plan de manejo. Por mencionar algunos trabajos recientes, se deben tomar en cuenta los trabajos de la Arq. Almyr Alba y el plan de José María Ezquiaga. De este modo se tendrá una idea de los temas que debe abarcar dicho plan.

- Realizar un cronograma de trabajo a corto, mediano y largo plazo para la realización del plan de manejo.

- Incluir en todo momento los proyectos planificados por el Patronato de Portobelo y San Lorenzo en el plan de manejo.

- Agregar en el estudio preliminar un presupuesto o monto total de los trabajos del plan de manejo.

A continuación se entrega el curriculum vitae y un presupuesto por la realización de este estudio preliminar para la realización de un plan de manejo para las Fortificaciones Caribeñas, cuyo tiempo estimado de trabajo será de seis meses. Si dicha propuesta es aceptada, el estudio iniciará a partir del mes de mayo de 2016.

Atentamente,

[Signature]

Silvia I. Arroyo D.
Arquitecta
Master en Restauración y Patrimonio Mundial
Céd. 8-399-510
Licencia 98-057-005
Móvil +50761500210
Silvia I. Arroyo D.  
Arquitecta

Estudios


2011  Curso “Climate change, cultural heritage and risk: energy, mobility and access” - Centro Universitario Europeo per i beni culturali y Council of Europe (Ravello, Italia).


2002  Diplomado en museología – Facultad de Bellas Artes, Universidad de Panamá.


1997  Culmina la licenciatura de Arquitectura estructural – Universidad Santa María la Antigua (Licencia 98-057-005).

Experiencia profesional

2002-hoy  Patronato Panamá Viejo: encargada del plan de manejo (a la fecha); encargada de conservación preventiva y proyectos especiales (hasta 2011); encargada del levantamiento, diagnóstico, consolidación e inspección del Convento de la Concepción (hasta 2004).

2009-2011  Profesora de Historia del Arte, Historia de la Arquitectura y Restauración del Patrimonio Construido - Escuela de Arquitectura y Diseño, Facultad de Tecnología, Universidad Santa María la Antigua.

2006-2009  Consultora de investigaciones históricas para proyectos de restauración – A3, S.A.

2004  US/ICOMOS internship (entrenamiento, Consejo Internacional de Monumentos y Sitios) – Cornerstones Community Partnerships (NM, USA).


2001  Práctica profesional – Conservación del patrimonio artístico (CPA, España).

Publicaciones


2006  “Las teorías de intervención en el patrimonio construido y su aplicación” – Canto Rodado, revista especializada en patrimonio (Panamá).

Presentaciones

2015  “El enigma de las Casas Reales del sitio arqueológico de Panamá Viejo” - International Conference on Modern Age fortications of the western Mediterranean coast, FORTMED (Valencia, España).

2015  “La construcción de las Casas Reales del sitio arqueológico de Panamá Viejo” - IX Congreso Nacional y I Congreso Internacional Hispanoamericano de Historia de la Construcción, CHAHC (Segovia, España).

2014  “Criterios de intervención en el sitio arqueológico de Panamá Viejo: el convento de la Compañía de Jesús” – Jornadas internacionales de Reflexión en Patrimonio Cultural 2014: tradición y contemporaneidad” (Bogotá, Colombia).

2014  “La cartografía, los grabados, las fotografías y las descripciones como ayuda para estudiar la historia del sitio arqueológico de Panamá Viejo después de su destrucción” – XIII Reunión científica de la Fundación Española de Historia Moderna (Sevilla, España).

2014  “Experiencias en el manejo del sitio arqueológico de Panamá Viejo: el Plan Maestro de la puesta en valor del conjunto monumental de Panamá Viejo” - Seminario Internacional sobre Gestión de los Destinos Turísticos del Patrimonio Cultural (Santo Domingo, República Dominicana).

2010  “Panamá Viejo, Patrimonio mundial e impacto de la Vía Cincuentenario” – Sociedad Panameña de Ingenieros y Arquitectos (SPIA).

