

PHYSICAL  
CULTURAL RESOURCE  
MANAGEMENT PLAN OF  
**JAMRUD  
FORT**

DISTRICT KHYBER

SEPTEMBER 2023



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### LIST OF ACRONYMS

DoAM	Directorate of Archeology and Museums
DoT	Department of Tourism
EIA	Environmental Impact Assessment
EA	Executing Agency
EPA	Environmental Protection Agency
PCRMP	Physical Cultural and Resource Management Plan
GPS	Global Positioning System
GRM	Grievance Redressal Mechanism
IEE	Initial Environmental Examination
KITE	Khyber Pakhtunkhwa Integrated Tourism Development Project
KP	Khyber Pakhtunkhwa
NEQS	National Environmental Quality Standards
PD	Project Director
PKR	Pakistani Rupees
PMU	Project Management Unit
PPE	Personal Protection Equipment
WB	World Bank
TMA	Tehsil Municipal Administration
SWO	Social Welfare Officer

## Physical Cultural Resource Management Plan

### Section 1 Introduction

<b>Name of Sub- project</b>	Conservation and Preservation of Jamrud Fort
<b>Nature of Subproject</b>	Tourism promotion and cultural heritage
<b>Subproject Location</b>	Jamrud- District Khyber
<b>Proposed Activities</b>	The proposed activities at Jamrud Fort encompass a comprehensive rehabilitation and restoration project aimed at preserving this historical treasure for generations to come. To address the fort's structural integrity by conducting roof treatments and replacing damaged and decayed wooden battens, ensuring that the protective cover remains intact. Simultaneously, the rehabilitation of old stone and mud walls will be a pivotal aspect of the efforts, as the endeavor is to revive the fort's original charm and authenticity.
<b>Subproject Objective</b>	To preserve the physical and cultural aspects of the object so that its value does not decline and it can outlive our finite time span.
<b>Proposing Deptt/Directorate</b>	Directorate of Archeology and Museums (DOAM) – Department of Tourism, Culture, Archeology and Museums Khyber Pakhtunkhwa
<b>Sponsoring Agency / Department</b>	Project Management Unit (DoT), Khyber Pakhtunkhwa Integrated Tourism Development Project – KITE
<b>Agency responsible for O&amp;M</b>	Directorate of Archeology and Museums (DOAM) – Department of Tourism, Culture, Archeology and Museums Khyber Pakhtunkhwa
<b>Estimated Cost</b>	PKR 98 million
<b>Current Information for Environmental &amp; Social Screening</b>	SDS and E&S Expert conducted the screening with the support of PMU-KITE Team.

## Section 2 Executive Summary

The Government of Khyber Pakhtunkhwa (GoKP) has received a loan from the International Development Association (administered by the World Bank) for the implementation of the Khyber Pakhtunkhwa Integrated Tourism Development Project (KITE). Since 2019, KITE has been operational in Khyber Pakhtunkhwa (KP) under administrative control of Department of Tourism, Culture, Archeology and Museums, Government of Khyber Pakhtunkhwa. The project aims to improve tourism in the province's major destinations. These destinations are in various stages of development and are being developed and assisted with new infrastructure and innovation.

Archaeological tourism is an efficient instrument to interact with heritage and tourism in archaeological sites and to change archaeological attractions into tourism products and ultimately make archaeology knowledge public and generalize it. The project focus is on the preservation of the environment, wildlife, culture, and heritage. The Jamrud fort was built on a high mound from where Khyber, Mohmand and Bara areas could be seen, the fort was then named as Fatehgarh (the site of victory).

The Physical Cultural Resource Management Plan (PCRMP) covers all phases of subproject, i.e., the preservation and conservation of archaeological site, i.e., Jamrud Fort in District Khyber. The PCRMP aims to ensure that environmental and social implications are identified, environmental and social impacts are monitored and social and environmental mitigation measures are implemented. **The budget for E&S mitigation is PKR 1.62 million.**

Cultural heritage treasures are precious communal assets that show the past human legacy. It depicts present and future way of life as well as cultural values of a society, and enhances solidarity and social integration of communities.



**JAMRUD FORT VIEW**

### **Section 3 Sub-Project Description:**

The PMU KITE DoT has undertaken the initiative of preservation and conservation of Jamrud Forts in District Khyber after approval of Departmental Development Working Party. Jamrud Fort is unique attraction and heritage is the legacy from the past, what one live with today, and what one passes on to the future generations. The cultural and natural heritage resources are both irreplaceable sources of life and inspiration for both national and international tourists. Effective management and protection of all cultural resources, whether they are historic structures, archaeological sites, museum objects, or archaeological artifacts begins with an understanding of the broad scope of cultural resources for which the DoAM is responsible.

The Jamrud Fort is now under the jurisdiction of the DOAM after being handed over by the army, through a formal MOU (Annex-II).

The proposed activities at Jamrud Fort encompass a comprehensive rehabilitation and restoration project aimed at preserving this historical treasure for generations to come. To begin with, it is plan to address the fort's structural integrity by conducting roof treatments and replacing damaged and decayed wooden battens, ensuring that the protective cover

remains intact. Simultaneously, the rehabilitation of old stone and mud walls will be a pivotal aspect of the efforts, as the endeavor is to revive the fort's original charm and authenticity.

In addition to these critical structural enhancements, this will undertake the scrapping of old paint from the walls, unveiling the true beauty of the fort's ancient architecture. Furthermore, dismantling of all temporary walls and structures that have been erected over time, this will allow the fort's original layout to shine through once more.

Recognizing the importance of modern amenities, it is proposed to dig a water bore and electrify the entire site, ensuring that visitors have access to essential utilities while experiencing the historical significance of Jamrud Fort. To enhance accessibility and create a lasting impression, it is also plan to develop an impressive entrance gate that reflects the grandeur and historical importance of this iconic monument. Through these proposed activities, it is aspire to breathe new life into Jamrud Fort, transforming it into a beacon of historical preservation and cultural appreciation.

### **3.1 Fort Jamrud:**

Jamrud fort, also known as Fatehgarh, is a valuable heritage monument located 17 km west of Peshawar, next to Baba-i-Khyber, an entry to the old Khyber Pass. The fort was built by Hari Singh Nalwa (1791-1837), the commander-in-chief of the Sikh Khalsa Army, the Sikh Empire's army, according to historians.

### **3.2 Sub project's Locations:**

The project will be implemented at Jamrud Fort of District Khyber. Jamrud is the headquarter of the Khyber District. Khyber District lies between latitude 33° 43' to 34° 21' and longitude 71° 27' to 71° 32'. The Khyber District is drained by tributaries of the Kabul and Bara rivers. The following site with GPS coordinates, proposed number of units with name of authority owning the land is given below:

<b>S. No.</b>	<b>GPS</b>	<b>Name of Site</b>	<b>Responsible / Owner</b>
1	34.0034° N, 71.3784° E	Jamrud Fort	Directorate of Archaeology and Museums, Khyber Pakhtunkhwa.

### **3.3 Scope of Work at Jamrud Fort**

The scope of work for the Jamrud Fort Rehabilitation and Restoration Project is designed to comprehensively address the preservation and restoration needs of this historical treasure. By



focusing on structural integrity, authenticity, and protective cover maintenance, the project aims to ensure the Fort's longevity and historical significance for generations to come.

