

**State of Palestine**



**State of Conservation Report**

**For**

**Birthplace of Jesus:**

**Church of the Nativity and the Pilgrimage Route, Bethlehem**

Ref. 1433, Palestine



Bethlehem, Palestine

January 2017

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Follow the link <http://cdgcloud.com/cloud/index.php/s/LGg7x2HNGzrHfMz> to see annexes listed below:

Annexes

- Annex no.1: Report on the joint World Heritage Centre/ICOMOS Advisory Mission to Birthplace of Jesus : Church of the Nativity and Pilgrimage Route, Bethlehem (C1433)
- Annex no.2: Draft Conservation Plan for the Church of the Nativity
- Annex no.3: Restoration of the Church of the Nativity – Bethlehem Progress Report # 45
- Annex no.4: Brief Construction Progress Report/ September15, 2013–January11, 2017
- Annex no.5: Wall Mosaic Mapping
- Annex no.6: Internal Plaster Mapping

In response to the World Heritage Committee decision (40 COM 7A.14), Bethlehem Municipality prepared the State of Conservation Report for the World Heritage Site, ***Birthplace of Jesus: Church of the Nativity and the pilgrimage Route***, in close cooperation with the Ministry of Tourism and Antiquities, Presidential Committee for the Restoration of the Church of the Nativity and the Centre for Cultural Heritage Preservation.

## 1 Executive summary

*Birthplace of Jesus: Church of the Nativity and the Pilgrimage Route, Bethlehem* (Ref. 1433) was inscribed on the World Heritage List in 2012 following an emergency nomination, in accordance with criteria (iv) and (vi); and immediately on the List of World Heritage in Danger due to the lack of repair of the roof structure of the Church of the Nativity and the consequent threat to the roof timbers, roof covering, and the interior wall surfaces from water ingress.

The methodology adopted in executing the restoration works in the Church of the Nativity was based on the international charters: minimum intervention, respecting the historical monument, reversibility and respecting the authenticity of the place in addition to considering seismic improvement for the historical structure. It is worth mentioning that the roof and restoration works were completed in April 2016.

Since the commencement of the restoration works of the Church of the Nativity on September 15, 2013, the Presidential Committee for Restoration of the Church of the Nativity has been receiving generous donations from different donors, which encouraged the Committee to start restoration of other parts of the Church's based on a list of priorities, including the restoration of the narthex, the narthex eastern wooden door, the external stone façades, internal wall plastering, wall mosaics, Basilica metal doors, wooden Architraves and one of the Basilica stone columns along with its paint. All of these interventions were completed in 2015 and 2016.

Moreover, one of the stone columns was completed in October 2016. Since September 2016, the Presidential Committee has resumed restoration of the external stone façades. The west stone façade (Front Façade of the Basilica) was completed. Restoration of the North façade has been started since December 2016, and planned to be completed by the end of April 2017. Recently, the installation of lighting and fire detection systems have been added to the contract to be implemented in 2017.

An ICOMOS Mission visited the World Heritage Property (WHP) for two days, 1-2<sup>nd</sup> September 2016. It assessed the state of conservation of the Church of the Nativity, the progress made in implementing the DSOCR and Corrective Measures, and potential development future projects proposed within the World Heritage Property. It also held intensive meetings with related stakeholders, including the Ministry of Tourism and Antiquities (MoTA), the Presidential Committee for the Restoration of the Church of the Nativity and the Centre for Cultural Heritage Preservation (CCHP).

The Mission discussed the proposed projects in the WHP, especially the Manger Square Tunnel and the Manger Square Village. The Mission's recommendation on the two proposed projects states that both projects should be halted until a Traffic management plan or a sustainable urban Mobility Plan, has been put in place, and solid justifications for their need have been made. **The State of Palestine welcomes the Advisory Mission's recommendations and will act accordingly.**

Moreover, an International assistance request was submitted to the World Heritage Committee in order to prepare a management and Conservation Plan for the WHP. This request was approved and a contract has been made with Ramallah UNESCO Office for its implementation.

In light of the quality of the restoration works on major elements of the Property including the roof of the Nativity Church, which address the major aspects of the corrective measures to meet the requested Desired State of Conservation for the removal of the property from the List of World Heritage in Danger, **the State of Palestine requests the World Heritage Committee to remove the property from List of World Heritage in Danger.**

## 2 Response from the state party to the World Heritage Committee Decision: 40 COM 7A.14

### 2.1 *Desired State of Conservation and Corrective Measures Developed for the Property*

a) Desired State of Conservation for the removal of the property from the List of World Heritage in Danger (DSOCR):

#### **Complete conservation and repair of the roof structure of the Church of the Holy Nativity.**

b) Corrective measures:

- (i) Complete a full investigative survey of the historic timbers and lead work of the roof, identifying the age and historical significance of the various component parts.
- (ii) Develop a Conservation Plan that synthesis the conclusions of the detailed investigative survey into a clear statement of the significances of the various elements of the roof within a comprehensive conservation philosophy for the roof restoration project.
- (iii) Prepare a detailed project specification for the roof repairs that allow a full understanding of which elements of the roof will be maintained, which to be repaired and which to be replaced.
- (iv) Undertake the roof repair project, including stabilizing the vaults of the Narthex, and document its interventions.