2010  “Teoría y práctica de la intervención en el patrimonio construido: el caso de Panamá Viejo” – Maestría en turismo con énfasis en Gestión patrimonial (Facultad de Humanidades, Universidad de Panamá).
<table>
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<td>Estudio preliminar para la realización de un plan de manejo</td>
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<td>para las Fortificaciones de la Costa Caribeña: Portobelo y</td>
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<td>• Especificación de objetivos del nuevo plan.</td>
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<td>Portobelo y San Lorenzo.</td>
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<td>• Estudio de la legislación.</td>
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<tr>
<td>• Revisión de los estudios previos.</td>
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<td>• Revisión de proyectos actuales del Patronato Portobelo y San Lorenzo.</td>
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<td>• Cronograma de trabajo.</td>
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“Renovation Project for the Exhibition of the Customs Museum in Portobelo”

**Annex 6:** The contents of Annex 4 include the working team’s background experience, the project profile, and budget for the project. The contents of this Annex are presented in Spanish.
Patronato de Portobelo y San Lorenzo

Propuesta de Proyecto de Exhibición para el Centro de Interpretación del Conjunto Monumental de Portobelo

La exhibición del Centro de Interpretación de Portobelo ha venido cumpliendo su función educativa, turística y de esparcimiento, ofreciendo a miles de visitantes la exhibición “Portobelo” durante más de una década. A pesar de que se trató de una muestra que proponía el uso de las técnicas museográficas más avanzadas de su momento, se hace necesario que el Patronato ofrezca a sus usuarios una actualización de la misma.

Con el entusiasmo que evidencia la actual Junta Directiva del Patronato de Portobelo en cuanto a la puesta en valor, preservación y difusión del patrimonio histórico panameño, la ocasión en propicia para revisar la museografía actual, y reorientarla hacia los fines y objetivos trazados por los planes del patronato; enfocando esta alternativa más hacia la comprensión del sistema de defensa y su arquitectura en el contexto político, social y económico de la época, rescatando a los arquitectos protagonistas de estas obras, situándolos en el verdadero espacio que merecen en la historia de la arquitectura hispanoamericana.

A continuación, presentamos al equipo de profesionales que respaldan la producción de de la propuesta museográfica. La curaduría y redacción de textos estaría a cargo del Arq. Reinier Rodríguez, cuya experiencia similar más reciente, la exhibición Balboa y los Cueva que tuvo lugar en el Centro de Visitantes de Panamá Viejo, a propósito de la conmemoración de los 500 años del avistamiento del Océano Pacífico recibió excelentes comentarios a nivel nacional e internacional. La coordinación museográfica estará a cargo del Arq. Edgar González, quien en repetidas ocasiones y desde la primera exhibición ha estado involucrado con el Patronato de Panamá Viejo, y quien en conjunto con el Arq. Rodríguez desarrolló la actual exhibición de Portobelo en el año 2004. La elaboración de la propuesta gráfica, se hará en colaboración con la diseñadora Maisa Ferro, cuya experiencia de más de 15 años de colaboración es garantía de un trabajo de calidad. Para la ilustraciones, hemos invitado al novel artista e ilustrador Franco Holness, con el propósito de generar una imagen novedosa pero de gran calidad a los aspectos visuales del proyecto. Todo el proceso estaría seguido desde muy cerca por el personal del Patronato de Portobelo y San Lorenzo bajo una permanente comunicación.
Objetivos de la exhibición

1. Presentar al público nacional e internacional la historia del comercio y de las fortificaciones de Portobelo, ajustándose a las más recientes tendencias museográficas, a través de recursos atractivos, en adición a los medios tradicionales de presentación de contenidos.

2. Demostrar a la comunidad local y nacional, el compromiso del Patronato de Portobelo y San Lorenzo como gestor de desarrollo humano, investigativo, turístico y social en sus focos de acción.

3. Ofrecer una exhibición que sirva como ancla para que los visitantes del Conjunto Monumental de Portobelo reciban una vista introductoria de cada edificación antigua, para facilitar su interpretación.

4. Extender la superficie de exhibición para un mejor manejo y distribución de los contenidos de la muestra.

5. Ampliar la propuesta de actividades para los turistas que vienen a Panamá Viejo cada año.

6. Actualizar los contenidos expuestos de la exhibición.

Propuesta temática

Durante la ocupación española en las Indias Occidentales, Portobelo ocupó una misión fundamental dentro del esquema comercial entre la Metrópoli y las colonias en ultramar, haciendo que esta ciudad adquiriese unas condiciones humanas y arquitectónicas de particular importancia, dejando como testimonio su arquitectura y un importante legado arqueológico. Proponemos que la nueva exhibición del centro de interpretación explique estos hechos, pero haciendo énfasis en sus estructuras militares, de modo que invite a recorrer los fuertes y castillos de este conjunto monumental.