### **3.3.1 Structural Rehabilitation:**

- Conduct a thorough assessment of the fort's structural integrity.
- Identify areas with compromised roofing and replace damaged or decayed wooden battens.
- Repair and reinforce the fort's foundations, walls, and roofs to ensure stability.
- Apply necessary treatments to protect the fort's roof from environmental elements.

### **3.3.2 Wall Rehabilitation:**

- Assess the condition of the old stone and mud walls.
- Repair and restore damaged or deteriorated sections of the walls.
- Reinforce and consolidate the walls to prevent further erosion.
- Retain the original architectural style and authenticity during the restoration.

### **3.3.3 Preservation of Artifacts:**

- Document and catalog historical artifacts found within the fort.
- Safely remove, clean, and store artifacts for their protection during the restoration.
- Collaborate with heritage conservation experts to ensure the preservation of historical architectural features. Use traditional building materials and techniques when restoring the fort's structure and appearance.

### **3.3.4 Landscaping and Surroundings:**

- Improve the fort's surroundings, including pathways, gardens, and access points.
- Maintain the natural landscape in accordance with the historical context.

### **3.3.5 Accessibility and Safety:**

- Ensure the fort is safe for visitors through structural stability and safety measures.
- Improve accessibility for people with disabilities while preserving the historical character.



### 3.4 Description of Physical and Biological Environment

#### 3.4.1 Physical Environment<sup>1</sup>

The existing environment in and around the subproject areas has been studied with respect to the physical, ecological and socio-economic conditions. The literacy rate was 41.97%, male literacy was 65.08% and female literacy was 18.10%. The district's 1,273 people were of religious minorities, primarily Christians. Pashto is the predominant language, spoken by 98.83% of the population. The majority of the Khyber Authority tribes are Afridi<sup>2</sup>.

The major plains are the Khajuri Plain and the Bara Plain. It is one of the busiest trade routes of Pakistan due to its close proximity with Afghanistan and hence Central Asia. Free Trade Zone shall be declared in this district to further boost the trade. According to Building code of Pakistan 2007, the project area falls in Seismic Zone 3 of Pakistan (high hazard) with PGA from 0.24 to 0.32g<sup>4</sup>. Two main rivers in the Khyber District are the Bara and Chora Rivers. On the northern border of district, River Kabul runs between the area of Shalmanis and Mullagoris.

<sup>1</sup> Environmental and Social Impact Assessment for Peshawar – Torkham Expressway (District Khyber), 2018

<sup>2</sup> <https://academic-accelerator.com/encyclopedia/khyber-district#:~:text=The%20literacy%20rate%20was%2041.97,Khyber%20Authority%20tribes%20are%20Afridi.>

### **3.4.2 Water Availability for Construction Work:**

There is operational water Bore within the vicinity of Fort. The Contractor will utilize the existing operational water bore and pipelines within the fort for construction work, which can provide a source of water for various construction needs, such as mixing concrete, dust control, and general site use.

However there are chances to implement temporary water storage tanks or pumps to compensate for the lower water pressure, ensuring an adequate supply for construction activities.

There might be need to enhance the water infrastructure within the fort to improve water pressure and distribution for operational needs, such as visitor facilities and maintenance to accommodate the fort's long-term operational requirements, including visitor amenities, landscaping, and sanitation facilities.

The existing sewerage system within Jamrud Fort is operational and will be preserved and kept intact. It is essential to maintain the historical authenticity of the fort's infrastructure. The Contractor will ensure regular maintenance and periodic inspections to ensure the continued functionality and structural integrity of the existing sewerage system.

The fort's drainage system, which may have deteriorated over time, will be revived and improved as part of the preservation and development work. The reviving of the drainage system is crucial to manage storm water runoff, prevent erosion, and protect the fort's structural elements.

### **3.4.3 Topography**

The Khyber District is located between 33° 33' to 34° 27' north latitudes and 70° 28' to 71° 51' of east longitudes. Khyber District is dominated by barren and rugged mountainous terrain with narrow strips of valleys. The district shares its borders with District Orakzai in south, Kurram District to south west, and Peshawar to the east and Mohmand District in north. The total area of the district is 2,576 sq. kms. Elevation of the subproject area ranges from 970 to 997 meters.

### **3.4.4 Geology**

The mountainous terrain of Khyber District has small basins and valleys, with scattered settlements and agricultural fields. This is the geological region of Pre-arrivals, metamorphic

in general including Precambrian and younger intrusions. The massive grey limestone with sand and clay beds that makes up the Carboniferous Khyber Formation and the slate, phyllites, and schists with minor limestone and quartzite beds of the Ordovician-Silurian Landi Kotal Formation found in the eastern part of the Khyber Agency. However, Mesozoic sediments occur in the western part of the District.

### **3.4.5 Soil**

The soil of the Khyber District is mainly from the local weathering of bedrock, deposited by streams and rivers. Landforms in the area are varied and include piedmont plains, valleys, gravel fans, rough broken land and gullied land. Level areas are loamy, while lowlands are slightly strongly calcareous. The soil of low permeability strata consists of silt, clay and rarely fine sand. While the soil of high permeability strata is generally composed of sand and gravel from a depth of 30 m to 150 m. The content of organic matter and available phosphorus is very low.

### **3.4.6 Seismology**

According to Building code of Pakistan 2007, the subproject area falls in Seismic Zone 3 of Pakistan (high hazard) with PGA from 0.24 to 0.32 g. Preservation and conservation of historical structures like Jamrud Fort in a high seismic hazard zone, such as Seismic Zone 3 in Pakistan, require special measures to ensure their structural integrity and safety during seismic events. Here are some measures that are required for preserving and conserving Jamrud Fort in a high seismic hazard area. The existing Fort design is already earthquake proved structure. The contractor will prioritize the preservation of the fort's historical and architectural significance while implementing seismic retrofitting and structural improvements. This includes using materials and techniques that maintain the original character of the fort, collaborating with heritage conservation experts, and documenting the conservation work to ensure the historical authenticity is upheld. Moreover, the contractor will integrate earthquake preparedness and safety education into the development work i.e. installs flexible expansion joints to accommodate seismic movement without causing damage to the structure. Implement measures like base isolators or other foundation improvement techniques to mitigate seismic effects if required.

### **3.4.7 Surface Water Hydrology and Drainage**

There are a number of rivers and their tributaries in the Khyber Agency that have perennial flow from snow melt. Two main rivers in the Khyber District are the Bara and Chora Rivers. On the northern border of district, River Kabul runs between the area of Shalmanis and Mullagoris.

### **3.4.8 Ground Water**

According to the available information, approximately 20 test-and tube wells have been drilled in different valleys. Groundwater is usually found at a depth of 55 - 70 meters, where annual recharge is 85.41MCM for an average year, 46.18 for a dry year and 146.06 MCM for a wet year<sup>3</sup>.



### **3.5 Project Administrative Jurisdiction**

District Khyber (NMD), Khyber Pakhtunkhwa.

### **3.6 Project Implementation Schedule**

The tentative implementation period is 12 Months.

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<sup>3</sup> ESIA for Peshawar – Torkham Expressway (Component I), April 2018.

## **Section 4 Methodology/ Procedures for Conservation Works**

The conservation works shall be carried out as per steps given below with great care, skills and devotion and implemented at site.