In addition to the evaluation of the implemented works, the overall conservation and management plan as well as the proposed projects within the World Heritage Property were discussed with relevant stakeholders in Bethlehem Municipality building. At the end of December 2016 the Advisory Mission submitted the State of Palestine a concise report on the state of conservation of the Nativity and recommendations regarding the two proposed projects. (Annex no.1)

### 2.2 *The ICOMOS Advisory Mission*

The Desired State of Conservation and related Corrective Measures developed for the removal of the property from the List of World Heritage in Danger were successfully achieved by March 2015 when the Roof restoration works were completed. Moreover, the restoration works of the Narthex roof cross vaults were also completed in the end of April, 2016. Thus, the State of Palestine requested the World Heritage Committee to consider the removal of the property from the List of World Heritage in Danger.

The State of Palestine asked for an Advisory Mission to assess, before the removal of the scaffolding from the Nativity Church, the implementation of the Corrective Measures and whether the Desired State of Conservation has been achieved in order to allow the property to be removed from the List of World Heritage in Danger. The Advisory ICOMOS Mission headed by Mr. Richard Griffiths who visited Bethlehem on September 1<sup>st</sup>-2<sup>ed</sup>, 2016.

The main role of the Mission was evaluation the state of conservation of the roof of the Nativity Church, with particular attention to progress made in undertaking the *corrective measures* and achieving the Desired State of Conservation:

### **2.3 Conservation Plan for the Church of the Nativity**

In reference to the World Heritage Committee decision (40 COM 7A.14 item no.5), the Presidential Committee for the Restoration of the Church of the Nativity has prepared a draft of the Conservation Plan for the Church of the Nativity, based on a table of contents suggested by the ICOMOS Advisory Mission; it includes the requirement of the World Heritage Committee (WHCom) adopted in 2016, that includes all components of the conservation plan required by the WHCom, such as the current conditions of the church after implementation of conservation interventions to meet the DSOCR and Corrective Measures, as well as future management and maintenance policies to guarantee the correct maintenance of the Church and the follow up of day to day maintenance and management actions.(see annex no.2)

Furthermore, this conservation plan will be a principle part of the holistic management and conservation plan of the entire WHP which is expected to be finalized by 2018.

### **2.4 Completed restoration works during the year 2016, (See annex no.4)**

#### **2.4.1 Narthex consolidation**

The structure of the Narthex is today strongly deformed. The façade wall exhibits a rotation towards the square more pronounced in the middle and starting approximately from the lintel of the door of Humility, about one meter above the ground. In consequence of this rotation, the façade wall has undergone a maximum horizontal displacement at the top, approximately in the middle of the free part of the wall, of about 40 cm.

The arches connecting the cross vaults to each other, and also the ones along the diagonal planes of the vaults are strongly deformed. Moreover, cracks and detachments from the walls occurred in the central area. The causes of these damages have never been clarified. The replacement of the original wooden roof with a system of thrusting masonry vaults, probably gave a significant contribution to the rotation of the façade towards the square, increased also by the occurrence of a series of seismic events.

In particular, the central vault, propped since the thirties of the 20<sup>th</sup> century, exhibits detachments, 17-19 cm wide, from the Narthex façade and 10-11 cm from the Church façade. Moreover big cracks, parallel to the façades, are visible at the extrados.

The intrados of the vaults, which had suffered also water infiltrations because of the numerous cracks and gaps, and also for the absence of any maintenance at the extrados, had been propped in the central part during the British Mandate.

Interventions completed by October 2016.

Before the beginning of the restoration works also the two adjacent cross vaults were propped for safety reasons

The following main criteria are at the basis of the structural project:

- i. The existing medieval cross vaults, although cracked, partially detached from the walls and made of roughly cut stones and poor quality mortar, are preserved. However, they will bear only their self-weight.
- ii. As consequence, all the unnecessary filling material is removed.
- iii. A new steel structure bears the new floor and connects the two opposite façades to improve the seismic response of the whole structure
- iv. For greater safety, the vaults are connected to the overlying steel structure by means of thin tie rods which enter into action only in the event of an incipient collapse

#### **2.4.2 Wall mosaics**

The wall mosaics covering the surfaces of nave and transept, show clear signs of physical and structural decay. Mappings of the different types of decay were made with reference to detachment from the masonry support, organic coherent deposits, incoherent deposits, lacunae with or without synopia, filling with gypsum and cracks.

Interventions completed by June 2016. (See annex no. 5)

#### **2.4.3 Plastering**

The plastered surfaces were affected by an incoherent and partially coherent, superficial deposit of atmospheric particulate also due to the redeposit of the material carried by the percolation of rainwater coming from the old roof, on which it was possible to see the leakages. Other principal deterioration morphologies are the complete detachment of one or more plaster layers or of the whole plastering layers

**The works included** the consolidation of the existing plastering, replacing the cement patches with a lime plastering, and refill the damaged or missing parts of the plastering layers, replacing the cement patches with a lime plastering and filling the damaged or missing parts of the plastering layers. Special mortar of lime base with high porosity was applied to the areas of possible high humidity.

