



United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

World Heritage Patrimoine mondial

44 COM

Paris, 18 June 2021
Original: English

UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL ORGANIZATION

ORGANISATION DES NATIONS UNIES
POUR L'EDUCATION, LA SCIENCE ET LA CULTURE

CONVENTION CONCERNING THE PROTECTION OF THE WORLD
CULTURAL AND NATURAL HERITAGE

CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE
MONDIAL, CULTUREL ET NATUREL

WORLD HERITAGE COMMITTEE / COMITE DU PATRIMOINE MONDIAL

Extended forty-fourth session / Quarante-quatrième session élargie

Fuzhou (China) / Online meeting / Fuzhou (Chine) / Réunion en ligne
16 - 31 July 2021 / 16 – 31 juillet 2021

Item 7 of the Provisional Agenda: State of conservation of properties inscribed on the World Heritage List and/or on the List of World Heritage in Danger

Point 7 de l'Ordre du jour provisoire : Etat de conservation de biens inscrits sur la Liste du patrimoine mondial et/ou sur la Liste du patrimoine mondial en péril

MISSION REPORT / RAPPORT DE MISSION

Kathmandu Valley (Nepal) (C 121bis)
Vallée de Kathmandu (Népal) (C 121bis)

16 – 21 October 2019 / 16 – 21 octobre 2019

Report on the Joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring Mission to the World Heritage Property of the Kathmandu Valley (Nepal, C 121bis)

16–21 October 2019



Gamini Wijesuriya, representing ICCROM and the World Heritage Centre
Catherine Forbes (Australia), representing ICOMOS International

Table of Contents

EXECUTIVE SUMMARY	4
INTRODUCTION	4
SUMMARY OF FINDINGS	4
IMPLEMENTATION OF PREVIOUS FOLLOW-UP MEASURES	6
CONCLUSIONS	6
RECOMMENDATIONS	7
1. BACKGROUND TO THE MISSION	9
1.1 INTRODUCTION	9
1.2 INSCRIPTION HISTORY	9
1.3 STATEMENT OF OUTSTANDING UNIVERSAL VALUE	9
1.3.1 <i>Brief Synthesis</i>	9
1.3.2 <i>Integrity</i>	10
1.3.3 <i>Authenticity</i>	10
1.3.4 <i>Protection and Management Requirements</i>	10
1.4 REDEFINITION OF PROPERTY BOUNDARIES	11
1.5 EXAMINATION OF THE STATE OF CONSERVATION BY THE WORLD HERITAGE COMMITTEE	11
1.5.1 <i>39 COM and the Reactive Monitoring Mission, October -November 2015</i>	11
1.5.2 <i>41 COM and the Reactive Monitoring Mission, March 2017</i>	12
1.5.3 <i>43 COM and the current Reactive Monitoring Mission October, 2019</i>	13
2. LEGAL AND MANAGEMENT FRAMEWORK	14
2.1 HERITAGE LEGISLATION	14
2.2 INSTITUTIONAL FRAMEWORK, MANAGEMENT STRUCTURE AND COORDINATION MECHANISMS	14
3. IDENTIFICATION AND ASSESSMENT OF ISSUES AND THREATS	16
3.1 INTRODUCTION	16
3.2 MANAGEMENT EFFECTIVENESS	16
3.2.1 <i>Coordination</i>	16
3.2.2 <i>Actions Taken since the 2017 Reactive Monitoring mission</i>	24
3.2.3 <i>Recovery Planning</i>	26
3.2.4 <i>Planning for the Future</i>	26
3.3 RECOVERY OF THE EARTHQUAKE AFFECTED PROPERTY AND ITS ATTRIBUTES CONVEYING THE OUTSTANDING UNIVERSAL VALUE, INCLUDING INTEGRITY AND AUTHENTICITY	29
3.3.1 <i>Earthquake Damage</i>	29
3.3.2 <i>Recovery and Reconstruction</i>	29
3.3.3 <i>Impacts of the Recovery on Attributes of OUV</i>	47
3.4 ISSUES RELATING TO THE RECOVERY AND RECONSTRUCTION OF THE ATTRIBUTES OF OUTSTANDING UNIVERSAL VALUE	50
3.4.1 <i>Emergency Response</i>	50
3.4.2 <i>Inventories</i>	50
3.4.3 <i>Heritage Expertise</i>	50
3.4.4 <i>Traditional Skills and Knowledge</i>	50
3.4.5 <i>Tendering Process</i>	50
3.4.6 <i>Materials</i>	51
3.4.7 <i>Human Safety</i>	51
3.4.8 <i>Building Condition</i>	51
3.4.9 <i>Routine Maintenance and Repair</i>	51
3.4.10 <i>Urban Infrastructure</i>	51
3.4.11 <i>Privately Owned Heritage</i>	51
3.4.12 <i>Solar Street Lighting</i>	52

3.4.13	<i>Political Support</i>	52
3.4.14	<i>Record Keeping</i>	52
3.4.15	<i>Evidence Based Decision Making</i>	52
3.4.16	<i>Values Based Recovery</i>	52
3.5	POSITIVE AND NEGATIVE DEVELOPMENTS IN THE CONSERVATION OF THE PROPERTY SINCE THE LAST REPORT TO THE WORLD HERITAGE COMMITTEE	52
3.5.1	<i>Positive Developments</i>	52
3.5.2	<i>Negative Developments</i>	53
4.	ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY	54
4.1	ARE OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY OF THE PROPERTY MAINTAINED?	54
4.2	FOLLOW-UP MEASURES	57
4.2.1	<i>Response to Previous Decisions of the World Heritage Committee on the State of Conservation of the Property</i>	57
4.2.2	<i>Response to the Terms of Reference for 2019 Reactive Monitoring mission</i>	60
4.2.3	<i>Measures the State Party Plans to Take to Protect the Outstanding Universal Value of the Property</i> 67	
4.2.4	<i>Proposed Mitigation and Corrective Measures</i>	68
5.	CONCLUSIONS AND RECOMMENDATIONS	74
5.1	CONCLUSIONS	74
5.2	RECOMMENDATIONS TO THE WORLD HERITAGE COMMITTEE	75
5.3	DESIRED STATE OF CONSERVATION	76
5.3.1	<i>Desired State of Conservation (DSOC)</i>	76
5.3.2	<i>Corrective Measures and Timeframe for their Implementation</i>	77
5.4	INCLUSION ON THE LIST OF WORLD HERITAGE IN DANGER	79
ANNEXURE 1		81
	DECISION ADOPTED BY THE WORLD HERITAGE COMMITTEE AT ITS 43 RD SESSION (BAKU, 2019)	81
ANNEXURE 2		83
	TERMS OF REFERENCE FOR THE REACTIVE MONITORING MISSION, 2019	83
ANNEXURE 3		84
	MISSION SCHEDULE, OCTOBER 2019	84
ANNEXURE 4		86
	PHOTOGRAPHS TAKEN DURING THE MISSION, OCTOBER 2019	86

Executive Summary

Introduction

In April and May 2015, a series of earthquakes severely affected the World Heritage Property of the Kathmandu Valley (KVWHP). Since then, three joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring (RM) missions have been undertaken to assess the property's state of conservation and its recovery from the earthquakes.

The first Reactive Monitoring Mission (undertaken in October 2015) found that the earthquakes had inflicted serious damage to the Kathmandu Valley property, making the property extremely vulnerable, and that without a well-coordinated and focused recovery, the property was facing serious deterioration of its architectural and town planning coherence, which would affect its physical and historical integrity and authenticity, and in turn its OUV. The mission found that the scale and scope of the recovery process was not adequate to deal with the ascertained and potential threats to the property and its OUV but recommended that the decision to place the property on the List of World Heritage in Danger be deferred.

The second Reactive Monitoring Mission (undertaken in March 2017) reviewed the progress being made by the State Party on recovery and implementation of the recommendations of the 2015 mission. As progress was still not considered adequate, the mission recommended inscription of the property on the List of World Heritage in Danger and provided a comprehensive list of measures that would, if implemented, reverse or mitigate the threats to the property.

As the State Party had provided little evidence to the WHC that the mitigation measures recommended by the 2017 Reactive Monitoring mission had been implemented, a third Reactive Monitoring mission was undertaken in October 2019. The purpose of this mission was to assess the current state of conservation of the Kathmandu Valley World Heritage property, to review the progress of the State Party in implementing the recommendations of the 2015 and 2017 missions, to assist with the development of a strategy for the implementation of the six-year Recovery Master Plan and to provide guidance on its review. The terms of reference for the 2019 mission are attached at Annexure 2.

Summary of Findings

The 2019 Reactive Monitoring Mission found that the State Party has made substantial progress towards the recovery of the KVWHP and its OUV. However, although many issues identified in previous Reactive Monitoring missions' reports were found to have been addressed, many others remain outstanding and continue to adversely affect the property's state of conservation. Although a significant number of monuments have been restored or rehabilitated, much of the property still remains highly vulnerable and under threat.

The integrity of the urban and religious ensembles is being recovered progressively, with severely damaged and collapsed monuments being repaired and rebuilt. In many cases, recovery and reconstruction of the monuments has retained a very high degree of original fabric, but in others, authenticity has been affected by the introduction of large quantities of new material (predominantly bricks and mortar). A traditional approach to reconstruction, utilising traditional materials, methods and skills, has been adopted for a large proportion of the monuments. This approach promotes the maintenance of traditional knowledge and craft skills, promoting the maintenance of these intangible attributes of the KVWHP and OUV. Respect for and continuance of religious beliefs, practices and rituals throughout the recovery also supports the property's intangible attributes and OUV.

The six-year rehabilitation plan has been the key document used by the State Party to guide recovery of the KVVHP. This document, which has been used in conjunction with the adopted Conservation Guidelines, is linked to the State Party's six-year recovery program coordinated by the NRA. The Rehabilitation Plan provides an overview approach to the recovery of the nation's heritage. However, it does not provide specific guidance on the recovery of each of the KVVHP's seven monument zones, which are all very different in their attributes, values, uses, associated communities and intangible heritage. Master plans for each of the PMZs are needed to promote a more holistic approach to recovery of the KVVHP, to ensure that all attributes expressing OUV are recovered. They are also needed to guide ongoing conservation and management of each monument zone, including future development and adaptation.

Coordination of the recovery response has improved considerably since the 2017 Reactive Monitoring mission. However, the term of the National Reconstruction Authority (NRA), the principal coordination authority for the recovery, expires in late 2020. It will be extremely important to the ongoing and successful recovery of the property beyond the life of the NRA that coordination between DoA, other government departments and authorities, site managers and community stakeholders, is maintained. The proactive involvement of local community groups, including priests, monks and local guthis, has demonstrated the community's strong commitment to the KVVHP and has built community cohesion and resilience. Review of the Integrated Management Plan (IMP) is still outstanding and is now urgent.

The focus by the State Party on listed/graded monuments at the expense of other attributes has had ramifications for traditional urban housing and the ancient settlements. Reconstruction of these elements as concrete framed structures (a consequence of the new building codes) has resulted in buildings having a very different form from their historic counterparts. The loss of traditional housing has impacted both the integrity and authenticity of the KVVHP and its OUV.

In addition, priority appears to have been given to the Newar monuments, primarily those of the Malla period. Many more recent structures (from the Shah and Rana periods) have not been recovered yet. Although they are not specifically mentioned in the SOUV, they comprise significant portions of the historic palaces and contribute to the architectural character of the monument zones and their buffer zones.

In summary,

- The religious monuments have been prioritised and many have been fully recovered, including stupas and chaitya, a large number of the tiered temples, sikhara style temples and columns. The recovery of these attributes is positive and is contributing to recovery of the OUV of the KVVHP.
- Recovery of the palaces is progressing, but substantial portions of the Hanuman Dhoka and Bhaktapur Durbar palaces remain in extremely poor condition and are thus highly vulnerable and under threat.
- Many sattals and rest houses have been recovered, although there are a number that have not been rebuilt and this is impacting the character of some monument zones. The sattals surrounding the temple complex of Changunarayan is of particular concern, as are some of the sattals in the Pashupati monument zone.
- Vernacular buildings, especially traditional houses, have suffered greatly. This has impacted the character of all the historic urban areas and ancient settlements. The historic urban areas of the Bhaktapur and Hanuman Dhoka Durbar Square protected monument zones (PMZs), and the ancient settlements of Changunarayan and Pashupati have been particularly impacted.
- The replacement of traditional pitched roofed buildings around the edges of the principal squares with flat roofed concrete framed buildings is also impacting the distinctive urban character of these squares.

Implementation of Previous Follow-Up Measures

The mission team observed that although the State Party has addressed or endeavoured to address many of the issues raised by previous missions, the State Party is yet to comply with the recommendations of the WHC by providing the required documentation to the WHC for review. The team also notes that the State Party has also failed to comply with several of the follow up measures set out by the WHC in decisions 41 COM 7B.95, 42 COM 7B.12 and 43 COM 7B.70 (as discussed in section 4.2.1 of this report). Recurring concerns have included the failure of the State Party to update the property's Integrated Management Plan and to develop and implement Recovery Master Plans for the seven monument zones.

Conclusions

The 2019 Reactive Monitoring Mission acknowledges the considerable progress made by the Government of Nepal towards the recovery of the KVVHP and commends the State Party for their commitment particularly in view of the immense scale and complexity of the disaster.

Approximately, forty-three percent of monuments have been recovered to date and a large number are currently in the process of recovery (either at planning phase, or at the repair and reconstruction phases). Although most major monuments should be completed by the end of the six-year recovery program established immediately after the earthquakes, the recovery of many other monuments will need to continue well beyond the six-year program. To ensure that this occurs, the State Party will need to continue the high level of commitment they have demonstrated to date, including a high level of commitment to coordination and resourcing.

However, although progress on recovery of the monuments has been considerable, there is still concern regarding the poor condition of the Hanuman Dhoka Durbar and Bhaktapur Durbar Palaces, the Changunarayan complex and Vishwarupa Temple (Pashupati) in particular. These attributes remain highly vulnerable and under threat. In addition, the loss of traditional housing within the historic urban areas and ancient settlements throughout the KVVHP has been considerable, impacting the property's OUV, integrity and authenticity.

Urban development and tourism pressure continue to pose a serious threat to the KVVHP, particularly as urban infrastructure needs to be upgraded and people need to be housed in the wake of the earthquakes. Thus, there is a need to extend the focus of the recovery of the KVVHP beyond the key monuments to their significant settings. The urban and ancient settlements, the landscape and the cultural routes that connect the different sites are integral to the KVVHP and its OUV. Recovery of these attributes must be prioritized to minimise impacts arising from upgrades to urban infrastructure and redevelopment of the city.

Although many of the threats identified by previous missions have been addressed and reduced, remaining threats to the property include:

- Ongoing deterioration of some structures that have yet to be repaired (eg Hanuman Dhoka Palace)
- Lack of attention given to the recovery of the urban and ancient settlements of the KVVHP;
- Loss of traditional housing within the KVVHP monument zones and buffer zones;
- Unsympathetic new development around the edges of the KVVHP monument zones, particularly around the edges of the main squares (eg Dattatreya Square in Bhaktapur);
- Uncontrolled development in the monument zones and buffer zones;
- Impacts of new urban infrastructure (utilities and roads) on KVVHP and its setting, including visual impacts and physical impacts, as well as impacts on subsurface archaeology;

- Lack of master planning to guide recovery and new development, including urban infrastructure, within the KVWHP, its monument zones and buffer zones;
- Lack of values-based conservation management planning for each of the monument zones (including buffer zones) to guide conservation, management, adaptation and change affecting the monuments and other attributes of the KVWHP, their significant settings and their associated intangible heritage;
- Lack of values-based conservation management planning for the major monument complexes (particularly palaces and large sattal complexes) to guide the conservation, management and adaptation of the monuments, their significant settings, associated collections and intangible heritage;
- Lack of cyclical maintenance programs to ensure the monuments are maintained in good condition;
- Lack of disaster risk management planning for the monument zones and major monument complexes;
- Lack of support and resourcing allocated to the recovery of the Changuarayan temple complex (including sattals); and
- Potential demolition and replacement of Lal Baithak, Bhaktapur.

These outstanding issues continue to impact the KVWHP's integrity, authenticity and attributes of OUV and place the property at risk. The ascertained and potential threats to the property are such that they continue to meet the conditions of Paragraph 179 (a) for inclusion on the List of World Heritage in Danger.

Recommendations

The World Heritage Property of the Kathmandu Valley is a very special place, highly valued by the people of Nepal and the rest of the world and deserves to be treated well.

Whilst recognising that some of the existing threats identified in the report will take more time to address, it is the opinion of the Reactive Monitoring mission that the recovery of the property should continue to be closely monitored, and where necessary, the international community of experts be called on to assist the Government of Nepal in providing the appropriate care for the property, and a strategy developed to obtain the necessary financial support for the property's ongoing recovery.

The Reactive Monitoring mission recommends that:

1. The WHC and the State Party formally adopt the statement of Desired State of Conservation (DSOC) set out in 5.3.1, prepared as a result of the 2017 Reactive Monitoring mission to the property.
2. The recovery of the World Heritage Property of the Kathmandu Valley continues to be closely monitored to ensure that corrective measures are implemented and the property is returned to normalcy.
3. An International Scientific Steering Coordination Mechanism be implemented for the property in order to provide technical and management advice and assist with the recovery, with mechanisms allowing for advice on development projects and the review of master plans or conservation plans to be given in a timely fashion.
4. A Master Plan be established for each Protective Monument Zone of the property to guide its ongoing recovery and future development.

5. The international community be encouraged to assist the State Party in its recovery of the KVWHP. This may include, but is not limited to, the provision of capacity development, particularly in relation to:
 - a. Further development of a secure centralized and accessible digital database for management of all documents pertinent to the property,
 - b. Values based heritage assessment and conservation management planning for the property, its monument zones and monument complexes;
 - c. Master Planning utilising the HUL approach to manage urban development within the KVWHP and its buffer zones.
6. Corrective measures as set out in Section 5.3.2 be implemented to ensure that the KVWHP, its attributes and OUV, including integrity and authenticity, are recovered in a way that prevents further loss to the property and ensures its long-term conservation.
7. Proposed changes to the Lal Baithak wing of the National Art Museum, Bhaktapur, be halted pending the submission of further documentation and a thorough technical review by ICOMOS to consider the potential impacts of the proposed project on the Outstanding Universal Value of the property.
8. Heritage Impact Assessments are conducted for proposed major new urban infrastructure projects (utilities, including sewer, stormwater drainage, water supply, electricity, street lighting and roads) within the monument zones and buffer zones and are shared with the WHC and its advisory bodies to ascertain their potential impact on the KVWHP with the view to proposing implementation of suitable mitigation measures.
9. Disaster Risk Management Plans be developed and implemented for each protected monument zone and for each individual monument, particularly the larger and more complex monuments.

1. Background to the Mission

1.1 Introduction

In April and May 2015, a series of earthquakes severely affected the World Heritage Property of the Kathmandu Valley. Since then, three joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring Missions (RM missions) have been undertaken to assess the property's state of conservation and its recovery from the earthquakes. These missions were undertaken in October 2015, in March 2017 and most recently in October 2019.

The first Reactive Monitoring Mission, undertaken in October 2015, found that the earthquakes had inflicted serious damage to the Kathmandu Valley property, making the property extremely vulnerable, and that, without a well-coordinated and focused recovery, it was facing serious deterioration of its architectural and town planning coherence, which would affect its physical and historical integrity and authenticity, and in turn its OUV. The mission found that the scale and scope of the recovery process was not adequate to deal with the ascertained and potential threats to the property and its OUV, however, a recommendation to place the property on the list of World Heritage in Danger was deferred.

The second Reactive Monitoring Mission, undertaken in March 2017, reviewed the progress being made by the State Party of Nepal on recovery and implementation of the recommendations of the 2015 mission. As progress was still not considered adequate, the mission recommended inscription of the property on the List of World Heritage in Danger and provided a comprehensive list of measures that would, if implemented, reverse or mitigate the threats to the property.

As the State Party had provided little evidence to the WHC that the mitigation measures recommended by the 2017 Reactive Monitoring mission had been implemented, a third Reactive Monitoring mission was undertaken in October 2019. The purpose of this mission was to assess the current state of conservation of the Kathmandu Valley World Heritage property, to review the progress of the State Party of Nepal in implementing the recommendations of the 2015 and 2017 missions, to assist with the development of a strategy for the implementation of the six-year Recovery Master Plan and to provide guidance on its review.

The current Mission Report provides the observations, findings and recommendations of the 2019 Reactive Monitoring mission and should be read in conjunction with the Reports of the 2015 and 2017 Reactive Monitoring missions.

1.2 Inscription History

The Kathmandu Valley was inscribed on the World Heritage List in 1979 on the basis of criteria (iii), (iv) and (vi).

1.3 Statement of Outstanding Universal Value

This statement of OUV was adopted retrospectively at the 36th session of the World Heritage Committee (St Petersburg, 2012).

1.3.1 Brief Synthesis

Located in the foothills of the Himalayas, the Kathmandu Valley World Heritage property is inscribed as seven Monument Zones. These monument zones are the Durbar squares or urban centres with their palaces, temples and public spaces of the three cities of Kathmandu (Hanuman Dhoka), Patan and Bhaktapur, and the religious ensembles of Swayambhu, Baudhanath, Pashupati and Changu Narayan. The religious ensemble of Swayambhu includes the oldest Buddhist monument (a stupa) in the Valley; that of Baudhanath includes the largest stupa in Nepal; Pashupati has an extensive Hindu temple precinct, and Changu Narayan comprises traditional Newari settlement, and a Hindu temple

complex with one of the earliest inscriptions in the Valley from the fifth century AD. The unique tiered temples are mostly made of fired brick with mud mortar and timber structures. The roofs are covered with small overlapping terracotta tiles, with gilded brass ornamentation. The windows, doorways and roof struts have rich decorative carvings. The stupas have simple but powerful forms with massive, whitewashed hemispheres supporting gilded cubes with the all-seeing eternal Buddha eyes.

As Buddhism and Hinduism developed and changed over the centuries throughout Asia, both religions prospered in Nepal and produced a powerful artistic and architectural fusion beginning at least from the 5th century AD, but truly coming into its own in the three hundred year period between 1500 and 1800 AD. These monuments were defined by the outstanding cultural traditions of the Newars, manifested in their unique urban settlements, buildings and structures with intricate ornamentation displaying outstanding craftsmanship in brick, stone, timber and bronze that are some of the most highly developed in the world.

Criterion (iii): The seven monument ensembles represent an exceptional testimony to the traditional civilization of the Kathmandu Valley. The cultural traditions of the multi ethnic people who settled in this remote Himalayan valley over the past two millennia, referred to as the Newars, is manifested in the unique urban society which boasts of one of the most highly developed craftsmanship of brick, stone, timber and bronze in the world. The coexistence and amalgamation of Hinduism and Buddhism with animist rituals and Tantrism is considered unique.

Criterion (iv): The property is comprised of exceptional architectural typologies, ensembles and urban fabric illustrating the highly developed culture of the Valley, which reached an apogee between 1500 and 1800 AD. The exquisite examples of palace complexes, ensembles of temples and stupas are unique to the Kathmandu Valley.

Criterion (vi): The property is tangibly associated with the unique coexistence and amalgamation of Hinduism and Buddhism with animist rituals and Tantrism. The symbolic and artistic values are manifested in the ornamentation of the buildings, the urban structure and often the surrounding natural environment, which are closely associated with legends, rituals and festivals.

1.3.2 Integrity

All the attributes that express the outstanding universal value of the Kathmandu Valley are represented through the seven monument zones established with the boundary modification accepted by the World Heritage Committee in 2006. These encompass the seven historic ensembles and their distinct contexts. The majority of listed buildings are in good condition and the threat of urban development is being controlled through the Integrated Management Plan. However, the property continues to be vulnerable to encroaching development, in particular new infrastructure.

1.3.3 Authenticity

The authenticity of the property is retained through the unique form, design, material and substance of the monuments, displaying a highly developed traditional artisanship and situated within a traditional urban or natural setting. Even though the Kathmandu Valley has undergone immense urbanization, the authenticity of the historic ensembles as well as much of the traditional urban fabric within the boundaries has been retained.

1.3.4 Protection and Management Requirements

The designated property has been declared a protected monument zone under the Ancient Monument Preservation Act, 1956, providing the highest level of national protection. The property has been managed by the coordinative action of tiers of central government, local government and nongovernmental organizations within the responsibilities and authorities clearly enumerated in the Integrated Management Plan for the Kathmandu World Heritage Property adopted in 2007. The implementation of the Integrated Management Plan will be reviewed in five-year cycles allowing

necessary amendments and augmentation to address changing circumstances. A critical component that will be addressed is disaster risk management for the property.

1.4 Redefinition of Property Boundaries

The redefinition of the boundaries was suggested and discussed during World Heritage Committee meetings as early as 1992. This was in response to urban expansion, which had changed the character of the large area originally inscribed. The redefinition of the boundaries for the Kathmandu Valley World Heritage property was requested by the Committee at its 28th session (Suzhou, 2004) and the State Party proposed a minor boundary modification which was approved by the Committee in July 2006 (Decision 30 COM 8B.42).

Following the earthquake, and particularly the damage and demolition of traditional houses in the urban areas and ancient settlements, minor modifications to the boundaries may need to be considered in the future.

1.5 Examination of the State of Conservation by the World Heritage Committee

From 1989 to 2016, the World Heritage Committee examined the state of conservation of the Kathmandu Valley on many occasions. The full documentation records are available on the UNESCO World Heritage Centre's web page at: <http://whc.unesco.org/en/list/121/documents>.

At its 27th session (Paris, 2003), the World Heritage Committee inscribed the property on the List of World Heritage in Danger due to the uncontrolled urban development which continuously decreased the urban landscape and architectural fabric of the property, and in view of the lack of management mechanisms to adequately conserve the OUV of the property and the lack of a legally redefined boundary for the property and its buffer zones. The State Party took significant corrective actions to address these issues/threats and at its 31st session (Christchurch, 2007), the Committee removed the property from the List of World Heritage in Danger (Decision 31 COM 8C.3), considering that the necessary management planning measures had been or were being implemented, notably the development of an Integrated Management Plan (2005-07) and the adoption of the boundary redefinition (2006). Nonetheless, the Committee continues to monitor actively the state of conservation to ensure that the property receives the best possible protection.

1.5.1 39 COM and the Reactive Monitoring Mission, October -November 2015

The devastating earthquakes that struck Nepal in April-May 2015 resulted in huge loss of human life and extensive damage to the historic monuments and buildings of the Kathmandu Valley. Initial assessments conducted jointly by UNESCO and the Department of Archaeology (DoA) of Nepal, recorded the damages caused by the earthquake to the property. All seven monument zones of the property were affected, with many temples and palace buildings having been severely damaged or having completely collapsed. Severe damage to housing and other community structures affected the integrity of the urban monument zones (Hanuman Dhoka, Patan and Bhaktapur) and the ancient villages associated with the religious sites (Changunarayan, Pashupati, Swayambhu and Baudhannath).

In response to the extensive damage to the property caused by the earthquake and aftershock, the World Heritage Centre and the Advisory Bodies recommended that the World Heritage Committee inscribe the property on the List of World Heritage in Danger during its 39th session (Bonn, 2015). The State Party requested a postponement, in view of the enormous efforts made.

In its Decision 39 COM 7B.69, the World Heritage Committee considered that the extensive damage caused by the earthquake to the property represents both ascertained and potential danger, in accordance with Paragraphs 177 to 179 of the Operational Guidelines, and requested that the State Party invite a joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission to consider the state of conservation of the property and the development of an Emergency Action Plan by the Government of Nepal. The Committee also called upon the international community to provide

financial and technical support to the State Party of Nepal for the protection, conservation and restoration of the World Heritage property 'Kathmandu Valley' following the earthquake.

At the invitation of the Department of Archaeology of Nepal, the joint Reactive Monitoring mission to Kathmandu Valley took place from 27 October to 2 November 2015. The report of this mission can be found at the following link: <http://whc.unesco.org/document/142384>.

The October-November 2015 Reactive Monitoring mission noted that earthquakes had badly affected the authenticity and integrity of the property, placing its Outstanding Universal Value at risk. However, despite extensive damage and collapse, with the exception of some temples, examples of most building types remained and all seven monument zones continued to provide a testament to the OUV of the property.

The mission also noted that there was a lack of adequate response to natural disasters and a lack of clear and effective direction from the State Party in pursuing recovery, primarily due to other political priorities. This had impacted the coordination of recovery efforts across the nation and contributed to a delay in the functioning of the National Reconstruction Authority (NRA).

The mission proposed a wide range of recommendations related to the need to strengthen management, effective coordination, planning, tourism structures, technical support and capacity building. It further formulated recommendations concerning emergency work, documentation and recovery plans and processes.

The Reactive Monitoring mission considered that the property, which had become vulnerable as a result of the earthquakes, was potentially facing serious deterioration of its architectural and town-planning coherence, and its urban or rural spaces, as well as serious loss of historical authenticity and cultural significance. Given that the scale and scope of the recovery process was not adequate to deal with these potential threats, it was recommended that, in accordance with Paragraphs 177 and 179 of the Operational Guidelines, the Committee consider inscribing the property on the List of World Heritage in Danger in order to define and implement comprehensive mitigation/corrective measures in collaboration with key national and international stakeholders. This strategy appeared to hold the best prospect for addressing the threats.

In its Decision 40 COM 7B.41, the World Heritage Committee took note of the report of the 2015 Reactive Monitoring mission (see link above) and requested the State Party to implement all its detailed recommendations and to report back on the details of the six year RMP developed in keeping with the national level priorities and programmes as expected by the National Reconstruction Authority (NRA).

The World Heritage Committee also noted some concerns about public tenders for the rehabilitation and reconstruction of monuments within the property, which were launched before damage was assessed and before comprehensive documentation was available for recovery plans and processes. The Committee requested the State Party submit detailed information to the World Heritage Centre about any foreseen major restoration, rehabilitation or reconstruction works, for review by the Advisory Bodies in accordance with Paragraph 172 of the Operational Guidelines.

Despite the recommendation to place the property on the Danger List, this did not happen at the World Heritage Committee meeting at the request of the State Party to defer the decision.

1.5.2 41 COM and the Reactive Monitoring Mission, March 2017

The Committee again considered putting the property on the danger list during its 40th Session (Istanbul, 2016), but agreed to a request from the State Party to defer this consideration and to a request for a further UNESCO WHC-ICOMOS-ICCROM Joint Reactive Monitoring Mission to review the progress accomplished by the State Party and further define correctives measures. This would allow the Committee to examine the state of conservation of Kathmandu Valley during its 41st session in

2017, with a view to considering, in the absence of significant progress, the possible inscription of the property on the List of World Heritage in Danger. At the invitation of the Government of Nepal, the joint WHC/ICOMOS/ICCROM Reactive Monitoring mission to the Kathmandu Valley took place from 20 to 25 March 2017. The report of this mission can be found at the following link: <https://whc.unesco.org/en/documents/158654>.