1. Introducción histórica (Portobelo en el contexto de la colonización española en América)
2. Portobelo como terminal de enlace en el sistema comercial español
3. Operaciones navales y embarcaciones coloniales
4. La guerra del Caribe y los ataques piratas contra Portobelo
5. La estrategia defensiva de Tierra Firme
6. La Arquitectura militar en Portobelo
7. Sincretismo cultural y vida cotidiana
8. La bahía de Portobelo y su potencial arqueológico

En todos los ámbitos temáticos, es importante destacar el trabajo que realiza el PPSL, al igual que los planes que establecen en su planificación maestra.
Propuesta de consultoría |

Curaduría

- **Plan museográfico**: Guión general de contenidos de referencia para utilizarse como base en la selección de imágenes, piezas y discurso temático de la exhibición.
- **Investigación bibliográfica** para la ejecución de los contenidos teóricos.
- **Redacción de textos** a todos los niveles de lectura de la exhibición (no está incluida la traducción a idiomas diferentes al español).
- **Selección de piezas** de las colecciones museográficas del INAC.
- **Entregable**: Documento que incluye en desarrollo conceptual y general del contenido, Textos finales e Índice de imágenes, ilustraciones y recursos visuales que serán entregados a diseño gráfico. Cédulas explicativas de las piezas seleccionadas.
- **Costo:** 8,500.00

Diseño Museográfico

- **Esquema de recorrido**: Análisis y propuesta de circulación del público en los espacios asignados a las exhibición.
- **Desarrollo de ámbitos temáticos**: Proceso de la información provista por curaduría para transformar los contenidos en un diseño conceptual. En este punto se colabora estrechamente con el equipo de diseño y recursos gráficos.
- **Plano constructivo**: Desarrollo de planos y diseño de los soportes arquitectónicos (vitrinas, exhibidores, mamparas, mesas explicativas, soporte de piezas especiales, etc.). Se incluye el diseño de la iluminación y ubicación de tomas eléctricas.
- **Entregables**:
  1. Planta de recorridos de la exhibición por sus ámbitos temáticos.
  2. Propuesta a nivel de anteproyecto de los ámbitos expositivos (en este punto se debe haber avanzado considerablemente en la curaduría). Vistas tridimensionales esquemáticas (no fotorealistas) de los espacios y áreas de la exhibición.
  3. Plano constructivos en formato 2” x 3”.
- **Costo:** 16,000.00
Diseño gráfico

- **Diseño de la imagen gráfica** general para la exhibición (selección de tipografía, esquemas de color, imagen gráfica).
- **Desarrollo de piezas gráficas**: producción de todos los esquemas imprimibles a los tamaños establecidos en el diseño de soportes museográficos, una vez entregado el guión conceptual de la exhibición.
- **Entregable**: Se entregarán los archivos finales listos para imprimir y las versiones finales listas para almacenamiento informático.
- **Costo**: 5,500.00
- **Compra de recursos gráficos fotográficos**: 1,000.00
- **Producción de recursos fotográficos**: 1,000.00
- **Producción de ilustraciones**: 1,500.00

**NOTA**: No se incluyen los costos de recursos audiovisuales ni aplicaciones digitales. En el caso de ser requeridas se establecerán los costos de producción, curaduría y de coordinación según requerimientos del contratante.

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“Conservation project on Santiago Fortifications
(Castle, battery and hilltop stronghold)”

Annex 7: Technical information (developed by Eng. Heriberto Rojas) regarding the mechanical and structural diagnosis and structural corrective/stabilization/consolidation measures design for the various forts and fortifications at Portobelo.

- “Conservation project on Santiago Fortifications (Castle, battery and hilltop stronghold)”
- “Conservation project San Fernando Fortifications (lower battery, upper battery and hilltop stronghold)”
- “Conservation project on San Jeronimo Battery Fort”
- “Conservation project San Lorenzo Castle and its Upper Battery”
NOTAS IMPORTANTES
1. REFERENCIAS (NORMAS)
   (2) Reglamento de las construcciones de concreto reforzado (ACI-318-08 En Español).