The works were completed at the end of October 2016. (See annex no.6)

#### **2.4.4 Stone wall**

The top priority was given to the restoration of the stone façades at the two corners and the lateral naves so as to avoid any damage to the lead roofing under construction.

The restoration work included cleaning works, the replacement of cement pointing with lime and also the replacement of some severely eroded and deteriorated stone pieces.

The works were completed by the end of October 2014.

#### **2.4.5 Architraves**

The carved tribulation surface is affected by an incoherent and partially coherent, superficial deposit of atmospheric particulate, while cracks, micro-cracks and lacks appear just localized. The xylophagous insects attack has also caused partial and localized losses of material even in the innermost parts.

A material consolidation was carried out wherever the timber had been attacked by insects. In some cases, especially in the most deteriorated parts, it was necessary to replace the existing timber with a new one; in such cases particular attention was paid to preserve the external decorated surfaces and to replace only the internal parts. As the architraves must absorb the horizontal thrusts transferred by the relieving masonry arches above, the interventions of structural consolidation, now carried out, aimed also at recomposing the internal continuity existing in the past and interrupted by the material decay or by wrong past interventions.

The work was completed by October 2016

#### **2.4.6 The restoration of the three terraces (the two transepts and apes)**

The works aimed to insure a perfect waterproofing system to prevent any water leakage that could reach the recently restored plaster inside the church. The works included the dismantling of the existing stone tiles after numbering preparing for re-installation in the same location after the completion of the



waterproofing layers and the restoration of the external plastering of the parapets including flashing of the joint between parapet and floor. The works have been completed by June 2016.

#### ***2.4.7 The restoration of the stone columns***

The Presidential Committee has authorized the restoration of a column at lateral nave north as a sample. The restoration included the cleaning and consolidation of the capitals, shaft and the bases, which consists the removing of the coherent and incoherent deposits, consolidation of the existing cracks and holes, and also the cleaning and retouching of the existing paintings.

The restoration of the column was completed in October 2016.

### ***2.5 Ongoing restoration works***

#### ***2.5.1 The restoration of the external stone facades – western and northern elevation***

The works has started on September 2016 by erecting the necessary scaffolding system; define the state of conservation and documentation, cleaning works and the removal of the cement pointing. The works on Western façade was completed in December 2016, while the Northern façade is planned to be completed by end of April 2017.

#### ***2.5.2 Fire detection system***

The fire alarm system will cover the whole space inside the Church and will be compatible with possible extensions to the grottos in the future (the grottos are still a controversial issue), its aim is to reveal and signal a fire as soon as possible.

The alarm signal will be transmitted and displayed on a control central device, an acoustic and visual signal to be installed in a suitable place.

The purpose of the fire system is

- To promptly activate the emergency evacuation plans.
- To facilitate and speed up a safe evacuation of people and, if possible, of artifacts.
- To promptly activate the security staff, measures tools against fire.

The Intervention will be completed by April 2017 (Under progress)

#### ***2.5.3 Lighting system***

In the concept design the lighting system retains some features that have become typical of the church over the centuries, and are now part of the collective imagination, like luminosity of the nave, twilight of the aisles, as well as it highlights some architectural and decorative items that have been until now nearly neglected, such as the colonnades of the aisles, the carved architraves, the paintings on the columns, some ancient graffiti on the stones, the baptismal font, the extraordinary wooden structure above the central area, the reflection of the light by the inclined tesserae of the wall mosaics, the Armenian door, the vaults and masonry apparatus of the narthex.

The lighting system will respect the requirements imposed by the sacredness of the site but, and will try to make certain peculiarities of the church visible to visitors and appreciated by them in the proper way.

It was necessary to create a 3D model of the basilica and carry out several simulations in order to define the number, type and position of the luminous bodies and foresee the final effect. Studies and checks are still ongoing.

The Intervention will be completed by April 2017



## ***2.6 Future restoration phases***

### ***2.6.1 Stone Columns and paintings***

The surface of the paints on columns are uniformly affected by an incoherent and partially coherent, superficial deposit of atmospheric particulate, also due to the redeposit of the material carried by the percolation of rainwater coming from the roof and, in a restricted way, to sprinkles of the paint used for the maintenance of the overlying surfaces.

Interventions is planned to be completed by November 2019 (Subject to availability of the needed funds)

### ***2.6.2 Floor mosaic***

The floor mosaics surface is uniformly covered by a consistent, incoherent and partially coherent, superficial deposit of atmospheric particulate and on the plan there is an un-homogeneous subsidence, in the north transept and the nave.

The cohesion between the tesserae and the mortar is good, except for some floor areas in the north transept and there is a few number of breaking up (disaggregated) or micro-cracked tesserae, while on the surface it is possible to observe the natural effect of the anthropogenic wear. There are not appearing many lacunae and losses, especially because several areas have been previously restored with fillings.

Under a manual percussion of the mosaic plane there have been detected some adhesion defects deeply into the preparatory layers which can probably be related to a physiological condition of the plan and are not considerable as an important degradation example. Some cracks are also revealed.