As per Conservation protocols, first excavation of site shall be carried out in order to find antiquities /Artifacts. This activity shall be carried out under the supervision of Directorate of Archaeology and Museum (DoAM's) designated Archaeologists. The antiquity discovered shall be properly cleaned from dust/rust using proper techniques such as application of acetone. The antiquity shall be transferred to Antiquity store of DoAM in order to register it; During Excavation work the debris waste shall be properly disposed of after sieving it so that any minor antiquity like Coins can be collected and managed accordingly. The conservation activities shall be carried out by pre-qualified contractor of DoAM having skilled labor, well trained for such works, under supervision of technical staff of DoAM. After completing the conservation work, assessment will be made ensure that the objectives have been met and that the site's historical and architectural significance has been preserved or enhanced.

## **Section 5. Stakeholder's Engagement:**

Consultation and information disclosure to the local community and other stakeholders during project planning, design, and implementation stages is critical to sustainable development. Similarly, stakeholder participation at all phases of project preparation is required to accomplish the objectives of meaningful consultation.

During the PCRMP preparation, all relevant stakeholders from various walks of life were consulted to learn their concerns and adopt appropriate measures in project design, implementation, and dissemination of necessary information about subproject likely impact on PCR, environment and social aspects, bank policy guidelines, and land acquisition parameters.

The consultation process will be extended in order to discuss the project's most recent development actions and collect feedback from the locals. Consultation sessions took place in numerous communities along the project's path.

## 5.1 Some major stakeholders consulted are mentioned in the table:

Stakeholder key contact/s	Level of interest (low>medium>high)	Ability to impact (low>medium>high)	Date and venue of the consultation	No of Participants
Sikandar Khan and Bakht Mohammad	High	High	26 September 2023- DOAM	02 males
Engineer Arif Khan and two resident engineers	High	High	12 January 2023 in the DOAM	03 males
Adnan and Salman  Head of site Two Archaeologists	High	High	13 September 2023	02 males
Site Engineer & Staff Assistant	Medium	Medium	13 September 2023	05 males
Social Welfare Officer, SM Khapal Kor and Child Protection Officer	Medium	Medium	25 September 2023	07 males
Assistant Commissioner Jamrud- Dr Amir Zeb	High	High	25 September 2023	02 males
Additional District Commissioner (ADC) Naseer Abbas Khalil Khyber District	High	High	25 September 2023	02 males
Random public tourist	High	Medium	27 September 2023	07 males

The consultation involved briefing about the assessment of environmental and social impacts caused by the proposed civil and conservation work at Fort Jamrud. The consultation was attended by the following participants:

## 5.2 Table –I -Stakeholder’s Details

No	Name	Designation
1.	Sikandar Khan	Engineer
2.	Adnan	Archeologist
3.	Salman	Archeologist
4.	Munir Khan	Site Engineer
5.	Uzair Maqsood	Architect
6.	Hamza Afridi	Student
7.	Malik Yaseen	Local shopkeeper
8.	Khan Javed Shinwari	Student
9.	Sohail Irfan	Local councilor
10.	Javed Afidi	Local resident
11.	Rehan Saafi	Local resident
12.	Waheed Gul	Local resident
13.	Yasir Wajid-	Local resident
14.	Molvi Sakib Afidi	Elder and Imam Masjid
15.	Shah Faris	Local resident
16.	Anees Khankhel	Site helper
17.	Ayub Suleiman	Watch Man
18.	Ibrahim Khan	Local resident – Engineer by profession
19.	Wahab	Local resident
20.	Zaheer	Local resident
21.	Attaullah Khan	Local trader





**MEETING WITH ASSISTANT  
COMMISSIONER, KHYBER**



**MEETING WITH ADDITIONAL DEPUTY  
COMMISSIONER, KHYBER**

Individual meetings and Focus Group Discussions (FGD) with relevant stakeholders were held to inform them about the proposed intervention and to explore its potential environmental and social implications, identify their concerns and take into account special needs and considerations. The aim of the exercise was to collect stakeholder input on how to avoid or reduce adverse effects, and to discover their guidance and preferences.

The consultations involved briefing about the proposed plan of civil and conservation work carried out to promote the tourism and attract international visitor's as this Fort is considered close to the Sikh community globally. The staff members appreciated the idea and welcomed the initiative, and suggested the following to be considered during implementation:

- To minimize or mitigate adverse environmental and social impacts, projects often implement measures or strategies. These can include actions like reforestation, pollution control, community engagement, and more, depending on the nature of the project.
- Advance planning for cultural heritage properties should be conceived in terms of the whole property and provide integrated concern for its buildings, structures, and their associated contents and landscapes.
- Conservation principles should be included among the legal and normative instruments applied in actions needed for damaged heritage elements, in order to ensure integrated response to post-disaster needs.
- No cutting of trees or disturbance to the existing natural and social environment.



**MEETING WITH SWO & NGOS**



**MEETING WITH LOCAL ELDERS**

### **5.3 Summary of stakeholder's consultation:**

Consultations with the main stakeholders, including the District Administration, local community, Maliks (elders), NGOs, and the Social Welfare Department, yielded positive feedback and support for the Jamrud Fort Conservation and Preservation project by KITE-DOT. They appreciate the renovation efforts aimed at preserving cultural heritage and the Department of Archaeology and Museums (DoAM) taking over the fort's management. All stakeholders expressed their willingness to provide support and suggested organizing a half-day session to brief them on the project and the role of the physical cultural resource management plan. The meeting with elders of the area stated that the project will provide socio-economic benefits to the inhabitants of the area associated with an increase in tourism and services in the vicinity of the entire PCR site, which create microeconomic benefits for local people. There is a possibility of increased economic opportunities and significant growth and extension of the local markets.

## 5.4 Consultation with Women/ Females:

Khyber District, one of the newly merged districts of Ex FATA into Khyber Pakhtunkhwa (KP), has faced years of insecurity and terrorism, impacting its development indicators. The literacy rate in the region stands at 41.97%, with notable gender disparities—male literacy at 65.08% and female literacy at 18.10%. Fort Jamrud, a significant cultural heritage site in the district, has been the focus of preservation and conservation efforts. However, due to local traditions and challenges related to women participation, a consultation was conducted with the support of Hafeez Ullah, Deputy Social Welfare Officer, and the local NGO PVDP, on behalf of PMU-KITE-DOT, to gather input and suggestions from the women. The exclusive consultation with women provided valuable insights and suggestions regarding the preservation and conservation of Fort Jamrud. Addressing their concerns and implementing their recommendations is essential to make the Fort more accessible, family-friendly, and culturally significant. These insights should guide future efforts to ensure that Fort Jamrud serves as a source of pride and heritage for the entire community, particularly women.

**Access to Fort Jamrud:** The primary concern raised by the community, particularly women, is the limited access to Fort Jamrud due to its military control.

**Recommendation:** Steps should be taken to ensure easier and safer access to the fort for all community members. This includes addressing security concerns and improving road infrastructure leading to the site.

**Family-Friendly Attractions:** Local traditions make it challenging for women to visit the fort without their families, which limits their engagement with the site.

**Recommendation:** To encourage family visits and greater community involvement, additional attractions should be developed within or near the fort. These could include recreational areas, picnic spots, and cultural events suitable for all age groups.