2. OBSERVACIONES (NOTAS)
   1.- Para la ejecución de esta obra se requiere la participación de dos especialidades (a) un Ingeniero Civil Estructural y (b) un Ingeniero Geotécnico.
   2.- El ingeniero encargado de la obra verificará las dosificaciones de los aditivos del hormigón que se requieren según la estructura. Las especificaciones de dichos aditivos se encuentran en los anexos del informe que forma parte integral del presente trabajo.
   3.- Todas las medidas del plano; al llevarlas a la obra; deberán ser verificadas en las condiciones del campo, tanto por el contratista como el inspecto autorizado.
   4.- Todo concreto estructural de las vigas longitudinales, hormigón para bombeo y demás estructuras tendrá una resistencia a la compresión de 5,000 (lb/pulg2).
   5.- Los elementos de hormigón y sus características físicas se calcularán en cada caso tomando como peso específico del Concreto 2,450 (Kg./m3) y de los elementos de acero según (3).
   6.- El recubrimiento de las barras de refuerzo será mínimo de 4" o 10 cm libres, dado que el hormigón estará expuesto al ambiente marino.
   7.- Para el diseño de los micropilotes se utilizó una resistencia de Ra= 10,500 Kg/m2 dado que el suelo a profundidad de 0,50m - 1.50 m es de 16,000 Kg./m2 y en los estratos inferiores dicha resistencia baja a 5,000 Kg/m2. El largo de los micropilotes en ningún caso debe ser menor de 12.00 m.

MATERIALES:
Concreto: fc' = 5,000 lb/pulg2
Acero, Refuerzo: fy = 60,000 lb/pulg2
Acero de Estribos: fy = 40,000 lb/pulg2
Acero de Tubo: fy = 50,000 lb/pulg2
Resistencia de suelo superficial: Ra = 10,000 Kg/m2.
DESCRIPCIÓN DE LOS PROCEDIMIENTOS PARA LA INYECCIÓN DE LA RESINA DE POLIURETANO

1. Roclear abundantemente agua con manguera para humedecer el área (en caso de estar seca) y que esta perturbe la formación ya que la resina reacciona con el agua.
2. Instalación de las sondas de inyección de 80' de largo de 3/8' de diámetro de acero inoxidable de alta resistencia. Las sondas se conducen a la máxima profundidad, ayudándose con las puntas guías expansibles, hasta 1.80-2.00 m para comenzar la inyección desde el más profundo y posteriormente hacia la superficie del suelo.
3. En caso de no estar saturado de agua el suelo, se debe inyectar agua en primer lugar con la bomba de inyección Titan 540 o similar, la misma que inyectaría la resina epoxica.
4. Recircular el agua con la bomba para asegurar a lo largo todo el volumen.
5. El rango de presiones de la bomba para transmitir el epóxico es entre 500 psi y 2,300 psi, por lo que es necesario controlar con una válvula regulable de alta presión (685-H) colocada en el extremo de la manguera.
6. Usar Prime Flex 920 con un 2% - 3% de Prime Kat, componente reactor para el Prime Flex 920 esta en el proceso de reacción formando una espuma rígida que deberá crecer entre 600% y 2,900% en lugares no confinados. Prime Flex 920 y el reactor Prime Kat deben ser mezclados en un recipiente con paletas de mezcla con baja velocidad.
7. Conectar la válvula de control de flujo para el bombeo de los materiales.
8. Ajustar la presión de la bomba a su posición más baja.
9. Aumentar la presión según sea necesario. Abrir el control de flujo lentamente para comenzar a transportar el material en forma líquida a través de la sonda en el substrato del suelo.
10. Se debe rellenar de lo más profundo moviendo la sonda hacia la superficie, de ser necesario se debe aumentar la presión para alcanzar la superficie en el mejor estado. Se debe bombar hasta la resistencia del muro.
11. Una vez la sonda ha sido elevada a 24' de la superficie debe detenerse la inyección y retirar la sonda del substrato.
12. Terminada la inyección se debe hacer una limpieza rápidamente a los equipos de inyección circulando por varios minutos con PrimeFlex EchoFlush.
1. Apuntalar el muro en la parte superior para evitar el desplome de esa sección de muro que presenta una grieta horizontal, convirtiéndola en una sección susceptible de desprenderse del muro.

2. Perforar la mampostería en forma perpendicular a la grieta con una inclinación hacia abajo de 5 a 8 grados aproximadamente cada 0.30 m por la vertical alternativamente. Se debe calcular la separación de manera tal que se produzca una cruz, donde la intersección de las perforaciones sería la grieta, pero a distintos niveles, separados por los 0.30 m. Estas perforaciones deben ser de 35 mm o 1 ½" de diámetro.

3. Introducir barra de acero inoxidable de 3/4" con elementos separadores de manera que la barra quede centrada en el hueco.

4. Inyectar resina epoxica con baja presión para evitar mayores rajaduras en las rocas. Presión por el orden de 0.5 a 1.5 MPa.

5. Hacer una especie de taco de piedra de un material igual o parecido para tapar el hueco en la parte superficial de la perforación. Esto también se puede hacer colocando un taco de la misma perforación en forma prensa, cuando este taco queda firmemente fiato se coloca adhesivo; luego se deja secar con la resina epoxica.