It is under study to uncover partially the floor mosaic carpet which has been previously documented during the archeological excavation carried out during the British mandate.

Interventions are planned to be completed by September 2019 (Subject to availability of the needed funds)

## ***2.7 Historical notes of the roof structure of the Church of the Nativity***

In accordance with the World Heritage committee (decision 39COM 7A.28) the State Party prepared a historical notes included dating of the wooden structure of the roof of the Church of the Nativity.

The onsite inspections carried out in 2010, and more recently in 2013-2014, as well as the dendrochronologic analysis and the radiocarbon analysis (C14) performed on several samples, provided the results reported in the sequel. It is worth noting that, whereas the dendrochronologic analysis allows, in the most favorable cases, the year when the tree was cut down, the C14 analysis provides a time range, depending on the features of the samples, within which the tree was cut down.

Most of the secondary components of the trusses in the aisles (cantilevers, sleepers, struts) and a few components of the trusses of the crossing area (tie-beams) are made of LARCH. The felling of the trees date back to the time interval 1440 - 1460 A.D. The dendrochronologic analysis proved that they were brought to the site from the Eastern Alps belonging, at that time, to the Republic of Venice that had closed trade relations with the Middle East. Moreover, historical documents testify that in 1479, thanks to the Franciscan Father Giovanni Tomacelli, responsible for the Basilica and Custodian of the Holy Land, important restoration works were carried out. They involved the Republic of Venice and England as providers of wood and lead sheets respectively. We should not be surprised by the long period elapsed between the date when the trees were cut down and the date of the actual interventions. Such a delay was probably due to the diplomatic obstacles among the subjects involved and to the logistic problems of transportation and processing.

Most of the remaining structure of the Church is made of OAK (tie-beams, rafters, struts, some cantilevers, curbs along the walls, purlins) dating back to 1848, the time when some reconstruction works were carried out after the 1834 earthquake. The dendrochronologic analysis proved the Turkish provenance of the trees used, so underlining the analogy with some interventions made in the same period and with the same species of wood in Aya Sophia in Istanbul.

Some components of the secondary roof structures (sleepers, struts, curbs, purlins) and all wooden architraves are made of CEDAR.

In particular, it is possible to identify three groups of Cedar structural elements:

- 1) Architraves above the colonnades (650 A.D.  $\pm$  60 years), dating back to the time of Justinian's reconstruction. They let to think that the whole timber structure was originally made of Cedar.
- 2) Some structural components of the roof (1164  $\pm$  76 years), dating back to the time of the Crusades. This period is characterized by important works carried out inside the Church (paintings on columns, main altar in the Grotto, wall mosaics) and minor restoration works on the roof, like localized repairs made by using wooden elements already present in the roof at that time.
- 3) Some elements of the roof (1591  $\pm$  75 years), the presence of which is justified by minor restoration works carried out by Greek carpenters in 1670 -71, as reported in historical documents. Because they used wood brought from Istanbul, it is reasonable to assume that these Cedar elements were part of the same timber delivery.

In conclusion, it is worth noting that the present roof structure is undoubtedly the result of several interventions over time, consisting of repairs/replacements/reconstructions using frequently, in particular in the case of secondary structural components, parts of the previous structure.

References:

- The final Report delivered by the Consortium in 2010
- Dendrochronological analysis of the timber structure of the Church of the Nativity in Bethlehem, Int. Jour of Cultural Heritage, Special Issue, 13, e54-e60, 2012
- Short Technical Report (not published) by M. Mannucci – LegnoDOC, 2014

## ***2.8 Restoration Methodology***

In accordance with the Advisory Mission's recommendation the State Party presents herein after the methodology adopted in the restoration works of the internal plaster and wall mosaic for the Church of the Nativity.

### ***2.8.1 Restoration methodology for internal plasters and surrounding plasters***

- 1) Accurate photographic documentation. Realization architectural relief using photogrammetric and topographical method. 1:20 scale return. Detecting the state of conservation and execution techniques. Delivery of the site mapping, to be performed on the itemized relief.
- 2) Tests execution for the various phases of the operation, for the materials application and different methodologies, including costs related to comparison with data coming from diagnostic research and historical archive investigations.
- 3) Thermographic survey.