**Educational Outreach:** Limited awareness among students, both male and female, about the cultural heritage of Fort Jamrud despite its significance to the region.

**Recommendation:** Collaborate with schools and colleges to incorporate cultural heritage education into the curriculum. This will help students understand their role as custodians and hosts of this historical site, fostering a sense of ownership and pride.

No.	Name	Designation
1	Gul Para	Social Mobilizer (PVDP)
2	Saiqa Noshin	Local resident/councilor
3	Kiran wahab	Community worker
4	Zaib u Nisa	Local resident

### Major points of discussion

S. No.	Concerns raised	Response
1.	There is a concern for hiring of local workers doing conservation and preservation activities and provision of jobs at Fort.	It will be ensured that preference will be given to local skilled and unskilled workers.
2.	Army presence creates a sense of fear and discourage tourists	The fort is properly handed over to the DoAM and after the conservation this impression will be completely shed of.
3.	There was a concern about loss of originality during conservation and civil works in and around the archaeological site.	The PCRMP ensures the concerns are taken care off.
4.	There is no electricity and water inside the Fort that needs to be included in the development work	PMU will take up the matter with DoAM
5.	Minimize the effects of noise, dust, vibration, traffic and other hazards associated with construction activities on the nearby communities living along the subprojects areas. The Contractor should not use heavy machinery which may affect the PCRs.	The contractor will ensure the regular water sprinkling of the site to suppress excessive dust emission(s). All the construction machinery used during construction activities will be kept in good working condition and be properly tuned and maintained in order to minimize the exhaust emissions and vibration related issues in and around the subprojects areas. Moreover, the Contractor will ensure the compliance with measure recommended in this PCRMP.
6.	Disruption of traffic due to construction is a major concern raised by the local shopkeepers	The contractor requires the use of a temporary traffic management system. Close coordination with local shopkeepers and traffic police.

## **Section 6 Environmental and Social Screening (E&S Screening)**

As part of the environmental and social impact assessment process, a screening matrix focusing on environmental and social impacts is developed specifically for the proposed sub-project. The matrix examined the interaction of project activities with various components of the environment and of society. The impacts were broadly classified as physical, biological and social which fall under category C. The aim of the environmental and social screening process is to determine if and what environmental and social review and management is required. The proposed sub-project will not have any significant environmental & social impact because the project will not involve diversion of forest land, destruction of ecological resources, displacement of people, acquisition of private lands, or any other major environmental threats/risks. There may be some short-term inconvenience to the local users due to construction/Rehabilitation of the existing building. The main purpose of this E&S screening is to demonstrate that an integrated environmental and social impact assessment of restoration works can be conducted through following the mitigation strategies proposed in the Fort Jamrud PCRMP.

The project involves the conservation and preservation of cultural heritage consequently; OP 4.11 is triggered that requires preparation of PCRMP. The present document provides an overview of Jamrud Fort site observed during the E&S exercise under the preparation of the Physical Cultural Resource Management plan (PCRMP) of the project. This PCRMP outlined the preliminary potential environmental impacts, mitigation measures and management of cultural heritage site. A generic screening mechanism has also been developed in the PCRMP which will be updated and used before the implementation of the subproject. Details are mentioned in below given E&S Screening:

## Section 7 Environment and Social Screening Check List for Jamrud Fort

S. No	Issues	None	Minor/ Small	Moderate/ Medium	Significant / Large	Remarks/ Mitigation Measures (If required)
<b>A</b>	<b>Zoning and Land Use Planning</b>					
1.	Will the subproject affect land use zoning and planning or conflict with prevalent land use patterns?	X	–	–	–	The project is anticipated to align with and adhere to the current land use regulations and plans in place.
2.	Will the subproject involve significant land disturbance or site clearance?	X	–	–	–	This is already established structure due its historical significance, it will only be preserved.
3.	Will the subproject land be subject to potential encroachment by urban or industrial use or located in an area intended for urban or industrial development?	X	–	–	–	The subproject land, belonging to DOAM (Directorate of Archaeology and Museums), is not subject to potential encroachment by urban or industrial use and is not located in an area intended for urban or industrial development.
<b>B</b>	<b>Utilities and Facilities</b>					
1.	Will the subproject require the setting up of ancillary facilities?		X	–	–	
2.	Will the subproject make significant demands on utilities and services?	–	X	–	–	
3.	Will the subproject require significant levels of accommodation or service amenities to support the workforce during construction?	–	X	–	–	The site is in urban settings, so there would be hardly chances of accommodation or service amenities to support the workforce during construction.
<b>C</b>	<b>Water and Soil Contamination</b>					
1.	Will the subproject require large amounts of raw materials or construction materials?	–	–	X	–	Yes raw material to build the boundary wall and access paths might require.
2.	Will the subproject generate large amounts of residual wastes, construction material waste or cause soil erosion?	–	X	–	–	
3.	Will the subproject result in potential soil or water	X	–	–	–	In Preservation work, oil, grease and fuel use is

S. No	Issues	None	Minor/ Small	Moderate/ Medium	Significant / Large	Remarks/ Mitigation Measures (If required)
	contamination (e.g., from oil, grease and fuel from equipment yards)?					minimal.
4.	Will the subproject lead to increased suspended sediments in streams affected by road cut erosion, decline in water quality and increased sedimentation downstream?	X	–	–	–	
5.	Will the subproject involve the use of chemicals or solvents?	–	X	–	–	
6.	Will the subproject lead to the destruction of vegetation and soil in the right-of-way, borrow pits, waste dumps, and equipment yards?	–	X	–	–	
7.	Will the subproject lead to the creation of stagnant water bodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors?	–	X	–	–	
<b>D</b>	<b>Noise and Air Pollution Hazardous Substances</b>					
1.	Will the subproject increase the levels of harmful air emissions?	–	X	–	–	
2.	Will the subproject increase ambient noise levels?	–	–	X	–	Noise disturbance is expected during the work. As mitigation measure contractor shall provide ear plugs to the workers and manage the timing.
3.	Will the subproject involve the storage, handling or transport of hazardous substances?	X	–	–	–	
<b>E</b>	<b>Fauna and Flora</b>					
1.	Will the subproject involve the disturbance or modification of existing drainage channels (rivers, canals) or surface water bodies (wetlands, marshes)?	–	X	–	–	Some modification might occur.
2.	Will the subproject lead to destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development?	X	–	–	–	
3.	Will the subproject lead to the disruption/destruction	X	–	–	–	