Reviewing the recommendations of the mission, the Committee, at its 41st Session (Krakow, 2017) while recommending that the State Party implement the recommendations of the Mission Report, deferred the decision to place the property on Danger List as recommended by the mission and decided to encourage the State Party to: 'invite a joint WHC/ICOMOS/ICCROM Advisory Mission to ascertain the progress accomplished by the State Party in implementation of six-year RMP and to give guidance on reviewing it.' No Advisory Mission was requested by the State Party in response to this recommendation in 2017-2018.

1.5.3 43 COM and the current Reactive Monitoring Mission October, 2019

The Committee at its 42nd session (2018) recognised the progress made by the State Party and reiterated the importance of inviting the Advisory Mission as proposed at the 41st session that did not occur. Although the State Party invited an Advisory Mission in late 2018 and again in early 2019 as recommended by the Committee, and despite the efforts of the World Heritage Centre, ICOMOS and ICCROM to undertake the mission, again an Advisory Mission did not occur.

At its 43rd Session (Baku, 2019), the Committee requested: the State Party to Invite a joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission to assess the state of conservation of the property, to review progress with the implementation of the recommendations of the October 2015 and March 2017 missions, to assist with the development of a strategy for the implementation of the six-year RMP (Recovery Master Plan), and to provide guidance on its review' (Decision 43 COM 7B.70).

At the invitation of the Government of Nepal, the joint WHC/ICOMOS/ICCROM Reactive Monitoring mission to the Kathmandu Valley took place from 20 to 25 October. The Mission was composed of the following members:

1. Dr Gamini Wijesuriya (Sri Lanka), Representing ICCROM and the UNESCO World Heritage Centre (Paris)
2. Mrs Catherine Forbes (Australia), representing ICOMOS International.

As detailed in its Terms of Reference (see Annexure 2), the mission assessed the state of conservation of the property and the implementation of the recommendations of the 2015 and 2017 Reactive Monitoring missions in relation to ongoing recovery operations carried out by the State Party with the support of other donors. It also considered how the attributes of OUV damaged in the earthquake were being recovered and through which reconstruction/ rehabilitation and conservation processes.

2. Legal and Management Framework

2.1 Heritage Legislation

The Ancient Monument Preservation Act, 2013 (AMPA, 1956, with the Fifth Amendment in 1988) is the principal legislation for the conservation, preservation and management of cultural property in Nepal. It gives the Department of Archaeology (DoA), currently under the Ministry of Culture, Tourism and Civil Aviation, the central responsibility for the conservation of cultural heritage throughout the country.

This Act gives the DoA the legal provisions to declare a monument or area to be a Protected Monument Zone (PMZ). The DoA is subsequently responsible for the protection of the site, including the prescription of building bylaws, approving requests for building permits and for any other construction activities within the zone. The DoA is also given the authority to stop inappropriate and/or illegal building activities and to request for the demolition of unauthorized constructions.

The seven Monument Zones of the Kathmandu Valley have been declared PMZs and the boundaries have been gazetted under the provisions of the AMPA. The DoA is therefore responsible for the preservation of the areas comprising the property inscribed on the World Heritage List.

In addition to the 1956 Act, the following legislation or regulations complement the legal grounds upon which cultural heritage is protected in Nepal:

- Local Self-Governance Act (1999)
- Town Development Act (1988)
- Pashupati Area Development Trust Act (1987)
- Guthi Corporation Act (1964)
- Building Bylaws (2007)
- National Building Code (prepared in 1994, approved in 2005)

The seven Monument Zones of the Kathmandu Valley were inscribed as a single World Heritage property in 1979. Twenty-four years later, in 2003, the property was inscribed on the List of World Heritage in Danger due to the loss of traditional vernacular heritage and the threat of uncontrolled development.

From 2004 onwards, the State Party has committed itself to work closely together with the stakeholders and responsible international agencies to address the issues that have threatened the OUV of the Kathmandu Valley. One of the key achievements have been the process leading to the development of an Integrated Management Plan (IMP, 2007), which was prepared in close cooperation between the Department of Archaeology and the local authorities and site managers, with international support and expertise.

In addition, 2015 post earthquake mechanism at National Level in particular the National Reconstruction Authority (NRA) has a considerable influence on the recovery process.

2.2 Institutional Framework, Management Structure and Coordination Mechanisms

As defined by the Ancient Monument Preservation Act 1956 (Fifth Amendment, gazetted in 1996) and the Integrated Management Plan, the DoA is the principle authority for the coordination of conservation activities of the World Heritage property. The World Heritage Conservation Section of DoA deals exclusively with cultural World Heritage (Kathmandu and Lumbini). The DoA also has site offices in Kathmandu, Lalitpur and Bhaktapur. A Coordinative Working Committee (CWC) has been established as per the provision of the IMP. The DoA has set up the CWC Secretariat within this structure. Powers in respect to enforcing bylaws and monitoring are handed down to the local authorities. Site managers have been established for each of the seven Monument Zones and their roles clearly defined.

Processes and linkages within the management structure have been identified and improved, and a clear system for the flow of information has been established. Separation of reporting and decision-making processes for regular, irregular and emergency cases remain to be established. For the conservation of historic buildings, including disaster and risk management, community involvement and participation is encouraged.

The World Heritage property has been declared a PMZ under the Ancient Monument Preservation Act 1956, providing the highest level of national protection. The property is managed by the coordinative action of tiers of central government, local government and non-governmental organizations and the responsibilities and authorities are clearly enumerated in the IMP. The implementation of the IMP was to be reviewed in five-year cycles allowing necessary amendments and augmentation to address changing circumstances. A critical component that has been identified is the need for disaster risk management for the property.

The IMP defines the approach and strategies for the preservation of the property's OUV through the improvement of existing institutional, legal and economic frameworks. The process is defined by the sixteen documents that comprise the IMP. The Integrated Management Framework is the official document that has been adopted by the State Party, and supplemented by a working document, the Integrated Plan of Action. Additionally, Management Handbooks have been prepared for each of the seven Monument Zones, each supplemented by individual Plans of Action. These documents are to be reviewed and revised at regular intervals. Review of the IMP was being undertaken immediately prior to the 2015 earthquakes, but the updated document had not been finalized at the time and will need further review in the light of the earthquakes, taking into account the impacts of the earthquakes on the property.

With the completion of the IMP in 2007, a clearly defined approach and strategies for the protection of the OUV of the Kathmandu Valley has been put in place through improvement of existing legal and administration frameworks. However, ten years since its inception, the IMP still requires further development (details based on 2017 Report).

After the earthquakes of April-May 2015, the DoA has developed conservation guidelines and a Recovery Master Plan to address the emergency situation of post disaster restoration and rebuilding for the World Heritage property. So far, the Recovery Master Plan has not been completed and submitted to the World Heritage Centre for review by the Advisory Bodies.

The National Reconstruction Authority (NRA) has a coordinating role and provides funds for recovery of monuments at the World Heritage Property.

3. Identification and Assessment of Issues and Threats

3.1 Introduction

This Reactive Monitoring Mission is a follow up mission to two previous Reactive Monitoring missions (October-November 2015 and March 2017) undertaken in response to the 2015 earthquakes. As such, this report is set out firstly to address the issues and threats identified in the previous mission reports to confirm whether they continue to be a threat. It then sets out any additional issues or threats identified during the most recent Reactive Monitoring mission (October 2019).

3.2 Management Effectiveness

The mission team acknowledges that the DoA and the Government of Nepal have been working extremely hard to recover from the disaster and that significant progress on the recovery of the Kathmandu Valley World Heritage Property (KVWHP) has been substantive.

3.2.1 Coordination

Both the 2015 and 2017 Reactive Monitoring missions identified lack of adequate coordination between the DoA, the national government, various ministries and agencies, local authorities and local community groups, as an issue affecting the recovery of the KVWHP. It was evident during the 2019 Reactive Monitoring mission that coordination between all parties has improved considerably and that the threat has reduced. Coordination between the various parties is discussed in more detail below.

The government has stated that it remains committed to the recovery of the nation's cultural heritage, including the KVWHP, as it is important to the daily life of the community. As the more urgent physical needs of the population have been met, greater attention has been given to recovery of cultural heritage. It was reported that forty-three percent of the nation's earthquake damaged monuments have now been restored.

3.2.1.1 *Coordination between DoA and Government Authorities/Agencies*

The National Reconstruction Authority (NRA), set up by the Government of Nepal in the wake of the earthquakes, is responsible for coordinating and supporting the reconstruction efforts of all ministries and government authorities. It holds regular meetings with representatives of each ministry, including the Ministry of Culture, Tourism and Civil Aviation. The DoA also has regular meetings with the NRA and two DoA staff have continued to work in the NRA office.

It was noted, however, that the NRA was established for a limited five-year term and that this term will expire in October 2020. Thus, a mechanism for ensuring that the coordination structures and relationships developed between the various government authorities under the NRA will need to be in place to ensure that coordination structures and relationships continue to function beyond the life of the NRA.

The NRA reported that they had recently commissioned master plans for all the protected monument zones (PMZs) of the KVWHP to facilitate coordination between the government agencies in relation to infrastructure and other development within the World Heritage Property and its buffer zones. The DoA will be invited to provide input to the master plans. It was noted that a first draft of the Master Plan for Hanuman Dhoka had been provided to the DoA for comment.

The Reactive Monitoring mission team notes that:

- Planning for the transition from the initial recovery phase under the NRA to the ongoing recovery and development of Nepal under normal government structures must begin now.
- With the anticipated expiry of the NRA at the end of its term, it will be very important that mechanisms are in place to ensure that coordination and relationships developed between

the various government departments and authorities under the NRA continue to function beyond the life of the NRA.

- It will be essential that coordination between the DoA and other government agencies continues to promote and prioritise the recovery, conservation, maintenance and management of the KVWHP as part of the ongoing recovery and development of the Kathmandu Valley.
- It is important that the DoA sustains its relations with the various government departments and agencies under the NRA once the NRA reaches the end of its term.
- The DoA must be consulted in the early stages of planning of any development (infrastructure and/or urban development) that would impact the KVWHP and that their advice is sought throughout the design development process and implementation phase to ensure that potentially adverse impacts on the KVWHP are avoided.
- The proposed Master Plans for the PMZs should be used guide development within and around the PMZs of the KVWHP and provide a structure to facilitate coordination between the various government and community stakeholder groups to ensure that the OUV, integrity and authenticity of the KVWHP and its attributes are maintained and prioritized in any new work.

3.2.1.2 Coordination between DoA and Site Managers

Coordination between the DoA and site managers is generally working well through the Coordinative Working Committee (CWC) established under the Integrated Management Plan (IMP). The steering committee currently meets at least every two months.

In general, work has been proceeding in accordance with the 6-year Rehabilitation Plan and the adopted Conservation Guidelines prepared in the immediate wake of the 2015 earthquakes. The first document provides an outline program for recovery within the six-year timeline. The second provides guidance on the principles and processes to be used in the recovery. This second document recommends development of site level Rehabilitation Master Plans for each of the protected monument zones (PMZs) and historic settlements, but in most cases, these do not appear to have been prepared. Thus, clearly identified goals and priorities for the recovery of each of the PMZs still appear to be lacking.

Reactive Monitoring mission comments:

- To date, the focus of the KVWHP recovery has been on its listed/graded monuments, with the recovery of other attributes of the KVWHP being left somewhat neglected (e.g. ancient settlements, urban setting, traditional housing). It is noted, however, that these non-listed/graded elements are essential attributes contributing to the property's urban or landscape context, and thus its OUV, integrity and authenticity.
- In principle, the adopted Conservation Guidelines appear to provide adequate guidance to enable the ongoing recovery of significant attributes of the KVWHP, although in practice it has been noted that these guidelines have not always been fully implemented (e.g. supervision and quality control were identified as lacking in previous Reactive Monitoring mission reports). Although the open spaces, natural landscape and ancient settlements are acknowledged, there is little guidance on their protection or recovery, which is why a recommendation was made to develop Master Plans using the HUL approach. Therefore, while the Conservation Guidelines are considered adequate with regard to reconstruction of structures, they are not adequate with regard to the recovery of the PMZs and their significant settings.
- The sites and monuments are recognized as part of the living heritage of the community, and intangible/living heritage is recognised and included, e.g. traditional knowledge and skills required for rebuilding or rituals to be carried out during recovery. The inclusion of the local community in the recovery process is also foreseen. However, other aspects of intangible

heritage are barely mentioned, e.g. the symbolism of carvings, associated stories, festivals, links to other sites- While these are currently not discussed, they should be strongly embedded in the activities and approaches taken at each site.

- High-level guidance on recovery of heritage sites, including Protected Monument Zones (PMZs) and ancient settlements, is also included in the Conservation Guidelines. However, greater emphasis and more detailed guidance still appears to be needed to promote a more holistic approach to recovery of the PMZs and ancient settlements and to prevent further erosion or loss of important non-listed attributes of the KVVHP and its OUV.
- Master Planning for each of the PMZs and their buffer zones is **essential** to planning for ongoing recovery, conservation and management of the KVVHP beyond the current recovery phase.
- The Master Plans should be supported by conservation management plans for each of the monument zones and the individual monuments within them.
- Capacity development in master planning and conservation management planning may be required to enable this.

The monuments within the KVVHP are being repaired or rebuilt to their previous form and detail. Less attention, however, appears to have been paid to other attributes of the monument zones not identified as listed/graded monuments (e.g. traditional housing, urban setting). Although the State Party reports that 43% of the monuments have been recovered to date, this figure does not include housing or other attributes of the KVVHP that are not listed as monuments. This is impacting the property's integrity and its OUV. Intangible attributes, however, do appear to be considered in the recovery of each monument, but it is unclear whether other national or local heritage values are being considered.

A process of systematic documentation – including recording of the damage, condition assessment and structural analysis, collation and analysis of evidence to support recovery and reconstruction processes and outcomes, documentation of proposed works, heritage impact assessments of proposed works, and documentation of work in progress – does appear to have been undertaken for some sites (e.g. Hanuman Dhoka Palace, Kasthamandap and KVPT work in Patan), but this is not evident for all sites.

It is evident from the State of Conservation (SoC) report submitted by the state party 1 February 2019 and from site inspections carried out during the 2019 Reactive Monitoring mission that a broad range of approaches has been adopted by site managers to monument recovery. These include:

- in situ repairs (using traditional materials and technologies) and strengthening (using contemporary materials and technologies);
- full deconstruction and reconstruction of monuments with varying degrees of old and new fabric being incorporated within the rebuilt structure (all using traditional materials, but some using lime mortar instead of mud);
- adoption of traditional approaches to reconstruction that include total replacement of damaged elements; and
- approaches that retain as much original fabric as possible with carefully pieced in repairs.

During the mission, it was not always clear to the Reactive Monitoring mission team why a particular approach had been adopted in a particular instance, but all approaches appear to have been approved by the DoA. Although it was recognized by the Reactive Monitoring mission team that each monument would have been impacted differently and the approach to recovery and reconstruction would have been a response to the individual circumstances of the monument, records documenting the damage, assessed causes, proposed repair methodologies and interventions, reasons for the interventions and heritage impact assessments of the proposed interventions were not always available for reference

or review. Nor was the architect or engineer available for comment. Thus, the decision-making processes were not always clear to the Reactive Monitoring mission team.

Reactive Monitoring mission comments:

- It is important that all projects are well documented, including the reasoning behind why certain methodologies were adopted in recovery. This is discussed further in previous reports and sections 3.2.1.6 and 3.4.15 of this report.

3.2.1.3 Coordination between DoA, Local Authorities (Municipalities) and Local Communities

As noted in previous Reactive Monitoring mission reports, local authorities (municipalities) have responsibility for recovery of some monuments, but also for the recovery of housing, non-listed monuments and public spaces (e.g. public squares). Coordination between the DoA and local municipalities is also through the Coordinative Working Committee (CWC) established under the IMP. The level of cooperation and understanding between DoA and the municipalities varies.

Municipalities have been working with local community groups (user groups) to facilitate recovery of monuments in their PMZs. In many cases, this appears to have been very successful (particularly in Lalitpur and Bhaktapur). Some conflicts have arisen between community groups, site managers and authorities in regard to some projects in the Hanuman Dhoka Durbar Square PMZ, but relations on other projects appear to be good. It was noted by one community representative that, whilst community members could meet and discuss issues with the municipalities, it was very difficult for community members to meet with the DoA or UNESCO.

As noted in the 2017 Reactive Monitoring mission report, traditional housing, which makes an important contribution to the urban setting of the KVVHP, contributing to its OUV, has suffered very badly because of the earthquakes and the recovery. Even though some local authorities have provided incentives to property owners to rebuild their houses with brick facades and carved timber window and door elements (as set out in the building bylaws), there is little expectation that houses will be reconstructed to their original form.

All the municipalities have had concerns over the lack of enforcement of the building bylaws within the monument zones and buffer zones. The municipalities expressed a need for the Government of Nepal to stop illegal/non-compliant development (exceeding the thirty-five foot height limit) as it was setting a precedent for further illegal development. At least one Municipality noted that the issue had been exacerbated by some government departments also failing to comply with the building bylaws.

Reactive Monitoring mission comments:

- Incentives to retain and conserve traditional housing, as opposed to replace traditional housing, must be promoted if this attribute, which contributes to the integrity, authenticity and OUV of the KVVHP, is to survive within the KVVHP.
- This should include financial incentives. Some successful examples exist in Lalitpur including two projects funded by UNESCO prior to the earthquakes. These demonstrate to local property owners the potential for viable and sustainable conservation and adaptation of these buildings as houses, guesthouses and shops.
- With regard to new development, there is a strong need for all three tiers of government to work together to prevent illegal development in and around the KVVHP monument zones and buffer zones.

3.2.1.4 Coordination between DoA and International Partners and Experts

Four years into the recovery, there appear to be fewer international partners and experts still involved in the recovery. This is partly due to the type of work undertaken by these partners (e.g. preliminary

investigations such as geological, damage and archaeological assessments; and provision of training), the completion of some projects, and lack of funds to continue work into a second phase (e.g. reconstruction of sattals at Changunarayan). Those international partners remaining are generally providing a high level of service (e.g. China Aid is currently working on a section of the Hanuman Dhoka Durbar Palace complex). In general, international partners and experts have made significant contributions to the recovery.

The work of some international partners has been the subject of conflict with local communities, partly in relation to the sacred nature of particular sites and partly in relation to the proposed use of alternate materials and technologies. It is also probable that the issues have also been exacerbated by lack of cultural awareness, miscommunication or misunderstanding of local expectations around community engagement, and issues of transparency and accountability. In most cases, they do not appear to have been engaged by DoA, but rather by UNESCO or other local stakeholder groups (e.g. Hanuman Dhoka Durbar Palace Museum). Recovery work has stopped on three temples in the Hanuman Dhoka Durbar Square PMZ and the partners have withdrawn leaving the monuments unrepaired and unprotected. The conflicts that have arisen in Hanuman Dhoka Durbar Square appear to be associated with one community group and do not extend beyond a specific group of Hindu temples within the square. Refer to Section 3.2.1.11 for more detail and discussion of the issues.

Reactive Monitoring mission comments:

- Good communication between international parties and the DoA, good understanding of the local context (physical, social, cultural, economic and statutory), and good cultural awareness are extremely important, but more so where international partners are involved, particularly where their own experience is very different.
- The current conflicts present a short-term threat to the recovery of the three temples involved, but it is anticipated that the temples will be recovered. Refer to Section 3.2.1.11.

3.2.1.5 Coordination between DoA and UNESCO Kathmandu

The DoA and UNESCO Kathmandu appear to have a good working relationship generally.

UNESCO Kathmandu has supported several research and training projects during the recovery as previously reported. Two of the temple recovery projects in Hanuman Dhoka Durbar Square were coordinated by UNESCO Kathmandu. Where international project partners have withdrawn as a result of conflict with local community members as described above, UNESCO has facilitated the transfer of the allocated funds to other sites to enable completion of their recovery (e.g. funds from abandoned temple projects in Hanuman Dhoka were transferred to a temple project in Patan).

UNESCO Kathmandu has raised concerns with DoA regarding some projects within and adjoining the KVWHP, including incompatible development around Dattareya Square, Bhaktapur, development on the edge of Hanuman Dhoka Durbar Square PMZ and conflicts arising between the local community and international partners in Hanuman Dhoka Durbar Square. DoA and UNESCO Kathmandu have discussed each of the issues raised, with some being referred on to the WHC and the advisory bodies for review and comment (e.g. the proposed development at the entrance to the Hanuman Dhoka Durbar Square was reviewed by ICOMOS in 2018). Each of these issues was discussed during the Reactive Monitoring mission.

Reactive Monitoring mission comments:

- UNESCO Kathmandu continues to liaise with DoA on various projects and provide support where possible.

- UNESCO Kathmandu also continues to monitor the State party's progress on recovery of the KVWHP, as well as recovery of other heritage sites in the Kathmandu Valley and beyond.
- DoA and UNESCO appear to be in agreement on several of the issues raised, particularly those relating to inappropriate development occurring in and around the edges of the KVWHP, and the need to strengthen building codes for the KVWHP and the powers of the DoA to enforce the building codes.
- Some of the issues raised, however, particularly those involving conflict between UNESCO, developers, project partners and local community groups, have not been able to be resolved by either UNESCO or DoA. In these cases, DoA appears to have stood back from the conflicts, whereas UNESCO has engaged with the relevant parties, but not always successfully. In the case of UNESCO projects, it is expected that UNESCO would endeavour the dispute. However, where it is not a UNESCO project, it should be DoA's role to resolve the relevant issues.
- Unresolved disputes between the parties, including DoA and UNESCO, do pose significant issues for recovery of the property.

3.2.1.6 Coordination between DoA, WHC and the Advisory Bodies

DoA has submitted no information to the World Heritage Centre (WHC) on the progress of the recovery of the KVWHP other than the SoC reports submitted on 1 February 2016, 2017, 2018 and 2019. These provide a brief overview of the recovery of the various monuments, but little detail on evidence-based decision making in relation to the approaches adopted.

Prior to the 2019 Reactive Monitoring mission, the DoA had not reported to the WHC on progress relating to any of the recommended corrective measures set out in the 2017 Reactive Monitoring mission report. The DoA failed to submit the following documents as requested:

- A coordination framework.
- Evidence of additional protection and safety measures implemented.
- Mapping of the extent of damage to each of the monument zones.
- Recovery Master Plans for each of the monument zones.
- Required documentation for proposed major works projects, including heritage impact assessments, for review by the Advisory Bodies in accordance with Paragraph 172 of the Operational Guidelines. This includes documentation for recovery projects involving substantial reconstruction incorporating predominantly new materials (e.g. Kasthamandap and others). These are clearly major works projects.
- Evidence of quality control measures to be implemented in the recovery.
- Research evidence for the use on lime mortar in pre-Rana (pre 19th century) structures.
- Report on the operation of the data management system.
- Disaster Risk Management Plans for each of the monument zones.

The Reactive Monitoring mission team, however, recognizes that information on the above items exists in different places and with diverse partners. Collecting the information into a central repository and disseminating it does not appear to have occurred (see below). It is noted that the lack of reporting by the State Party to the WHC contravenes the State Party's obligations under the World Heritage Convention to which the State Party is a signatory. It is also noted that the lack of reporting has led to the WHC and the Advisory Bodies being apprehensive about the extent and standard of recovery of the KVWHP and the impact this would be having on the attributes, OUV, integrity and authenticity of the KVWHP. The Reactive Monitoring mission comments on implementation of the corrective measures are discussed further under sections 3.2.2 *Actions Taken* and 3.2.3 *Recovery Planning* of this report.

Documentation was submitted to the WHC for review by the Advisory Bodies under Paragraph 172 of the Operational Guidelines for the proposed new sewer through the Patan Durbar Square Monument Zone.

Reactive Monitoring mission Comments:

- It is extremely important that the State Party undertake to implement the recommendations of each of the Reactive Monitoring mission reports and report on their progress in doing this to the WHC and Advisory bodies. If it does not, the WHC and Advisory bodies will very likely assume that the State Party is not committed to recovery of the property.
- Implementing the recommendations of the Reactive Monitoring mission reports would clearly demonstrate the State Party's commitment to the recovery of the KVVHP, its OUV, integrity and authenticity, and arrest the concerns of the World Heritage Committee in this regard.
- It would also demonstrate the State Party's commitment to fulfilling its obligations under the World Heritage Convention.

3.2.1.7 Data Management

Management of documentation is still lacking as the proposed centralized digital data management system (Cultural Heritage Inventory Management System – CHIMS) is still not fully operational. The system has taken time to set up, as it has had to accommodate multiple languages and multiple place names for individual sites. The data from the 1975 inventory has been entered, but no earthquake data has been entered to date. This still appears to remain scattered amongst the DoA, consultants (local and international), academic institutions, site managers, local authorities and others.

Unfortunately, the funding facilitated by UNESCO for CHIMS is no longer available. However, it was noted by DoA that when more funding does become available, the DoA intends to continue the project. The system will eventually be used to manage data for all heritage sites across Nepal, not just the KVVHP.

Reactive Monitoring mission comments:

- The lack of a centralized data system in which all information on the KVVHP is kept up to date poses an issue for the long-term management of the property.
- This data is important for monitoring the condition and state of conservation of the property.
- It is important that all data relevant to the property be kept to ensure that the information is available for future repairs, maintenance and recovery from future events.
- It is also important that the knowledge gained through the various research projects is made available to the DoA and property managers.

3.2.1.8 Timing and Budgets for Recovery of the World Heritage Property

Up until now, implementation of recovery work undertaken by the DoA has been delayed to some degree by the number of approvals required from different ministries. This process still needs to be streamlined.

The mission notes that the Ministry of Culture, Tourism and Civil Aviation is currently reviewing the Heritage Act (Ancient Monument Preservation Act). Proposed amendments should provide the DoA with more autonomy in relation to the recovery, and the ongoing conservation and management of cultural heritage sites in Nepal and provide the Director General (DG) of the DoA greater authority over programming and budgetary expenditure. The DoA will no longer be restricted to 1 year contracts and will be able to phase project work over 2 to 3 years. The DoA has also been allocated a larger budget to plan its activities over the extended period. This will give the DoA more flexibility in managing the recovery of heritage sites.

3.2.1.9 DoA Capacity

Since the earthquakes, the number of DoA staff has been significantly increased, although many are new graduates who have had to learn on the job. This has increased DoA's capacity to evaluate recovery and reconstruction proposals, undertake coordination and documentation tasks, and to monitor work in progress. Even so, there have been several reports that work is still not being assessed or monitored adequately. It was not possible to assess this on this Reactive Monitoring mission.

Reactive Monitoring mission comments:

- Building and sustaining the capacity of the DoA is fundamental to the long term conservation of the KVWHP and its OUV.

3.2.1.10 Tendering Process

Under the government's open tender policy (which required the cheapest price be accepted), it was not possible for DoA to implement prequalification of contractors for tendering on work on heritage sites as recommended by the 2017 Reactive Monitoring mission (including listed monuments within the KVWHP). As noted in previous Reactive Monitoring mission reports this has posed a serious threat to the KVWHP and its OUV. In addition, government restrictions on wages and materials exacerbated the problem of quality control and impacted much of the recovery work undertaken by DoA. This has also threatened the recovery of the property, its OUV, integrity and authenticity.

For work undertaken by community organisations (user groups), on the other hand, there has been no requirement to accept the cheapest tender, giving them much greater flexibility in who they select to undertake work. As much of the work overseen by the municipalities is now being organized through local user groups, skilled artisans can be selected to undertake repairs to the monuments (Bhaktapur is a good example).

The government has recently reviewed procurement guidelines for heritage. The new guidelines will provide the DoA with the authority to set minimum standards for the work and select contractors with the correct experience and skill base. The new procurement guidelines have not been sighted by the Reactive Monitoring mission team.

3.2.1.11 Works Undertaken by External Consultants

The conflict arising between the community and external consultants proposing to undertake works to the Aagan Temple (located within the Hanuman Dhoka Palace Museum complex), appears to relate to the consultants climbing the temple to document the works and entering sacred spaces that they did not have permission to access.

In regard to the proposed in situ strengthening and repair of the Jagannath and Shree Krishna Mahavishnu Temples (located within Hanuman Dhoka Durbar Square) conflict appears to have arisen partly in relation to spiritual issues, partly in relation to the proposed methodology to be used for strengthening (potentially in accordance with ICOMOS principles, but unacceptable to the local community), and partly in relation to the proposed funding and contractual arrangements for undertaking the works. The details of the conflict were not clear, but it has been reported that the international experts were physically threatened. The result has been the withdrawal of the consultants and the removal of all safety barriers from around the structures.

These, however, are exceptional examples, demonstrating the need for international consultants to be sensitive in their approach to sacred/living heritage sites and to develop an understanding of the local cultural values, knowledge, custom and practices, when working in such situations.

Although the international partners are unlikely to return, it is hoped that repair work will proceed with local partners. The Hanuman Dhoka Durbar Palace Museum will oversee the restoration of the

Aagan Temple. Partners for the restoration of Jagganath and Shree Krishna Mahavishnu Temples have yet to be identified, but local community stakeholders have expressed an interest in overseeing this work as a community lead recovery project.

Reactive Monitoring mission comments:

- It is important that international consultants respect local custom and cultural sensitivities when undertaking work in Nepal and work with local communities where possible.

3.2.2 Actions Taken since the 2017 Reactive Monitoring mission

The following actions have been undertaken since the 2017 mission, many of which address the corrective measures set out in the 2017 Reactive Monitoring mission report:

- A coordination framework has been established and appears to be working well. It includes the CWG established under the IMP. It will be important that relations established with other Government agencies under the NRA are continued once the NRA is terminated. Refer to section 3.2.1 Coordination for details.
- Recovery work has been progressing steadily.
- Detailed damage / condition assessments have generally been completed for many sites.
- Recovery documentation has been prepared for many sites, but the level of detail included is variable. Detailed documentation and assessment reports were sighted for the Hanuman Dhoka Durbar Palace Museum complex, Kasthamandap and structures repaired by KVPT in Patan. However, it was noted that this level of documentation does not exist for all monuments undergoing recovery work.
- A centralized database for documentation management has been set up, but is not fully operational. The 1975 heritage inventory has been added to the database.
- Salvaged elements have been sorted and assessed for their potential reuse. Elements have been repaired or replicated as necessary for reinstatement.
- Recovery and reconstruction of many significant monuments has been completed. Recovery of some is still in progress and recovery of others is yet to be commenced.
- Photographic reports have been produced for several sites. These show the extent of damage, work in progress and work completed (e.g. Boudha Stupa and Swayambu). Some include detailed assessment of the damage, causes of failure and mitigation or strengthening measures implemented during recovery (e.g. Patan Palace).
- The tender process for Kasthamandap in Hanuman Dhoka Durbar Square was stopped following the 2017 Reactive Monitoring mission. The project was taken over by a community-based organization, which engaged a group of highly regarded experts to guide the reconstruction process using entirely traditional materials and methods. This work has been well documented and reconstruction has commenced.
- The Lal Baithak wing of the National Art Museum in Bhakatpur is still standing following the 2017 Reactive Monitoring mission. Further research has been undertaken to determine the potential for its reconstruction to an earlier form. This was presented to the Reactive Monitoring mission team during the 2019 mission.