- 4) Laboratory analysis of collected samples.
- 5) Stratigraphic tests for identification of the finishing coats sequence of the plasters.
- 6) Mechanical removal of incoherent deposits, (dusts, atmospheric particulate) using flat brushes and small extractor fans.
- 7) Removal of superficial coherent deposits, concretions, encrustations, fixatives, with sponges and water and through mechanical removal of solubilized deposits using flat brushes, brushes, scalpels.
- 8) Restoring of the plasters cohesion, applying a strengthening product by impregnation to inject, to the verification of results and to the removal of the excess product applied, using either ethyl silicate or acrylic resins (Acril ME) in solution or emulsion or micro-emulsion. In cases of breakdown and pulverisation.
- 9) Restoring of the cohesion between plaster and wall support, through filling adhesives injection, to the fissures filling (even for small fissures) and to the subsequent product excess removal from the surfaces. With mortar Ledan (to be transported on site)
- 10) Mechanical removal of additions and reconstructions done during previous operations which could be suitable for the plaster surface. This operation must be done on the lower part of the walls and in some areas of the upper part of the walls.
- 11) Removal of metallic items such as bolts, brackets, clamps, etc. ... that could result as possible deterioration reason or are no longer useful, for items up to a maximum depth of 6 cm, to be assessed per each element removed, including the costs related to the borders consolidation and to the eventual thin layer (“velinatura”) of the parts in any danger of falling.
- 12) Treatment (with Inralac) aimed to stop oxidation and to the protection of metallic items retained, including the costs related to the protection of the surrounding plaster areas.
- 13) Filling of plaster layers fallen, including tests for the composition of a mortar suitable for coloring and grain size, to the application of one or two plaster layers, to the subsequent cleanup and chromatic revision of borders. With St.Astier natural hydraulic lime.
- 14) Visual interference reduction of the plaster surface in the presence of abrasions, shooting gaps, stains, and / or discontinuity of old paints, and painting of new plasters or filling with glazes made from milk of lime (St.Astier and mineral pigments) and watercolors.

### **2.8.2 Methodology for wall mosaic restoration**

- 1) Accurate photographic documentation. Detecting the state of conservation and techniques of execution of the entire product with delivery of the mapping construction, to be performed on major existing, itemized. Estimated on an hourly basis of the restorer excluding charges related to temporary works required and ultimately to its graphic.
- 2) Tests for the various phases of the operation, the application of materials and methodologies, including charges for comparison with data from surveys and diagnostic and historical investigations. Estimated on an hourly basis of the restorer excluding charges related to temporary works necessary.

- 3) Thermographic survey on plaster on wall nave and transept near mosaic made before mounting the scaffolding. We will have a broad view of the overall heat map of the area to check then close-ups after mounting the scaffolding to identify the areas affected by separation of layers.
- 4) Laboratory analysis: the samples collected by micro-drawing will concern: stone materials, plaster, bedding mortar, filling mortars, morphologies of degradation (efflorescence, black crusts, encrustation, concretions, microorganism etc.). The samples will be analyzed in the laboratory in order to acquire elements which will be meaningful and representative for the recognition both of the mineralogical-petrographic nature of the materials and of the chemical and biological degradation of the samples.
- 5) Blocking out of mobile mosaic tesserae by gluing resins; preliminary action to the cleanup operations; to be assessed per single operation on all kinds of material, including costs related to the removal of resin excess.
- 6) Restoring of wall mosaic tesserae cohesion, in case of breakdown, by means of paintbrushes and syringes to rejection, preliminary action to the cleanup operations.
- 7) Partial restoring of wall mosaic tesserae cohesion, in case of pulverization, by means of paintbrushes and syringes to rejection, preliminary action to the cleanup operations, including costs related to the subsequent removal of consolidating product excess and to the protection of surrounding surfaces through a collection and flow system for the product.
- 8) Temporary filling and micro-filling, with mortar made of slaked lime and fine sand in cases of cracks and spilling of the tesserae and of the bedding mortar, including costs related to the subsequent removal of the temporary mortar.
- 9) Restoration of the cohesion of the wall mosaics bedding mortar, in cases of breakdown, using paintbrushes and syringes and pipettes to rejection, after or within the cleaning operation phases; including costs related to the removal of consolidating product excess: for a phenomenon spread between 50% and 100% per sq. meter, to be assessed per sq. meter.
- 10) Cohesion restoration of the preparatory layers, after and within the cleaning operation phases; to be assessed per sq.dm, provides the nucleus the drilling aimed to the introduction of needles and syringes and to facilitate the removal mentioned above where necessary, and the removing of some tesserae, including costs related to the filling of the holes, the relocation of the tiles in the original position.
- 11) Removal of superficial coherent deposits, concretions, encrustations, adulterated fixatives, by applying tablets soaked with solutions of inorganic salts, carbonate or ammonium bicarbonate, including costs related to the tests for the suitable solvents identification, to the appropriate application timing, and to the subsequent removal of solubilized deposits by means of paintbrushes, brushes, scalpels, probes.
- 12) Removal of superimposed several kinds of substances such as oil, paint, wax, etc. from wall mosaics, through one cycle application of tablets soaked with organic solvents; including costs related to the tests for the suitable solvents identification, to the appropriate application timing, and to the subsequent removal of residual solution and dirt, to be assessed per sq. meter on the sq. meters spread affected by the phenomenon.

- 13) Extraction of soluble salts, even residue from as previously adopted cleaning techniques, by the application of absorbing tablets, repeating application until complete extraction; including costs related to the tests for the identification of suitable absorbent materials.
- 14) Removal of coherent deposits with thick depth, by mechanical manual and / or precision instruments: ultrasonic device; to be assessed per sq. meter on all kinds of material.
- 15) Mechanical removal of materials made of mortar or of relatively coherent materials, executed during previous work, which may interfere with the work, both for material and composition, or which have lost their function or aesthetic conservative, maximum depth 3 cm.
- 16) Filling with mortar in cases of splits, fractures, operations performable on all types of materials, including costs related to the tests for the composition of mortars suitable for coloring and grain size, to the superficial treatment of itself and to the cleanup of possible residuals from the surrounding surfaces.
- 17) Integration in cases of wall mosaics lacunae, performable on all types of materials, including costs related to the pursuit of materials similar to the original, to the tests for the composition of mortars suitable for color and grain size: layer of depth with hydraulic mortar.
- 18) Integration in cases of wall mosaics lacunae, performable on all types of material, costs related to the pursuit of materials similar to the original, to the tests for the composition of mortars suitable for color and grain size, to its superficial treatment and to the cleanup of possible residuals from the surrounding surfaces: finishing layer.