S. No	Issues	None	Minor/ Small	Moderate/ Medium	Significant / Large	Remarks/ Mitigation Measures (If required)
	of wildlife through interruption of migratory routes,					
4.	Disturbance of wildlife habitats, and noise-related problems?	–	X	–	–	
<b>F</b>	<b>Destruction/Disruption of Land and Vegetation</b>					
1.	Will the subproject lead to unplanned use of the infrastructure being developed?	–	X	–	–	
2.	Will the subproject lead to long-term or semi-permanent destruction of soils in cleared areas not suited for agriculture?	X	-	–	–	
3.	Will the subproject lead to the interruption of subsoil and overland drainage patterns (in areas of cuts and fills)?	X	–	–	–	
4.	Will the subproject lead to landslides, slumps, slips and other mass movements in road cuts?	X	–	–	–	
5.	Will the subproject lead to erosion of lands receiving concentrated outflow carried by covered or open drains?	X	–	–	–	
6.	Will the subproject lead to health hazards and interference of plant growth adjacent to roads by dust raised and blown by vehicles?	–	X	–	–	
<b>G</b>	<b>Cultural Property</b>					
1.	Will the subproject have an impact on archaeological or historical sites, including historic urban areas?	–	–	X	–	It provides new, biodiversity areas and be created using green materials, minimizing waste and energy-intensive production of materials.
2.	Will the subproject have an impact on religious monuments, structures and/or cemeteries?	–	–	X	–	Yes. Sikh communities have special attachment to this site. Therefore they would be happy and pay more visits to this site.
<b>H</b>	<b>Expropriation and Social Disturbance</b>					
1.	Will the subproject involve land expropriation or demolition of existing structures?	–	–	X	–	There is some structure developed by the army for temporary use of soldiers will be



S. No	Issues	None	Minor/ Small	Moderate/ Medium	Significant / Large	Remarks/ Mitigation Measures (If required)
						demolished.
2.	Will the subproject lead to induced settlements by workers and others causing social and economic disruption?	–	–	X	–	
3.	Will the subproject lead to environmental and social disturbance by construction camps?	–	X	–	–	
4.	Will the sub- project require of tree cutting, if yes how many, location, pictures	–	X	–	–	Yes It might involve the cutting or disturbing of bushes or naturally grown plants.

## 7.1 Summarized E&S Screening

Type of Grant (s)	Physical					Biological		Social and Socioeconomic											
Activities	Soil Erosion/ Contamination	Air Quality	Surface Water Quality	Groundwater Quality	Water Availability and Consumption	Natural Vegetation	Wildlife	Blocked Access Routes	Noise and Vibration	Impacts on Agriculture	Impacts on Irrigation Network	Livestock Grazing	Compensation Issues	Safety Hazard	Infrastructure Utilities	Public Health	Aesthetic Value	Cultural Issues	Gender Issues
Conservation activities	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

## **Section 8 Potential Positive Impacts of the Subproject on Local Environment**

This Section defines the beneficial as well as the potentially significant adverse environmental and social impacts during design/pre-construction, construction and operation phases of the proposed subprojects on the physical, ecological and socio-economic domains of the environment. The appropriate mitigation measures are also proposed in this section.

The sensitivity of the receptor and the nature of the impact both play a role in determining its significance. The more sensitive the receptor is, the greater will be the significance of the impact of that proposed activity. For this PCRMP, activities and the nature of impact are combined with the sensitivity of the receptor to evaluate the significance of the impact. The significance of impact is characterized as very low, moderate, high, or very high, nature, duration of impact, reversibility of impact and consequence of impact. Environmental issues having “moderate”, “high” and “very high” significance are provided with mitigation measures. The Conservation and Preservation of Jamrud Fort subproject, with its focus on enhancing the tourism sector and conserving and preserving the cultural and natural heritage of the area, can have several positive impacts, including:

### **8.1 Economic Growth:**

As mentioned, the subproject is expected to boost tourism in the region. This can lead to increased economic activity through various means, such as the creation of new businesses, increased demand for local products and services, and job creation in the tourism and hospitality sectors. This economic growth can benefit both the local community and the provincial government through increased tax revenues.

### **8.2 Cultural Preservation:**

The conservation and preservation aspect of the project will help protect and showcase the cultural heritage of the region. This can include the maintenance of historical sites, preservation of local traditions and craftsmanship, and the promotion of cultural events and festivals. Such efforts can ensure that the rich cultural heritage of the area is passed down to future generations.

### **8.3 Environmental Conservation:**

The preservation and conservation of site requires comprehensive plan to the conservation of natural resources. Efforts to protect the environment, such as, tree plantation, minimum use chemicals and grease, oil etc. and waste management plan, are key to protecting natural

habitats on the site. This not only preserves the natural beauty of the area but also ensures its sustainability for future generations.

## **Section 9 Potential adverse environmental and social Impacts and their Mitigation Measures**

The assessment of potential impacts of the proposed subproject reveals that this project will generate only minor to moderate adverse environmental impacts. These adverse impacts will be mostly confined to the construction works and will be temporary in nature. The predicted adverse impacts will be minimized and reduced by implementing the prescribed mitigation measures and will be continually monitored by implementing and updating the PCRMP. Adverse environmental and social impacts during the different stages of a subproject, such as Pre-Construction, Construction, and Operation and Maintenance (O&M), can have various negative impacts on the local environment and PCR (Protected Cultural Resource). Here are some common adverse impacts and potential mitigation measures:

### **9.1 Pre-Construction Stage:**

Before undertaking any developmental project, it is important to comply with the laws and regulations that apply to construction work i.e. EPA rules and regulations etc. Therefore, No Objection Certificates (NOCs) will be required as legal complications may lead to delays in the sub-project construction. A PCRMP needs to be prepared to demonstrate the manner in which the Contractor will comply with the requirements of management plans proposed in PCRMP.

### **9.2 Construction Stage Impacts:**

#### **9.2.1 Excavation of Earth**

**Adverse Impact:** During excavation process, there is a chance of finding PCRs remains. Mismanagement of the PCRs remains may result loss of a valuable asset. Further, excavation of earth from borrow areas and for clearance of subproject area (where applicable) may result in erosion of soil. Erosion results in change of edaphic characteristics of soil. The impact is categorized as site specific, short term and high adverse in nature.

**Mitigation Measures:** In case of finding PCRs remains during excavation, the Contractor shall immediately report through Supervision Consultant to Directorate of Archaeology and

Museums, KP to take further suitable action to preserve those PCRs or sensitive remains; and follow all procedures for preservation and protection of sites and articles of paleontological, archaeological, and historical PCR as specified by the Antiquities Act, 2016/ Chance find procedures provided in this PCRMP.

### **9.2.2 Re-plaster / Repainting**

**Potential Impact:** New plaster and color scheme might not match the original and causing damage to the original wall or entirely change the building perception. This impact is categorized as site specific, permanent and moderate adverse in nature. There are very few chances of any removal of asbestos. The technical staff did not find asbestos at the time of assessment, anywhere, apparently. **Mitigation Measures:** Laboratory tests of the original plaster and color will support the suitable choice in conservation; ensure the conservation, preservation, restoration and allied civil works of PCR in accordance with the authenticity of the material, shape, layout, and/or workmanship techniques; and some cracks might be left exposing (as per advise of DoAM) to the public but with appropriate and technical treatment, they will reduce the risk while also revealing traces of the past.

### **9.2.3 Habitat Disruption and Destruction:**

**Adverse Impact:** Construction activities can disrupt or destroy local habitats, affecting wildlife and plant species.

**Mitigation:** The Contractor will implement habitat restoration plans, conduct surveys before construction to identify sensitive areas, and establish buffer zones to protect critical habitats.

### **9.2.4 Soil Erosion and Sedimentation:**

**Adverse Impact:** Construction can lead to increased soil erosion and sediment runoff into nearby water bodies, negatively impacting water quality.

**Mitigation:** The Contractor will implement erosion control measures such as silt fences, sediment ponds, and revegetation. The contractor also minimizes construction activities during periods of heavy rainfall.