Reactive Monitoring mission comments:

- Any proposal to replace the existing Lal Baithak building, or other similar buildings, would need to be based on sound and detailed evidence.

- The significance of the existing building needs to be fully assessed, and not just the significance of the previous buildings lost in the mid nineteenth century. For instance, the current museum building (Lal Baithak) was built in 1858 as the Royal Reception Hall and provided a place for receiving foreign guests as well as a place for viewing the various rituals and festivals that took place in the square in front of the palace. Thus, it has significance in its own right.
- A detailed heritage impact assessment (HIA) in accordance with *ICOMOS Guidance on Heritage Impact Assessment for Cultural World Heritage Properties* (2011) must be undertaken for this and other major projects, including an objective assessment of the impacts of the proposed demolition of the existing building(s), as well as the impacts of reconstructing the former building(s). The HIA must consider the historic development of the place and its context within the palace and the Durbar Square, its heritage attributes (tangible and intangible), and their contribution to the OUV of the KVVHP. It should also consider impacts on local heritage values.
- The proposals must be submitted to the WHC for review and comment by the Advisory Bodies under Paragraph 172 of the operational guidelines.
- At this stage, the Reactive Monitoring mission team do not believe sufficient research has been undertaken to justify demolition and replacement of the existing Lal Baithak building.
- The Tilaganga Tamraganga Road through Pashupati has finally been closed to traffic with permanent barriers constructed across its entry points.

While recognizing some may take time, the following actions recommended by the 2017 mission have not been undertaken or completed:

- Provision of adequate protection to monuments damaged by the earthquakes is still lacking for some sites. Some monuments and other structures within the KVVHP are still lacking adequate protection and/or temporary stabilization measures (e.g. large sections of the Hanuman Dhoka Palace complex and some sattals and other large buildings in Pashupati). Further collapses have occurred as a result (e.g. Vishwarupa temple, Pashupati; Municipality Building, Bhaktapur; portion of Hanuman Dhoka Palace). Some salvaged elements are still stored out in the weather.
- Provision of adequate safety measures to protect the public is still lacking in some areas. Safety barriers have not been provided to prevent entry to some unsafe sites or have been removed from other sites (e.g. temples in Hanuman Dhoka Durbar Square). Some very unstable sections of the Hanuman Dhoka Palace complex are currently being used by contractors as work areas or for personal use.
- Comprehensive maps showing the extent of damage and recovery across the seven monument zones do not appear to have been compiled and updated since the initial emergency. Maps showing who is undertaking repairs to each monument were produced for the 2017 Reactive Monitoring mission, but do not provide information in relation to structures that are not listed monuments. Some sites have better documentation than others.
- Further investigation into the local ground conditions around the monuments in the urban areas is still required to guide recovery of infrastructure through the monument zones. This should include investigations into surface layers and subsurface pipes that may be broken and causing damp issues for the monuments and other structures.
- Plans for major infrastructure works have not been provided. According to the NRA, major infrastructure works within the KVVHP is still in the planning process (e.g. water supply, sewer, new pavements, ring road around Pashupati, etc). It is proposed to plan for these in a holistic manner, including input from the DoA, to ensure a cohesive approach and minimize heritage

impacts. It is recommended that all infrastructure projects impacting the KVWHP be referred to the WHC and the Advisor Bodies for review under paragraph 172 of the operational guidelines.

- Recovery Master Plans have not been prepared for most of the monument zones.
- Disaster Risk Management Plans have not been prepared for each of the monument zones.

3.2.3 Recovery Planning

The following comments respond directly to the items identified in the 2017 Reactive Monitoring mission report.

3.2.3.1 Integrated Management Plan

The Integrated Management Plan (IMP) is overdue for revision. Although it is acknowledged that a review was in progress, and indeed almost complete at the time of the earthquakes, the earthquakes have had a significant impact on the property and this must be addressed. The review has now been delayed more than five years, and although requested in each of the previous Reactive Monitoring mission reports, it is still to be done.

The Integrated Management Framework (IMF) must be updated to take into consideration any changes to the property and its OUV brought about by the earthquakes and recovery from the earthquakes. The lack of an up to date IMP poses a threat to the property.

Review of the IMP and IMF is now urgent.

3.2.3.2 Six year Overview Rehabilitation Plan

The DoA is still working towards recovery of most monuments within the six year period established in the Six year Overview Rehabilitation Plan (understood to be the State party's Recovery Master Plan (RMP)) prepared immediately after the earthquake. This plan corresponds with the six-year timeframe set by the Government for recovery of cultural heritage under the Government's overall Recovery Plan. However, it is acknowledged that not all monuments will be fully recovered within this period. Planning for the future conservation and management of the KVWHP is critical at this stage and needs to be addressed before the six-year recovery period comes to an end so as to enable a smooth transition to the next phase.

3.2.3.3 Recovery Master Plans

A Rehabilitation Coordination Plan has been prepared for the Hanuman Dhoka Durbar Square Monument Zone (2018). This plan reviews the damage resulting from the 1934 earthquake and the approach taken to recovery at that time. It also identifies repair and conservation works undertaken between 1934 and 2015. It records the extent of damage experienced during the 2015 earthquake and records where the salvaged elements of each of the collapsed monuments were stored during the emergency phase. In addition, it provides information on the legislative context for recovery, conservation principles to be used in recovery and the building bylaws relating to the construction of new buildings within the monument zone and buffer zone. It also considers replacement of urban infrastructure.

Recovery master plans have not been sighted for any other monument zones.

3.2.4 Planning for the Future

3.2.4.1 Master Plans for the Monument Zones

As recovery is now well advanced, it is time to plan for the future management of the KVWHP and its recovery beyond the six year RMP. Master Plans need to be developed for each of the PMZs that provide a framework to enable transition from the recovery phase through to the next phase of work. This includes, in addition to the ongoing recovery of the PMZs and their attributes (monuments and

other attributes such as historic urban context, including its significant layout, spaces, vernacular architecture, views), planning for future development (including infrastructure) within the monument zones and their buffer zones.

The HUL approach to managing the Historic Urban Landscape provides the best available framework for developing these master plans. The HUL approach is based on the recognition and identification of a layering and interconnection of natural and cultural, tangible and intangible, international and local values present in a city. According to the HUL approach, these values should be taken as a point of departure in the overall management and development of the city. <http://historicurbanlandscape.com/themes/196/userfiles/download/2016/6/7/wirey5prpznidqx.pdf>

Master Plans have recently been commissioned by the NRA to guide development within each of the historic urban centres. These Master Plans should address urban planning issues including those associated with tourism, traffic management (including identification of parking and pedestrian only areas), urban infrastructure (e.g. lighting, electricity, sewer, water, drainage, paving) and urban development (including location of specific uses within the monument zones such as tourist facilities, commercial, educational, religious, administrative, army, police and fire services, residential and so on).

The Master Plans must be guided by an assessment of significance based on good understanding of the historic context of the KVWHP, OUV and its attributes, and an understanding of the importance of maintaining the property's integrity and authenticity, as well as that of its other local/national values and their attributes, including intangible. Refer to the following section on Conservation Management Plans (CMPs).

For more detail on what should be included in a master plan refer to section 4.2.4.1

A Conceptual Master Plan has been prepared for the Hanuman Dhokha Palace Museum to guide its future use and adaptation to accommodate new museum exhibits, visitor and research facilities.

A Master Plan is currently being developed by the Pashupati Area Development Trust for the Pashupati Monument Zone to guide its future development. It is being developed in consultation with the DoA and community stakeholders and considers management of all the tangible and intangible attributes of this living site, within their natural and cultural environment. A land use plan is being developed that incorporates religious, cultural, archaeological and natural layers to enable an integrated approach to managing nature and culture. The vision is to promote spiritual, cultural and natural conservation and social welfare.

Preliminary meetings have also been held in relation to development of a Master Plan for Hanuman Dhoka Durbar Square Monument Zone. This master plan is aiming to coordinate traffic management, tourism, infrastructure and urban development within the context of the heritage site and the surrounding area, to remove pressure from the site, whilst promoting the heritage attributes and values of the site.

3.2.4.2 Conservation Management Plans for the Monument Zones and Monuments

The Master Plans mentioned above should be underpinned by Conservation Management Plans (CMPs) for the Zones and individual monuments. As part of the Master Plan, a separate CMP should be prepared for each PMZ, recognizing that each has its own specific character, values and attributes and own specific pressures and needs. It should be guided by the assessment of the significance of each PMZ mentioned above and include guidance on how to conserve and manage specificities of the Zones and individual monuments.

At present there do not appear to be CMPs (or any equivalent document) for any of the monuments or monument zones. The primary document currently used is the IMF, which is primarily an overview document designed to guide coordination and management of the KVWHP as a whole. It predates the earthquake and does not provide sufficient detail on each PMZ to guide decision making in regard to potential change within the individual PMZs. The KVWHP comprises sites of living heritage that will be subject to some change over time. The impact of the earthquakes on the property has forced change on some monuments (particularly the palaces) and other attributes, as has tourism and urban development pressure (particularly on traditional housing and shops). Change needs to be planned for and managed so that the OUV of the property, its attributes (tangible and intangible), integrity and authenticity is maintained. It is also important that local heritage values, including intangible, are considered and respected.

A CMP for each PMZ should include:

- A clear statement of significance for each PMZ. This should include their contribution to the OUV of the KVWHP, but also their significance within the local context (this will most likely be different, more specific and much broader in scope than the OUV).
- Clearly identify and map the significant attributes (tangible and intangible) of each PMZ, including:
 - monuments,
 - significant attributes that are not listed monuments,
 - their significant settings,
 - significant views (to, from and within the monument zones and buffer zones),
 - historic links to other attributes, sites and associated communities,
 - related religious and cultural festivals (including routes followed), ceremonies, customary activities, stories, meanings and movable heritage,
 - collections housed within the sites,
 - areas of archaeological sensitivity, and
 - any other attributes that are linked to the sites.
- Factors affecting the above attributes, authenticity and integrity including
 - statutory controls (legislation),
 - safety requirements,
 - access and evacuation requirements, etc.
- Issues affecting the property, such as urban development pressure, tourism, traffic and changing demographics of the associated communities.
- In addition to continuation of existing uses, assessment of opportunities for:
 - the adaptation of existing structures that no longer support their original use, and
 - the potential for compatible new development within the monument zones or buffer zones.
- Identification of risks to the heritage attributes and values arising from their vulnerability and exposure to natural and human hazards.
- Conservation policies to guide the ongoing management, conservation and maintenance of the PMZs, monuments, other attributes and their settings.
- Conservation policies to guide adaptation to compatible uses and future development within the PMZs and buffer zones, to ensure that the OUV and other heritage values are maintained and not compromised in the process of change.
- Disaster risk management policies (including policies requiring development of disaster risk management plans, including risk prevention, mitigation and preparedness strategies) for the monuments and other attributes of the PMZs.
- Interpretation and visitor/pilgrim management strategies.
- Implementation guidelines.

- Action Plans with priorities, timeframes and budgets to ensure that
 - any additional research required is undertaken,
 - ongoing recovery and repairs are completed,
 - cyclical maintenance is budgeted for and carried out within the management systems for the property,
 - any planning for change is consistent with the CMP conservation policies and guidelines, and
 - disaster risk management plans are prepared, and risk management strategies are implemented.

Over time, individual monuments, related groups of monuments (e.g. related temples in close proximity to each other), monument complexes (eg palaces), public open spaces (e.g. Durbar Squares, urban or landscape settings) may need their own CMPs. These should be required when new development is proposed within sensitive areas of the PMZs or a monument to be adapted to a new use. The CMPs would be prepared prior to development of design options to guide the proposed changes.

3.3 Recovery of The Earthquake Affected Property and its attributes conveying the Outstanding Universal Value, including integrity and authenticity

3.3.1 Earthquake Damage

All seven monument zones of the KVVHP were severely damaged by the earthquakes of 25 April and 12 May 2015. The extent of damage was described in the 2015 and 2017 Reactive Monitoring mission reports.

3.3.2 Recovery and Reconstruction

The Reactive Monitoring mission team visited all seven monument zones, but had very limited time at each. Thus, the team could only inspect a sample of the work being undertaken. The progress of recovery and reconstruction in each of the monument zones is described below and refers primarily to the sample projects viewed during the mission and items discussed with the stakeholders at each site.

3.3.2.1 Hanuman Dhoka Durbar Square Monument Zone

Hanuman Dhoka Durbar Square Monument Zone was the most heavily impacted of the monument zones within the KVVHP with eleven monuments (eight tiered temples, two sikhara temples and a pillar) recorded as having totally collapsed. Almost all the temples and other monuments in the monument zone were damaged, including the Hanuman Dhoka Palace, which was very severely damaged.

Recovery of the temples, shrines, sattals and other structures located within the main Hanuman Dhoka Durbar Square is progressing.

- Recovery of the Taleju Bhawani Temple (the largest of the tiered temples), which overlooks the northern portion of the square, has been completed.
- Recovery of several smaller temples and other structures located in the northern portion of the Hanuman Dhoka Durbar Square has also been completed.
- Two temples still outstanding in this area include the Jagannath and Shree Krishna Mahavishnu Temples. These have been the subject of conflict between the local community and the international team involved, resulting in the latter withdrawing from the project. Safety barriers have been removed from around these temples, which still pose a risk to the public due to their damaged condition. People are again walking and sitting beneath them.

- The third temple affected by this conflict is the Aagan Temple, which overlooks this section of the Durbar Square from above the entrance to the Hanuman Dhoka Palace. This temple remains scaffolded in preparation for work to be carried out.
- In the central portion of the Durbar Square, work has begun on the Trailokya Mohan Temple and the Maju Dega Temple, the tallest of the tiered temples within the square, but recovery of the Narayan Temple is yet to commence. Several other buildings in this area, including the Kumari Bahal, are also still awaiting repair.
- The condition of the Garud Narayan Temple, located at the junction between the Hanuman Dhoka Durbar Square and Maru, and reported to be secure after the earthquakes, was observed to have deteriorated since the 2017 Reactive Monitoring mission, with more roof tiles missing.
- Within the Maru section of the square (southwestern end of the monument zone), recovery of the Silyan Sattal has been completed and reconstruction of Kasthamandap is progressing.
 - Recovery of Kasthamandap is a community driven project being undertaken under the authority of the KMC. It is being rebuilt using traditional materials and methods throughout. Where possible, it is incorporating the salvaged elements found to be sound and still capable of taking the structural loads. This includes one of the four large central posts, six outer posts, ten carved capitals and several beams. Each piece has been carefully documented and assessed. Carbon dating carried out on one of the carved capitals has indicated 5th century origins.
 - Kasthamandap was able to source the required timber (Sal) through a special procurement process enabled by the Government.
 - Elements salvaged from Kasthamandap are currently on public display with interpretation in the Dhukuti (former Royal Treasury), part of the Hanuman Dhoka Durbar Palace Museum.

The Hanuman Dhoka Palace, which occupies a substantial portion of the monument zone and contributes significantly to the setting of the Durbar Square, is also recovering slowly.

- The central section of the palace (which was undergoing restoration work at the time of the earthquake) has been completed.
- The south-eastern portion (Basantapur Palace Durbar) comprising the four tall palace towers (Basantapur Bhawan, Lalitpur Bhawan, Bhaktapur Bhawan, Kirtipur Bhawan) set around the Lohan Chowk, is currently being restored with the assistance of China Aid. The fabric is being repaired and reinstated using traditional materials and methods, although it was noted that some of the concrete beams from previous restoration works have been left in place.
- Extensive interpretation is provided on large panels on the scaffold. This includes information on the history of the place, the damage assessment and the recovery process and methodologies being used.
- Gaddi Baithak (the Royal Reception Hall) has been stabilized with the assistance of Miyamoto Global Disaster Relief. The second phase of conservation work is scheduled for 2020.
- Large sections of the palace, however, remain unstable and unprotected. The southern section between the Gaddi Baithak and the Basantapur Bhawan suffered partial collapse and has been substantially demolished to enable rebuilding. A small portion to the north of Gaddi Baithak has collapsed since 2017 Reactive Monitoring mission. Detailed damage assessments have been undertaken of these wings and a plan for recovery is in place for commencement in 2020.

- Although work on the Aagan Temple located in the northern section of the palace has stalled, it is anticipated that this will recommence alongside repairs to the northern wings of the palace. This work is sponsored by the Government of Japan.

Many buildings located within the Hanuman Dhoka Durbar Square Monument Zone are not classified monuments, but are attributes of the KVWHP and, like the palace, make a significant contribution to the setting of the Hanuman Dhoka Durbar Square (west and north of the palace) and its monuments, and the Basantapur Durbar Square (south of the palace). These include small shops, houses, restaurants and schools, as well as buildings used by the army and fire service. Many remain in a fragile state with bulging and leaning walls, substantial cracks and some areas of partial collapse. Most have been temporarily propped, but have few have been repaired yet.

- A proposal has been made to replace the earthquake-damaged fire station, an important early twentieth century neoclassical building located at the main eastern entrance to the monument zone. This building was designed to form part of a formal ceremonial entranceway to the palace precinct and Gaddi Baithak.

Traditional housing and nineteenth and early twentieth century commercial properties in the buffer zone continue to be under threat, with a number having already been replaced with new buildings.

- Several houses and commercial buildings located along the northern edge of the monument zone have been replaced with new brick faced concrete framed buildings.
- It was noted that whilst new buildings within the monument zone and buffer zone should not exceed thirty-five feet in height, several do exceed the height limit. In addition, access stair turrets, roof top awnings and water tanks have been added to roof terraces, effectively adding additional height.
- The new commercial building (proposal was reviewed by the Advisory Bodies in 2018) located opposite the fire station at the eastern entrance to the monument zone is almost complete. There is still community concern regarding a shrine that was housed in the basement of the previous building not being returned to the site.

Relocation of the police station out of the monument zone and buffer zone has provided new opportunities to remove traffic from the area and potential to provide new tourist facilities without intruding on the monument zone. Options for the adaptation of the police station site should be considered in the Master Plan. The historic uses of the site, historic approaches to the Durbar Square should be considered alongside current needs.

The army is staying in the monument zone as it is a traditional occupant of the site and integral to continuing the ceremonies carried out at the Taleju Bhawani Temple.

Recovery of OUV, including Integrity and Authenticity

In summary, the recovery work undertaken so far on the monuments and other attributes of the Hanuman Dhoka Durbar Square Monument Zone has contributed substantially to the recovery of the composition and architectural character of the monument zone. It has also begun to re-establish the site's sense of scale and distinctive skyline (punctuated by the tiered roofs of the temples and palace towers). Although full recovery of the palace and the square's key attributes has a long way to go, those temples and shrines that have been recovered are active with daily offerings being made and other customary activities taking place. Both locals and tourists have returned to the square and the place is a hive of activity.

The progressive recovery of the Hanuman Dhoka Durbar Square Monument Zone and its attributes is gradually contributing to the recovery of the KVWHP's OUV, including integrity and authenticity. Some

recovered monuments retain a high degree of integrity and authenticity in their building fabric, whereas others, particularly those that were very severely damaged or collapsed in the earthquakes, incorporate a higher degree of new material. In most cases, however, very traditional approaches have been taken to the recovery of the monuments, including the use of traditional materials, skills, methods and technologies. This approach to recovery and reconstruction, referred to as cyclical renewal, is characteristic of building repair and maintenance work in the Kathmandu Valley and the KVVHP. Thus, this process, which promotes the maintenance of traditional artisanship (an attribute of OUV), is considered to maintain the authenticity of the KVVHP.

Reactive Monitoring mission team recommendations:

Where the rebuilt structures have incorporated a large portion of new material, clear interpretation should be provided, explaining the reconstruction process and clearly identifying the new and old fabric of the property.

Summary of Threats arising from the Recovery

Although the recovery is proceeding well, and many of the issues identified in previous Reactive Monitoring mission reports have been addressed, there are still some threats remaining to attributes of the OUV of the KVVHP within the Hanuman Dhoka Durbar Square Monument Zone. These include the following:

- Lack of protection of damaged structures that have not yet been repaired. This is resulting in further deterioration of the building fabric. In addition, the temporary stabilization of some structures does not appear to be adequate.
 - This applies particularly to the Hanuman Dhoka Durbar Palace, which was very severely damaged. There have been further collapses since the 2017 Reactive Monitoring mission and sections of the palace have been lost.
 - Removal of temporary propping from the Jagannath and Shree Krishna Mahavishnu Temples leaves these buildings unsupported in the event of future earthquake.
 - The ongoing loss of roof tiles from less severely earthquake-damaged structures is putting them at high risk of decay (affecting mud roof tile beds, mud-mortared walls, exposed timber elements) (e.g. Garud Narayan Temple).
- Lack of attention to the damaged structures within the monument zone that are not listed as protected monuments, but which are attributes of the KVVHP.
 - Many of these structures, which include vernacular buildings such as shops and houses, but also late 19th and early 20th century commercial buildings, remain in extremely poor condition and extremely vulnerable.
 - There do not appear to be any plans in place to promote their conservation and repair at this stage.
 - Their potential replacement with modern concrete framed structures that lack the traditional level of façade detail and traditional pitched roof forms will have an impact on the OUV, including integrity and authenticity, of the KVVHP.
- The use of waterproof compounds on the external faces of some monuments (brickwork and timber).
 - These compounds have changed the look of the monuments making them very glossy in appearance. The glossy look is highly undesirable as it is uncharacteristic of the historic monuments and detracts from their usual visual appearance. The brick monuments should not be shiny.

- The waterproof compounds are likely to accelerate decay of the building fabric. The compounds seal the damp into the structure and do not allow the fabric to breathe and dry out naturally.
 - These compounds should be avoided and removed if possible, without damage to the building fabric and finish.
- New infrastructure introduced to the Hanuman Dhoka Durbar Square Monument Zone has the potential to impact the archaeology and the visual character of the PMZ.
 - The solar lights introduced after the earthquakes are visually intrusive to the setting of the place.
 - New lighting that highlights the structures and the space, without intruding on people's appreciation of it, should replace the existing solar lighting.
 - Introduction of utilities, such as water, drainage and sewerage, must be coordinated to minimise impacts on the heritage attributes of the place, including subsurface archaeology.
 - Utilities, including electrical and telephone cabling, should be hidden from view and not strung haphazardly along the monuments as masses of cables. These are dangerous and visually intrusive.
- New buildings.
 - New buildings in the monument zone and buffer zone are supposed to be restricted to a thirty-five foot height limit. This limit has been exceeded in a number of cases.
 - Although the new concrete framed structures have brick facades and timber windows, to provide a level of consistency with the traditional buildings, they do not have the traditional steep gabled roof forms. This element is being lost from the monument zone.
 - Some of the new buildings have awnings supported on angled timber brackets like those that supported the traditional roofs, but the roof form has been lost and replaced with flat roofs that are used as roof terraces.
 - In many cases, additional elements are added to these roof top terraces, such as lightweight shelters and rainwater tanks set on metal stands. These extend well above the roofs and are creating a new skyline to the city. These types of elements should be removed from rooftops within the KVWHP and around its boundaries, or relocated so that they are not visible from the street, public squares or listed monuments.
 - The new buildings are changing the character of the monument zone.

3.3.2.2 Bhaktapur Durbar Square Monument Zone

Bhaktapur was very badly affected by the earthquake, with over 200 monuments damaged and traditional housing very severely affected.

Recovery of the temples, shrines, sattals, hittis, gates and other structures located within the PMZ is progressing. Under the guidance of the Bhaktapur Municipality and DoA, and with advice from the local technical committee comprising architectural and engineering experts from two engineering colleges, local user groups (community stakeholders) are undertaking many of the recovery projects. The user groups direct projects and contribute local knowledge, skilled labour, materials and funds, and thus have a great sense of ownership of the projects. The relationship between the Municipality, DoA and the user groups appears to be good with projects receiving a high level of commitment from both the authorities and the local community. Those sites associated with the living heritage of the

community (festivals and other customary activities) have been prioritized over those that are dead (no longer visited).

The recovery of several temples in the main Bhaktapur Durbar Square has already been completed, and it is anticipated that the remaining temples will be completed within the six-year recovery period. The long southern wing of the Taba Sattal (Tadhunchen Bahal) is also nearing completion. Work on each site has generally progressed as described in the 2017 Reactive Monitoring mission report. In all cases, extensive research has been undertaken, including archaeological investigations, prior to reconstruction.

As indicated in 2017, due to its history of seismic failure, the stone Batsala Devi Temple has been strengthened. A cross-braced timber frame has been inserted around the shrine at the heart of the structure. Lime mortar incorporating powdered stone has been used for the restoration instead of the previous cement mortar.

The local festivals and rituals associated with each of the monuments have continued as a significant part of community life. The high level of artisanship existing within the community has been maintained and developed through the work on the various recovery and reconstruction projects.

Work on the National Art Museum (former palace) located on the main Bhaktapur Durbar Square is progressing slowly. The northwest wing of the museum, dismantled in 2017, is now in the process of being reconstructed. The remainder of the building remains propped, awaiting repair. The potential demolition of the Lal Baithak (the central Rana style wing of the former palace) and its replacement with a new building in Malla style is still being debated. A presentation was made by the Municipality to the 2019 Reactive Monitoring mission team outlining the evidence collected to justify the building's replacement.

Reactive Monitoring mission comments:

In addition to the comments made in section 3.2.2 regarding the process of heritage assessment and heritage impact assessment, the team make the following observations:

- The drawings presented of the former palace (by Rajman Singh Chitrakar in 1844 and Henry Ambrose Oldfield in 1853) show a palace that no longer exists in the form illustrated.
- Even the western wing (Simha Dhawaka Durbar), as drawn, does not match the detail that exists now. The carved windows shown in the drawings have all been replaced with relatively plain windows that are far less decorative or ornate than those shown in the drawings.
- The large arched window and doors shown at the western of the building in the nineteenth drawings no longer exist.
- From the 1934 photograph of the reconstruction of the Simha Dhawaka Durbar following the 1934 earthquake it is evident that both wings were severely affected by the earthquake and that both were modified during the reconstruction.
- The internal ceiling and wall linings, and the internal stair of the western wing clearly date from this period.
- In fact, the Lal Baithak appears to retain a higher degree of integrity than the western wing of the palace. Its roof was lowered, but it retained its windows, shutters and open central porch, and most likely its walls, floors and cast iron balustrades.
- One of the Oldfield illustrations of the former palace, if accurate, shows significant cracking in the walls of the old palace, possibly from a previous 19th century earthquake.

- It is possible that some of the walls from the earlier palace remain within the existing buildings, but judging by the way in which structures are rebuilt in Nepal following each earthquake, the likelihood is low.
- However, it is noted that the hitti at the rear of the palace may be early.
- It is also noted that the local community would prefer a Malla style building in place of the existing Rana style building.
- However, the evidence submitted to date does not support replacement of the Lal Baithak in Malla style. The reconstruction and detail of individual elements would be entirely conjectural.
- The Reactive Monitoring mission team recommends stabilization, strengthening and repair of the existing structures (both wings).
- For further discussion, refer to the 2017 Reactive Monitoring mission report (p.27).

The Municipality building located to the north of the Fifty-Five Window Palace was severely damaged by the earthquakes and has suffered further collapse since the 2017 Reactive Monitoring mission. It is scheduled for repair in 2020.

Apart from the temples, shrines, palaces and museums, relatively few traditional structures retaining their original brick and timber structures, intricately carved timber elements and traditional steeply pitched roof forms (tiled or metal) have survived in the Bhaktapur Durbar Square Monument Zone and its buffer zone. These include the temples, god houses, sattals and rest houses dotted along the main path linking the main squares.

Private houses and shops have suffered greatly from the earthquakes and from the rebuilding process. Along the main street traditional houses are now extremely rare. Although new buildings have generally been built with brick facades and timber windows, they are taller, do not retain the same level of detail and do not retain the pitched roof form of their traditional counterparts. Although some new buildings have tiled awnings supported on angled timber brackets to replicate the wide eaves of the traditional houses, the overall impression when looking along the street is not the same. There are also many empty house sites scattered throughout the monument zone and buffer zone as people have abandoned their collapsed homes and have failed to rebuild. The loss of traditional houses has had a substantial impact on the integrity of the KVWHP and its OUV.

Although the building bylaws restrict new buildings to thirty-five feet in height and require the front facades to be built of brick with timber windows, they do not appear to be sufficient to maintain the character of the KVWHP and there are many instances where they have not been adhered to. The thirty-five foot height limit set in the bylaws appears to correspond with the ridgeline of the traditional houses. However, as most people are rebuilding using a concrete frame, rather than traditional brick and timber, they are filling the space that would otherwise have been occupied by a large pitched roof with an additional floor. They then use the flat roof as an outdoor terrace and build stair shafts, additional lightweight roof structures on top for weather protection. Some have even extended their roof top terraces out over the street. Roof top water tanks have also become a feature of the skyline.

The Reactive Monitoring mission team were asked by UNESCO to review new development on Dattatreya Square (part of the KVWHP) in particular. One of the new buildings facing the square appears to exceed the height limit set for new buildings within the PMZ and buffer zone by at least one floor. The building, which is highly prominent as it looks directly over the temple that is the centerpiece of the square, has a flat roof and is substantially taller than other buildings on the square (and two floors taller than the building it replaced). Although the DoA and the Municipality have ordered removal of the additional floor, the owner has not complied. At present, the only means by

which the Municipality and the DoA appear to have for discouraging this type of development is to refuse issue of a completion certificate. It was reported that without this the property owner would have difficulty obtaining a mortgage or selling the property.

Reactive Monitoring mission comments:

- The upper floors of this building that extend above the legal height limit should be removed.
- A sloping roof of similar pitch to the traditional buildings around the square should be reinstated to maintain the setting of the square.

A second new building on the square has also included an additional floor, but this is set it within its new sloping roof. This appears to be a more acceptable option as it maintains the traditional roof form, at least in part. As such, it has a lower impact on the historic architectural character of the square than the first example. Other sites around the square left empty by the earthquake are still to be redeveloped. The design of the new buildings on these sites must respect the scale and form of the original buildings around the square, including their large roof forms, if the architectural character of the square is to be conserved.

A group of historic Newari houses adjacent to the western entry gate to the main Bhaktapur Durbur Square (identified in the 2017 Reactive Monitoring mission report) currently still survive, but no work has been undertaken to stabilize or repair them since the earthquakes. The houses, which are of exceptional significance due to their high quality of artisanship and high degree of integrity and authenticity, are privately owned. It was reported that at present the numerous property owners have not been able to agree on what should happen to the houses – repair or demolish and replace with new. As traditional houses have become a highly endangered attribute of the KVVHP since the earthquakes, the Reactive Monitoring mission team has suggested that the Government of Nepal consider options for encouraging retention and restoration of the group, including provision of financial incentives, or even the possibility of resuming (purchasing) the property, restoring them and finding a viable use for them. At present the houses have been abandoned, leaving them highly exposed and vulnerable to further decay and potential collapse.