## ***2.9 The management plan for the World Heritage Site***

In reference to the World Heritage Committee decision (40 COM 7A.4, item 6), an International assistance Request was submitted to the WHC in order to prepare a management and Conservation Plan for the WHP. This request was approved and a contract has been made with Ramallah UNESCO Office to be implemented. It will be a holistic plan for the entire WHP including the conservation plan of the Nativity Church.

Bethlehem Municipality will allocate additional resources to bridge shortage of funds needed to produce this plan, which is expected to be finalized by 2018.

## **3 Implemented conservation issues identified by the state party**

Currently, Bethlehem Municipality works with all partners involved in the (WHP) (mentioned before) to secure a high level of conservation and protection of the property, controlling all the issues related to it. Moreover, the Municipality is working to conserve the physical attributions of the Outstanding Universal Value, integrity and authenticity of the (WHP), especially the unsystematic urban expansion. However, the Municipality still working with the ratified “Regulatory Bylaws for the conservation of the Historic Centre in Bethlehem and the individual Traditional buildings ,all the construction and conservation works are controlled by various charters that provide a framework for the proposed interventions those directly associated with the secure of the architectural attributes and urban fabric of the historic town.

It’s worth mentioning that these Bylaws were welcomed by the World Heritage Committee in its session (39COM7A.28).

The plan for later stages will include “Regulatory Bylaws “for the Buffer Zone for a 70- meter wide that surrounded the same boundaries of the historic town, simultaneously with final phase of preparing the

Master plan of the city, in order to ensure adequate protection for the historic town, to ensure a high levels of conservation, and will put an end for the growth and future negative expansion of the building that affect directly the urban fabric of the city.

It's worth mentioning that many projects were conducted by Bethlehem Municipality and its partners in order to conserve the cultural heritage resources of the city and developing access to services In order to meet the requirement of the modern life style

These projects are as the following:

No.	project	Description	Completion date	Donation
1.	<b>Rehabilitation of Bethlehem Old market (phase II)</b>	Rehabilitation of the public space located within the historic town that provides the locals with adequate services. The rehabilitated area was 280 meters long, included maintenance of the infrastructure (upgrading the water, waste electrical and telephone network) as well as beautification of the outer facades of the heritage building aiming at enhancing the aesthetic appearance of the site. The works included cleaning , pointing and installing unified canopies for the commercial shops , installing new lighting units and planting the area, and providing proper places for loading and unloading the goods, Installing a waste compactor that have been specifically designed to compact wet waste materials, in order to reduce pollution in the (WHP) area and keeping it clean.	September, 2016	American Near East Refugee Aid (ANERA)
2.	<b>Beautification and Rehabilitation of Manger Square (phase II)</b>	<p><b>Roofs of the Municipality Buildings:</b></p> <p>The Roofs of the old and new Municipality Buildings, and the Peace Center Building was greened and equipped with recycled wood tiling, and pergolas for the use of media during festivities.</p> <p><b>The Square Improvements:</b></p> <ol style="list-style-type: none"> <li>1. Landscaping interventions was made including patching of damaged tiles, cleaning of stone elements, adding new signage to shops and installation of two Digital Screens.</li> <li>2. At the main Entrance to the Municipality replacing existing short wall with a planter, adding flag poles, fixing street tiling , drainage and streamlining traffic with fixed bollards and moveable planters and creating a new parking for the Mayor away from the entrance</li> <li>3. Afeem's Road Improvements, the Road is an essential exit of the square, the surface was tiled and the road had no drainage system, the intervention included asphalt with a rough texture to avoid a slippery surface, adding a drainage system to the</li> </ol>	August, 2016	The late Mr. Said Khoury, Co-founder of Consolidated Contractors Company (CCC) through Bethlehem Development Foundation



		<p>road, and adding a new stair case for pedestrians.</p> <ol style="list-style-type: none"> <li>4. Retiling of the entrance of the old Municipality Building, removal of all steel door adding a new automatic glass door, and painting the staircase.</li> <li>5. Rehabilitation of the backyard of the old Municipality Building included a construction of a new 100m<sup>3</sup> water cistern, tiling of the area in front of the stores and the staircases, rehabilitation of manholes, steel doors and adding a 250KVa standby generator to be used for festivals and events.</li> <li>6. Adding new signage for the Municipality Buildings, adding new rolling shutters and security glass doors for two shops, adding new signage for seven shops, and canopy rehabilitation of one shop.</li> <li>7. Installation of Underground Waste Bins Containers The system includes double containers system that works on hydraulic power.</li> </ol> <p><b>Lighting and Electrical Works.</b></p> <ol style="list-style-type: none"> <li>1. A new Lighting scheme was installed to accentuate the surrounding buildings, the features of the square and the processional route. In addition, new spot lights were installed beneath the trees in the square to articulate them; the entire lighting theme is programmed to change depending on the season.</li> <li>2. The electrical distribution capacity was boosted to cater for the increase for electrical power during Christmas season, adding a new 500AMP service for the square, with 4 external sockets to be used during festivals and events.</li> </ol>		
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## 4 Future issues identified by the state party concerning the World Heritage Site