6. Repetir este procedimiento en toda la grieta vertical del muro, cada 0.30 m, como se dijo antes en cruz.

7. Referir con mezcla de cal, con el procedimiento usual la grieta.

La inyección de resina de poliuretano y finalmente rellenar y proteger con geotextil.

**NOTA**
SE DEBE CONSTRUIR PRIMERO LA ESCOLLERA DE PROTECCION POSTERIORMENTE REALIZAR LA INYECCION DE RESINA DE POLIURETANO Y FINALMENTE RELLENAR Y PROTEGER CON GEOTEXTIL.
**SECCIÓN B - PROPUESTA DE MURO DE MICROPILOTES**

**ESC. 1:100**

**DE: HOJA:**

**MURO PANTALLA DE MICROPILOTES**

**INGENIERÍA TOTAL, S.A.**

**FUERTE DE SANTIAGO NUEVO**

**DISEÑO ESTRUCTURAL: ING. HERIBERTO ROJAS**

**REVISADO: ARQ. ALMYR ALBA**

**ARQ. RODOLFO SUÑÉ**

**INSTITUTO NACIONAL DE CULTURA**

**PATRONATO DE PORTOBELO Y SAN LORENZO**

**DIRECCION NACIONAL DEL PATRIMONIO HISTORICO**

**APROBADO POR:**

**DETALLE UNION DE MICROPILOTE**

**ESCALA 1:20**

**DIBUJO DE BARANDA**

**ESCALA 1:20**

**ELEVACION PANTALLA DE MICROPILOTES**

**SIN ESCALA**

**SECCION DE VIGA Y MICROPILOTES**

**SIN ESCALA**

**SECCION DE ANCLAJE Y MICROPILOTES**

**SECCION DE APLICACION DE SHOTCRETE (GUNITADO)**

**ADITIVOS PARA HORMIGON DE LAS VIGAS Y PARA PARA**

**1. EUCON MSA (Microsilica). Este aditivo produce**

**concreto de alta densidad y es especial para ambientes* marinos.**

**2. EUCON CIA. (Inhibidor de**

**corrosión). Este aditivo**

**está diseñado para proteger el acero de la corrosión especialmente en construcciones marítimas.**

**3. CONCREPLAST R. (o un SUPER PLASTIFICANTE)**

**Este aditivo es un plastificante para permitir la**

**manejabilidad del hormigón que se ve un tanto inhibida por**

**los 2 anteriores aditivos.**

**4. Las dosificaciones de estos productos se encuentran en**

**las especificaciones de los mismos en los anexos del**

**informe que acompaña estos planos.**

**SECCION DE MICROPILOTE**

**ESCALA 1:20**

**HILERA DE MICROPILOTES**

**VIGA CABEZAL SOBRE PILOTES**

**CARRETERA EXISTENTE**

**PENDIENTE DE 2.5%**

**PENDIENTE DE 2.5%**

**3.00 m**

**6.00 m**

**6.00 m**

**6.00 m**

**6.00 m**

**2.00**

**2.00**

**2.00**

**POSTES DE BARANDAL**

**1.00**

**3.10**

**2.56**

**1.79**

**1.79**

**8 mm**

**HORMIGON**

**5,000 lbs/pulg2**

**TUBO DE ACERO**

**F510 (A50)**

**POSTERIORES DE MICROPILOTE**

**SECCION DE ANCLAJE**

**1.00**

**3.10**

**2.56**

**1.79**

**1.79**

**8 mm**

**HORMIGON**

**5,000 lbs/pulg2**

**TUBO DE ACERO**

**F510 (A50)**

**POSTERIORES DE MICROPILOTE**

**SECCION DE ANCLAJE**

**1.00**

**3.10**

**2.56**

**1.79**

**1.79**

**8 mm**

**HORMIGON**

**5,000 lbs/pulg2**

**TUBO DE ACERO**

**F510 (A50)**

**POSTERIORES DE MICROPILOTE**

**SECCION DE ANCLAJE**

**1.00**

**3.10**

**2.56**

**1.79**

**1.79**

**8 mm**

**HORMIGON**

**5,000 lbs/pulg2**

**TUBO DE ACERO**

**F510 (A50)**

**POSTERIORES DE MICROPILOTE**

**SECCION DE ANCLAJE**

**1.00**

**3.10**

**2.56**

**1.79**

**1.79**

**8 mm**

**HORMIGON**

**5,000 lbs/pulg2**

**TUBO DE ACERO**

**F510 (A50)**

**POSTERIORES DE MICROPILOTE**

**SECCION DE ANCLAJE**
DE:HOJA:
PATRONATO DE PORTOBELO Y SAN LORENZO
DE:HOJA:
PERFILES DE PERFORACIONES
INGENIERIA TOTAL, S.A.
FUERTE DE SANTIAGO NUEVO
DISEÑO ESTRUCTURAL: ING. HERIBERTO ROJAS
REVISADO: ARQ. ALMYR ALBA
ARQ. RODOLFO SUÑÉ
INSTITUTO NACIONAL DE CULTURA
PATRONATO DE PORTOBELO Y SAN
LORENZO
DIRECCION NACIONAL DEL
PATRIMONIO HISTORICO
APROBADO POR:
C10X25