It was noted that several late 19th and early 20th century neoclassical buildings survive on the main path linking the public squares of the monument zone. These are not listed as attributes of the KVVHP contributing to the OUV of the property. However, it was noted that they make a positive contribution to the streetscape. At present, these buildings are not considered heritage and are not protected even at a local level. Yet, with so many buildings having been lost and replaced with new buildings, these survivors of the pre-earthquake streetscape of Bhaktapur, their heritage value should be reassessed and the possibility of legal protection at a local level considered.

The Bhaktapur Municipality is planning to ban vehicles from the monument zone. The brick paving to the streets (which is replaced every few years due to its very soft nature) is currently being replaced in stone. This does not appear to have a significant impact on the character or OUV of the PMZ.

Recovery of OUV, including Integrity and Authenticity

In summary, with the exception of the vernacular buildings, the integrity of KVVHP and its attributes is being recovered in the Bhaktapur Durbar Square Monument Zone. The loss of traditional houses within the monument zone and the buffer zone is a serious concern. These are important attributes contributing to the urban character of the Bhaktapur Durbar Square Monument Zone. Refer to comments below under *Summary of Threats from the Recovery*.

There is also some concern regarding the potential loss of buildings from the second half of the nineteenth century and early twentieth century. Although these are not identified as attributes of the KVVHP, they contribute to the urban character of the monument zone and its buffer zone.

Recovery is generally research based, but the tendency to replace collapsed temples and other buildings with structures that reflect an earlier period of architecture than the buildings that they are replacing is impacting the authenticity of the monument zone. Although it is recognized that for many monuments, the reconstruction is reinstating a form that existed prior to the 1934 earthquake (e.g. Fasi Dega Temple), the Reactive Monitoring mission team recommends that clear interpretation be provided to avoid any confusion regarding their authenticity. The interpretation should clearly indicate the history of the monuments, their significance and significant attributes (both tangible and intangible), and provide an explanatory statement regarding the reconstruction (e.g. reasons and evidence for the current reconstructed form). Although the ancient statues of gods salvaged from the damaged temples have been incorporated into the reconstructed temples and the sites themselves have long associations with particular deities, beliefs and cultural practices, the new structures should not be claimed to be ancient. Interpretation is required for any monument reconstructed incorporating substantially new materials (e.g. Fasi Dega Temple).

Summary of Threats from the Recovery

Although the recovery of the monuments is proceeding, and some of the issues identified in previous Reactive Monitoring mission reports appear to have been addressed, there are still some threats to the OUV and attributes of OUV of the KVVHP remaining within the Bhaktapur Durbar Square Monument Zone. These include the following:

- Lack of protection provided to damaged monuments that have not been repaired as yet, resulting in further deterioration of the building fabric.
 - This applies to both the Lal Baithak and the municipality buildings, which were damaged in the earthquakes.
 - The municipality buildings have suffered further decay and partial collapse, since the 2017 Reactive Monitoring mission.
 - The Lal Baithak, although in better condition than the municipality building, has been left unrepaired and is still vulnerable.
- Lack of attention to damaged structures within the monument zone that are not listed as protected monuments, but which are attributes of the KVVHP.
 - This includes vernacular buildings such as houses and shops.
 - Some of these structures remain in extremely poor condition and are therefore, extremely vulnerable.
 - The potential replacement of these buildings with modern concrete framed structures, which lack the traditional level of detail and the traditional roof forms, will have an impact on the integrity, authenticity and OUV of the KVVHP.
- Overall loss of traditional housing within the monument zone and buffer zone.
 - Remaining traditional houses should be given a high priority as they are now an endangered attribute, and incentives should be provided to facilitate their conservation and repair.
 - Remaining traditional houses that have a high degree of integrity and authenticity, such as the houses outside the western gate to the main Bhaktapur Durbar Square, should be considered for special attention to ensure their survival. This may include

considering purchase and adaptation of the buildings to a compatible high-income use that does not require extensive unsympathetic alterations to the buildings (e.g. boutique hotel accommodation that emphasizes the traditional house experience).

- The new buildings are changing the character of the monument zone.
 - Although the boundary of the KVWHP may extend to the edge of a public square or street, any buildings around the edges should be considered as forming the boundary and defining those public spaces. Thus, their facades and built form should be acknowledged as critical elements that contribute to defining KVWHP boundaries and its urban character. They should be treated as part of the property and not as outside the property.
 - Under the bylaws, new buildings in the monument zone and in the buffer zone, are supposed to be restricted to thirty-five feet. This limit has been exceeded in a number of cases, including on the edges of the monument zone around the main squares. The upper floors of these non-compliant buildings should be removed.
 - Within and around the edges of the KVWHP large steeply pitched roof forms should be reintroduced. Although the new concrete framed structures have brick facades and timber windows, to provide a level of consistency with the traditional buildings, they do not have the traditional steep gabled roofs. This element is being lost from the monument zone, changing its character. Consideration should be given to including roof form and roofing materials in the bylaws for new buildings within the monument zone and on the edges of the monument zone.
 - Means of enforcing building bylaws for the monument zone (or edge of the monument zone) need to be strengthened to facilitate removal of non-compliant development.
- Lack of protection of nineteenth century Rana style and early twentieth century neo-classical style buildings within the monument zone and buffer zone.
 - Although these are not listed as attributes of the KVWHP, they contribute to the historic layering of the property and their removal is equivalent to removing layers of history from the property.
 - The Rana and neoclassical buildings make a positive contribution to the rich layering of the Bhaktapur streetscapes within the KVWHP and its buffer zone.
 - The heritage values of these buildings should be reassessed, at a local level, even if they are not identified as attributes at a world heritage level.
 - The IMF states that none of the Rana style buildings was considered a listed monument in the original nomination. However, despite this, restoration of the structures should not discriminate between Malla, Shah and Rana style buildings (IMF p.5).
 - Consideration should be given to promoting their repair and conservation.
 - With regard to the Lal Baithak, the evidence submitted to date to support its replacement with a Malla style brick building is insufficient and flawed. Reconstruction to an earlier form would still be entirely conjectural.
 - The palace (National Art Museum), including its Rana style wing, is a listed monument within the KVWHP.

- The existing Rana style wing was designed specifically for Royal Receptions and for viewing the festivals and ceremonies in the Durbar Square. It represents an important part of the palace's history.
- New infrastructure introduced to the Bhaktapur Durbar Square Monument Zone has the potential to impact the archaeology and the visual setting of the place.
 - All utilities, including electrical and telephone cabling, should as far as possible be hidden from view.
 - Where possible, the introduction of new or replacement utilities (e.g. water, drainage, sewerage, electrical supply and lighting) should be coordinated to minimise heritage impacts on the heritage attributes, including subsurface archaeology and the urban setting.
 - The solar lights introduced to other monument zones after the earthquakes are visually intrusive and should be avoided in Bhaktapur.
 - New lighting that highlights the monuments and significant spaces without intruding on people's appreciation of the place should be considered.

3.3.2.3 Patan (Lalitpur) Durbar Square Monument Zone

Patan Durbar Square Monument Zone also suffered considerable damage from the earthquakes.

Recovery of the palace, temples, shrines, sattals, hittis and other structures located within the monument zone is progressing. Progress in the main Patan Durbar Square has been considerable with most of the damaged temples, columns and mandapas completely recovered or in the progress of recovery. Repairs to the Sundari and Mul Coks (southern parts of the palace) have been completed and repairs to the Mani Keshaw Narayan Chok (northern end of the palace) are currently being undertaken. In all cases as much original fabric as possible has been retained, repaired and reinstated, with missing or severely damaged elements carefully pieced in, and inconspicuous strengthening added only where needed. The work has generally been coordinated and undertaken by Kathmandu Valley Preservation Trust (KVPT), an NGO, with the support and involvement of local user groups. The work is well documented.

With the recovery of the monuments, the festivals in Patan have also been revitalized, one after 24 years.

New LED lighting is currently being trialed on one of the temples. It is intended to replace existing spotlights with more atmospheric lighting that highlights the architectural features of the buildings and improves the experience of both locals and tourists visiting the square at night. The square is very active at all times of day and night.

The Patan Museum has now been extended to fill the whole palace, with new exhibits being set up in the southern portions to tell the story of the earthquakes, including the response and recovery. It includes copies of the documentation, images of the work at different stages of completion, videos of the artisans working and displays of artefacts from the buildings that could not be reinstated. Extensive interpretation has been provided.

Recovery of monuments and other attributes located outside the main Patan Durbar Square has been slower, but is progressing. It is primarily being undertaken by the local user groups under the guidance of the Municipality. The Reactive Monitoring mission team only visited some areas in the northern portion of the monument zone. The team did not visit the southern portion so is unaware of progress there.

Housing seems to have been less effected in the Patan Durbar Square Monument Zone than in other urban monument zones, although there have been some losses. The Municipality has been proactive in promoting the recovery of housing, running six community awareness programs every year and providing financial support to property owners. All new houses must have brick facades, timber windows and wide bracketed eaves.

The Reactive Monitoring mission team visited several houses and shops restored prior to the earthquakes as demonstration projects to illustrate the viability of restoring and adapting these types of historic buildings. Two of these were partially funded by UNESCO and had won awards (one guesthouse and one restaurant and shop). The buildings were in good condition and had encouraged other property owners in Patan to conserve and adapt their own houses. It was observed that, although the same building bylaws exist in Patan (Lalitpur) in relation to the construction of new houses, it appears that more historic buildings have been retained and restored than in other monument zones.

As with other monument zones, the damaged Rana buildings have not been repaired yet and are still exposed and vulnerable to decay and possible future collapse. This includes the range of buildings (Court Building) located at the southern end of the palace.

Recovery of OUV, including Integrity and Authenticity

In summary, the key attributes of OUV and the OUV of the KVWHP are being recovered in the Patan Durbar Square Monument Zone. The integrity of the monuments and the monument zone is being recovered and the methods used are ensuring a high degree of material authenticity. More original fabric is being retained in this monument zone than in other monument zones, but it was noted by the KVPT architect that using ICOMOS principles, which promote retention of as much original fabric as possible, is not always compatible with local perceptions of recovery. For example, a broken statue of a god was carefully repaired and reinstated within one of the temples. However, spiritually, it is not possible for the priest to pray to the broken god. Thus, a new god was also installed within the temple to ensure that the traditional customary activities could continue.

Summary of Remaining and New Threats resulting from the Recovery

In general, the recovery work in Patan seems to be well organized and focused on recovery of OUV through the recovery of key attributes, retaining as much original fabric as possible.

- The major known threat to the integrity of the property, particularly its archaeology, is the proposed new sewer, which was assessed by the Advisory Bodies separately (2019). It is planned to run the sewer through the Patan Durbar Square, but work has not yet commenced.
 - It is the Reactive Monitoring mission team's understanding that the proposed route of the sewer follows existing pipes that extend the length of the main path between the Patan Palace and the Durbar Square.
 - To avoid or minimise potential archaeological impacts the sewer should be kept as close as possible to the existing pipework so that it is being laid in already disturbed ground. Ideally, it would be relocated outside the Patan PMZ.
 - Further recommendations for mitigating the impacts of the proposed sewer were provided by ICOMOS in their 2019 review of the documentation.
- It was also noted that poor drainage continues to be a major issue for Patan and needs to be addressed as it is causing ongoing decay of the buildings. Coordinating drainage works with the sewer works and undertaking them together could potentially minimize the cumulative impact of the new infrastructure on the KVWHP.

- Improving drainage would assist in improving the condition of the heritage buildings within the Patan PMZ.
- Proposed drainage works should be referred to the WHC and the Advisory bodies for review under Paragraph 172 of the operational guidelines.

3.3.2.4 *Changunarayan Monument Zone*

The Changunarayan Monument Zone experienced extensive damage during the 2015 earthquakes, with the main temple and several smaller temples affected, and the sattals surrounding the group collapsing. The historic housing in the ancient settlement associated with the site also experienced severe damage.

The large Changunarayan Temple at the centre of the temple complex has been repaired and is fully functional. Two of the smaller temples have also been repaired, but only one of the sattals has been reconstructed. The rest of the temples, shrines and sattals surrounding the temple complex have not been repaired. The surviving remains of the sattals remain particularly exposed and vulnerable. New retaining walls are currently being constructed to stabilize the northwestern slope of the hill to enable recovery of the sattals on the northern and western sides of the complex.

Within the village, located on the eastern side of the hill, the main hitti (well) has been cleaned out and is back in use. Only one or two of the small sattals and shrines on the main path to the temple have been repaired, with the majority still awaiting repair.

The greatest loss has been that of the traditional houses of the ancient village. The Reactive Monitoring mission team saw only four simple mud brick houses in the village and no traditional houses on the main path up to the temple. Therefore, within the village the only vernacular buildings remaining with their pitched roofs are the sattals and shrines. The new houses in the village are generally concrete framed and, in accordance with building bylaws, have brick facades and timber windows and doors. However, they are considerably taller than the traditional houses that they replace and lack the traditional gabled roof form. Consequently, the character of the village has changed although the layout remains much the same.

The community has been repairing and revitalizing several ancient ceremonial paths up to the temple, including the path of one thousand steps on the southern side of the hill and the water path on the northern side of the hill. The latter is used daily to collect water from the river and take it up to the temple for ceremonial purposes. The community has also been repairing the waterspouts and smaller temples along these paths.

Within the priest's area on the opposite side of the hill from the village, conflict has arisen where a new house has been built (without permission) by one priest on land that, although privately owned, had previously been used for religious and pilgrimage purposes. The statues that occupied the site have now been displaced and pilgrims can no longer visit the site.

Recovery of OUV, including Integrity and Authenticity

Progress on recovery in Changunarayan has been slow. Only some of the attributes of OUV have been recovered. This is primarily because the village and temple complex are located away from the city and the main tourist path, leaving the place with far fewer resources to fund recovery than other sites.

Although the main temple has been recovered, the sattals and other structures that are also important attributes of OUV and provide the temple's significant courtyard setting have not. In addition, the ancient village has lost its houses, which are also attributes of OUV.

For this monument zone, emphasis is being placed on the ancient ceremonial paths and routes used to approach the temple complex and the structures that survive along these paths (e.g. hittis, shrines, god houses and sattals). These maintain the intangible and tangible attributes of OUV. The broader rural setting of the hill on which the temple complex is built, and the monument zone survives and is being maintained.

Summary of Threats resulting from the Recovery

Outstanding threats to OUV and attributes of OUV in the Changunarayan Monument Zone include the following:

- The sattals around the temple complex are still in a dilapidated state, with only one having been rebuilt. Thus, the historic enclosure of the temple complex is lacking. The remains of the sattals are still highly exposed to the weather and vulnerable to decay and further collapse.
- Several of the smaller temples and shrines within the main courtyard are yet to be repaired and/or reconstructed. Some of these remain highly vulnerable in their current state.
- The use of water proofing compounds on the external faces of the monuments (brickwork and timber) has changed the look of the monuments (they are now very glossy in appearance) and this is likely to contribute to accelerated decay of the building fabric
 - The water proofing compounds seal the damp into the structure and do not allow the fabric to breathe and dry out naturally.
 - These compounds should be avoided and removed if possible, without damage to the building fabric and finish.
- The loss of traditional houses in the site's ancient settlement has adversely affected the OUV of the KVWHP. The houses are important attributes of the KVWHP and the monument zone and their loss has resulted in significant change to the village's architectural character.
- The introduction of new services and signage to the temple complex is intruding on the setting of the temple complex.
 - Solar lighting has been introduced to the temple complex since the earthquakes to light the area around the temples. Although this facilitates nighttime use of the place, it is not designed to highlight the temples and it is visually intrusive to the complex.
 - In addition, some lights and solar panels have been inappropriately fixed directly onto the monuments with cables draped over the monuments. These are intrusive and should be removed.
 - A more sensitive lighting system should be introduced. Low energy lighting that highlights the temple structures, but does not affect the visitor appreciation of the place should be considered.
 - Brightly coloured garbage bins have been introduced to the temple complex to manage waste. These need to be more strategically located so that they do not intrude visually on the temple setting.
 - An animated electronic information board (using moving red lights) has been introduced to the main entrance of the temple complex. The signage is intrusive and should be replaced with signs that are more sensitive to the world heritage setting.
 - No business advertising signage should be permitted on, around or within the temple complex.

3.3.2.5 *Pashupati Monument Zone*

The extent of damage to the monuments and other structures in the Pashupatti Monument Zone has proven to be much greater than reported immediately following the earthquakes. Many temples, monasteries, sattals and other structures were affected. The PMZ covers a very large area and is one of the most visited and active sacred places in the country. Recovery is progressing but, as to be expected with a disaster of this magnitude, it is far from complete.

The structures in the areas where the highest number of visitors congregate have been prioritized for repair first. This includes the areas around the main temple (Shree Pashupatinath Temple), the main public entrance points to the Pashupati site and along the main public paths (main pilgrim routes). The Reactive Monitoring mission team could only visit a portion of the site.

Work has been completed on some of the buildings adjacent to the main entrance to the site from the Pashupatinath Road and the ancient settlement, as well as temples, shrines and sattals along the Aarya ghat that runs along the Bagmati River to the south of the main temple complex. Work is proceeding at the Jayabageshwari Temple (western portion of site), temples, shrines and sattals in the Gorakhnath area (top of the hill), and in the Guheshwari area (northern portion of site adjacent the Bagmati River).

It has been reported that large excavators have been used to undertake some of the work. Community members expressed concern that archaeological remains unearthed during the work had not been systematically investigated to determine their origins or significance. There was no substantive discussion with the Pashupati Development Corporation or the DoA regarding this issue during the Reactive Monitoring mission.

Some structures have been repaired in situ, whilst others have been totally disassembled and reassembled. The approach taken has depended on the type and extent of damage. The carved timber elements have generally been salvaged, carefully numbered and stored whilst the brickwork is rebuilt and then they have been reinstated. Lime mortar has been used for repairs to most of the buildings, including buildings that previously had mud mortar. This is leaving some white staining on the brickwork. In some cases, the brickwork has also been coated with a clear glossy waterproofing compound to seal the surface. This appears to be exacerbating the discolouration of the brickwork and will most likely accelerate decay. The accuracy of the reconstructions is not clear. No documentation (photographs or drawings) has been sighted to make comparisons. It was noted, however, that even whilst the temples are half disassembled, the priests continue to receive and bless those making prayers and offerings at the sites.

No work has been undertaken on the domed Vishwarupa temple on the top of the hill other than to deconstruct the remains of the dome. It was reported by community members that the Vishwarupa statue at the centre of the temple was severely damaged when part of the structure collapsed. It was also reported that other ancient objects from the temple had not been safely stored whilst the temple could not house them and that they had been the subject of abuse/misuse by the public. Two sides of the temple complex where the priests live appear to have been repaired and are occupied, but the remaining sides are in extremely poor condition with trees and other vegetation growing through the walls. As part of the recovery, the Pashupati Area Development Trust is considering opening a portion of the complex to pilgrims through the provision of yoga classes. However, this has not yet been agreed to by the community of priests associated with the temple.

Although recovery is proceeding steadily, there are still a considerable number of buildings that remain in a fragile condition – both large and small. This includes some buildings in the Guheshwari Area, some associated with the main Shree Pashupatinath Temple, and a complex of large early

twentieth century neoclassical buildings adjacent to the main path down to the western side of the river. One large building was reported to have had a fire in it (former kitchen wing to the main Pashupatinath Temple). In some instances, the measures put in place to protect the public from the buildings should they fail do not appear adequate. Many of the smaller temples, shrines and sattals located along the ghats, the main path over the hill and along the northern portion of the Bagmati River are still awaiting repair.

Traditional houses comprise only a small portion of the structures located within the ancient settlement that is part of the Pashupati Monument Zone. Since the earthquakes a small number of these have been refurbished or rebuilt, whereas others remain unrepaired and in a vulnerable state. The small shops in the ancient settlement that sell the offerings to the pilgrims appear to be busy. The shrines located along the main path through the ancient settlement are active with daily offerings being made.

In general, the hittis in and around the monument zone have been cleaned out and are in use. However, it was reported that, because of the Melamchi Drinking Water Project currently being implemented throughout Kathmandu, some hittis have been disconnected from their ancient water sources. This has some spiritual connotations. Some, but not all, are now being supplied by town water.

Concern has been raised by some community members regarding the beautification works being undertaken within the garden and forest areas of the monument zone. This includes the construction of a new cemetery site, walls and new concrete paths built to accommodate the growing number of visitors to the sites. Protesters were arrested for trying to stop the construction of a new concrete path to the Vishwarupa Temple on the hill. Cremations and burials within the forest and garden areas have recently been stopped by the Supreme Court as they were found to contravene the cultural values associated with these areas (the dwelling place of the Lord Shiva).

Trees have been planted in areas around the top of the hill and the Vishwarupa temple where landslides have been prevalent. However, it was noted that, despite the use of substantial tree guards, the monkeys have destroyed most of these trees. Other stabilization works are now being planned.

On a positive note, the illegal road through the Pashupati Monument Zone has finally been closed with solid barriers put in place across the road and new trees planted. The proposed ring road around the property was not discussed on this Reactive Monitoring mission.

A conceptual Master Plan for Pashupati is currently being prepared by the Pashupati Area Development Trust, in consultation with the local community, to guide future management and development of the site. It is still in its early stages, but appears to be considering a broad range of issues and constraints. It is focusing on conservation of both the natural and cultural attributes and values of the site.

Solar lighting has been installed throughout the monument zone.

Recovery of OUV, including Integrity and Authenticity

The recovery of attributes within the Pashupati Monument Zone is progressing, but still has a long way to go. The integrity of the site is gradually being recovered with the reconstruction of the collapsed monuments along the Bagmati River and in some other areas of the site. However, many structures are still awaiting repair and/or reconstruction. Recovery of some attributes is also still lacking, specifically the large domed Vishwarupa temple, which is unique, and the traditional housing in the ancient settlement. The temple needs a temporary shelter. Protective measures are also needed for some other structures to prevent further loss prior to their recovery.

The quality of the work and methodologies used in the monument zone are variable, impacting both the integrity and authenticity of individual monuments. In general, it appears that most timber and stone elements have been salvaged, repaired and reinstated in the rebuilt monuments, but a large proportion of the brickwork and its mud mortar has been replaced with new brickwork and lime mortar, particularly in the sattals. This is affecting the authenticity of the property.

The Pashupati Monument Zone remains a very active site and the OUV associated with its intangible heritage remains very strong.

Summary of Threats Resulting from the Recovery

Threats to OUV and its attributes of OUV in the Pashupati Monument Zone include:

- The systematic disassembly and reassembly of monuments, with the introduction of a substantial quantity of new material, is compromising the material authenticity of the monuments.
 - In addition, Reactive Monitoring mission photographic evidence built up over three mission trips suggests that the monuments may not always be reassembled exactly as they had existed prior to the earthquakes. Some openings appear to have been moved or altered.
 - This may be acceptable under some circumstances, but no documentation has been sighted or explanation given to explain the changes.
- Inadequate support is being provided to some structures that are still standing, but which are in a very unstable state (e.g. buildings near the main temple complex).
 - At the same time, inadequate protective measures have been put in place to protect the public frequenting these areas.
- The use of lime mortar in buildings that traditionally used mud mortar has compromised the material authenticity of one of the attributes of OUV. It has been reported that only one building remains among those repaired following the earthquakes that still incorporates mud mortar – Jayabageshwari Temple.
 - The temple appears to include two types of mud mortar from two periods of construction/repair.
 - Mud mortar should be conserved where it still exists and does not compromise structural integrity. Refer to comments included in the 2017 Reactive Monitoring mission report.
- The use of waterproof compounds on the external faces of some monuments (brickwork and timber) has changed the look of the monuments. It is also likely to accelerate decay.
 - The compounds seal the damp into the structures and do not allow the fabric to breathe and dry out naturally.
 - These compounds should be avoided and removed if possible, without causing damage to the building fabric and finish.
- Urban development and increased numbers of pilgrims and tourists are continuing to apply pressure to the Pashupati Monument Zone (its cultural and natural areas, its pilgrim sites and its ancient settlement).
- The proposed ring road continues to pose a potential threat.

3.3.2.6 Swayambhu Stupa Monument Zone

The extent of earthquake damage within the Swayambhu Monument Zone ranged from more superficial damage to the stupas to collapse of several other important temples and chaitya, as well

as severe damage or collapse of monasteries and priests' houses around the hilltop on which the main stupa is located.

All the stupas, including the main stupa, have been repaired and the Tasi Gulma Temple has been reconstructed, although it has yet to be inaugurated. The Pratipur and Anantipur sikhara style temples have been rebuilt either side of the main eastern staircase. These have been built to their previous form and using traditional materials, but are substantially new in their fabric.

The Shantipur Temple has also been rebuilt by the priests of the temple, although it has not been rendered and painted yet. Monkeys in the area have been creating issues for the building, as they are able to pull bricks out of the plinth due to the soft nature of the mud mortar used. It is proposed to reinstate the interior mural salvaged after the earthquake once conservation works have been completed at the National Museum, and to paint a new mural on another wall within the rebuilt temple.

Extensive work has been undertaken to stabilize the northeastern slopes of the hill that had subsided. Unstable soil has been removed and the new concrete framed monastery building (Karmaraj Gumba), being built to replace the previous structure that had collapsed (also concrete framed), has been securely fixed into the bedrock and will provide some support to the hilltop and pavement around the main stupa. This building and the adjacent new priests' houses (being constructed to replace those that collapsed) have been set back from the main stupa by one to two metres to provide more space around the stupa. The monastery has also been reduced in height. The façade of the monastery will match the original neo-classical building, but the priests' houses, whilst using the same materials, will not match the earlier buildings other than in size and spacing. To some extent, this approach has addressed concerns raised in the 2017 Reactive Monitoring mission report.

All religious sites are back in use. An annual debating festival for young monks from across the Kathmandu Valley was taking place around the Ananda Kuti Vihar and Manjushri Satal (both of which had been repaired since the earthquakes) on the day of the Reactive Monitoring mission site visit.

Recovery of OUV, including Integrity and Authenticity

The repair of damaged monuments and reconstruction of collapsed monuments has substantially recovered the significant attributes and integrity of Swayambhu Monument Zone. There has been a loss of original fabric, particularly in relation to the Pratipur and Anantipur Temples and the Shantipur Temple. For the Shantipur Temple, the recovery of the building by the temple priests has maintained a high level of authenticity.

The redesign of the Karmaraj Gumba (which has a smaller footprint, setback and height than its predecessor) and the adjacent priests' houses is improving the setting of the main stupa. The stabilization of the hilltop should reduce potential impacts on the stupa and surrounding temples during future earthquake events.

Summary of Threats resulting from the Recovery

Threats identified to attributes of OUV in the Swayambu Monument Zone in the 2019 Reactive Monitoring mission report have generally been addressed. There is still a need to ensure that reconstruction of the monasteries, priest housing and associated shops does not result in overdevelopment of the hilltop.

3.3.2.7 Buddhanath Stupa Monument Zone

The top of the large Buddhanath Stupa (above the Dome), which was damaged in 2015, was fully recovered prior to the 2017 Reactive Monitoring mission.

It was noted that the two remaining traditional houses in the monument zone are still standing, although in need of conservation work. Development around the stupa appears to have been controlled, with the new buildings meeting building bylaws for the Monument Zone and Buffer Zone. In most cases, roof top terraces have been contained within pitched roofs as they face the stupa.

The most intrusive elements to the Monument Zone are the electrical cables draped over the fronts of monuments and the solar panels mounted on the front elevation of one of the monastery buildings located immediately opposite the main entrance to the stupa.

Recovery of OUV, including Integrity and Authenticity

The attributes of OUV, including integrity and authenticity, of the Bauddhanath Monument Zone have been fully recovered.

Summary of Threats Resulting from the Recovery

Potential threats to attributes of OUV in the Bauddhanath Stupa Monument Zone are likely to arise from increased urban pressure, although this currently appears to be under control, and the introduction of new service infrastructure such as solar panels and water tanks on roofs.

3.3.3 Impacts of the Recovery on Attributes of OUV

The following discussion assesses the impact of the recovery and reconstruction process on the attributes of OUV identified as being at risk in 2015 and 2017, and confirms whether the loss or threat to key attributes has been mitigated or increased.

3.3.3.1 Loss of or Threats to Unique Architectural Attributes

The unique architectural attributes of the palaces, temples, stupas and other monuments, defined by their form, scale, structure and materials, are important attributes of the OUV of the World Heritage property.

Palaces

The Hanuman Dhoka Palace suffered the most damage including collapse of its tiered nine-storey palace tower and extensive structural damage to its more recent nineteenth century wings. The older sections of the palace have been or are currently being repaired and the collapsed towers rebuilt, including reinstatement of the original carved timber elements. Large portions of the building, however, remain in a precarious state and vulnerable to further collapse. Some portions have collapsed since the 2017 Reactive Monitoring mission.

The palace in Bhaktapur (National Art Museum) suffered severe damage. One wing is currently being reconstructed, but the Rana style Lal Baithak remains fragile and under threat of demolition and replacement with a faux Malla style building.

The palace at Patan suffered some damage, including collapse of some sections. Repairs are well progressed, and the collapsed sections have been rebuilt. The palace generally is no longer under threat, although the Rana wings have yet to be repaired.

The palaces remain under threat.

Tiered Temples

The tiered temples are generally as a group being repaired and reconstructed with their original carved timber elements being reinstated. In some cases, the bricks have also been salvaged and reused, but in other cases they have been replaced with new. The stepped masonry bases of several of the tiered temples have had some intervention with lime mortar being introduced during stabilization of their sidewalls. Many others retain a high degree of integrity.

The threat to the tiered temples is diminishing.

Stupas

The large domed stupas of Bauddhanath and Swayambu have been repaired and are not under threat.

Other Religious Attributes

The Sikhara style temples at Swayambu and Bhaktapur have been rebuilt. These are not under threat.

The rectangular Shantipur temple at Swayambu has been repaired by the chief priest and his family. This temple is no longer under threat, although conservation works are yet to be completed.

The large nineteenth century domed Vishwarupa Temple on the top of the hill in the Pashupati Monument Zone has still not been repaired. It is highly vulnerable and under threat.

The fallen stone pillars in each monument zone have been repaired and re-erected. These are no longer under threat.

The bell and drum towers have also been repaired and are not under threat.

Sattals and Public Rest Houses

In many cases the damaged sattals have been or are in the process of being rebuilt. This includes Kasthamandap in Hanuman Dhoka Durbar Square Monument Zone. The greatest loss of sattals has been at Changu Narayan, where only one sattal has been rebuilt. The other sattals that form the courtyard setting of the main temple have not been repaired and are still exposed and vulnerable.