### 9.2.5 Air Quality.

**Potential Impact:** A decline in the ambient air quality within the vicinity of works is expected during the construction phase and demolition activities. Due to these activities release of exhaust emissions, containing carbon monoxide (CO), and particulate matter (PM) is expected, which can deteriorate the ambient air quality in the subproject sites. The objectionable impacts of settling of the suspended dust would be its dry deposition on vegetation and tree covers, motor vehicles, PCRs, other exposed surface and indoor air quality. The overall impact on the quality of air during the construction phase may be low adverse keeping in view the extent of conservation, preservation, restoration and civil works activities for all subproject sites, however, it will be temporary and limited to the project's implementation phase only.

**Mitigation Measures:** The impacts construction phase of the proposed subprojects could be effectively mitigated by the implementation of simple procedures by the Contractor including that all vehicles, machinery, equipment and generators used during construction activities should be kept in good working condition and be properly tuned and maintained in order to minimize the exhaust emissions. Open burning of solid waste from the Contractor's camps and at construction site should be strictly banned and preventive measures against dust should be adopted for on-site mixing and unloading operations.

### 9.2.6 Noise and Vibration:

**Adverse Impact:** Construction-related noise and vibrations can disrupt local communities and wildlife.

**Mitigation:** The contractor will implement noise barriers, restrict noisy activities during sensitive hours, and conduct pre-construction surveys to identify noise-sensitive areas.

### 9.2.7 Cultural and Archaeological Site Disturbance:

**Adverse Impact:** Construction can damage or destroy culturally significant sites and artifacts.

**Mitigation:** The Site in charge (archeologist) will lead to conduct archaeological surveys before construction to identify and protect sensitive areas. Modify project plans to avoid or minimize impacts on culturally significant sites.

### **9.2.8 Water Pollution:**

**Adverse Impact:** Construction can lead to runoff containing pollutants such as chemicals and construction materials entering nearby water bodies.

**Mitigation:** the contractor will implement water management practices, use erosion control measures, and educate construction workers about proper waste disposal.

### **9.2.9 Traffic Congestion:**

**Adverse Impact:** Construction activities can lead to increased traffic congestion, which can disrupt local transportation systems.

**Mitigation:** The contractor will coordinate with local authorities to schedule construction activities during off-peak hours, implement traffic management plans, and provide alternative transportation options.

### **9.2.10 Waste Generation:**

**Adverse Impact:** Construction generates a significant amount of waste, including construction debris and materials.

**Mitigation:** the contractor will implement waste reduction and recycling programs, properly dispose of hazardous materials, and follow waste management regulations.

### **9.2.11 Accidental Damages**

**Adverse Impact:** Conservation, preservation, restoration and allied civil works activities may potentially impact PCRs through direct ground disturbance during construction and where indirect disturbance occurs outside the PCRs area from increased access by people and construction machinery.

**Mitigation:** Avoid, redirect the activities so that they do not endanger any PCR and Inventory of PCR close to the subproject area of influence, to be at risk of damage or disturbance should be prepared along with photographs. The assessments shall be carried out by Conservation Architects/ Engineers in association with proposed alterations or renovations on a recorded structure.

### **9.2.12 Dust Emission from stone quarrying and transportation:**

**Adverse Impact:** This will not cause any impact on the immediate project area except that the vehicles carrying the construction material shall exert additional traffic load on the roads leading to the project. Crushed stone will fall on roads.

**Mitigation:** The contractor shall use the road network carefully and repair any damages immediately. During transportation, covering of vehicle with sheet will be done. Unloading of vehicles will be done on designated sites.

### **9.2.13 Accidental Damages**

**Potential Impacts:** Conservation, preservation, restoration and allied civil works activities may potentially impact PCRs through direct ground disturbance during construction and where indirect disturbance occurs outside the PCRs area from increased access by people and construction machinery. Due to the use of heavy equipment during the conservation, preservation, restoration and allied civil works of PCRs can cause compaction or collapse of buried PCRs / archaeological sites. This impact is usually caused by lack of technical capacity of the Contractor in technical management or caused by human error that can lead to the adverse impact on PCRs.

**Site has the potential to be damaged or destroyed, as follows:** Direct disturbance areas due to on-ground works (e.g., leveling ground, demolition, excavating etc.); and Direct disturbance areas due to movements of people and the construction machinery (e.g., erosion, removal of artifacts, etc.).

**Mitigation Measures:** Avoid, redirect the activities so that they do not endanger any PCR; Inventory of PCR close to the subproject area, to be at risk of damage or disturbance, should be prepared along with photographs. The assessments shall be carried out by Conservation Architects/ Engineers in association with proposed alterations or renovations on a recorded structure; Ensures that the relevant signs for protections of PCRs are displayed where and when required; avoid the use of heavy construction machinery during the excavation process; and The Contractor staff must have relevant qualification and experience of similar projects.

### **9.2.14 Occupational Health and Safety:**

**Potential Impact:** Occupational health and safety (H&S)-related impacts may occur during the construction phase as a result of activities such as earthworks, roof works, window and



door replacement, wall painting work, concrete mixing plant installation, construction of contractor camps (if necessary), movement of machinery, and manual handling during loading and unloading operations. As a direct result of these works, the health and safety of all staff members working on the subproject will be directly impacted. Stone or metal particles have the potential to harm the eyes. Risk of being struck by falling materials, significant hand-arm and whole-body vibration risks, skin and respiratory system irritation from exposure to cement dust, overexertion and awkward postures, etc., will all have an effect.

**Mitigation Measures:** The Contractor will strictly follow WBGEHSG. The Contractor will prepare the site specific community health and safety plan in compliance with relevant sections of the WBGEHSG; Occupational health and safety monitoring programs of the Contractor (s) should verify the effectiveness of prevention and control strategies; Contractor will ensure the provision of First Aid Boxes and emergency contact numbers etc. Training of workers in construction safety procedures, environmental awareness, equipping all construction workers with safety boots, helmets, gloves and protective masks, goggles, shields and monitoring their proper and sustained usage; Work areas will be cordoned off where necessary; Ensure the provision of fire prevention and firefighting equipment; Contractors will instruct their staff to use PPEs (e.g., wire containment, displaying warning signs along the work site, and communicating advance warnings to mats) to enhance the safety.

## **Section 10 Legal and Regulatory Framework**

### **10.1 E&S Operational Policies of World Bank:**

This activity can potentially cause negative environmental and social impacts in small scale, localized and reversible in nature therefore this PCRMP has been prepared in accordance with OP 4.01, and OP 4.11.

### **10.2 OP 4.01 Environmental Assessment:**

This policy defines the Environmental Assessment (EA) process and various types of the EA instruments. Since most of impacts from this activity are likely to be small scale, short term, localized, and reversible in nature therefore can be managed through PCRMP mitigation and management plan (checklist followed by supervision and monitoring checklist).

### **10.3 OP 4.11 Physical and Cultural Resources:**

This policy safeguards archaeological, physical or cultural heritage sites and assists in their preservation and avoids their elimination. The sub-project activity is planned to be implemented on PCRMP site. Therefore, this PCRMP has been prepared to ensure any adverse impacts can be catered to during the civil and conservation work as well as operationalization phase.