2 RIGIDIZADORES
210mmX80mmX15mm
2 RIGIDIZADORES
210mmX80mmX15mm
2 PERFILES DE ACERO
260mmX120mmX15mm
MONTAJE VIGA
0,25
0,30
4 Hilos
560mm2

2 RIGIDIZADORES
210mmX80mmX15mm
2 RIGIDIZADORES
210mmX80mmX15mm

DETALLE DE VIGA DE REPARTO Y ANCLAJE
“Conservation project San Fernando Fortifications (lower battery, upper battery and hilltop stronghold)”

Annex 7: Technical information (developed by Eng. Heriberto Rojas) regarding the mechanical and structural diagnosis and structural corrective/stabilization/consolidation measures design for the various forts and fortifications at Portobelo.

- “Conservation project on Santiago Fortifications (Castle, battery and hilltop stronghold)”
- “Conservation project San Fernando Fortifications (lower battery, upper battery and hilltop stronghold)”
- “Conservation project on San Jeronimo Battery Fort”
- “Conservation project San Lorenzo Castle and its Upper Battery”
1. DRENAJE FRANCES
L = 46.00m.

2. MUROS A APUNTALAR

3. ESCOLLERA DE PROTECCIÓN

4. INYECCIÓN DE RESINA DE POLIURETANO EN EL PATIO DE ARMAS

5. INYECCIÓN DE RESINA DE POLIURETANO EN LA ENTRADA

6. RETICULO CEMENTADO EN MURO

7. RETICULO CEMENTADO EN GARITA

NOTAS IMPORTANTES

1. REFERENCIAS (NORMAS)
   (1) Reglamento para el diseño estructural de Panamá

2. OBSERVACIONES (NOTAS)
   1- Para la ejecución de las obras de construcción se requieren la participación
tenitor por las especialidades (a) un Ingeniero Civil Estructural y (b) un Ingeniero Geotécnico.
   2- El ingeniero encargado de la obra verificará las dimensiones de los aditivos para la estructura. Las
   3- Todas las dimensiones del plano deben ser verificadas en las condiciones del campo, tanto por el contratista como el
   4- Para cualquier detalle no especificado en estas notas se refiere a reglamento para diseño estructural de la
   5- El plano debe ser verificado por el ingeniero de la Dirección Nacional de Patrimonio Histórico del INAC.

6. RETICULO CEMENTADO EN MURO

NOTAS DE ARQUEOLOGÍA

Todas las áreas que sean afectadas por movimientos de tierra deben ser evaluadas arqueológicamente antes de iniciar las obras de construcción y monitoreadas arqueológicamente durante el desarrollo de dichas obras. Estos trabajos de arqueología deben estar a cargo de un arqueólogo certificado por la Dirección Nacional de Patrimonio Histórico del INAC.

PLANTA ARQUITETÓNICA - FUERTE SAN FERNANDO
PROCEDIMIENTO DE INYECCIÓN DE RESINA DE POLIURETANO

**ETAPA 1**
- **MURO EXISTENTE**
- **SONDA 3/8" Ø X 80" PULGADAS DE LARGO ACERO INOXIDABLE**
- **BULBO DE POLIURETANO RIGIDO**

**ETAPA 2**
- **MURO EXISTENTE**
- **SONDA 3/8" Ø X 56" PULGADAS DE LARGO ACERO INOXIDABLE**
- **BULBO DE POLIURETANO RIGIDO**

**ETAPA 3**
- **MURO EXISTENTE**
- **SONDA 3/8" Ø X 24" PULGADAS DE LARGO ACERO INOXIDABLE**
- **BULBO DE POLIURETANO RIGIDO**