### 4.1 Rehabilitation of the Star Street

The Advisory Mission experts walked through the Pilgrimage Route along the Star Street to be notified about the components of the project.

In 2012, the Pilgrimage Route was inscribed on the World Heritage List due to its Outstanding Universal Value, that is directly associated with the Birth of Jesus; this Route includes buildings that testify the significant and breathtaking style of architecture that dated back to the Ottoman period.



The Mission explored the current condition of the Street; most of the commercial shops within Star Street are currently closed and deserted by their owners. This situation has begun with the outbreak of the Al-Aqsa Intifada at the end of 2000, which had a severely adverse impact on the infrastructure and the urban fabric of the historic town; as a result, most of the shop owners closed their stores to invest in other places, converting it into a ghost street. Today, it is merely a road used for vehicles reaching their destinations and allows for inadequate parking. The Mission also visited the rehabilitated heritage buildings like the Iconic School and the Syriac Hosh.

Bethlehem Municipality vision is to rehabilitate the Route to attract the inhabitants to reopen their deserted properties; also to attract tourists to increase the time they spend inside the heritage town, while simultaneously aiming to revive other interesting sites located within walking distance of the Church of the Nativity. Converting the street into pedestrian will make it a vibrant place full with activities and relevant facilities; as a result boosting the flow of foreign cash in the city, that contributes to rise the living standards of the local community, preserving and protecting the Palestinian Cultural Heritage resources.

In reference to the Advisory Mission's recommendations, this project would address issues related to the properties, their infrastructure and services; it will help provide economic incentives that may attract the original inhabitant to reopen their closed stores; the project will also contribute to reduce the inadequate car park along the Street by creating a new drop off point and a new car park at the north end of the Route giving the visitors and pilgrims an opportunity to walk along the Pilgrimage Route on their way to the Church.

It's worth mentioning that the State Party and the Russian Ambassador had signed an agreement concerning the Rehabilitation of the Star Street at Ministry's headquarter in the city of Ramallah /Palestine on 27th September, 2016, The total budget of the of the project is four million dollars over the duration of two years.

The project includes three categories; provide accessibility to the services, conserve of build-up heritage and provide services for the inhabitants and visitors.

Recently Bethlehem Municipality had launched the Tender documents concerning the rehabilitation of the Street, and the tender will be opened on 31st January 2017.

#### ***4.2 Manger Square Tunnel and Manger Square Village (multipurpose parking and commercial building)***

According to the Advisory Mission's recommendations the above mentioned two proposed projects should be halted until a Traffic Management Plan, or a Sustainable Urban Mobility Plan, has been put in place, and solid justifications for their need have been made (see annex no.1). The State of Palestine welcomes these recommendations and the two proposals are halted. For the time being, the Municipality of Bethlehem has started preparing the Traffic Management Plan for Bethlehem City.

#### ***4.3 Preparing Traffic and Transportation Plan for Bethlehem City***

##### ***4.3.1 Background***

Bethlehem Municipality has received a Grant from the Municipality of Paris, for the implementation of the project Mobility Study and data collection for Bethlehem city.

Bethlehem Municipality is looking forward with the Municipality of Paris to draw up a "Transport and Mobility Master plan" at the scale of the Governorate of Bethlehem. The works will consist of providing

planning documents to the conurbation of Bethlehem, those documents are indispensable for the improvement of accessibility over its territory and for the need for mobility requirements expressed by the population.

This mobility study is the first phase, the second phase will be executed through a separate contract to be launched by mid-2017.

It is worth mentioning that the ICOMOS Mission welcomes the initiative of Bethlehem Municipality to develop this project at Bethlehem city scale with technical support from the Municipality of Paris.

#### ***4.3.2 Congestion and blockage of public spaces which hinder the development of tourism***

From an urban perspective, the predominant features of the City of Bethlehem are its continuous built-up area, a hilly topography and an increasing scarcity of available land. In recent years, the failure to regulate urban growth has resulted in a dense and high-built environment, without any consideration of the size of service roads.

The combination of a badly structured road network in poor conditions with a strong trend towards car ownership is generating increased traffic congestion, which the poor observance of traffic regulations only aggravates.

The most difficult way to circulate is in the narrow back streets of the old city, Star Street which inscribed on the World Heritage List in Danger in 2012.

Alternatives to private cars remain limited and unreliable. The public transport network, based around buses/minibuses and individual/collective taxis, is remarkable for its dilapidated fleet and unsophisticated organization, which used to be regulated by the Ministry of Transport, the service offer is unsatisfactory, in terms of quality, regularity and coverage of territory.