Sattals and public rest houses are still under threat.

Traditional houses and shops

The traditional houses with their ground floor shops appear to be the attributes that have suffered the most from the earthquakes and the recovery process. Most of the severely damaged houses have been demolished and are being replaced with new concrete framed buildings. Although the new buildings are brick clad and incorporate carved window elements, they are often taller than their historic counterparts and have flat roofs rather than steeply pitched. Very few of the traditional houses are being repaired, despite local monetary incentives. This has affected most of the monument zones, including those that were already threatened by urbanization and modern development.

The traditional house remains seriously under threat in the post-earthquake recovery.

Hittis (water spouts, wells and ponds)

The earthquakes did not seriously affect the hittis and ponds and most are back in use by the community. However, many have been disconnected from their traditional water sources as the Melamchi Water Supply Project, which is designed to provide safe drinking water, has been implemented across Kathmandu.

Materials

Although the original carved timber and metal elements, and even brickwork in many cases, have been salvaged and reinstated in the recovered monuments, the traditional use of mud mortar, which is clearly identified as an attribute of OUV, has only been reinstated on some sites. Lime mortar has been used for the reconstruction of some monuments. It is not known what affect this will have on the seismic performance of the traditional timber-framed structures, particularly the tiered temples.

3.3.3.2 Threats to the High Levels of Craftpersonship

Considerable effort has been made to develop craft and artisan skills, with master artisans (carpenters, masons and metalworkers) engaged to lead teams and provide training to others. This has been very successful and extremely important to the recovery of the monuments. It has created a new generation of artisans to continue the work.

This attribute is not under threat.

3.3.3.3 Threats to the Unique Urban and Ancient Settlements

The unique structure and fabric of the urban and ancient settlements are important attributes of the OUV of the property. The distinctive character of these areas is defined by the scale, form, design and materials of the traditional Newari architecture, as well as the layout of the public squares and narrow streets. In general, the streets and squares are being retained in their pre-earthquake form. The character of squares and streets is changing as the architecture changes.

Traditional housing, an important attribute of most of the monument zones, has been severely affected by both the earthquakes and the recovery, and its loss threatens OUV in relation to the urban and ancient settlements of the monument zones. In most cases, the new housing is required to reflect the brick materiality of the historic houses and include carved timber window elements, but its scale (usually with an additional storey added) and form (flat roof rather than pitched roof) is quite different.

The character of the urban and ancient settlements remains under threat.

New urban infrastructure is still being planned for many of the monument zones and its impact on the urban and ancient settlements, including archaeology is still to be determined.

- The introduction of solar street lighting has had a visual impact on most of the monument zones.
- Swags of electrical and telephone cables also intrude visually on most monument zones. These present a safety risk to the public and should, where possible, be hidden from view (eg placed underground if possible).
- Water, sewerage and drainage needs to be resolved, preferably at the same time as the street pavements.
- The proposed Ring Road expansion around Pashupati is likely to affect some of the monuments within that zone.

3.3.3.4 Threats to Traditions, Beliefs, Legends, Rituals and Festivals

The traditional rituals and festivals associated with each of the religious monuments have continued and do not appear to be under threat.

- All the religious sites appear to be fully functional.
- Despite the damage to temples and shrines, daily offerings and religious activities continue.
- Seasonal festivals have been revitalized.
- The number of pilgrims attending sites has increased substantially as the recovery has progressed.

It is noted, however, that local communities have shut down some reconstruction sites where they have felt that the method of reconstruction contravenes spiritual requirements. The link between the community and sites remains strong.

3.4 Issues Relating to the Recovery and Reconstruction of the Attributes of Outstanding Universal Value

Many of the issues identified in the 2015 and 2017 Reactive Monitoring mission reports have been resolved, but many are still outstanding and must be resolved to ensure the future of the KVWHP and its OUV. These are addressed very briefly in the same order as in the previous reports.

3.4.1 Emergency Response

The emergency response phase included securing and stabilizing sites and salvaging, inventorying, storing and protecting materials and artefacts from the sites. This phase is complete, but it is noted that:

- There are some sites are continuing to deteriorate due to their exposure to the elements, whilst they await recovery (eg Hanuman Dhoka Durbar Palace).
- Most salvaged building elements awaiting reinstatement in the recovery are now protected from the weather.
- Emergency shoring has been removed from some structures (Jagannath and Shree Krishna Mahavishnu (Gobinath) Temples in the Hanuman Dhoka Durbar Square) even though they have not been repaired.
- In addition, some of the more severely damaged and less visible wings of the Hanuman Dhoka Palace do not appear to be adequately shored or protected.

3.4.2 Inventories

Building artefacts and collections have been inventoried and recorded photographically. Data management continues to be an issue.

3.4.3 Heritage Expertise

The level of expertise employed on the various recovery projects varies considerably. It is noted, however, that as recovery has progressed, the level of experience of those involved has increased. Young engineers and architects have been learning on the job under the guidance of seniors and have a greater level of expertise than two years ago.

3.4.4 Traditional Skills and Knowledge

Extensive capacity development in masonry, carpentry and wood carving skills has been facilitated by the DoA and the Municipalities. Programs to build community awareness of the expectations of the recovery of the KVWHP have also be extensive. This includes programmes to promote reconstruction of housing incorporating traditional elements such as carved windows and doors.

3.4.5 Tendering Process

The open tendering process has been a major issue for the recovery of the KVWHP. Contractors have not been required to demonstrate their capacity, skill or commitment to undertaking the work to the standard expected for a World Heritage listed property. This could have potential impacts on attributes and authenticity.

As local user groups have not had to comply with the open tender policy, they have been able to be more selective in their engagement of skilled artisans for recovery and reconstruction work. This has had a positive impact on recovery of the OUV of KVWHP.

It is hoped that the new procurement requirements being developed for historic monuments by the Government of Nepal will resolve issues associated with the tendering process for works commissioned by the DoA.

3.4.6 Materials

The DoA has been able to provide a supply of traditional Saal wood, pine, bricks and mortar for the recovery of KVWHP. It is not known whether the long-term supply of timber has been addressed or whether standards have been established for brick production.

At this stage, it still appears that inadequate research has been provided to support the replacement of traditional mud mortar with lime mortar in relation to pre nineteenth century structures. This must be addressed as mud mortar is identified as an attribute of the KVWHP and its OUV. If the mortar is to be replaced with lime, there needs to be good reason for its replacement based on evidence. It is recognized that mud mortar is weak, but it is also recognized that there are traditional structural solutions that mitigate the risk (e.g. timber bands used to contain the brickwork).

3.4.7 Human Safety

In most cases the public have been excluded from monuments that are unstable. However, it was noted that there are still some areas where this is not the case. Workers are currently using unstable portions of the Hanuman Dhoka Durbar Palace and safety barriers have been removed from around the Jagannath and Shree Krishna Mahavishnu Temples in Hanuman Dhoka Durbar Square.

3.4.8 Building Condition

The poor condition of some monuments was identified as a key contributor to their failure during the earthquakes. The recovery of the monuments has in almost all cases resulted in outstanding repair and maintenance works being carried out, leaving many of the monuments in much better condition than they were before the earthquakes.

The use of water proofing compounds on brick walls in some monument zones (Pashupati and Changuarayan) is not recommended, as it is likely to accelerate decay as it prevents the buildings from breathing and drying out.

Consideration still must be given to drainage systems, ground levels and pavement treatments at the base of monuments. Copper sheet has been used under the main timber posts of Kasthamandap and various structures in Patan to protect the posts from rising damp and potential rot.

3.4.9 Routine Maintenance and Repair

A program of cyclical maintenance must be developed, budgeted for and implemented to ensure that monuments remain in good condition. Community participation in the ongoing care of monuments and other attributes of the KVWHP will be important to their long-term survival.

3.4.10 Urban Infrastructure

The impact of urban infrastructure (roads, drainage, water supply, electricity and street lighting) on the monuments, public squares, streetscapes and housing does not appear to have been addressed as yet. Thus, it continues to pose a potential threat to the KVWHP and its attributes of OUV (monuments, other structures, archaeology, streetscapes and public spaces). It is important that findings of archaeological investigations are shared with the local planning and infrastructure authorities and that suitable guidelines are prepared and adopted by the government for the construction or installation of new infrastructure within the KVWHP and its buffer zone. Planning for urban infrastructure should be undertaken in tandem with the development of master Plans for the PMZs.

3.4.11 Privately Owned Heritage

Privately owned earthquake damaged buildings are generally being replaced with concrete framed buildings. Although they have brick façades and incorporate timber window and door elements (sometimes carved), they tend to lack the traditional pitched roof and the level of detail in their

facades is diminished. They are also taller than the traditional buildings and have water tanks and other elements on their roofs. This is affecting the integrity and authenticity of the KVWHP and its OUV.

The new structures must comply with the new building codes, which generally promote the reinforced concrete frame and brick infill walls and funding for reconstruction is tied to the implementation of these codes. Traditional housing typologies do not comply with the codes and are thus being phased out. It is now a rarity in the most affected areas. This is also severely impacting the authenticity of the KVWHP and its OUV.

3.4.12 Solar Street Lighting

Solar street lighting, although practical in lighting public spaces, remains visually intrusive to the KVWHP. Its installation has also resulted in uncontrolled and undocumented disturbance of archaeological remains in the monument zones.

3.4.13 Political Support

Recovery of Nepal's heritage remains a high priority of the Government of Nepal. However, it is only recently that attention has been paid to the impact of strategic policies developed by the Government to facilitate recovery of the nation has had on the recovery of the KVWHP. New strategies are being developed to minimise further damage and reduce this threat.

3.4.14 Record Keeping

Record keeping in relation to the KVWHP appears to have improved within DoA, although the digital system for managing records in relation to the KVWHP (as well as Nepal's national heritage) is still not operational. Full records as outlined in the 2017 Reactive Monitoring mission report must be kept for future reference.

3.4.15 Evidence Based Decision Making

In some cases, there has been extensive research undertaken to establish the history of the monument and causes of failure prior to determining the most appropriate solution for reconstruction. In other cases, the research undertaken has been limited, with insufficient justification being provided to support the interventions adopted in recovery. All decision making must be evidence based. This requires balanced and critical evaluation of all the relevant evidence as outlined in the 2017 Reactive Monitoring mission report.

3.4.16 Values Based Recovery

Recovery options must be values based as well as evidence based. They must support the recovery of the OUV, as well as the attributes of OUV. This requires:

- Clear identification of the attributes that support or exemplify OUV (both tangible and intangible), including authenticity and integrity; and
- Identification of solutions, whether structural or other (e.g. to minimise damp and decay), that are consistent with maintaining or recovering OUV.

3.5 Positive and Negative Developments in the Conservation of the Property since the Last Report to the World Heritage Committee

3.5.1 Positive Developments

The mission team notes the following positive developments in the conservation of the property since the 2017 Reactive Monitoring mission report to the World Heritage Committee:

- There has been considerable progress on the post disaster recovery and reconstruction of the monuments in almost all monument zones.

- Recovery of monuments in Patan, Swayambhu and Bhaktapur is well advanced, and completed in Bauddhanath.
- Coordination between the DoA and all other parties has improved and a shared understanding of expectations in relation to recovery of the KVWHP has been developed.
- DoA has employed additional staff to undertake documentation and administration of the recovery and reconstruction process, developing its capacity for the future.
- The adopted Conservation and Reconstruction Guidelines are being implemented.
- Research and documentation has been undertaken to guide recovery of many of the monuments, although the standard is still variable.
- Tendering for the reconstruction of Kasthamandap was stopped. A community driven project focused on rebuilding the monument using traditional materials, approaches and methodologies has been adopted and is now being implemented for the recovery of the monument.

3.5.2 Negative Developments

The mission team note that the following issues relating to the conservation of the property have continued to negatively impact the KVWHP since the 2015 & 2017 Reactive Monitoring mission reports to the World Heritage Committee:

- Certain amount of traditional housing has been impacted as an attribute in several historic urban areas and ancient settlements (Hanuman Dhoka, Pashupati, Bhaktapur and Changu Narayan)
- Focus on recovery of the urban ensembles and ancient settlements, which convey the OUV of the monument zones, is still lacking.
- Some damaged buildings remain unprotected from the weather (particularly in Hanuman Dhoka and Pashupati).
- The absence of monitoring of works undertaken to ensure adequate quality control is still an issue.
- No response has been submitted the WHC regarding the corrective measures set out in the 2017 Reactive Monitoring mission report.
- No Recovery Master Plans have been developed for the recovery of the PMZs.
- No international Advisory Committee was formed. However, international advice has been obtained for recovery of some monuments.

4. Assessment of the State of Conservation of the Property

4.1 Are Outstanding Universal Value, Integrity and Authenticity of the Property Maintained?

The 2019 Reactive Monitoring Mission finds that although substantial progress has been made towards the recovery of the KVVHP and its OUV, many issues identified in previous Reactive Monitoring mission reports remain outstanding, and these are adversely affecting the property's state of conservation, integrity and authenticity. Much of the property remains highly vulnerable and under threat.

In summary,

- The religious monuments have been prioritised and many have been recovered, including all the stupas and chaitya, a large number of the tiered temples, the sikhara style temples and the columns. The recovery of these attributes is positive and is contributing to recovery of the OUV of the KVVHP.
- Recovery of the palaces is progressing, but some substantial portions remain highly vulnerable and under threat.
- Many sattals and rest houses have been recovered, although there are a number that have not been rebuilt and this is impacting the character of some of the monument zones.
- The vernacular buildings, particularly houses, have suffered greatly, impacting the character of all the historic urban areas and ancient settlements.
- The replacement of traditional pitched roofed buildings around the edges of the principal squares of the monument zones with flat roofed concrete framed buildings is impacting the distinctive urban character of the squares.

The integrity of the urban and religious ensembles is being recovered progressively, with severely damaged and collapsed monuments being repaired and rebuilt. In many cases, recovery and reconstruction of the monuments has retained a very high degree of original fabric. However, in some cases, certain aspects of authenticity of the structures has been affected by the introduction of a large quantity of new material (predominantly bricks and mortar).

Even so, a traditional approach to recovery that utilises traditional materials, methods and skills has been adopted for a large proportion of the monuments. This approach promotes the maintenance of traditional knowledge and craft skills and, even though in some cases it results in replacement of historic fabric with new (particularly where the historic fabric has been severely damaged), the approach supports these intangible attributes and OUV. Respect for and continuance of religious beliefs, practices and rituals during recovery also supports the intangible attributes of the KVVHP and its OUV.

The proactive involvement of local community groups, including priests, monks and local guthis, has demonstrated the community's strong commitment to the KVVHP and built community cohesion and resilience.

Although individual recovery master plans have not been developed for most of the monument zones, coordination of the recovery response has improved since the 2017 Reactive Monitoring mission. Good coordination between DoA, other government departments and authorities, site managers and community stakeholders, will be critical to the ongoing and successful recovery of the property beyond the expiration of the NRA (the principal coordination authority for the recovery). Review of the IMF is still outstanding and is now urgent, and master plans for each of the PMZs are also very much needed to ensure a more holistic approach to recovery of the KVVHP, ensuring that its OUV, integrity and authenticity is maintained.

The focus by the State Party on listed/graded monuments at the expense of other attributes has had ramifications for traditional urban housing and the ancient settlements. Reconstruction of these elements has taken a very different form from their historic counterparts. This has resulted from enforcement of building codes, but not of the bylaws designed to govern new development within the KVVHP and its buffer zones. The loss of traditional housing has impacted both the integrity and authenticity of the KVVHP and its OUV.

In addition, priority appears to have been given to the Newar monuments, primarily those of the Malla period. Many more recent structures (from the Shah and Rana periods) have not been recovered yet. Even though they are not specifically mentioned in the SOUV, they comprise significant portions of the historic palaces and contribute to the architectural character of the monument zones and their buffer zones. Conservation and recovery of vernacular architecture, such as houses, has been of a lower priority.

Outcomes vary between monument zones and are summarised as follows:

- As previously reported, recovery of **Bauddhanath** stupa has been completed and the OUV of the Bauddhanath Monument Zone has been maintained.
- Work in **Patan** has been consistently of a high standard, generally following international best practice in heritage conservation. The repairs to the palace are nearing completion and works to the temples and other structures within the Durbar Square are also well advanced, with several temples and other monuments completely recovered. In all cases, as much original fabric as possible has been conserved, and repairs undertaken using traditional materials and technologies. The recovery has maintained the integrity and authenticity of the attributes of the Patan (Lalitpur) Durbar Square Monument Zone and the OUV of the KVVHP.
- At **Swayambu** the main stupa and other religious attributes have been recovered, some through repair in situ and some through reconstruction. With the exception of the wall mural from the Shantipur temple, all sculptures and other religious artefacts have been returned to their temples. Recovery of the Shantipur Temple has been undertaken by the priests of the temple and the wall mural will be returned once conservation works have been completed by the National Museum. The landslide area on the northeastern side of the hill has been stabilised and the collapsed monasteries and priest housing around the top of the hill are now being rebuilt at a smaller scale than existed previously. This will reduce their impact on the main stupa and its setting. The recovery of the attributes (both tangible and intangible) of the Swayambu Monument Zone has recovered the integrity of the PMZ, and contributed to recovery of the KVVHP and its OUV.
- Although **Pashupati** Monument Zone suffered considerable earthquake damage, a large number of monuments were not severely affected. Thus, the PMZ retained a reasonable degree of integrity following the earthquakes. However, the recovery of monuments that were damaged has been variable. Whilst some monuments were repaired in situ, many structures were demolished and rebuilt. Although many carved timber and decorative metalwork elements were repaired and reinstated in the rebuilt monuments, in general the brickwork appears to have been replaced and laid with lime mortar, which is not consistent with maintaining the mud mortar attribute of the pre nineteenth century monuments. This has impacted the material aspect of authenticity. Traditional houses in the ancient settlement are still considered to be at risk as those that have been recovered do not retain their original structural systems and the few that remain relatively intact have not been recovered as yet. This is impacting the integrity and authenticity of the ancient settlement. The landscape setting of the PMZ is being impacted to some extent by current works to manage the large number of pilgrims and tourists to the site. In general, the integrity of the Pashupati PMZ is

being recovered, although some aspects of authenticity have been affected as mentioned above.

- In **Bhaktapur**, the majority of temples and other religious attributes have been recovered in the PMZ. Recovery of the palace is progressing slowly. The proposed demolition of the 1858 Rana style palace building for replacement with a pre 1850s Malla style building needs further consideration. The loss of traditional housing and other attributes that are not listed as protected monuments has adversely affected the urban character of the monument zone, thereby affecting the OUV of the monument zone.
- In **Hanuman Dhoka**, the monument zone most severely impacted by the earthquakes, significant progress has been made on the recovery of the temples and other religious attributes, as well as the sattals and rest houses. This includes recovery of Kasthamandap, which was a contested site during the 2017 Reactive Monitoring mission. Kasthamandap is being rebuilt using traditional knowledge, skills, materials and methods, reinstating as much original fabric as possible (although much was damaged in the earthquake). The repair and reconstruction of the monuments in the Durbar Squares is recovering the architectural character and integrity of the PMZ and its OUV. Substantial progress has also been made on recovery of the palace, although large areas of the palace complex remain unrepaired and unprotected. Recovery of these areas is due to commence in 2020. Recovery of Hanuman Dhoka Durbar Square Monument Zone is progressing, but still has a long way to go to full recovery, mostly due to the scale of the disaster.
- At **Changu Narayan**, repairs have been completed to the large Changu Narayan Temple, two of the smaller temples and one sattal. Works to the other sattals surrounding the temple complex have not progressed, leaving the setting of the temple complex incomplete and its integrity impacted. The loss of traditional housing at Changu Narayan, and its replacement with new concrete framed housing, has also had a substantial impact on the integrity and authenticity of the ancient settlement area of the monument zone, impacting OUV of this PMZ.

The impact of the recovery on the intangible attributes that contribute to OUV has generally been good:

- In most cases the daily rituals and seasonal festivals associated with each of the religious sites have continued, maintaining this aspect of OUV.
- A substantial effort has been made to ensure that the traditional skills and knowledge of artisans are passed on through training and participation in the restoration of the monuments and repairs to housing throughout the monument zones. Thus, this aspect of OUV is maintained.
- The traditional practice of cyclical renewal has been embraced on many sites, with monuments being disassembled, repaired and reassembled, reusing the original elements. Thus, integrity, authenticity and OUV are maintained.
- Religious carvings that were severely damaged in the earthquake have been repaired or copied for reinstatement on the temples to ensure that the stories associated with the deities are maintained.
- Community involvement in the recovery appears to have generally been through local guthis. It will be important that these continue to be actively involved in the long-term care and management of sites.
- The traditional maintenance practices and regimes associated with the various festivals do not appear to have not been revived to date, although there has been a proposal for this.

4.2 Follow-Up Measures

4.2.1 Response to Previous Decisions of the World Heritage Committee on the State of Conservation of the Property

4.2.1.1 *World Heritage Committee Decision: 41 COM 7B.95*

In 2017, in Decision 41 COM 7B.95, the World Heritage Committee requested that the State Party fully commit to use appropriate methods and materials in recovery works (Paragraph 8).

- To a large extent this has been done, although lime mortar continued to be used in recovery of several pre-nineteenth century monuments. More recently, mud mortar has been used in most repairs to pre-nineteenth century monuments, except in exposed locations, such as the outer walls of the stepped masonry bases of monuments.
- Lime mortar is being used to repair monuments previously restored with cement mortar. This seems appropriate.

The World Heritage Committee also requested that the State Party integrate the Recovery Master Plan (RMP) within an overall socio-economic revitalization programme for urban communities, encourage residents and local businesses to engage in the recovery process and ensure that it delivers wide-ranging social and economic benefits (Paragraph 9).

- It is not clear whether an overall socio-economic revitalization programme for urban communities has been developed that integrates the RMP for the KVWHP, although some municipalities have built this into their programmes of recovery.
- The State Party has successfully encouraged residents and local businesses to engage in the recovery process.
- It was noted that small businesses appear to be returning to the KVWHP as it recovers and that all the monument zones are very active.
- Numerous workshops have been run to build the capacity of local artisans. These have since gone on to work on the recovery of all types of buildings within the Kathmandu Valley, including those within the KVWHP.
- Some municipalities have run workshops to build awareness of local residents and property owners regarding the significance of their properties and the expectations for recovery.
- Municipalities have also provided financial incentives to property owners to enable them to recover their properties.

The World Heritage Committee called upon the international community to support the State Party's urgent recovery work through financial, technical or expert assistance (Paragraph 10).

- International assistance was given in the early phase of disaster response and recovery, but has diminished since.
- Some of the international organisations that were involved in conservation work within KVWHP over the years leading up to the earthquake have continued to provide support (e.g. KVPT in Patan).
- International support is also continuing with regard to recovery of the Hanuman Dhoka Durbar Palace. This is being provided by several international partners.
- In most monument zones, recovery is being undertaken without international support.

In response to the of the World Heritage Committee decision 41 COM.7B.95, the State Party invited a joint WHC/ICOMOS and ICCROM Advisory Mission to ascertain the progress accomplished by the State Party in implementation of six year RMP and to give guidance on its review (Paragraph 11).

- This mission did not proceed in 2018. However, the 2019 Reactive Monitoring mission reviewed progress on the implementation of the six-year rehabilitation plan.
- Substantial progress has been made, but it is unlikely that full recovery will be achieved by the end of the six-year period.
- This is not unreasonable, considering the scale of the disaster.
- It will be important that recovery continue beyond the six-year program.
- Ongoing recovery work must be planned and budgeted for before the end of the six-year recovery period.

4.2.1.2 World Heritage Committee Decision: 42 COM 7B.12

In 2018, in Decision 42 COM 7B.12, the World Heritage Committee requested that the State Party systematically carry out, follow and implement the recommendations of the October 2015 and March 2017 missions (Paragraph 6).

- The 2019 Reactive Monitoring mission has commented on implementation of the corrective measures in section 3.2.1, 3.2.2 and 3.2.3 of this report.
- Although the state party has not reported to the WHC and the advisory bodies as requested, it has been noted that many of the recommendations and corrective measures included in the 2015 and 2017 Reactive Monitoring mission reports have been addressed to some extent.
- See summary below under section 4.2.2.
- Those that have not been adequately addressed are reiterated in the recommendations of this report.

The World Heritage Committee encouraged the State Party to invite the World Heritage Centre and the Advisory Bodies to provide technical support to assist the State Party with developing structures to coordinate and guide the recovery of the property and its Outstanding Universal Value (OUV) (Paragraph 7).

- The State Party has requested assistance with regard to developing and implementing Recovery Master Plans for the KVVHP.

The World Heritage Committee reiterated requests to the State Party to commit to the use of appropriate methods and materials in recovery works (Paragraph 9); to integrate the Recovery Master Plan (RMP) within an overall socio-economic revitalization programme for urban communities, encourage residents and local business to engage in the recovery process and ensure that it delivers wide-ranging social and economic benefits (Paragraph 10); and to invite a Joint World Heritage Centre/ICOMOS/ICCROM Advisory Mission to ascertain the progress accomplished by the State Party and to assist in the review and implementation of the six year RMP (Paragraph 12).

- See responses to recommendations of Decision 41 COM 7B.95 above.

4.2.1.3 World Heritage Committee Decision: 43 COM 7B.70

In 2019, the World Heritage Committee again requested (Paragraph 6) the State Party to:

- A. Initiate with technical support from, and in on-going dialogue with, the World Heritage Centre and the Advisory Bodies, an International Scientific Steering Coordination Mechanism tasked with assisting with the development of structures and resources to guide the recovery of the property and its OUV,
- B. Invite a joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring Mission to assess the state of conservation of the property, to review progress with the implementation of the

recommendations of the October 2015 and March 2017 missions, to assist with the development of a strategy for the implementation of the six-year RMP, and to provide guidance on its review,

C. Seek further technical support from the World Heritage Centre and Advisory Bodies in order to coordinate and guide the recovery of the property, based on documentation, research, analysis and use of appropriate traditional methods and materials, and

D. Ensure all recommendations and outcomes of the above are fully integrated within the six-year RMP.

- No International Scientific Steering Coordination Mechanism has been established.
 - It seems that responsibility for organising such a mechanism was unclear and that the State Party anticipated guidance from the WHC and the Advisory Bodies on this. This did not occur.
 - International advice has been provided by international consultants on an ad hoc basis.
 - Technical reviews have been undertaken of proposals submitted to the WHC for review by the Advisory Bodies (e.g. Patan sewer and new development on the edge of the Hanuman Dhoka PMZ of the KVWHP).
- The 2019 Reactive Monitoring mission has reviewed the state of conservation of the property and progress on implementation of the recommendations of the previous 2015 and 2017 Reactive Monitoring missions.
- The 2019 Reactive Monitoring mission has reviewed the research and documentation undertaken to guide recovery on specific monuments and sites, as well as methods and materials used.
- The 2019 Reactive Monitoring mission has reviewed progress of the recovery against the six-year rehabilitation plan.
- As the recovery is already well advanced, recommendations have been made for planning beyond the six-year rehabilitation plan. This includes, instead of developing a more comprehensive Recovery Master Plan, master plans for each of the monument zones should be developed to guide:
 - the ongoing recovery of the sites and their attributes,
 - urban infrastructure recovery and development, and
 - future development of the sites – including development arising as a consequence of the earthquakes, ongoing urban pressure and tourism.

The World Heritage Committee requested that the recommendations of the ICOMOS Technical Review of the Patan Durbar Square Monument Zone sewer project be implemented (Paragraph 7).

- It was noted that the sewer project has not yet commenced.
- The state party intends to implement the recommendations of the ICOMOS technical review.
- As drainage remains a major issue in the Patan Durbar Square Monument Zone the 2019 Reactive Monitoring mission recommends that this be addressed at the same time as the sewer so as to minimise heritage impacts on the PMZ and its buffer zone.

The World Heritage Committee requested that the recovery of the KVWHP be completed in accordance with the six-year rehabilitation plan – that is within six years (Paragraph 8).

- If all goes well and in accordance with the six-year plan, recovery of the key monuments of the KVVHP should be completed within the six year period.
- Full recovery of attributes that are not listed monuments is unlikely to be completed.
- Recovery of other elements within the KVVHP that are not listed as attributes, but contribute to the character of the KVVHP, will also remain outstanding.
- This is not unreasonable, considering the scale of the disaster.
- Planning for the ongoing recovery of the KVVHP must be included in the master plans for each monument zone. Budgets and timeframes must also be set prior to the end of the six-year period.

The World Heritage Committee reiterated its request to the international community to support the recovery (Paragraph 9).

- See response to Decision 41 COM 7B.95 above.

4.2.2 Response to the Terms of Reference for 2019 Reactive Monitoring mission

4.2.2.1 Progress on Implementation of Recommendations of 2015 and 2017 Reactive monitoring Missions (item 3)

Corrective measures from the 2015 Reactive Monitoring mission report were addressed in the 2017 Reactive Monitoring mission report.

A brief response to the 2017 recommended mitigation and corrective measures and any outstanding 2015 corrective measures is provided here. More detailed discussion is provided in Section 3 of this report.

Mitigation and Corrective Measures 2017	Comment	Further response required
Recommendations from section 4.2.3 of 2017 Reactive Monitoring mission Report		
1. Coordination Framework	Coordination has significantly improved The coordination framework is clear Refer to section 3.2.1 of this report	–
2. Recovery Master Plan	Six year rehabilitation plan only prepared – set goals and timeframes for recovery of monuments The expectation is that all protected monuments will be recovered There has been less focus on other attributes, such as housing – there appears to be no expectation that housing will be rebuilt in its original form It is now 4.5 years into recovery and a comprehensive recovery master plan (RMP) is no longer so relevant	There is a need now to plan for the future – recovery beyond the six year plan This involves development of Master Plans for each monument zone to guide the ongoing recovery and future development within the PMZs and their buffer zones Each site has different attributes and needs that must be addressed Refer to section 3.2.4 of this report: Planning for the Future
3. Protection of damaged monuments	Many monuments have been stabilised and repaired or rebuilt, including the Gaddi Baithak.	Reassess temporary stabilisation to monuments that have not been repaired as yet

Mitigation and Corrective Measures 2017	Comment	Further response required
	Some monuments remain vulnerable – particularly wings of the Hanuman Dhoka Durbar Palace, Jagannath and Gobinath temples, sattals at Changunarayan and Pashupati, Municipality building and Palace in Bhaktapur Housing and other vernacular buildings remain vulnerable in most monument zones impacting their OUV.	Ensure that stabilisation measures are adequate to ensure stability of structures in further earthquakes and strengthen as necessary Provide weather protection where possible to structures that have had severe damage to their roofs
4. Public safety	The sites are far safer than they were in 2017.	Some sites still need additional safety measures to be instituted – Jagannath and Shree Krishna Mahavishnu Temples in Hanuman Dhoka Durbar Square and some damaged buildings at Pashupati
5. Applications for approval to undertake recovery work are to be supported by full documentation, evidence to justify interventions and assessment of heritage impacts, with a focus on retaining significant fabric and maintaining integrity, authenticity and OUV	The level of documentation prepared for the recovery of each monument is variable. Some have a high level of documentation, accompanied by archaeological, structural and investigative research into causes of failure. Other sites do not appear to have been adequately assessed or documented, resulting in loss of significant fabric and some inappropriate works being undertaken.	A high standard of research and documentation must accompany all future proposals for recovery of monuments.
6. All major works projects within the KVWHP are to be referred by the DoA to the World Heritage Centre (WHC)	Two project proposals were referred to the WHC – sewer through Patan PMZ and new building at the entrance to the Hanuman Dhoka PMZ No recovery projects that involved substantial reconstruction in new materials and/or to a different form were referred to the WHC Projects such as Kasthamandap (substantially new fabric) should have been referred. Some information has been provided on the changes to the Fasi Dega Temple in Bhaktapur and a submission has just been made for the Lal Baithak in Bhaktapur. Preliminary comments on this	Recovery of monuments incorporating substantially new fabric and/or a change in form/design should be referred to the WHC and its advisory bodies for review and input. These are substantially new buildings. A formal submission, including all documentation and a detailed heritage impact assessment of the proposed changes to the Lal Baithak, must be made to the WHC and reviewed by the advisory bodies under Paragraph 172 of the operational guidelines. This process will be undertaken independently of this Reactive Monitoring mission report.