### **10.4 KP Environmental Protection Act (Revised 2014):**

Relevant provisions are as follows:

**Section 15 (Handling of Hazardous Substances)** requires that “Subject to the provisions of this Act, no person shall generate, collect, consign, transport, treat, dispose of, store, handle, or import any hazardous substance except (a) under a license issued by the EPA and in such manner as may be prescribed; or (b) in accordance with the provisions of any other law for the time being in force, or of any international treaty, convention, protocol, code, standard, agreement, or other Instrument to which Pakistan is a party.”

**Section 18 (Penalties):** Whoever contravenes or fails to comply with the provisions of section 11, 12, 13, or section 16 or any order issued thereunder shall be punishable with fine which may extend to one million rupees, and in the case of a continuing contravention or failure, with an additional fine which may extend to one hundred thousand rupees for every day during which such contravention or failure continues:

### **10.5 Khyber Pakhtunkhwa Antiquities Act 2016:**

The protection of cultural resources in KP is ensured by the Antiquities Act of 2016. Antiquities have been defined in the Act as ancient products of human activity, historical sites, or sites of anthropological or cultural interest, national monuments etc. The act is designed to protect antiquities from destruction, theft, negligence, unlawful excavation, trade and export.

### **10.6 Land Acquisition Act, 1894 Including Later Amendments**

The Land Acquisition Act, 1894, is a “law for the acquisition of land needed for public purposes and for companies and for determining the amount of compensation to be paid on account of such acquisition”. The exercise of the power of acquisition has been limited to public purposes. This law is applicable in resettlement of the community and

will ensure provision of adequate compensation of land to the affectees. This law is applicable as the land will be acquired from public/ private landholders.

### **10.7 Protection of Trees and Brushwood Act, 1949**

This Act prohibits cutting or lopping of trees and brushwood without permission of the Forest Department. The Forest Department will be approached for permission to cut trees (if required) in or around the proposed subprojects site. This law is applicable to control the cutting of trees, bushes and shrubs.

### **10.8 Building Code of Pakistan, 1986**

The provision of Building Code of Pakistan shall apply for engineering design of building like structure and related components. The construction in violation of the Building code shall be deemed as violation of professional engineering work. Seismic provisions were later added in 2007 named as ‘Seismic Building Code of Pakistan’. This code stipulates the minimum requirements for seismic safety of building and structures and the provisions of the Building Code of Pakistan (Seismic Provisions-2007) shall apply for engineering design of buildings, like structures and related components.

### **10.9 National Forest Policy 2015**

Historically, Forestry remained a provincial subject even after independence of Pakistan. In the Constitution of Islamic Republic of Pakistan 1973, Forestry is purely a provincial subject and not impacted by the eighteenth amendments in the Constitution (2010). However, the federal support to federating units for meeting international obligations and filling their financial gaps is widely acknowledged. Climate mitigation and adaptation measures are the focus of National Forest Policy in view of Pakistan’s high vulnerability to adverse impacts of climate change, in particular to extreme events.

### **10.10 The Forest Act (1927)/Addendum**

The Forest Act 1927 is designed to protect forest areas. The law prohibits grazing hunting, quarrying, clearing for the purpose of cultivation, removing forest produce, and felling or looping trees in forest or protected areas. Section 26 of the act prohibits the clearing of land, felling trees, cultivation, grazing livestock, trespassing, mining and collecting forest reserves along with setting traps or snares and poisoning of water. Any person who contravene shall be liable with punishment set by the law. However, after Forest

Ordinance Amendment (2016) in sec 27 and 34-A of the Forest Act 1927 a subsection (3) is inserted according to which the government after approval from the provincial cabinet declares reserved forest as no more reserved and can acquire the forest land for purpose of projects of national importance. The forest act also allows the concerned authorities to regulate privately owned forests and land under certain conditions such as protection from floods or landslides, safeguarding roads, bridges and railways and preservation of public health (Sec 55). This law avoids impacts on floral assets in development of tourist's facilities.

### **10.11 International Labor Organization (ILO)**

The ILO aims to ensure that it serves the needs of working women and men by bringing together governments, employers and workers to set labor standards develop policies and devise programs. The ILO has the following four strategic objectives:

- Promote and realize standards and fundamental principles and rights at work
- Create greater opportunities for women and men to decent employment and income
- Enhance the coverage and effectiveness of social protection for all
- Strengthen social dialogue.

The ILO aims to ensure the needs of working women and men by bringing together governments, employers and workers to set labor standards develop policies and devise programs.

### **10.12 Employment of Child Act, 1991**

This act prohibits the employment of children in certain occupations and regulates the conditions of work of children. According to the definition in the act, a child is one who has not completed his 14th year of education. According to Section 3 of the Act, 'No child shall be employed or permitted to work in any of the occupations set forth in Part I of the Schedule or in any workshop wherein any of the processes set forth in Part II of that Schedule is carried on: Provided that nothing in this section shall apply to any establishment wherein such process is carried on by the occupier with the help of his family or to any school establishment, assisted or recognized by Government'. This Act prohibits the employment of children in any of the proposed subprojects activities.

### **10.13 Occupational Health & Safety Laws**

In Pakistan, the OHS in different sectors is covered in various laws. There is no single comprehensive law covering OHS. The following pieces of legislation could be relevant to the project in terms of OHS aspects:

- Factories Act 1934;
- North-West Frontier Province Factories Rules 1975;
- West Pakistan Hazardous Occupations Rules 1963;
- Provincial Employees Social Security (Occupational Diseases) Regulation 1967; and
- Workmen Compensation Act 1923 and Rules 1961.

However, the exact applicability of the above laws to the proposed subprojects is subject to discussion and legal opinion.

### **10.14 Provincial Laws, Regulations and Policies**

#### **10.14.1 KP Tourism Policy, 2015**

This policy identifies key priorities of provincial government for the next few years to develop the tourism sector as the priority sector and transform it into an engine of economic growth by making KP a preferred tourist destination. KP tourism sector vision aims to develop an internationally competitive tourism sector to fully realize its diverse potential; making tourism a leading economic sector for the province through public-private partnership. The policy focuses on sustainable tourism development. The objectives of policy includes; to establish KP as a preferred tourist destination, nationally in the short to medium term and globally in the long term, increase tourist traffic in the province by at least 10% every year over the next five years, Increase private sector investment in the provincial tourism sector in the provincial tourism sector over the next five years, increase workforce quality in the sector provide quality services in the short to medium terms and position KP as a source of world class tourism workforce in the long run. Establish a tourism quality assurance system in the province and ensure compliance in the short to medium term and achieve global service standards in the long term. This policy will provide guidance in planning and implementation of the subproject activities.

#### **10.14.2 KP Tourism Act, 2019**

Khyber Pakhtunkhwa Tourism Act, 2019 which will provide a framework for the Integrated Tourism Zones (ITZs), Provincial Tourism Authority (PTA), tourist police and private sector entities in the tourism and hospitality sectors of KP. The aims of this act includes but not limited to: Promote, preserve and revive cultural heritage, cultural traditions, values, festivals and dialects; measures for sustainable development; promote and preserve tangible and intangible cultural assets, values and traditions of province, develop, publish and implement regulations in respect of forests, mountains, water features, lakes, waterfalls, flora and fauna. The authority will have the powers to acquire land for the purpose of promoting tourism and developing resorts, skiing facilities, hotels and other tourism related activities.