The increasingly restricted access to the area thus curbs the city's potential for economic development, the congestion in the historic center and the area around the Church of the Nativity has a negative impact on the promotion and protection of local heritage and restricts the revitalization of the commercial fabric and organized activities for tourists.

Today, Bethlehem faces the question of diversifying its tourism offer, the city is dependent on pilgrimage tourism, which typically involves short stays (often ½ day without an overnight stay) and generates more pressure on urban services than economic benefits for the city.

The development of a peaceful environment is one of the main criteria for the success of this diversification. The roll-out of new products based on the promotion of local crafts or the creation of culture and heritage-based pedestrian routes will have to involve a reorganization of traffic and parking and a better division of the public space, especially in the historic center.

#### ***4.3.3 Local context***

From an administrative point of view the municipality is part of Bethlehem Governorate, which has a population of 200,000 people located in one continuous built-up area, between the three cities of

Bethlehem, Beit Jalal and Beit Sahour, eight villages (including Al Doha and Al Kader) and three refugee camps (Ayda, Al Duheisha and Al Azza).

#### **4.3.4 Objectives of the project and perimeter**

The main objective of the project is to provide a comprehensive analysis of the level of accessibility of the territory. The Consultant is expected to perform an extensive work on data collection to identify the offer (roads, intersections, engineering works, pedestrian network, car parks, public transport and taxis) and the demand for transport (traffic counts, household surveys and origin/destination matrices).

The analysis is based on the existing data and previous studies available and carried out by the partners of Bethlehem Municipality; this will include a short review of laws and regulations, socio-economic data, existing planning documents and main upcoming projects in the field of mobility, urban and economic development.

#### **4.3.5 Project ownership**

Given the scale of the project, the Municipality of Bethlehem will be the project owner in close coordination with a steering committee that will incorporate all of the institutional partners throughout the governorate; the City of Paris will provide technical assistance to the Municipality of Bethlehem in the implementation of the project

#### **4.3.6 Steering committee**

The steering committee will be composed by members of the cities of Bethlehem, Beit Jala, Beit Sahour, the Governorate, the Ministry of transport, the Ministry of tourism and Antiquities, the Bethlehem Development Foundation (BDF), the City of Paris and Agency France Development (AFD).

The tender has been opened on 18/10/2016; there were three participants; after finishing the technical and financial offers, the successful bidder was the Community Development Group (CDG) and Applied Research Institute – Jerusalem/ society (ARIJ) from the city of Bethlehem.

The price of the bid was 120,000 Euro, the (CDG) and (ARIJ) has received the letter of acceptance and signed the contract with Bethlehem Municipality and will start soon implementing the tender.

The project should be completed within five months beginning from the date of signing the contract between the two sides.

## **5 Time table for the remaining Corrective Measures in the World Heritage Site**

The State of Palestine would request to remove the Property from the World Heritage List in Danger; simultaneously the recommendation of ICOMOS Mission that a timetable can be agreed with the completion of the remaining Corrective Measure including the completion of the conservation plan for the Church of the Nativity and the comprehensive management plan for the WHP that supposed to be completed by February 2018 in order to be discussed by the World Heritage Committee during the year 2017.

## **6 Removal of the *Birthplace of Jesus; Church of the Nativity and the Pilgrimage Route, Bethlehem, Palestine* from the List of World Heritage in Danger**

In reference to the ICOMOS Mission report, the State of Palestine would like to emphasize that the Desired State of Conservation and related Corrective Measures developed for the removal of the property from the List of World Heritage in Danger have been successfully achieved. Therefore, *the State of Palestine is requesting the World Heritage Committee to remove the property from the List of World Heritage in Danger.*

## 7 Conclusions

The Church of the Nativity was inscribed on the World Heritage in Danger due to the lack of repair of the roof structure of the Church of the Nativity and the consequent threat to the roof timbers, roof covering, and the interior wall surfaces from water ingress.

The State of Palestine successfully achieved the Desired State of Conservation and its related Corrective Measures developed for the removal of the property from the List of World Heritage in Danger. This achievement acknowledged by the ICOMOS Advisory Mission visited Bethlehem on September 2016. The Mission assessed the state of conservation of the Nativity Church, progress of Corrective Measures implementation, and proposed projects suggested to be implemented planned inside the WHP, especially Manger Square Tunnel and Manger Square Village.

In reference to the Advisory Mission's recommendations, the State of Palestine is committed to halt these two proposed projects till the completion of a Comprehensive Traffic and Transportation Plan for Bethlehem city that may obviate the need for such these projects.

A great progress was made in the implementation of the Conservation Plan for the Church of the Nativity, while the work on the Management and Conservation Plan for the WHP will be started after signing the contract with Ramallah UNESCO Office. This plan will be completed by 2018.

In light of the quality of the restoration works on major elements of the property including the roof of the Nativity Church, which address the major aspects of the corrective measures to meet the requested Desired State of Conservation for the removal of the property from the List of World Heritage in Danger **the State of Palestine requests the World Heritage Committee to remove the property from List of World Heritage in Danger.**