Mitigation and Corrective Measures 2017	Comment	Further response required
	proposal have been included in section 3.	
7. Monuments rebuilt using original fabric should be referred to DoA for approval	It appears that all recovery works to monuments have been assessed and approved by the DoA	The process should continue
8. DoA to submit planning documents as set out in Corrective Measures (5.3.2 of 2017 report) to WHC and advisory bodies for review and approval	No documents were submitted to the World Heritage Centre other than a proposal for a new sewer through the Patan PMZ Refer to sections 3.2.1, 3.2.2 and 3.2.3 of this report: Coordination between DoA, WHC and the Advisory Bodies; Actions Taken since 2017 and Recovery Planning	DoA must submit required documents to WHC as set out in 5.3.2 of this report by the dates set
9. Quality control measures to be adopted alongside open tender system	Prequalification of contractors tendering on recovery of monuments was not implemented Contractors did not have to guarantee use of skilled craftsmen for the projects Monitoring and certification of work was also lacking Local communities were able to work around this and could select their skilled craftsmen Government is now proposing to give DoA more flexibility in how they contract work for future recovery and conservation works to heritage properties Refer to section 3.2.1 Tendering Process	Quality control measures still need to be instituted, including: • Prequalification of contractors, • signed agreements to ensure skilled artesans are on site undertaking the work, • regular inspections to monitor work in progress, • certification on completion that work completed to approved drawings, specifications and details
10. Full and Detailed Documentation to be reviewed and approved by DoA	This has not been sighted for most projects. It was sighted for Kasthamandap, Hanuman Dhoka Palace and projects by KVPT.	In accordance with Paragraph 172 of the Operational Guidelines, full documentation is still required for assessment of any proposed new recovery work.
11. Basic Guidelines for the Conservation and Reconstruction of Earthquake-Damaged Heritage (2072) to be included in all tender packages and the contractors must sign an	The guidelines have been adopted. It is not known whether contractors agreed to implement them. It appears that the works were not regularly monitored to ensure that the guidelines were followed.	The guidelines should continue to be used. They should form part of the building contract to ensure that contractors follow them when undertaking work to attributes of the KVWHP.

Mitigation and Corrective Measures 2017	Comment	Further response required
agreement stating that they will abide by them.		
12. DoA must monitor work to ensure it is consistent with documentation	Extent of monitoring undertaken is unknown	Works should continue to be closely monitored
13. New infrastructure projects must be referred to the DoA for review and comment	This appears to be happening – the sewer in Patan was referred to the DoA with a full heritage impact assessment	Infrastructure projects should continue to be discussed and reviewed by the DoA in order to minimise heritage impacts Major works should be referred to the WHC for review by the advisory bodies under paragraph 172 of the operational guidelines
14. Historic Urban Landscape (HUL) approach recommended for managing development in the PMZs and buffer zones	HUL was not discussed during the 2019 Reactive Monitoring mission Development in the PMZs and buffer zones is controlled through the building bylaws. These refer to building height and materials, but not form or context. There is currently no holistic approach to managing development within the historic urban landscape	The HUL approach is recommended as a basis for developing Master Plans for the PMZs and buffer zones
15. Centralised data management system	CHIMS has been established, but only baseline data has been entered (1975 heritage inventory) It is intended that with more funding the project be continued to include data on all Nepal's heritage	CHIMS be made fully operational as soon as possible and data on all the KVWHP be entered in relation to all monuments and PMZs Data should be gathered and entered on other attributes of the KVWHP as well Funding needs to be found to continue the project.
16. Set standards for clay brick and mortar production	This has not been done There are no controls on brick quality	Quality standards should be established
17. Ensure religious rituals are able to be carried out during reconstruction	This appears to be occurring in relation to recovery of religious monuments and on community lead projects	Appropriate rituals should continue
18. The DoA is to involve the community in decision making and ongoing care of monuments	The community has been involved in numerous projects and is leading in many – including Kasthamandap as well as many projects in the Bhaktapur and Lalitpur municipalities Community stakeholders, often represented through their guthis, are involved with the site managers on	Community engagement should continue.

Mitigation and Corrective Measures 2017	Comment	Further response required
	many sites and are included in the steering committee meetings.	
19. Prepare a Disaster Risk Management Plans (DRMPs) for each PMZ	This has not been done.	Prepare and implement DRMPs for each PMZ and all major monument complexes (eg palace museums)
Corrective Measures from Section 5.3.2 of 2017 Reactive Monitoring mission report.		
1. Coordination Framework	Established and working	–
2. Protection of monuments and safety measure for people	See items 3 and 4 above	Strengthen stabilisation and protection of monuments that are still fragile and vulnerable. Ensure there is adequate protection to the public.
3. Review impacts of the earthquake on the attributes and OUV of each PMZ Map recovery	Current Mapping shows who is responsible for recovery of each monument Priorities are not identified on the maps – All listed monuments are being repaired/rebuilt There is no mapping showing the damage to and intended recovery of the other attributes of OUV (eg houses)	There needs to be an increased focus on the heritage attributes that are not monuments The extent of damage to these attributes should be mapped (eg collapsed housing, severely damaged housing, abandoned housing, surviving traditional housing, new replacement housing) Also rest houses, hittis and other attributes of OUV should be included to track their current status and recovery
4. Recovery Master Plan	Work is being done as proposed in accordance with the six year rehabilitation plan and the conservation and reconstruction guidelines. These set out recovery priorities in general terms, but are not specific to recovery in each PMZ No comprehensive Recovery Master Plan has been prepared as proposed in the 2015 and 2017 reports. Recovery is well advanced with the expectation that the majority of protected monuments will be recovered within the six year period. Recovery has engaged the local communities, respected intangible heritage, built the capacity of and provided work for traditional craftspeople and artisans, and contributing to the recovery of local businesses.	Master Plans to guide ongoing recovery and future development in each PMZ are required. Refer to items 2 and 14 above. Refer also to section 4.2.2.2 below.

Mitigation and Corrective Measures 2017	Comment	Further response required
5. Major Works to be reviewed by the WHC and its advisory bodies	Two project proposals were referred to the WHC – sewer through Patan PMZ and new building at the entrance to the Hanuman Dhoka PMZ No recovery projects that involved substantial reconstruction in new materials and/or to a different form were referred to the WHC Projects such as Kasthamandap (substantially new fabric) should have been referred. Some information has been provided on the changes to the Fasi Dega Temple in Bhaktapur and a submission has just been made for the Lal Baithak in Bhaktapur. Preliminary comments on this proposal have been included in section 3. However, a full submission is still required for a formal review.	All Major Works are to be referred to and reviewed by the WHC and its advisory bodies Recovery of monuments incorporating substantially new fabric and/or a change in form/design should be referred to the WHC and its advisory bodies for review and input. A formal submission, including all documentation and a detailed heritage impact assessment of the proposed changes to the Lal Baithak, must be made to the WHC and reviewed by the advisory bodies under Paragraph 172 of the operational guidelines. This process will be undertaken independently of this Reactive Monitoring mission report.
6. Work to Kasthamandap and Lal Baithak to be halted	Proposed works to Kasthamandap and Lal Baithak were halted. Recovery of Kasthamandap has been approved as a community lead (user group) project instead of the project being contracted through the open tender system. Works are proceeding on reconstruction using traditional materials and methods. Lal Bhaithak remains standing for the time being. The local community are still seeking to replace it with a new building constructed to look like a building from an earlier period Refer to discussions in section 3.3.2	Works to Kasthamandap may continue. Any proposal to replace the Lal Baithak should be referred to the WHC and its advisory bodies for review and comment (under Paragraph 172 of operational guidelines). Refer to item 6 above.
7. Quality control measures	Not implemented Refer to items 9 and 12 above	Quality control measures are still required Minimum standards should be set for all work to the KVVHP.
8. Infrastructure projects (water supply, sewer, etc) to be discussed with and reviewed by DoA to ensure minimum heritage impact.	Sewer was referred to the WHC and the Advisory Bodies Water supply has not been referred, even though it is impacting heritage sites (eg water supply cut off to the historic hittis)	All infrastructure projects need to be coordinated and planned in consultation with the DoA to ensure minimal impact on the KVVHP.
9. Research into mud and lime mortar	No research has been presented to support use on lime mortar in pre-nineteenth century structures.	Research is still required into the history of the mud and lime mortar

Mitigation and Corrective Measures 2017	Comment	Further response required
	However, the more recent projects have generally used mud mortar and not lime.	use in KVVHP and which structures each is appropriate to.
10. Data Management System	Refer to item 15 above	Data should continue to be uploaded to CHIMS and the system should be made operational to enable sharing of information
11. Disaster Management Risk Plans (DRMPs)	No DRMPs have been prepared	DRMPs are still needed for each PMZ These should be prepared and implemented
Outstanding recommendations from 2015 Reactive Monitoring mission Report		
Review and update the Integrated Management Plan (IMP)	The IMP was updated just before the earthquake, but the revised version not adopted due to the earthquake It does not address changes to the KVVHP resulting from the earthquake	The IMP should be revised to reflect any changes to the KVVHP, its OUV, including integrity and authenticity, resulting from the earthquake and the post disaster response and recovery. It should also reflect changes to the attributes of the KVVHP.
Managing urban development pressure	Urban development has continued to be a major issue for the KVVHP and its buffer zones Building bylaws have been developed to control new development within the PMZs and their buffer zones. However, these are often ignored and not enforced by the authorities In addition, the building bylaws appear to be inadequate to control development on the immediate edge of the PMZs. This is particularly evident around the main squares where the PMZ boundary stops at the front wall of the buildings. Despite the traditional buildings being attributes of OUV, they are being replaced with new flat roofed concrete framed buildings that are out of character with the PMZs, despite their brick facades.	Enforcement of building bylaws is essential. In addition, consideration must be given to the bylaws being strengthened or made more specific for new development on the edges of the durbar squares, where roof form is very important to the character of the squares. There is a great need to develop strong incentives to encourage property owners to retain and restore their historic/traditional houses and shops rather than replace them.

4.2.2.2 Comprehensive Recovery Master Plan (items 4 – 10)

A comprehensive recovery master plan has not been developed as described in previous Reactive Monitoring mission reports to guide recovery of the KVVHP.

However, the 2019 Reactive Monitoring mission team acknowledges that significant progress has been made on recovery of the KVVHP and that recovery has engaged local communities, contributed

to building the capacity of local craftspeople and artisans, contributed to local livelihoods, built community cohesion and contributed to local socio-economic revitalisation.

Recovery has been based on the assumption that most monuments within the KVVHP will be recovered within the six-year recovery period. However, it is unclear what plans are in place to guide recovery of remaining monuments beyond the six-year recovery period.

In addition, only limited attention has been paid by the DoA to the recovery of other attributes of the KVVHP such as the urban areas and ancient settlements, and the natural and rural areas that all contribute to the distinctive character and setting of the KVVHP. The Municipalities have had a greater role to play in these areas in building community awareness and overseeing implementation of the building bylaws in regard to new development. In general, however, the expectation regarding the recovery of traditional houses has been low. There is a great need to increase the focus on these and develop strategies and incentives to ensure the retention and conservation of any surviving traditional houses within the different monument zones and their buffer zones. Planning is required to manage development.

Considering the current stage of recovery, the requirement for the recovery master plan has become somewhat redundant. However, aspects of the previous recommendation still stand. This includes planning to manage ongoing recovery and development within the monument zones and buffer zones with priorities being established based on sustaining heritage values and the attributes that support those values. The planning needs to respond to the development pressures that are on the property, to identify what changes are acceptable and how they can be accommodated within the property without adversely impacting the property and its OUV, including integrity and authenticity.

4.2.2.3 International Scientific Steering Committee (item 11)

An international scientific steering committee has not been established to provide technical and management advice to assist with the recovery. Such a committee could still be useful if a mechanism can be developed that has a degree of flexibility to enable advice to be given in a timely fashion. Such advice may relate to development and review of the master plans and conservation plans.

4.2.3 Measures the State Party Plans to Take to Protect the Outstanding Universal Value of the Property

The DoA proposes the following measures to protect the OUV of the property:

- To continue the repair and reconstruction of monuments within the KVVHP in accordance with the DoA's Six Year Rehabilitation Plan and Basic Guidelines for the Conservation and Reconstruction of Earthquake-Damaged Heritage (2072);
- To continue to review and assess all recovery and reconstruction proposals to ensure that proposed interventions are supported by relevant research and that the proposed work does not adversely impact the heritage fabric and values;
- To set minimum standards of repair to monuments and other attributes of the KVVHP and implement strategies to ensure that appropriate conservation standards are met;
- To monitor work in progress;
- To review and update the IMP, taking into consideration the impacts of the earthquakes and the post disaster recovery on the KVVHP, its OUV, including integrity and authenticity; and
- To work with and provide guidance to the NRA, local authorities, site managers and other stakeholder groups in development of Master Plans for each of the monument zones within the KVVHP.

Reactive Monitoring mission comments:

- The above measures are all necessary to achieving a positive outcome for the recovery of the KVWHP.
- The DoA's commitment to the above measures demonstrates their commitment to the recovery of the property.
- It will be essential that the DoA also commits to implementing the recommendations of the 2015 and 2017 Reactive Monitoring mission reports and to implementing the recommendations of this report. Where this is not possible within the timeframes given, the DoA should liaise with the WHC and seek advice on how particular measures can be addressed within a reasonable an agreed timeframe.
- The DoA must report their progress to the WHC.

The Ministry of Culture, Tourism and Civil Aviation and the NRA propose the following measures to protect the OUV of the property:

- To provide greater flexibility to the DoA in relation to procurement of contractors: to ensure that contractors with heritage expertise and experience are used to undertake work and to ensure that skilled artisans and craftspeople are engaged to carry out repair, conservation and reconstruction work on monuments and other attributes of the KVWHP.
- In consultation with the DoA and local communities, to prepare master plans for the monument zones and buffer zones of the KVWHP to guide future development.

Reactive Monitoring mission comments:

- The greater flexibility given to the DoA in regard to procurement of contractors is positive and should have improved outcomes for the ongoing recovery of the property.
- The commitment to preparation of master plans for each of the PMZs is also positive. The DoA, local authorities and stakeholders need to be active participants in developing these master plans.

4.2.4 Proposed Mitigation and Corrective Measures

The 2017 Reactive Monitoring mission assessed the KVWHP as being highly vulnerable and under threat. It recommended inclusion of the property on the List of World Heritage in Danger. It thus proposed the following corrective measures to mitigate the threats to the property and to facilitate its recovery so that it would meet the desired state of conservation:

- The DoA must continue to implement the recommendations of the 2015 and 2017 Reactive Monitoring mission reports, including the following:
 - As a matter of urgency, those monuments that have been seriously affected by the earthquakes and are still unstable, exposed and vulnerable to the monsoon rains or further earthquakes, must be **protected to prevent further deterioration** of their significant fabric. Of particular concern are sections of the Hanuman Dhoka Palace, Visharupa Temple at Pashupati, the municipality building and Lal Baithak in Bhaktapur, and some monuments in the Patan buffer zone.
 - As people are still occupying the area around the Jagannath and Shree Krishna Mahavishnu Temples in Hanuman Dhoka Durbar Square, and as these buildings still present a danger to the public, it is recommended that **protective measures** be put in place to exclude the public until the structures are repaired and made safe.
 - The Government of Nepal and the DoA should continue to ensure that all recovery and reconstruction work undertaken within the boundaries of the KVWHP and its buffer

zone passes through the normal **approvals processes** adopted for work within the KVVHP. This includes full documentation of the proposed work, accompanied by well-documented evidence to justify any interventions, and a detailed assessment of the heritage impacts of the proposal. The approvals process should ensure that work undertaken does not unnecessarily destroy significant fabric and that the integrity and authenticity of the property are maintained in the recovery of attributes.

- All **major works** must be referred to the DoA and the World Heritage Centre for approval prior to commencement. Major works include major infrastructure works within or around the edges of the property (e.g. ring road to Pashupati, sewer, water and drainage), reconstruction of monuments that incorporates substantially new material, major structural interventions or changes in built form (e.g. proposed Lal Baithak rebuild, redevelopment of the former police station site in Hanuman Dhoka Durbar Square).
- The Government of Nepal and the DoA must agree on **quality control measures** to be adopted and implemented to ensure a high standard of work on all attributes of the KVVHP. This may include setting minimum standards for the work to the monuments, developing a system of prequalification for contractors tendering on work, signed agreements with contractors to ensure work is undertaken by the appropriately skilled artisans, and ensuring specified materials of a high standard are used.
- The DoA must ensure that **full and detailed documentation** showing the full extent of repair or replacement is prepared prior to calling tenders. The documentation should be reviewed by an experienced heritage architect prior to issue. If the contractor is required to undertake the research and design for the repair/reconstruction of a monument, all proposals must be reviewed and approved by DoA (and WHC if major works are proposed) prior to commencement.
- The Basic Guidelines for the Conservation and Reconstruction of Earthquake-Damaged Heritage (2072) must be included in all tender packages and the contractors must sign an agreement stating that they will abide by them.
- The DoA must **closely monitor work** undertaken to ensure that it is being carried out in accordance with the approved documentation, the Basic Guidelines for the Conservation and Reconstruction of Earthquake-Damaged Heritage (2072) and best international practice in heritage conservation.
- The DoA must continue to **involve local communities** and guthis in the decision making and recovery of the monuments, particularly those that are important public or community structures. The important role of the community in the long term management and maintenance of these structures must be recognized and consideration given to establish an equitable funding model to enable their ongoing care and maintenance.
- In addition:
 - As **Changu Narayan** Monument Zone does not have the same access to resources as the urban monument zones, additional assistance (including financial assistance) should be given to enable recovery of its suttas.
 - The DoA, site managers and municipalities, must pay more attention to the recovery of the historic urban areas and ancient settlements of the KVVHP. In order to maintain the distinctive character of the historic urban and ancient settlements, strategies must be developed to encourage private property owners to retain and conserve their

historic buildings, particularly their **traditional houses and shops**. This may include financial incentives.

- The use of **waterproof compounds** on the brickwork should be avoided.
- The surviving mud mortar in the Jayabageshwari Temple (Pashupatinath Monument Zone) should be conserved.
- Where reconstruction has involved substantial replacement of significant building fabric or a change in building form (e.g. Fasi Dega Temple and Kasthamandap), **interpretation** should be provided regarding the impact of the earthquake on the monument, the reconstruction process and the extent of original / significant fabric retained in the rebuilt structure (thus clarifying the integrity and authenticity of the monument).

The 2017 Reactive Monitoring mission team proposes the following corrective measures to mitigate the threats to the property from urban development:

- As the six year recovery program is drawing to a conclusion, **planning** must be put in place to ensure the ongoing recovery, conservation and management of the KVWHP.
- The **Integrated Management Plan** should be updated to reflect any changes to the KVWHP arising from the earthquakes and the post disaster recovery of the monuments. This includes addressing losses in integrity and authenticity and impacts on OUV.
- In consultation with the local communities, **Master Plans** should be developed for each of the monument zones and buffer zones. It is recommended that the **HUL (Historic Urban Landscape) approach** be used for developing these master plans, which should guide the ongoing recovery and future development within the KVWHP. See 4.4.4.1 below for more detail.
<http://historicurbanlandscape.com/themes/196/userfiles/download/2016/6/7/wirey5prpznidqx.pdf>
- The master plans should be underpinned by **conservation management plans** for each of the monument zones (including their buffer zones) and the major monument complexes (i.e. palace museums). The CMPs would be the primary management documents for guiding conservation, management, adaptation and development of the PMZs and their heritage attributes (tangible and intangible) and values (including OUV, national and local values) of the KVWHP, to ensure that all actions respect and conserve the heritage values of the property. Refer to section 3.2.4.2 for more detail of what is included.
- The master plans should be supported by the IMP and appropriate and enforceable heritage legislation and **planning legislation** (including the building by-laws to control the scale, form and materiality of new development) to ensure that all new development in the PMZs and the buffer zones respects the character, attributes and values of the KVWHP and its PMZs. Consider including roof form in the **building by-laws** for new development in the PMZs and buffer zones, particularly around the edges of the main Durbar Squares. Ensure that the by-laws are enforceable and are enforced.
- **Heritage impact Assessments** must be undertaken for all major new development within the KVWHP and its buffer zones, including major modifications to and/or adaptation of heritage attributes. The impacts of the proposed development on both tangible and intangible attributes must be assessed, as well as the impacts on OUV and local values. Adverse impacts must be avoided or if this is not possible mitigated to minimise their impact.
- The Government of Nepal needs to ensure that **new urban infrastructure** within the KVWHP is referred to the DoA for heritage input in the early planning phases, as well as for review and

comment as planning progresses. The heritage impacts of new infrastructure projects must be assessed. Every effort must be made to minimise the impacts on the KVVHP, its attributes and OUV – physical or visual (tangible heritage) or cultural (intangible heritage). This includes impacts on the public squares and streets, as well as the monuments, houses, other structures, subsurface archaeology, festivals or cultural routes, resident communities and traditional trades and businesses that contribute to the OUV of the KVVHP.

- In the light of the earthquake losses experienced in the historic urban areas of the KVVHP, consideration should be given to assessing the heritage value of more recent periods of architecture (e.g. **Shah, Rana and Neoclassical buildings**) and its contribution to the historic urban landscape. It is recognised that these do not express the OUV of the KVVHP. However, they do have local significance and their contribution to the character of the historic urban landscape should be recognised.
- **Cyclical maintenance programs** should be developed, budgeted for and implemented for the monuments. These should identify who is responsible for the work and provide guidance on how tasks should be done (materials, methods, skills) and what materials and methods should be avoided.
- The DoA, in consultation with site managers, local communities and emergency response organisations, must develop and implement a **Disaster Risk Management Plan** for each of the monument zones.
- The DoA should continue to develop its centralized **data management system** (CHIMS).

4.2.4.1 *Master Plans for Each of the Monument Zones*

The 2015 Reactive Monitoring mission recommended development of a Recovery Master Plan (RMP).

In 2017, the lack of a RMP with established priorities for recovery and reconstruction of the KVVHP and its seven PMZs was identified as a major threat to the property. The World Heritage Committee (Decision 40 COM 7B.41, Paragraph 7) urged the State Party, in full consultation with local community groups and traditional Guthis, to develop a RMP supported by guidelines to identify the attributes of OUV that can be recovered, how the choice of recovery options would be justified, and how the recovery work would be phased and undertaken. The RMP would facilitate the appropriate use, management and maintenance of the sites, in accordance with the maintenance of the OUV of the property as well as other local and national values. This has not been done.

A 6 Year Rehabilitation Plan and Basic Guidelines on Conservation and Reconstruction of Heritages Damaged by Earthquake, 2016 (2072) have been the primary documents guiding the recovery of the KVVHP. These do not address the specific values and needs of each of the different monument zones. It is this lack of site specific guidance that has failed to deliver a holistic approach to recovery of the seven PMZs.

It is a recommendation of this Reactive Monitoring mission that each monument zone has its own Master Plan to guide its ongoing recovery and development. As every monument zone is different in character with a different range of attributes and heritage values (at world, national and local level), each requires its own master plan to guide conservation, adaptation and development. The master plans should adopt a HUL approach and address issues associated with:

- urban development pressure,
- urban infrastructure needs,
- tourism and pilgrimage pressure,
- traffic management (including parking, deliveries and pedestrian only areas),

- potential major development projects (e.g. police station site redevelopment in the Hanuman Dhoka Durbar Square Monument Zone; ring road at Pashupati),
- natural hazards affecting the property (e.g. monsoon floods, landslides, earthquakes) and risks to people and property (improve drainage and ensure safe evacuation)

Using a consultative collaborative approach with the local communities, the master plans should set priorities for future conservation and development of each PMZ and its buffer zone.

They should include clear identification of the following, with policies for their management:

- heritage values relevant to the specific monument zones and monuments (including OUV, national and local heritage values, and any conflicting values)
- attributes (tangible and intangible), including attributes that are not identified as protected monuments (contributory attributes to the PMZs and their distinctive character)
- ongoing disaster recovery needs and priorities
- strategies for supporting retention and conservation of traditional housing (including ground floor shops)
- strategies for preventing illegal development
- strategies for managing advertising signage and illuminated signage

They should map the following:

- Attributes of the KVVHP, including those located outside the main tourist areas
- Attributes of the urban areas and ancient settlements that are not identified as protected monuments (including houses, shops, hittis, rest houses, sattals and other vernacular attributes)
- Natural attributes, including landform, forests and gardens
- Significant streets and public squares
- Historical approaches to the main monuments
- Significant views to and from the monuments, between sites and along streets
- Religious and ceremonial sites, culturally significant paths and festival routes (spiritual layers)
- Communities associated with the heritage sites, care and activities
- Traditional trades and businesses that support OUV and local heritage (e.g. wood carvers, metalworkers, potters, makers of the offerings for the temples, papermakers, etc)
- Natural hazards affecting areas (areas of poor drainage, flood risk, landslide risk)
- Archaeological potential and sensitivity
- Population/demographic distribution
- Land use zones
- Traffic management plans, including local and tourist parking areas
- Utilities (including water, sewer, stormwater and waste water drainage, electricity, telecommunications)
- Streetscape infrastructure (e.g. garbage bins, street lighting)
- Tourism infrastructure (including entry points, ticket sales, information, toilets)

- Interpretation opportunities/potential
- Lighting within monument zones and of monuments

The Master Plans must be compatible with the IMP and be guided by the conservation management plans.

5. Conclusions and Recommendations

5.1 Conclusions

The 2019 Reactive Monitoring Mission has found that the Government of Nepal has made considerable progress towards the recovery of the Kathmandu Valley World Heritage Property (KVWHP), particularly in view of the immense scale and complexity of the disaster. Approximately, forty-three percent of monuments have been recovered to date and a large number are currently in the process of recovery (either at planning phase, or during the repair and reconstruction phases). It is anticipated that the majority of the major monuments will be completed by the end of the six-year recovery program established immediately after the earthquakes. However, it is noted that recovery of some monuments will extend well beyond the six-year period. Therefore, the high level of commitment demonstrated by the State Party to the recovery of the KVWHP to date will need to continue. This will require an ongoing commitment to coordination and resourcing of the recovery of the KVWHP beyond the six-year program.

The recovery of significant attributes of the property is contributing to the gradual recovery of the KVWHP's integrity. Although there has been some loss of significant fabric as a result of the earthquakes, the method of recovery adopted, which focuses to a large extent on the use of traditional knowledge, materials, technologies and craft skills, has maintained important intangible attributes of the KVWHP and has contributed to maintaining the authenticity of the property. In addition, the intangible heritage associated with the religious sites (beliefs, rituals, customary activities and festivals) has remained strong throughout the disaster and the recovery, maintaining these aspects of OUV.

It is evident that the KVWHP is an integral part of the life of the Kathmandu Valley and that the recovery of the KVWHP is tightly bound together with maintenance of community identity and social cohesion within the valley. The community's dedication to and involvement in the recovery of the KVWHP is exemplary.

Urban development and tourism pressure continue to pose a serious threat to the KVWHP, particularly as urban infrastructure needs to be upgraded and people need to be housed in the wake of the earthquakes. Therefore, there is a need to extend the focus of recovery of the KVWHP beyond the key monuments to their significant settings. The urban and ancient settlements, the landscape and the cultural routes that connect the different sites are integral to the KVWHP. Thus, there is a need to ensure the recovery of these attributes where possible and to minimise the impacts arising from the recovery and redevelopment of the city.

Although many of the threats identified by previous missions have been addressed and reduced, some threats to the property remain, including:

- Ongoing deterioration of some structures that have yet to be repaired (e.g. Hanuman Dhoka Palace)
- Lack of attention given to the recovery of the urban and ancient settlements of the KVWHP;
- Loss of traditional housing within the KVWHP monument zones and buffer zones;
- Unsympathetic new development around the edges of the KVWHP monument zones, particularly around the edges of the main squares (e.g. Dattatreya Square in Bhaktapur);
- Uncontrolled development in the monument zones and buffer zones;
- Impacts of new urban infrastructure (utilities and roads) on KVWHP and its setting, including visual impacts and physical impacts, as well as impacts on subsurface archaeology;

- Lack of master planning to guide recovery and new development, including urban infrastructure, within the KVWHP, its monument zones and buffer zones;
- Lack of values based conservation management planning for each of the monument zones (including buffer zones) to guide conservation, management, adaptation and change affecting the monuments and other attributes of the KVWHP, their significant settings, and their associated intangible heritage;
- Lack of values based conservation management planning for the major monument complexes (particularly palaces and large sattal complexes) to guide the conservation, management and adaptation of the monuments, their significant settings, associated collections and intangible heritage;
- Lack of cyclical maintenance programs to ensure the monuments are maintained in good condition;
- Lack of disaster risk management planning for the monument zones and major monument complexes;
- Lack of support and resourcing allocated to the recovery of the Changunarayan temple complex (including sattals); and
- Potential demolition and replacement of Lal Baithak, Bhaktapur.

Although the Kathmandu World Heritage Property is gradually being recovered, much work remains outstanding, leaving the property vulnerable and under threat. Fewer than half of its monuments have been repaired or rebuilt since the earthquakes. In addition, attributes such as traditional housing in the historic urban centres and ancient villages has been lost. Flat roofed concrete framed buildings replace them changing the character of several of the Protected Monument Zones. This has impacted the property's integrity, authenticity and OUV. Thus, the property remains at risk.