**RESULTADO FINAL**
- **MURO EXISTENTE**
- **BULBO DE POLIURETANO RIGIDO**

**PROCESO DE INYECCIÓN DE RESINA DE POLIURETANO**

1. **Rociar abundantemente agua con manguera para humedecer el área y que esta permanezca húmeda ya que la resina reacciona con el agua.**
2. **Instalación de las sondas de inyección de 80" de largo de 3/8" de diámetro de acero inoxidable.**
3. **En caso de no estar saturado de agua el suelo se debe rociar agua en primer lugar con la bomba de inyección Titan 540 o similar.**
4. **Perforar las sondas con Prime Flex EcoFlush para asegurar que la zona esté completamente saturada.**
5. **Colocar el bulbo de poliuretano rigido en la superficie del suelo.**
6. **Ajustar la presión de la bomba para alcanzar la presión de 500 psi y 2,300 psi para iniciar el proceso de inyección.**
7. **Usar el reactor Prime Kat junto con Prime Flex 920 para iniciar el proceso de reacción formándose una espuma rígida que deberá crecer entre 600% y 2,900% en lugares no confinados. Prime Flex 920 y el reactor Prime Kat deben ser mezclados en un recipiente con paletas de mezcla con baja velocidad.**
8. **Ajustar la presión de la bomba a su posición más baja.**
9. **Aumentar la presión según sea necesario. Se debe rellenar el sustrato del suelo hasta el rechazo.**
10. **Una vez la sonda ha sido elevada a 24" de la superficie debe detenerse la inyección y retirar la sonda del sustrato.**
11. **Terminada la inyección se debe hacer una limpieza rápida de las áreas de inyección circundantes por varios minutos con Prime Flex EchoFlush.
DESCRIPCIÓN DEL PROCEDIMIENTO DE RETÍCULO CEMENTATO.

(1) Percutar la mampostería en forma perpendicular a la grieta con una inclinación hacia abajo de 5 a 8 grados aproximadamente cada 0.30 m por la vertical alternativamente. En la intersección de las perforaciones donde existe una grieta, pero a distintos niveles, separados por los 0.30 m, estas perforaciones deben ser de 55 mm o 1 ½" de diámetro.

(2) Introducir barra de acero inoxidable de 3/4" con elementos separadores de manera que la barra quede centrada en el hueco.

(3) Inyectar resina epoxica con baja presión para evitar mayores rajaduras en las rocas. Presión por el orden de 0.5 a 1.5 MPa.

(4) Hacer una especie de taco de piedra de un material igual o parecido para tapar el hueco en la parte superficial de la perforación. Esto se puede hacer sacando un taco de la propia perforación en forma previa, siendo este taco prácticamente igual a la piedra original. Dicho taco se pega con la resina epoxica que debe tener el color de la piedra perforada.

(5) Repetir este procedimiento en toda la grieta vertical del muro, cada 0.30 m, como se dijo anterior en cruz.

(6) Rellenar con mezcla de cal, con el procedimiento usual la grieta.
“Conservation project on San Jeronimo Battery Fort”

Annex 7: Technical information (developed by Eng. Heriberto Rojas) regarding the mechanical and structural diagnosis and structural corrective/stabilization/consolidation measures design for the various forts and fortifications at Portobelo.

- “Conservation project on Santiago Fortifications (Castle, battery and hilltop stronghold)”
- “Conservation project San Fernando Fortifications (lower battery, upper battery and hilltop stronghold)”
- “Conservation project on San Jeronimo Battery Fort”
- “Conservation project San Lorenzo Castle and its Upper Battery”
1. CANAL PLUVIAL ABIERTO.

2. INYECCIÓN DE RESINA DE POLIURETANO.

3. ESCOLLERA DE PROTECCIÓN.

4. DRENAJE FRANCÉS.
SECCIÓN ESCHELLER

SECCIÓN ESQUEMÁTICA DE INYECCIÓN DE RESINA DE POLIURETANO
ESCALA 1:70

PLANTA DE INYECCIÓN DE RESINA DE POLIURETANO
ESCALA 1:200

AMPLIACIÓN
ESCALA 1:20

DESCRIPCIÓN DE LOS PROCEDIMIENTOS PARA LA INYECCIÓN DE RESINA DE POLIURETANO:

a) Revisar abundantemente agua con manguera para humedecer el área y que sea permeable húmeda ya que lo estaríamos mojando con el agua.
b) Instalación de las bombas de inyección de 20 cm de largo de 24 cm de diámetro de paso insuficiente de agua.
c) Preparación de los materiales de inyección de poliuretano.
d) La presión de inyección se haría por la presión de agua.
e) La presión de inyección se haría por la presión de agua.
f) La presión de inyección se haría por la presión de agua.
g) La presión de inyección se haría por la presión de agua.
h) La presión de inyección se haría por la presión de agua.