The World Heritage Property of the Kathmandu Valley is a very special place, highly valued by the people of Nepal and the rest of the world and deserves to be treated well. Whilst recognising that some of the existing threats identified in the report will take more time to address, it is the opinion of the Reactive Monitoring mission that the recovery of the property should continue to be closely monitored, and where necessary, the international community of experts be called on to assist the Government of Nepal in providing the appropriate care for the property. Moreover, a strategy has to be developed to obtain the necessary financial support for the property's ongoing recovery.

5.2 Recommendations to the World Heritage Committee

The Reactive Monitoring mission recommends that:

1. The WHC and the State Party formally adopt the statement of Desired State of Conservation (DSOC) set out in 5.3.1, prepared as a result of the 2017 Reactive Monitoring mission to the property.
2. The recovery of the World Heritage Property of the Kathmandu Valley continues to be closely monitored to ensure that corrective measures are implemented and the property is returned to normalcy.
3. An International Scientific Steering Coordination Mechanism be implemented for the property in order to provide technical and management advice and assist with the recovery, with mechanisms allowing for advice on development projects and the review of master plans or conservation plans to be given in a timely fashion.
4. A Master Plan be established for each Protective Monument Zone of the property to guide its ongoing recovery and future development.

5. The international community be encouraged to assist the State Party in its recovery of the KVVHP. This may include, but is not limited to, the provision of capacity development, particularly in relation to:
 - a. Further development of a secure centralized and accessible digital database for management of all documents pertinent to the property,
 - b. Values based heritage assessment and conservation management planning for the property, its monument zones and monument complexes;
 - c. Master Planning utilising the HUL approach to manage urban development within the KVVHP and its buffer zones.
6. Corrective measures as set out in Section 5.3.2 be implemented to ensure that the KVVHP, its attributes and OUV, including integrity and authenticity, are recovered in a way that prevents further loss to the property and ensures its long-term conservation.
7. Proposed changes to the Lal Baithak wing of the National Art Museum, Bhaktapur, be halted pending the submission of further documentation and a thorough technical review by ICOMOS to consider the potential impacts of the proposed project on the Outstanding Universal Value of the property.
8. Heritage Impact Assessments are conducted for proposed major new urban infrastructure projects (utilities, including sewer, stormwater drainage, water supply, electricity, street lighting and roads) within the monument zones and buffer zones and are shared with the WHC and its advisory bodies to ascertain their potential impact on the KVVHP with the view to proposing implementation of suitable mitigation measures.
9. Disaster Risk Management Plans be developed and implemented for each protected monument zone and for each individual monument, particularly the larger and more complex monuments.

5.3 Desired State of Conservation

5.3.1 Desired State of Conservation (DSOC)

Since property was not inscribed on Danger List, no official DSOC was prepared. However, considering the need for the property to recover its OUV, the 2017 mission proposed a Desired State of Conservation (DSOC) and corrective measures based on that. The 2019 Mission team also considers that such a DSOC would benefit the State Party in its recovery of the property and therefore recommends retaining the 2017 statement on the DOSC, and that recovery progress be measured against it.

The DSOC for the World Heritage Property of the Kathmandu Valley would be that the property is recovered to be as close as possible to the state in which it existed prior to the earthquakes, but in a condition that would better protect it from similar disastrous events in the future and ensure its ongoing sustainability as an active part of Nepal's living cultural heritage.

The DSOC for the property, as described in the 2017 Reactive Monitoring mission report, includes:

- Recovery of the all seven monument zones with all their significant attributes of OUV, both tangible (monuments, archaeological remains, materials, decorative elements, religious artifacts, artworks, collections, housing, urban fabric, historic public facilities [e.g. drum towers, rest houses, ponds and hittis], streets and public squares, and other supporting elements) and intangible (beliefs, customary activities, stories, festivals, traditional knowledge and skills, and community associations and management systems) so that the OUV of the property is maintained and conserved for the future;

- Retention, repair, restoration and conservation of all attributes that survived the earthquakes, and provision of protection (both temporary and throughout the recovery process) to prevent further loss of significant fabric (including monument bases and subsurface remains, as well as the superstructures and their various component elements) and significant associations (historical, spiritual, social and other);
- Recovery and restoration of all surviving elements of severely damaged or collapsed attributes, using to the greatest extent possible (but without compromising human safety) traditional materials, construction methods, skills and knowledge;
- Incorporation of interventions only where absolutely necessary to ensure the stability and safety of the monuments into the future and where these interventions are supported by thorough investigation and research, and their potential impact on significant fabric is kept to an absolute minimum and does not compromise the durability of the surviving structures;
- Conservation of all the various layers of history that are expressed in the monuments and their significant urban and landscape settings;
- Conservation of the urban and landscape settings of the monuments and the monument zones, including the private housing, commercial premises and public facilities, such as drum towers, rest houses, ponds and hittis, together with the layout of streets, squares and other public spaces that provide the structure for the historic urban areas and ancient settlements;
- Restoration of religious artefacts and artworks to the restored monuments to ensure their ongoing religious continuity;
- Strengthening of community associations with the monuments through active engagement with local communities in identifying priorities for recovery, and coordinating the ongoing management and maintenance of the monuments to ensure their sustainability into the future;
- In the case of destroyed monuments, where the significant fabric cannot be recovered and their replacement is considered necessary by the local community to ensure the ongoing continuity of the living heritage of the property, and where this supports the recovery of OUV, reconstruction or replacement with new structures may be considered. All new work should be clearly distinguishable as such, whether it is in the construction detail, records kept and/or dating of the fabric, and should be interpreted; and
- Interpretation of the monuments that have been lost and will not be recovered.

5.3.2 Corrective Measures and Timeframe for their Implementation

In order to achieve the Desired State of Conservation, the State Party and the DoA must progress the recovery of the KVVHP by undertaking the following corrective measures and making the necessary submissions within the timeframes included in the following program.

Item No.	Action	Submission to WHC	Submission Date
1.	Increased protection is given to damaged monuments, particularly those that are not included in the current program of work, to minimise any future deterioration of the heritage fabric. Additional safety measures should be implemented to ensure the safety of both locals and visitors to the sites.	Evidence of implementation of protective measures including covering of severely damaged monuments (e.g. Vishwarupa Temple and portions of Hanuman Dhoka Palace) exposed to the weather.	1 October 2020

Item No.	Action	Submission to WHC	Submission Date
2.	Establish quality control measures to be implemented to ensure that the monuments are repaired and reconstructed in accordance with best practice and that the work is undertaken by appropriately experienced master craftsmen with specialist expertise in the use of traditional materials and traditional methods of construction.	Adopted Quality Control System including: criteria for prequalification of contractors, quality documentation being provided for tender and construction purposes, contract conditions including adherence to the Basic Guidelines for the Conservation and Reconstruction of Earthquake-Damaged Heritage (2072), and monitoring of work in progress.	1 October 2020
3.	The Integrated Management Plan (IMP) and Integrated Management Framework (IMF) be updated to reflect the changes to the property brought about by the earthquakes and any changes in management structures.	Revised and updated IMP and IMF	2 January 2021
4.	Coordinate with NRA and infrastructure providers regarding the construction of new infrastructure (eg sewer, drainage, water, street lighting, new roads or road upgrades) or infrastructure upgrades through the KVVHP. Review proposals and provide feedback to the authorities, identifying heritage impacts on the KVVHP and its attributes including the subsurface archaeology, the monuments and other structures, paving and streetscape. Negotiate the most acceptable route with the authorities prior to its implementation. Develop protective and mitigation measures to be implemented during construction including archaeological monitoring, recording and salvage.	Plans for installation of new infrastructure or infrastructure upgrades Heritage Impact Statement and Mitigation Measures to be implemented during construction.	As soon as routes are identified and agreed with DoA.
5.	All major works projects must be reviewed and approved by the WHC and the advisory bodies. This includes projects proposing changes to the monuments (eg Lal Baithak), as well as proposed new development within the monument zones (eg Police station site at Hanuman Dhoka).	Documentation , including evidence for proposed interventions and Heritage Impact Assessments for all major works projects undertaken in the recovery.	When proposal is made Approval must be granted prior to commencement
6.	Using the HUL approach, prepare Master Plans for each of the monument zones and their buffer zones to guide development within them.	Mapping of monument zones and buffer zones to show each of the information layers identified in section 4.2.4.1 Master Plans for all PMZs , including map showing proposed/potential development	2 January 2021 December 2020

Item No.	Action	Submission to WHC	Submission Date
		sites, as well as proposed development controls and guidelines. Include requirement for heritage impacts of proposed work to be assessed against all the mapped heritage attributes (tangible and intangible) and heritage values (OUV and local).	
7.	Prepare conservation management plans (CMPs) for two of the major monument complexes – Hanuman Dhoka Durbar Palace Museum, Bhaktapur Durbar Palace (National Art Museum) The CMPs should guide conservation, adaptation and change for these two monuments and should be prepared prior to any major change occurring	Table of contents for review Draft CMPs for review Final CMPs	1 October 2020 1 December 2020 1 February 2021
8.	Prepare conservation management plans (CMPs) for other major monument complexes – Swayambu, Pashipatinath, Changuarayan. The CMPs should guide conservation, adaptation and change for these three monuments and should be prepared prior to any major change occurring	Draft CMPs for review Final CMPs	1 April 2021 1 June 2021
9.	Develop a risk management framework for the World Heritage property. In consultation with local site managers, communities and emergency responders, prepare a disaster risk management plan for each of the monument zones.	Risk Management Framework for the World Heritage Property Disaster Risk Management Plan for each Monument Zone	1 December 2020 1 April 2021

5.4 Inclusion on the List of World Heritage in Danger

The World Heritage property of the Kathmandu Valley is a very special place, highly valued by the people of Nepal and the international community and deserves to be treated as a top priority.

The scale of the disaster was enormous and the extent of damage to the KVVHP was considerable, with impacts extending well beyond the boundaries of the property. The earthquakes affected all facets of community life, culture, housing, livelihoods, urban infrastructure, the economy and daily life.

The Reactive Monitoring mission team acknowledges the immense effort that has been made by the State Party in undertaking the recovery of the KVVHP in this context and the considerable progress that has been made. The team also acknowledges that the State Party is committed to the ongoing recovery and management of the property.

The mission team observes, however, that although the State Party has addressed or endeavoured to address many of the issues raised by previous missions, the State Party is yet to comply with the

recommendations of the WHC by providing the required documentation to the WHC for review. The team notes that the State Party has also failed to comply with several of the follow up measures set out by the WHC in decisions 41 COM 7B.95, 42 COM 7B.12 and 43 COM 7B.70 (as discussed in section 4.2.1 of this report). Recurring concerns have included the failure of the State Party to update the property's Integrated Management Plan and to develop and implement Recovery Master Plans for the seven monument zones.

Although progress on recovery of the monuments has been considerable, there is still concern regarding the poor condition of the Hanuman Dhoka Durbar and Bhaktapur Durbar Palaces, the Changunarayan complex and Vishwarupa Temple (Pashupati) in particular. These attributes remain highly vulnerable and under threat. In addition, the loss of traditional housing within the historic urban areas and ancient settlements throughout the KVVHP has been considerable, impacting the property's OUV, integrity and authenticity. The mission observes that the potential and ascertained threats to the KVVHP remain considerable and that the property's current status continues to meet the conditions of paragraph 179 (a) of the Operational Guidelines in regard to the inscription of properties on the List of World Heritage in Danger. The mission recognises that the property has not been inscribed on the World Heritage in Danger List (by the Committee) over the last four years, and that the work undertaken by the State Party to date is a testament to their commitment to the recovery of the KVVHP and its OUV.

The mission team is of the view that, notwithstanding the good measures undertaken by the State Party to date, the recovery process still requires close monitoring to ensure that all attributes are recovered and that the OUV of the property is recovered, including integrity and authenticity.

The continued commitment of the State Party, including planning for recovery beyond the six year recovery programme, will be essential to the successful recovery of the KVVHP beyond this point. As such planning must now not only address the recovery, but also the property's ongoing conservation, management and adaptation (where this is required to meet the needs of the community). The proposed Master Plans and Conservation Management Plans are considered to be essential documents for the managing the KVVHP into the future.

Annexure 1

Decision adopted by the World heritage Committee at its 43rd session (Baku, 2019)

Decision Adopted: **43 COM 7B.70**

The World Heritage Committee,

1. Having examined Document [WHC/19/43.COM/7B](#),
2. Recalling Decisions [39 COM 7B.69](#), [40 COM 7B.41](#), [41 COM 7B.95](#) and [42 COM 7B.12](#), adopted at its 39th (Bonn, 2015), 40th (Istanbul/UNESCO, 2016), 41st (Krakow, 2017) and 42nd (Manama, 2018) sessions respectively,
3. Acknowledges the ongoing commitment of the State Party and of national and international organizations towards the recovery of the property, through the implementation of the Recovery Master Plan (RMP), as well as through repair and conservation works already undertaken;
4. Reiterates its requests that the State Party integrate the RMP within an overall socio-economic revitalization programme for urban communities, encourage residents and local business to engage in the recovery process, and ensure that it delivers wide-ranging social and economic benefits;
5. Notes again the scale and scope of the 2015 earthquake disaster, as described in the reports of the 2015 and 2017 joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring missions to the property, and expresses concern at the serious deterioration of the property's architectural and town-planning coherence;
6. Considers that the recovery process needs to be further improved and hastened, and requests the State Party to:
 - a) Initiate with technical support from, and in on-going dialogue with, the World Heritage Centre and the Advisory Bodies, an International Scientific Steering Coordination Mechanism tasked with assisting with the development of structures and resources to guide the recovery of the property and its OUV,
 - b) Invite a joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission to assess the state of conservation of the property, to review progress with the implementation of the recommendations of the October 2015 and March 2017 missions, to assist with the development of a strategy for the implementation of the six-year RMP, and to provide guidance on its review,
 - c) Seek further technical support from the World Heritage Centre and Advisory Bodies in order to coordinate and guide the recovery of the property, based on documentation, research, analysis and use of appropriate traditional methods and materials, and
 - d) Ensure all recommendations and outcomes of the above are fully integrated within the 6 year RMP;
7. Also requests the State Party to implement fully the recommendations of the ICOMOS Technical Review of the Patan Durbar Square Monument Zone sewer project;
8. Further requests the State Party implement fully its already declared six year plan and complete all rehabilitation works by the end of 2021 and report to the World Heritage Committee;
9. Calls upon the international community to continue supporting the State Party's recovery work through financial, technical or expert assistance, including support for local communities and their housing and social needs;
10. Requests furthermore the State Party to submit to the World Heritage Centre, by 1 February 2020, 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 44th session in 2020, with a view to considering in the absence of significant progress in the implementation of the above recommendations to address the ascertained danger to the Outstanding Universal Value of the property, the inscription of the property on the List of World Heritage in Danger;

11. Underlines that the State Party's cooperation in conducting the requested and overdue mission will be a key consideration for the Committee at its 44th session;
12. Finally reiterates, consistent with Decision [40 COM 7](#), that the inscription of a property on the List of World Heritage in Danger, should not be viewed negatively by the State Party; its purpose is to marshal international support to help the State Party effectively address the challenges faced by the property by engaging with the Advisory Bodies to develop a programme of corrective measures to achieve the Desired state of conservation for the property as provided for under Paragraph 183 of the *Operational Guidelines*.

Annexure 2

Terms of Reference for the Reactive Monitoring Mission, 2019



United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования,
науки и культуры

منظمة الأمم المتحدة
للترقية والعلم والثقافة

联合国教育、
科学及文化组织

Culture Sector World Heritage Centre

H.E. Mr. Dipak Adhikari
Ambassador of the Federal
Democratic Republic of Nepal to
France
Permanent Delegate of the
Federal Democratic Republic of
Nepal to UNESCO
Ambassade du Népal
45 bis, rue des Acacias
75017 Paris

Ref.: CLT/WHC/APA/FJ/RL/19/221

26 September 2019

Subject: Joint WHC/ICOMOS/ICCROM Reactive Monitoring Mission to the World Heritage Property of Kathmandu Valley, Nepal, 16-22 October 2019

Dear Ambassador,

I have the pleasure to inform you that, in line with the World Heritage Committee's Decision **43 COM 7B.70** regarding the state of conservation of Kathmandu Valley, and taking into consideration the invitation letter of 8 August last, sent by your authorities, a joint World Heritage Centre (WHC) / International Council on Monuments and Sites (ICOMOS) / International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) Reactive Monitoring Mission to Nepal will be carried out from 16 to 22 October 2019, as agreed with the Department of Archaeology of Nepal.

The mission aims to assess the state of conservation of the property, to review progress with the implementation of the recommendations of the October 2015 and March 2017 missions, to assist with the development of a strategy for the implementation of the six-year Recovery Master Plan, and to provide guidance on its review. The mission team will be composed of the following representatives from UNESCO, ICOMOS, and ICCROM:

(1) Ms. Catherine Forbes (Australian National), ICOMOS International expert
Email: rebecca.currie@icomos.org

(2) Mr. Gamini Wijesuriya (Sri Lankan National), ICCROM International expert
and representing the World Heritage Centre for this mission
Email: gamini.wijesuriya@gmail.com

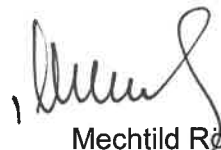
The costs of international travel and daily subsistence allowance during the mission in Nepal for the UNESCO staff with ICOMOS and ICCROM experts will be covered by UNESCO, ICOMOS, and ICCROM. Your authorities are kindly requested to facilitate this mission by preparing the mission programme and making necessary travel arrangements to the World Heritage property including the meeting's arrangements with related authorities and stakeholders.

You will find enclosed the draft Terms of Reference of the mission.

Please do not hesitate to contact my colleagues in the Asia and Pacific Unit, in particular Mr. Feng Jing (f.jing@unesco.org), Chief of Unit, and Mr. Roland Lin (r.lin@unesco.org), Project Officer, should you need any further information or for clarification.

Thanking you for your continued support in the implementation of the *World Heritage Convention*, I remain,

Yours sincerely,



Mechtild Rössler
Director

cc: Nepal National Commission for UNESCO
Department of Archaeology, Nepal
UNESCO Office in Kathmandu
ICOMOS International
ICCROM

DRAFT TERMS OF REFERENCE

For the Reactive Monitoring Mission to Kathmandu Valley, 16 – 22 October 2019

Background

Immediately following the 2015 Earthquake in Nepal, the World Heritage Committee considered potential inscription of the Kathmandu Valley World Heritage property on the list of World Heritage in danger, at its 39th Session (Bonn, 2015). At the request of the State Party of Nepal, the World Heritage Committee decided instead to send a Reactive Monitoring Mission to Nepal. Having considered the report by the UNESCO WHC-ICOMOS-ICCROM Joint Reactive Monitoring Mission carried out from 27th October to 2nd November 2015, the Committee again considered putting the property on the in danger list during its 40th Session (Istanbul, 2016), but agreed to a request from the State Party to defer this consideration and to request a further UNESCO WHC-ICOMOS-ICCROM Joint Reactive Monitoring Mission. Reviewing the recommendations of the mission, the Committee, at its 41st Session (Krakow, 2017) decided to encourage the State Party to: *invite a joint WHC/ICOMOS/ICCROM Advisory Mission to ascertain the progress accomplished by the State Party in implementation of six-year RMP and to give guidance on reviewing it.* At its 42nd session (Manama, 2018), the World Heritage Committee further encouraged the State Party to: *invite a joint WHC/ICOMOS/ICCROM Advisory Mission to ascertain the progress accomplished by the State Party in implementation of six-year RMP and to give guidance on reviewing it.*

Despite the efforts of the World Heritage Centre, ICOMOS and ICCROM, that Advisory Mission has not occurred. At its 43rd Session (Baku, 2019), the Committee requested: *the State Party to Invite a joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission to assess the state of conservation of the property, to review progress with the implementation of the recommendations of the October 2015 and March 2017 missions, to assist with the development of a strategy for the implementation of the six-year RMP (Recovery Master Plan), and to provide guidance on its review* (Decision 43 COM 7B.70).

In response to that Decision, the State Party has invited a joint WHC/ICOMOS/ICCROM Reactive Monitoring Mission to Kathmandu Valley by official letter dated 8 August 2019. Following consultation between the State Party of Nepal, UNESCO, ICOMOS and ICCROM, it has been agreed to organize this Reactive Monitoring Mission to Kathmandu Valley from 16–22 October 2019.

The following Terms of Reference have been prepared for the consideration of the State Party of Nepal and the team members of the Reactive Monitoring Mission.

Time Frame

The joint UNESCO/ICOMOS/ICCROM Reactive Monitoring Mission will be held from 16–22 October 2019 in Kathmandu. The schedule may be slightly modified in response to the availability of the mission members.

Scope

The joint UNESCO/ICOMOS/ICCROM Reactive Monitoring Mission will: *assess the state of conservation of the property, to review progress with the implementation of the recommendations of the October 2015 and March 2017 missions, to assist with the development of a strategy for the implementation of the six-year RMP, and to provide guidance on its review.*

Terms of Reference

In accordance with **Decisions 41 COM 7B.95, 42COM7B.12, and 43COM7B.70** (Annex 1) of the World Heritage Committee at its 41st (Krakow, 2017), 42nd (Manama, 2018) and 43rd (Baku, 2019) sessions regarding the state of conservation of the World Heritage property of Kathmandu Valley in Nepal, the joint UNESCO/ICOMOS/ICCROM Reactive Monitoring Mission will assess the impact on Outstanding Universal Value (OUV) of the property of damage caused to the historical structures and temples as well as other cultural heritage in the seven monument zones of the property arising directly or indirectly from the earthquake that struck Nepal in April 2015, and will advise and make recommendations accordingly.

The Mission should carry out the following tasks:

1. *Assess the current state of conservation of the property* and particularly the attributes which contribute to its Outstanding Universal Value, including authenticity and integrity, having regard to ongoing conservation and rehabilitation operations/activities being carried out by the State Party with the support of other donors, in accordance with the provisions of paragraphs 177-179 of the *Operational Guidelines* for the implementation of the *World Heritage Convention*;
2. Inspect and consider all seven monument zones of the property;
3. *Review progress with the implementation of the recommendations of the October 2015 and March 2017 Reactive Monitoring missions*;

4. *Assist with the development of a strategy for the implementation of the six-year Recovery Master Plan (RMP), and provide guidance on its review and provide guidance to the State Party on how to transform the current six year RMP into a wide ranging and **Comprehensive Recovery Master Plan**;*
5. Assess and advise how, in full cooperation with local communities and other stakeholders, an overall **Comprehensive Recovery Master Plan** for the property can be prepared for all seven monument zones setting out how the recovery work will be undertaken and phased, how it will be coordinated and consistent and how it will be supported by national institutions assessing the implementation of six year RMP that was already submitted to the World Heritage Committee;
6. Advise about any additional Guidelines that are required as supporting tools to guide the delivery of the **Comprehensive Recovery Master Plan**;
7. Advise, provide guidance and assist on how the **Comprehensive Recovery Master Plan** might be updated and integrated within overall conservation and management of the property;
8. Advise how the **Comprehensive Recovery Master Plan** will be linked to a wider socio-economic revitalization program for the whole Kathmandu Valley WHP, and how the recovery of attributes of OUV can deliver social and economic benefits;
9. Assess how options for the recovery of damaged or destroyed attributes can be explored and evaluated for their effectiveness in contributing to OUV and in supporting attributes that have survived;
10. Advise and provide guidance to link between recovery programs and capacity building for Department of Archaeology, local communities, Guthis and others, through better coordination of local and international expertise, training programs for both heritage principles and master crafts and schemes to foster long-term sustainability through the provision of reasonable remuneration and long-term employment;
11. Provide guidance on the establishment of an International Scientific Steering Committee and other mechanisms to assist with the long-term development of structures and resources to guide the recovery of the property and its OUV.
12. Participate and provide technical guidance to the workshop to be organized on 21 October 2019 (date to be confirmed).

The Mission should consult with the Nepali authorities at national, municipal and site levels.

Based on the results of the above-mentioned assessments, interactions and discussions, the Mission will advise and make recommendations to the World Heritage Committee regarding actions that the State Party should take to retain and/or recover attributes of OUV of the property.

The Mission will prepare a concise report on the findings and recommendations within six weeks following the site visit, following the World Heritage Centre Reactive Monitoring Mission report Format.

Tentative Mission Schedule

15 October – International participants arrive in Kathmandu

16-19 October – Mission meetings and site visits to KVWHP monument zones (4 days)

20 October – Team work day for report drafting, formulating the recommendations and preparation of the Workshop

21 October – Workshop (and other meetings) with local teams

22 October – International participants depart Kathmandu

Responsibilities of the State Party

During the joint WHC/ICOMOS/ICCROM Reactive Monitoring Mission to Kathmandu Valley, the State Party will:

1. Manage travelling facilities during site visits.
2. Provide a draft detailed mission program.
3. Accompany the team members during the mission.
4. Arrange necessary meetings with stakeholders and other activities as per the needs of mission.
5. Prepare and organize the workshop proposed for 21 October 2019 (date to be confirmed).

Budget

All expenses including DSA, international travel, expert fees, and desk review/coordination fees will be covered by UNESCO, ICOMOS and ICCROM.

ANNEX I: World Heritage Committee Decisions

Decision : 41 COM 7B.95

Kathmandu Valley (Nepal) (C 121bis)

The World Heritage Committee,

1. Having examined Document WHC/17/41.COM/7B.Add.2,
2. Recalling Decision **40 COM 7B.41**, adopted at its 40th session (Istanbul/UNESCO, 2016),
3. Acknowledges the strong commitment of the State Party and work that it has undertaken for the recovery of the property, particularly by salvaging important elements, its capacity-building efforts and the six-year plan for the recovery of the monuments damaged by the earthquake;
4. Takes note of the report of March 2017 joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission to the property;
5. Also acknowledges the scale and scope of the disaster, as described by the 2017 mission and the continuing, serious deterioration of the property's architectural and town-planning coherence resulting from the immediate impacts of the earthquakes;
6. Recognizes that the pace of recovery and the damaging restoration work on some monuments appears to reflect the current need for improvement in management capacity across the property, to undertake the necessary documentation, research and analyses that should underpin all recovery work;
7. Considers that the potential and ascertained threats to the Outstanding Universal Value (OUV) of the property are so considerable that the recovery process needs to be quickened and made more effective, and that the scale and scope of the disaster and the response required goes well beyond the capacity and resources of the Department of Archaeology (DoA), and also considers that much greater input, collaboration and coordination of support from the international community could likely help to achieve this shift;
8. Requests the State Party to fully commit to use appropriate methods and materials in recovery works;
9. Reiterates its request that the State Party integrate the Recovery Master Plan (RMP) within an overall socio-economic revitalization programme for urban communities, encourage residents and local businesses to engage in the recovery process and ensure that it delivers wide-ranging social and economic benefits;
10. Calls upon the international community to support the State Party's urgent recovery work through financial, technical or expert assistance;
11. Strongly encourages the State Party to invite a joint World Heritage Centre/ICOMOS/ICCROM Advisory mission to ascertain the progress accomplished by the State Party in implementation of six-year RMP and to give guidance on reviewing it;
12. Also requests the State Party to submit to the World Heritage Centre, by **1 February 2018**, 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 42nd session in 2018.

Decision : 42 COM 7B.12
Kathmandu Valley (Nepal) (C 121bis)

The World Heritage Committee,

1. Having examined Document WHC/18/42.COM/7B,
2. Recalling Decision **41 COM 7B.95** adopted at its 41st session (Krakow, 2017),
3. Acknowledges the strong commitment of the State Party and the work that it has undertaken for the recovery of the property, particularly its capacity-building efforts, as well as the efforts of international agencies and the six year plan for the recovery of the monuments damaged by the earthquake;
4. Also acknowledges the scale and scope of the disaster (as described in the reports of the joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring missions to the property of October 2015 and March 2017), the laudable work undertaken and the continuing, serious deterioration of the property's architectural and town-planning coherence resulting from the immediate impacts of the earthquakes;
5. Recognizes that the pace of recovery and the damaging restoration work on some monuments appears to reflect the current need for improvement in management capacity across the property, to undertake the necessary documentation, research and analyses that should underpin all recovery work;
6. Requests that the recommendations of the October 2015 and March 2017 missions be systematically carried out, fully followed and implemented in a best way by the State Party;
7. Encourages the State Party to invite the World Heritage Centre and the Advisory Bodies to provide technical support to assist the State Party with developing structures to coordinate and guide the recovery of the property and its Outstanding Universal Value (OUV);
8. Also considers that the potential and ascertained threats to the OUV of the property are so considerable that the recovery process needs to be made more effective, and that the scale and scope of the disaster and the response required goes well beyond the capacity and resources of the Department of Archaeology of Nepal (DoA), and also considers that much greater input, collaboration and coordination of support is needed from the international community;
9. Requests the State Party to fully commit to use appropriate methods and materials in recovery works;
10. Reiterates its request that the State Party integrate the Recovery Master Plan (RMP) within an overall socio-economic revitalization programme for urban communities, encourage residents and local business to engage in the recovery process and ensure that it delivers wide-ranging social and economic benefits;

11. Calls upon the international community to support the State Party's urgent recovery work through financial, technical or expert assistance, including support for local communities in terms of their housing and social needs;
 12. Suggests the State Party to invite a Joint World Heritage Centre/ICOMOS/ICCROM Advisory Mission to ascertain the progress accomplished by the State Party to assist in the implementation of the six year RMP as well as to give guidance on reviewing it and recommends that this mission take place by the end of 2018;
 13. Also requests the State Party to submit to the World Heritage Centre, by **1 February 2019**, 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 43rd session in 2019; with a view to assuring the maintenance of the OUV of the site.
-

Decision : 43 COM 7B.70
Kathmandu Valley (Nepal) (C 121bis)

The World Heritage Committee,

1. Having examined Document WHC/19/43.COM/7B,
2. Recalling Decisions **39 COM 7B.69**, **40 COM 7B.41**, **41 COM 7B.95** and **42 COM 7B.12**, adopted at its 39th (Bonn, 2015), 40th (Istanbul/UNESCO, 2016), 41st (Krakow, 2017) and 42nd (Manama, 2018) sessions respectively,
3. Acknowledges the ongoing commitment of the State Party and of national and international organizations towards the recovery of the property, through the implementation of the Recovery Master Plan (RMP), as well as through repair and conservation works already undertaken;
4. Reiterates its requests that the State Party integrate the RMP within an overall socio-economic revitalization programme for urban communities, encourage residents and local business to engage in the recovery process, and ensure that it delivers wide-ranging social and economic benefits;
5. Notes again the scale and scope of the 2015 earthquake disaster, as described in the reports of the 2015 and 2017 joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring missions to the property, and expresses concern at the serious deterioration of the property's architectural and town-planning coherence;
6. Considers that the recovery process needs to be further improved and hastened, and requests the State Party to:
 - A. Initiate with technical support from, and in on-going dialogue with, the World Heritage Centre and the Advisory Bodies, an International Scientific Steering Coordination Mechanism tasked with assisting with the development of structures and resources to guide the recovery of the property and its OUV,

- B. Invite a joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission to assess the state of conservation of the property, to review progress with the implementation of the recommendations of the October 2015 and March 2017 missions, to assist with the development of a strategy for the implementation of the six-year RMP, and to provide guidance on its review,
 - C. Seek further technical support from the World Heritage Centre and Advisory Bodies in order to coordinate and guide the recovery of the property, based on documentation, research, analysis and use of appropriate traditional methods and materials, and
 - D. Ensure all recommendations and outcomes of the above are fully integrated within the 6 year RMP;
7. Also requests the State Party to implement fully the recommendations of the ICOMOS Technical Review of the Patan Durbar Square Monument Zone sewer project;
 8. Further requests the State Party implement fully its already declared six year plan and complete all rehabilitation works by the end of 2021 and report to the World Heritage Committee;
 9. Calls upon the international community to continue supporting the State Party's recovery work through financial, technical or expert assistance, including support for local communities and their housing and social needs;
 10. Requests furthermore the State Party to submit to the World Heritage Centre, by **1 February 2020**, 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 44th session in 2020, **with a view to considering in the absence of significant progress in the implementation of the above recommendations to address the ascertained danger to the Outstanding Universal Value of the property, the inscription of the property on the List of World Heritage in Danger;**
 11. Underlines that the State Party's cooperation in conducting the requested and overdue mission will be a key consideration for the Committee at its 44th session;
Finally reiterates, consistent with Decision **40 COM 7**, that the inscription of a property on the List of World Heritage in Danger, should not be viewed negatively by the State Party; its purpose is to marshal international support to help the State Party effectively address the challenges faced by the property by engaging with the Advisory Bodies to develop a programme of corrective measures to achieve the Desired state of conservation for the property as provided for under Paragraph 183 of the *Operational Guidelines*.

Annexure 3

Mission Schedule, October 2019

Mission Schedule - October 2019	
Tuesday, October 15, 2019 - Day 1	
	<i>Arrival of the Mission Team</i>
Wednesday, October 16, 2019 - Day 2	
Time	Program
9:45 -10:45	UNESCO, meeting with UNESCO Head and related staffs
11:00-11:45	Meeting with DOA - DG, WH Section, related DoA staffs
11:45: 12:30	Meeting with DOA staffs and Representatives from Municipalities (CWC Members)
12:30-1:30	Lunch
1:30-2:30	Meeting with KMC (Mayor/Deputy Mayor & related others)
2:30 - 5:00	Field Visit-Hanumandhoka Durbar Square and PMZ
Thursday, October 17, 2019 - Day 3	
8:00	Departure from Hotel
9:00-10:00	Field Visit-Changunarayan
10:30 – 11:30	Meeting with BKT Municipality (Mayor/Deputy Mayor & Related others)
11:30-1:30	Field Visit-Bhaktapur Monument Zone
1:30-2:15	Lunch
2:15	Departure for Patan
3:00 – 3:30	Meeting with Lalitpur Metropolitan City (Mayor, Deputy Mayor and related authorities)
3:30-5:00	Field Visit- Patan Durbar Monument Zone
Friday, October 18, 2019 - Day 4	
9:30	Departure from hotel
10:00-11:30	Meeting in Ministry of Culture, Tourism and Civil Aviation (Minister & Secretary = separately)
11:30-11:45	Departure for NRA
11:45 - 12:45	Meeting with NRA
12:45 - 1:00	Departure for Lunch
1:00 - 2:00	Lunch
2:00 – 5:00	Field Visit- Swayambhu Hill top and PMZ
Saturday, October 19, 2019 – Day 5	
9:00	Departure from hotel
9:00-10:00	Field Visit-Bouddha PMZ
10:00	Departure for Pashupati
10:30 – 1:00	Field Visit-Pashupati PMZ
1:00-2:00	Lunch (In/around Pashupati)
2:00 – 3:00	Field Visit – Pashupati

3:00	Departure for Bhaktapur
3:30 – 5:00	Field Visit - Bhaktapur
Sunday October 20, 2019 – Day 6	
<i>All day</i>	<i>Desktop Work for Mission Team</i>
Monday, October 21, 2019 – Day 7	
10:00-1:00	Stakeholder's meeting/Workshop for Kathmandu Valley on Post-Earthquake Conservation, Reconstruction and Rehabilitation –Mayors of Related Municipalities; CWC members, Site Managers, Representatives from Ministry of Culture, Tourism and Civil Aviation, Guthi Corporation, National Reconstruction Authority, Department of Urban Development and Building Construction; Experts and related stakeholders (locals) <i>(Program schedule provided same day)</i>
1:00 – 2:00	Lunch
2:00 – 3:30	Field visit – Patan housing
4:00 – 5:30	Field visit – Hanuman Dhoka Durbar Square PMZ
	Departure from hotel

Annexure 4

Photographs taken during the Mission, October 2019

Hanuman Dhoka Durbar Square Monument Zone



Approach to Hanuman Dhoka Durbar Square along historic route from the northeast, with view of Taleju Bhawani Temple



Recovery of Taleju Bhawani Temple and Mahadev (Shiva) Temple at entrance both complete



Hanuman Dhoka Durbar Square, looking east – Offerings are being made at Kal Bhairab Shrine (centre); Indrapur (left) has been stabilised temporarily, but is yet to be repaired.



Pratap column (centre) has been repaired and re-erected. Chyasin Dega (left) and Laxmi Narayan Temple have been repaired – northern section of Hanuman Dhoka Durbar Square, looking north.



Chyasin Dega (Bamsa Gopal) has been rebuilt



Nagara Ghar (Great Drum House) has been repaired



Kegashwor (Kageswar) Temple (centre) reconstructed; Jagannath and Shree Krishna Mahavishnu (Gobinath) Temples (left) and northern wing of Hanuman Dhoka Palace (right) still to be fully stabilised and repaired.



Jagannath Temple has loose bricks in upper storey, but people are still occupying area beneath as safety barriers have been removed



Loose bricks in upper storey of Jagannath Temple



Temporary stabilisation and safety barriers removed from Shree Krishna Mahavishnu Temple, which has damage to its lower structure



Aaganchhen Temple over main entrance to Hanuman Dhoka Palace. These two wings of the palace (white) are yet to be fully stabilised and repaired



Northern face of Degutale (Degu Taleju) Temple and Shweta Bhairav Temple repaired (facing Hanuman Dhoka Durbar Square)



Falling damp affecting palace and Degutale Temple as palace wing has not been repaired as yet



Southern side of Degutale Temple still scaffolded facing palace Dakih and Masan Chowks



Aagan Temple from Hanuman Dhoka Durbar Square



Aagan Temple from Nasal Chowk within Hanuman Dhoka Palace



View from central section of Hanuman Dhoka Durbar Square looking north, showing Vishnu Temple (left) still to be repaired, and Bhagwati Temple (right). Shops are open for business,



View of central section of Hanuman Dhoka Durbar Square looking west, showing reconstruction commencing on Trailokya Mohan Narayan Temple (left) and Maju Dega Temple (right), two of the tallest temples in the Durbar Square due to their being mounted on high stepped pyramidal bases.



Nava Jogini House is still to be repaired



Garud Narayan Temple did not suffer severe damage during the earthquake, but is showing signs of neglect with roof desperately needing repair



Silyan (Singha) Sattal is fully recovered in southern section of Hanuman Dhoka Durbar Square (Maru)



Maru Sattal (Kasthamandap) is currently being reconstructed.



Kasthamandap – Original post (dark) reinstated amongst new posts (light). Old bricks have been salvaged and reused in brick plinth.



Kasthamandap – outer rows of posts including one original post (dark)



Kasthamandap during reconstruction



Kasthamandap – original beams reinstated (dark)



Some stone footings have been retained and others have been replaced. Copper shoes have been used to damp proof the base of the posts.



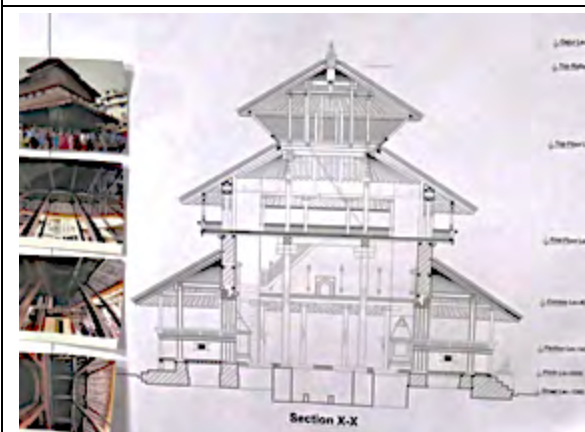
Original column bracket reinstated at ground floor level of new structure



Original carved brackets repaired (original sections dark and new sections light in colour) and reinstated within second floor of new structure.



Surviving bracket on display in Hanuman Dhoka Museum (Special exhibition on earthquake damage and recovery of Hanuman Dhoka Durbar Square) – carbon dated to 6th century



Documentation for reconstruction of Kasthamandap is based on surviving elements and site evidence as well as archival photographs



Documentation of column brackets for Kasthamandap



Gaddi Baithak has been fully stabilised and conserved – west elevation



South elevation of Gaddi Baithak facing Basantapur Square



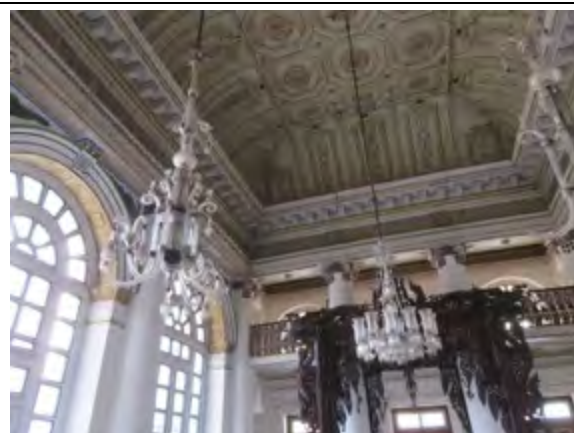
Interior of Gaddi Baithak following conservation work



Paintings of Rana kings conserved on walls of Gaddi Baithak



Structure of Gaddi Baithak has been stabilised. Crack and dislocation in eastern end wall has been left as evidence of the earthquake.



Gaddi Baithak - Original painted pressed metal wall and ceiling linings and glass light fittings have been conserved



View from Basantapur Square of Gaddi Baithak and southern wing of palace (partially demolished behind scaffold)



View from Basantapur Square of Basantapur Bhawan (Nine Storey Palace), currently being repaired and rebuilt



Northern portion of Hanuman Dhoka Durbar Palace viewed from Nasal Chowk has been repaired, including Panchamukhi Hanuman Temple (right).



Southern façade of northern portion of Hanuman Dhoka Durbar Palace repaired and conserved



Recovery of Basantapur Durbar Palace (around Lohan Chowk) is in progress. Kirtipur Bhawan (centre) and Bhaktapur Bhawan (left) are complete. Recovery of Basantapur Bhawan (scaffolded, right) and Lalitpur Bhawan (hidden behind) are currently in progress.



View across Nasal Chowk (Hanuman Dhoka Durbar Palace) from Kirtipur Bhawan showing the importance of the tiered temples and towers to the skyline of the monument zone.



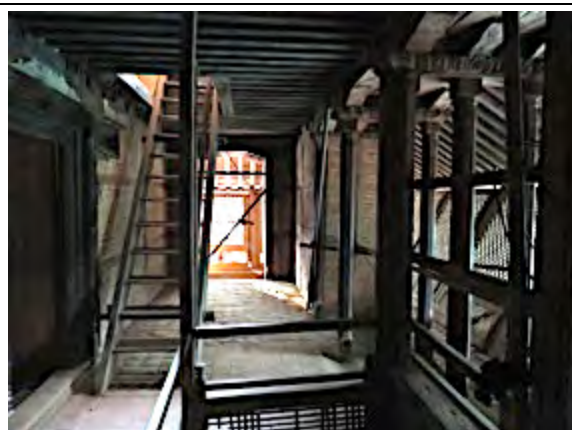
Lalitpur Bhawan scaffolded and recovery in progress.



Recovery of Bhaktapur Bhawan is complete.



Inside Basantapur Bhawan (Nine Storey Palace) – carved brackets and timber screens repaired and ready for reinstatement



Inside Basantapur Bhawan



Carpenter working on Basantapur Bhawan



Reconstructing outer ledge of Basantapur Bhawan using traditional techniques



Traditional jointing detail sed in repairs to timber and brick structure of Basantapur Bhawan. New and old timber pieces pegged together in outer beam.



Inside Basantapur Bhawan showing traditional pegging of floor



Repaired timber screens for reinstatement on Basantapur Bhawan



Repaired and newly carved replacement timber brackets for reinstatement on Basantapur Bhawan



Extensive interpretation of earthquake damage, detailed engineering assessment, and recovery of the four towers and palace wings surrounding the Lohan Chowk of the Hanuman Dhoka Durbar Palace.



Interpretation panel by China Aid



Southern wing of palace (left, scaffolded) has been substantially demolished as a result of the earthquake damage and decay resulting from ongoing exposure to the weather – to be rebuilt.



Central portion of palace is yet to be repaired (facing Nasal Chowk)



Wing of palace adjoining the Degutale Temple is still in very poor condition and yet to be fully stabilised and repaired



Section of palace that has collapsed since the 2017 RMM due to exposure of walls to the weather



Housing and other structures (including part of Kumari Bahal) on the southern boundary of the Hanuman Dhoka Durbar Square Monument Zone have not been repaired as yet



Housing and other historic structures are braced off each other to prevent them from falling – along southern boundary of the Hanuman Dhoka Durbar Square Monument Zone

	
Rear of buildings facing Basantapur Square within Hanuman Dhoka Durbar Square Monument Zone	Failure of rear wall of building facing Basantapur Square
	
Building on southern boundary of Basantapur Square is yet to be fully stabilised and repaired. Kumari Bahal is at the western end of the square and Gaddi Baithak on right.	Front of buildings along southern boundary of Basantapur Square – yet to be fully stabilised and repaired.
	
Modern concrete framed housing with brick facades and timber window and door elements – located on northern edge of Hanuman Dhoka Durbar Square Monument Zone	Housing and shops along western edge of Building on southern boundary of Basantapur Square is yet to be fully stabilised and repaired.



Junction of Ganga Path and Shukra Path at main eastern entrance to Hanuman Dhoka Durbar Square Monument Zone, looking west towards Hanuman Dhoka Durbar Palace. The Basantapur and Lalitpur Bhawans are visible behind the statue at the centre of the round about.



East elevation of the fire station showing partial collapse due to the earthquake and prolonged exposure to the weather. This building is within the Monument Zone.



North elevation of the fire station facing the Ganga Path. This building is located within the protected monument zone.



New building assessed by Advisory Bodies in 2018 is almost complete on the opposite side of the intersection. This building, which is in the Buffer Zone, links the neoclassical buildings on the Ganga Path with those on the Shukra Path.



Early twentieth century buildings line the Shukra Path between the Ganga Path and Indra Chowk. The cornices form a continuous streetscape, modified by the more recent addition of floors above the original buildings (View looking south from Indra Chowk).

Bhaktapur Durbar Square Monument Zone



Khauma Gate (western entrance gate) to Bhaktapur Durbar Square reconstructed.



Temples in western end of Bhaktapur Durbar Square repaired and/or reconstructed.



Temples at the eastern end of the Bhaktapur Durbar Square have been recovered or are in the process of recovery. Lal Baithak is on the left.



The Batsala Devi (Vatshala) Temple is currently being rebuilt.



Reconstruction of the Batsala Devi Temple incorporates the original stone and some new stone elements to replace what was destroyed in the collapse of the temple



A braced timber frame has been built around the central shrine to provide some protection to the shrine and to provide some seismic strengthening to the structure



National Art Museum (Sundokha) is still only temporarily propped.



Entrance to the National Art Museum with lions from the entrance to the former palace (Simha Dhwaka Durbar)



Brick Malla style building, appears to have been built to replace the former palace that collapsed during the 1934 earthquake



Lal Baithak (Royal Reception Hall), Rana style building built in 1858. The roof was lowered after the 1934 earthquake.



Rear wing of museum which is currently being rebuilt



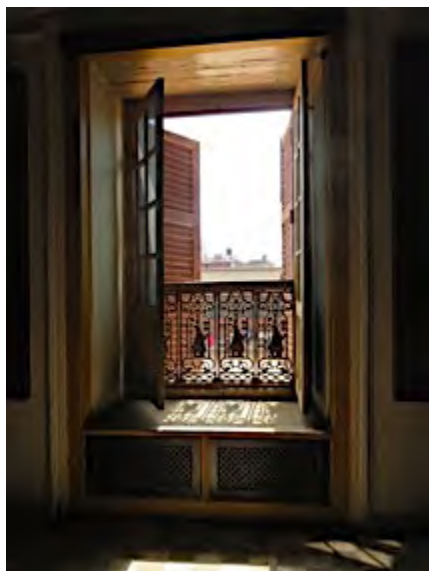
Reception hall inside the Lal Baithak. The ceiling was lowered in 1934.



Damage to Lal Baithak is being monitored, but repairs have not been undertaken.



Fireplace and painted timber floor in reception hall of Lal Baithak. The French windows overlooking the square are reflected in the glass either side of the fireplace.



French windows with cast iron balustrade to window seat, which includes ventilated panels below



Window glass is reported to be the oldest in Nepal – needs to be verified.



Timber ceiling brackets in Lal Baithak



Ceiling brackets in western wing of palace



Stone Siddhi Laxmi (Bhagavati) Temple has been re-erected



Temples in the eastern portion of the Bhaktapur Durbar Square are substantially rebuilt (including Siddhi Laxmi and Yantra Vatsala – looking west.



Tadhunchhen Bahal at the eastern end of the square and the long sattal along the southern side of the square are almost complete



The Fasi Dega (Silu Mahadev) Temple is currently being rebuilt to its pre 1934 form.



Reconstruction of the sattal incorporating as much original timber fabric as possible.



Reconstruction of the sattal



Original timber posts and carved timber brackets have been reinstated



Original carved timber brackets have been reinstated.



Carpenter making lattice screens for sattal



Lattice screens are being remade using traditional techniques



Municipality building (right) has suffered partial collapse since the 2017 mission due to exposure to the weather. The hitti has been restored.



Damage to Municipality building located to the rear of the Fifty-five Window Palace



Nyatapola Temple continues to dominate Taumadhi Square



Kasi Biswanath (Bhairab Nath) Temple located on Taumadhi Square has been repaired



Traditional buildings, including sattals and rest houses, survive on the western side of Taumadhi Square



Buildings lost on the southern side of Taumadhi Square are being replaced by concrete framed buildings.



Dattatreya Square, looking east, showing traditional buildings on left and new development on right of temple. The flat roofed concrete framed building is intrusive to the square, which is part of the Protected Monument Zone.



Dattatreya Square, looking west, showing traditional buildings on left and new development adjacent to and behind the temple (centre). The flat roofed concrete framed buildings are intrusive to the square, which is part of the Protected Monument Zone and KVWHP.



Traditional houses at eastern end of Dattatreya Square severely damaged or collapsed – being replaced with concrete framed buildings.



Peacock window in wall of museum reinstated (left), but wall still bulging and needing further work.



Earthquake damaged traditional houses near Dattatreya Square remain unrepaired (right)



Houses and other buildings along main path near Taumadhi Square. Traditional building in the distance is a religious building.



Traditional houses surviving along main path, with twentieth century concrete framed houses in the background



Traditional house has been repaired



View along main path looking south - concrete framed buildings on left and traditional buildings with additional floors added on right



God house retains traditional detail and roof form



Unrepaired traditional building along main path



Concrete framed houses with roof terraces, stair shafts (centre) and other additions, including cantilever out over traditional roof eaves (right)



Modern concrete framed building with brick façade and detailing to replicated traditional house in accordance with building bylaws



Early twentieth century house, which maintains floor levels and symmetry of earlier buildings



Quality early twentieth century neoclassical façade on main path, which should be considered for protection



Early twentieth century rendered façade on main path, which should be considered for protection



Significant traditional houses near the western gate to the Bhaktapur Durbar Square need to be protected and conserved as attributes of the KVVHP.



Traditional house adjacent to the western gate to the Bhaktapur Durbar Square needs to be protected and conserved as an attribute of the KVVHP.

Patan Durbar Square Monument Zone



Main path through Patan Durbar Square, looking north – Patan Palace is on right, temples are in the square on the left



Surviving temples in Patan Durbar Square have been repaired, and collapsed temples and other monuments have been rebuilt



Bishwanath Temple and Yognarendra Mall stone pillar have been repaired.



Bishwanath Temple was repaired in situ. The Bhimsen Temple is currently being repaired and rebuilt



Two manimandaps at the entrance to Manga Hitti have been reconstructed. Bishwanath Temple in the



Manga Hitti with Bahadur Shah wing (north wing) of palace (now a school) behind. This wing has been repaired. The section of the palace on the right is currently being repaired.



The mandapa has been rebuilt using almost all its original fabric. Only one post has been replaced.



Detail of mandapa post and floor connection.



LED lighting being tested on Hari Shankar Temple, which has been repaired and rebuilt.



Celebrating 77 years of life – traditional festival taking place in the Patan Durbar Square.



Patan Museum – west elevation



Exterior of Sundari Cok – west elevation



Taleju Temple damaged in earthquake has been repaired



Temple over Sundari Cok damaged in earthquake has been repaired



Eastern wing of Sundari Cok has been rebuilt, reinstating original fabric salvaged following the earthquakes



Detail of timber repairs



View over Bhandarkhal Tank, looking north. The rear wall of Sundari Cok (left) collapsed during the earthquake and has been rebuilt



Carpenter and joiner's workshop in Palace grounds



Earthquake exhibition in Sundari Cok – each panel describes the work to a particular monument



Earthquake exhibition in Sundari Cok – each panel describes the work to a particular monument



Sample exhibition panel relating to reconstruction of collapsed Char Narayan Temple



Video inside a room of the Sundari Cok describing the carvings



Video showing carvers – display in Sundari Cok



Display of hands salvaged after the earthquakes. These could not be matched to their sculptures



Sattal at northern edge of Patan Durbar Square Monument Zone



Street of traditional houses in western portion of the Patan Durbar Square Monument zone



Traditional refurbished as a guesthouse in the Patan buffer zone



Inside courtyard of guesthouse with owner



Bedroom in guesthouse



Under croft of guesthouse

	
Courtyard between a group of traditional houses in the Patan buffer zone	Wing of house overlooking courtyard used as a shop
	
Interior of house used as a shop	Interior of house used as a shop
	
Kumsheshwari Temple in western portion of Buffer zone is currently being repaired	

Changunarayan Monument Zone

	
View of Ancient settlement showing predominance of modern concrete framed houses	Public rest house (traditional building with gabled roof) located adjacent to main path up to Changunarayan Temple
	
New concrete framed house with brick façade and timber windows, built in accordance with bylaws, adjacent to small shrine located on main path up to Changunarayan Temple	Hitti and public rest house located on main path up to Changunarayan Temple
	
View along path to the temple on the top of the hill – new concrete framed houses on the left, and traditional sattals with pitched roofs on the right (hipped or gabled)	Rest houses adjacent to main path – one has been repaired and the other is still awaiting repair



View down path showing contrast between new houses and traditionally built sattals (rest houses)



Earthquake damage to rest house



Eastern entrance to temple complex – brickwork has been repaired, but is missing its original detail; upper floor of sattal is still missing; new electronic signage has been mounted on the wall adjacent to the entrance and is intrusive to the temple context



Other side of entrance way through earthquake damaged sattal



Changunarayan Temple in its courtyard – only one sattal has been rebuilt of the group that totally surrounded the temple



The Changunarayan Temple has been repaired and strengthened.



Priest on duty at the temple to accept offerings and give blessings.



All original carved timber work and metalwork has been conserved, including paintwork



One sattal has been reconstructed on the southern side of the courtyard



The sattal on the northern side remains in a dilapidated state.



Rebuilt Amatya Sattal



Rebuilt Kileshwar Mahadev Temple



Repaired Chhina Masta Temple



Glazed tiles have been removed from walls of Chhina Masta Temple and brickwork has been painted with a waterproof compound



Remains of sattal on western side of temple courtyard



Movable heritage items stored in dilapidated sattal on eastern side of temple courtyard



Remains of sattal on northern side of temple courtyard



Rear wall of northern sattal has lost its external skin of brickwork



Footings of western sattal being rebuilt to stabilise top of hill



Retaining walls built to stabilise top of hill below northern and western sattals



Rest house on western side of hill, adjacent to path up to western entrance to Changunarayan Temple complex



Stairs connecting settlement of priests' houses to temple complex



Southern gate to Changunarayan



Path up to southern gate; a hitti is on the right.

	
Ancient ceremonial path of one thousand steps	One of only a handful of vernacular houses surviving in the ancient settlement – it has mudbrick walls on a stone plinth.

Pashupati Monument Zone

	
Approach to main Pashupati Temple complex – most damaged buildings on this path have been repaired or rebuilt	Two buildings at entrance to Pashupati site – one has been rebuilt (right) and the other is currently being repaired in situ (left)
	
Building which partially collapsed has been repaired and the collapsed section rebuilt	Building at entrance to Pashupati site is currently being repaired.



Damage to this early twentieth century building, located adjacent to the main path down to the river, has not been repaired as yet.



This building has been vacated to allow repairs to be carried out.



Temples near Bagmati River have been rebuilt using original and new stone



Lime mortar with stone dust has been used in the reconstruction



Temples, sattals and other structures along the Bagmati River have been rebuilt



Temples, sattals and other structures along the Bagmati River have been rebuilt



Funerals continue



View of main Pashupati Temple complex from across the river



Funerals continue



Building in main Pashupati Temple complex has collapsed since the 2017 RMM.



New stone path through forest to Vishwarupa Temple



Remains of the domed Vishwarupa Temple on top of the hill. Further collapse and dismantling has occurred since the 2017 RMM.



Stone temples on top of hill in Gorakhnath Area



Some stone temples have been repaired



These brick temples in Gorakhnath Area have not been repaired



Rebuilt structures in Gorakhnath Area



Guheshwori Temple complex in process of being rebuilt. This is occurring in stages.



Completed section of Guheshwori Temple complex – north elevation facing road.



Rana style building at eastern end of Guheshwori Temple complex has not been repaired as yet



Detail of reconstructed building in Guheshwori Temple complex showing water proof compound applied to surface of bricks. Windows have been repaired – original timber is dark and new timber is light in colour.



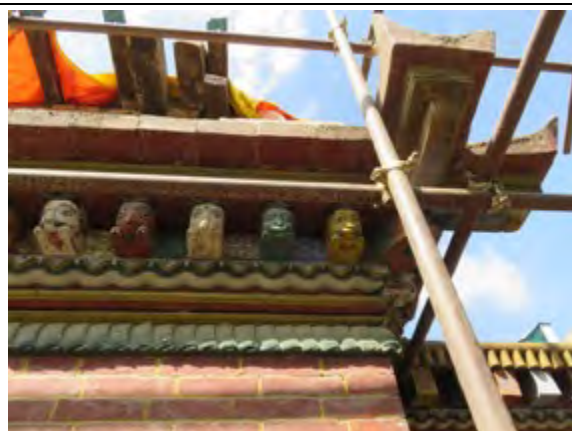
Temples near Bagmati River have not been repaired as yet.



Temples near Bagmati River. It is intended to adapt the rectangular building as a museum.



Jayabageshori Temple is currently being repaired



Eaves detail from Jayabageshori Temple



Timber brackets from the Jayabageshori Temple have been salvaged, numbered and stored during the works to the temple. They will be reinstated.



Priests still offer a service at the temple during the recovery and reconstruction work



Main path through ancient settlement showing dilapidated traditional houses (left) and new houses beyond



Surviving traditional houses within the ancient settlement



Path through ancient settlement to Pashupati temple complex. Stall sell offerings for the temples



Shrines along the path through the ancient settlement remain active.

Swayambhu Monument Zone



The Santipur Temple has been rebuilt by the monks



The mural will be reinstated on the internal wall of the temple once conservation works have been completed. A new mural will also be painted on the wall.



Timber bands have been incorporated into the masonry walls



Interior of the entrance area to the Santipur Temple showing the door to the sacred place within



Metalwork to eaves of Santipur Temple has been reinstated



Monkeys lift plinth bricks laid in mud mortar, making it difficult to maintain the brickwork of the temple.



The Swayambhu Stupa is fully recovered



Top of the Swayambhu Stupa and stone pillars



Pratapur Temple has been reconstructed



Anantipur Temple has been reconstructed



Building at top of eastern stairs is being rebuilt



Tasigomang Chaitya has been rebuilt



Chaitya, monastery and temples surrounding main Swayambhu Stupa have all been repaired



Temples are in active use



Monastery



Monastery used as workshop for ongoing recovery work



New monastery to replace buildings destroyed in earthquake is under construction



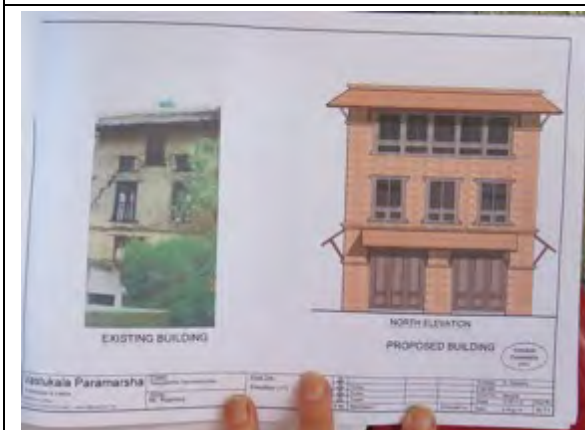
The new monastery is set further back from the stupa than previously



Site plan showing increased setbacks of new monastery and houses from the main stupa



Elevation of new monastery – the building is one floor lower than the previous building



Design of new houses to replace monk's houses that were destroyed in the earthquake



Stupas in the Saddle Area are fully repaired. Prayer flags are replaced very regularly.



Shrine in the Manjusthree (Saraswati) Area has been repaired and is in active use



Sattal in Manjusthree (Saraswati) Area has been repaired. Annual debating festival for young monks demonstrated continuance of intangible heritage at the site.

Bauddhanath Monument Zone



Entrance gate to Bauddhanath



Bauddhanath Stupa from site entrance



Ambulatory around base of stupa and buildings enclosing stupa site



Bauddhanath Stupa with prayer flags hung from parasol



Saffron and lime being spread over the stupa as offerings



Saffron and lime being spread over the stupa as offerings



Devotees walking around base of stupa – prayer wheels in wall



Making offerings at base of stupa



Last two traditional houses in ring around stupa



Solar panels on roof of monastery



Concrete framed buildings around stupa – most retain the gabled roof form



New brick clad concrete framed building in buffer zone