ADITIVOS PARA HERRAMIENTAS DE LAS VÍAS Y PARA LOS PLETAS

1. EJECION x 0.1 (Extensión). Este aditivo permite evitar que los aditivos se separen.
2. EJECION x 0.1 (Extensión). Este aditivo permite evitar que los aditivos se separen.
3. CONCRE-PLAST R (Extensión). Este aditivo es un productor para permitir la mezcla de agua y cemento.
4. CONCRE-PLAST R (Extensión). Este aditivo es un productor para permitir la mezcla de agua y cemento.

DIRECTIVA DE INYECCIÓN DE RESINA DE POLIURETANO

NÚMERO DE IDENTIFICACIÓN

PAPELERO DE SAN JERÓNIMO

DIRECTIVA DE INYECCIÓN DE RESINA DE POLIURETANO

NÚMERO DE IDENTIFICACIÓN

PAPELERO DE SAN JERÓNIMO
DE HOJA 4

PATRIMONIO HISTÓRICO

ESTUDIO GEOTECNICO

PERFILES DE perforaciones

RECOMENDACIONES SOBRE SUELOS

1. Seguir lo indicado en el Reglamento Estrutural Parte 2 (R.E.P), se debe estar atento a las Declaraciones sobre Suelos en el área de Porto Rey como W-177.

2. En el caso de que se requiera realizar excavaciones en suelo durante la construcción del proyecto, se deben cumplir con todas las reglas aplicables del punto 1.1. 'Control de Emergencias' y 'Guía de Emergencias del Estado de Emergencias de la República de España, versión 2014.

3. Cada vez que se realice el informe de suelos debe de ser revisado por el equipo constructivo asociado para el tipo de obras que se estén desarrollando.

4. Todos los trabajos de consolidación de suelos, realizados en este proyecto deberán contar con una inspección interna. Todo esto dentro de las mejores prácticas de la ingeniería y utilización personalizada, así como las directrices oficiales.

5. Es necesario que se entregue el informe del suelo al personal de Ingeniería a nivel de construcción. Los informes deben ser confiables para que puedan asegurar el mejor aprovechamiento para el diseño, ejecución y ejecución de los trabajos.

Fuente San Jerónimo

6. En las perforaciones se encuentra en estasis una loma litoral con gran SIM, de compactación muy suelta, plástividad baja y contenido total de agua media, con un espesor 10.00.

7. Se requiere realizar el sistema de alta submergible (Cierre de Infusión) en esta etapa, en base a estas indicaciones.

8. El nivel del agua se encuentra a una profundidad de 3.4 metros en el suelo en donde se realizarán las perforaciones, esto es producto del nivel del agua que ha mantenido este fuerte. Se debe a la excepción del nivel hidrogeológico que se realiza un informe que permite el alto de las aguas litorales por dibujo detallado.
“Conservation project San Lorenzo Castle and its Upper Battery”

Annex 7: Technical information (developed by Eng. Heriberto Rojas) regarding the mechanical and structural diagnosis and structural corrective/stabilization/consolidation measures design for the various forts and fortifications at Portobelo.

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- “Conservation project San Lorenzo Castle and its Upper Battery”
NOTAS IMPORTANTES

I. REFERENCIAS (NORMAS)

II. OBSERVACIONES (NOTAS)
1.- Para la ejecución de esta obra se requiere la participación de dos especialidades: (a) un Ingeniero Civil Estructural y (b) un Ingeniero Geotécnico. Sobre verificar las especificaciones de aditivos que se requieren. Las especificaciones de aditivos se encuentran en los anexos del informe que forma parte integral del presente trabajo.

2.- El ingeniero encargado de la obra verificará las dosificaciones de los aditivos del hormigón que se requieren. Las especificaciones de dichos aditivos se encuentran en los anexos del informe que forma parte integral del presente trabajo.

3.- Todas las dimensiones del plano, al llevarlas a obra, deberán ser verificadas en las condiciones del campo, tanto por el contratista como el inspector, y se estarán verificando detalladamente en estas notas, reuniendo el reglamento para diseño estructural de la Republica de Panamá, publicado en Gaceta Oficial N° 25.181 del 22 de Noviembre de 2004.

Nota de arqueología
Todas las áreas que sean afectadas por movimientos de tierra deben ser evaluadas arqueológicamente antes de iniciar las obras de construcción. Estos trabajos de arqueología deben estar a cargo de un arqueólogo certificado por la Dirección Nacional de Patrimonio Histórico del INAC.