#### **10.14.3 KP Wildlife & Biodiversity Act, 2015**

KP Wildlife Act is expedient to provide for the protection, preservation, conservation and management of wildlife in KP. The aims and objects of this Act are the: Strengthening the administration of the organization to effectively manage wild animals and their habitats; To holistically manage Protected Areas in sustainable manners for the best interest of the indigenous communities and local stakeholders; Securing appropriately the goods and services produced from wild animals and their habitats at the level of local communities and fulfilling the obligations envisaged under the biodiversity related multilateral environmental agreements ratified by the GoP. This law is applicable to provide the protection and conservation to the local wildlife.

#### **10.14.4 KP Forest Ordinance 2002**

This Ordinance is relevant if the proposed subprojects are located in or around forested areas. Especially, during construction, the contractors will need to strictly abide by its provisions. This Ordinance prohibits construction of any building or shed, road or enclosure, or any infrastructure, or altering or enlarging any existing road or infrastructure in a reserved forest. It also bans any cutting, felling or uprooting any tree or brushwood listed in Schedule –I. This law is applicable to conserve and protect floral diversity for all subprojects sites.

#### **10.14.5 Khyber Pakhtunkhwa Antiquities Act, 2016**

The protection, preservation, development and maintenance of antiquities in KP are ensured by the Antiquities Act of 2016. Antiquities have been defined in the Act as ancient products of human activity, historical sites, or sites of anthropological or cultural interest, national monuments etc. The act is designed to protect antiquities from destruction, theft, negligence, unlawful excavation, trade and export. The law prohibits new construction in the proximity of a protected antiquity and empowers the GoP to prohibit excavation in any area, which may contain articles of archaeological significance. No Objection Certificate (NOC) would be requested from Director Archeology Department for construction within 200 feet of cultural heritage sites.

#### **10.14.6 KP Climate Change Policy 2016**

Pakistan has drafted its National Climate Change Policy in 2012. However, after the 18th amendment in the constitution of Pakistan, the Govt. of KP decided to formulate a Provincial Climate Change Policy to be more specific, target oriented and also in line with National Climate Change Policy of Pakistan 2012 - thus a Provincial Climate Change Policy was formulated for the first time in June, 2016, to the specific needs of the Province. Successful implementation of the Policy in relevant sectors like agriculture, water resources, forestry, wildlife etc. will help in achieving targets pertaining to Climate Change resilience. This law will enforce the implementation of mitigation measures such as energy, transport, wastes, industries, urban planning etc.

#### **10.14.7 Culture Policy, Khyber Pakhtunkhwa, 2018**

The KP culture policy goals are to create an enabling environment in which Cultural Heritage Sector can flourish and play a significant and defining role in nation building, safeguarding of identity and socioeconomic development. The primary objective of KP cultural policy is to achieve the economic and social development and moderate the problems faced by existing cultural sector. KP culture policy aims to provide an environment conducive to the protection, growth and promotion of indigenous culture heritage. This policy will protect the cultural integrity of the province throughout the subprojects area.

#### **10.14.8 KP Commission on Status of Women**

The KP Commission on the Status of Women is a statutory advisory body established under the Khyber Pakhtunkhwa Act XIX of 2009 which was amended by the Khyber Pakhtunkhwa Assembly under the new Act XXVIII of 2016. The Commission in KP is the first ever Provincial Level Commission in the country, established with functions to oversee implementation of laws, policies and programs related to women and propose new measures where gaps exist. The third term of the Provincial Commission on the Status of Women was notified in January 2017.

#### **10.14.9 National Disaster Management Act, 2010**

National Disaster Management Act, 2010 was amended in March 2020 as The National Disaster Management (Khyber Pakhtunkhwa) (Amendment) Act, 2020. National Disaster Management Act, 2010 was passed by Parliament of Pakistan in 2010. The Act applies to whole Pakistan. The Act was passed in backdrop of 2010 Floods in Pakistan and strengthens Disaster Management system.

#### **10.14.10 Khyber Pakhtunkhwa Water Act, 2020**

Khyber Pakhtunkhwa Water Act, 2020 was passed by provincial assembly in July 2020. The Act applies to comprehensive management of water resources in KP and regulates their use in conservation and sustainability. This act is applicable as the proposed subprojects may utilize the groundwater resources and dispose of wastewater during the conservation, restoration and development works phase.

#### **10.14.11 GBV in the subproject site:**

It is comparatively large subproject, that involves both civil and preservation work and in such works require labor force and associated goods and services that cannot be fully met by local supply. In such cases, workers might be brought in from outside the subproject area. Construction workers are predominantly young males, typically separated from their families on a construction job for extended periods of time. They can therefore act outside their normal spheres of social control, which can lead to a spectrum of unacceptable and illicit behaviors, including sexual exploitation and abuse from the local community. Therefore it is important to arrange training to all project staff, including contractors and staff about the importance of preventing GBV, SEA, and SH. There shall be training for the workers on recognizing and reporting any incidents of GBV, SEA, or SH. The



contractor ensure to have clear and comprehensive policies/arrangement that explicitly prohibit GBV, SEA, and SH on the construction site. The Contractor will use PMU-KITE reporting mechanisms for workers to report any incidents or concerns.

#### **10.14.12 Sustainable Development Goals (SDGs)**

Sustainable Development Goals (SDGs) are a collection of 17 global goals set by the United Nations General Assembly in 2015, and adopted by Pakistan as its national goals. The goals are broad and interdependent, yet each has a separate list of targets to achieve. The SDGs cover social and economic development issues including poverty, hunger, gender equality, water, sanitation, energy, health, education, global warming, urbanization, environment and social justice. Relevance: The subproject has direct relevance with SDG 6 (Clean Water & Sanitation), SDG 8 (Decent Work & Economic Growth), SDG 11 (Sustainable Cities & Communities), SDG 13 (Climate Action) and SDG 15 (Life on Land).

### **Section: 11 World Bank Group Environmental, Health & Safety**

#### **Guidelines**

In addition to OP, the World Bank Group has also established its Environmental, Health and Safety (EHS) guidelines for all the interventions that are financed by the group. These EHS Guidelines are technical reference documents with general and sector-specific examples of Good International Industry Practice (GIIP). General EHS Guidelines: Issues associated with the construction and operation of maintenance facilities are addressed in the General EHS Guidelines with other key element like Environment and Occupational, Health and Safety (OHS) at workplace as well as for community. Summarized WB Group's Environmental and Health and Safety guidelines are provided<sup>4</sup>.

[https://www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/sustainability-at-ifc/policies-standards/ehs-guidelines](https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines)

### **Section: 12 National Environmental Quality Standards (NEQS), 2010**

In pursuance of the statutory requirement under clause (e) of sub-section (1) of section (6) of The Pakistan Environmental Protection Act, 1997(XXXIV of 1997), Pakistan

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<sup>4</sup> <https://documents1.worldbank.org/curated/en/157871484635724258/pdf/112110-WP-Final-General-EHS-Guidelines.pdf>

Environmental Protection Agency with prior approval of the Pakistan Environmental Protection Council, has published the NEQS in 2010.

The NEQS 2000 specify the following standards:

- Maximum allowable concentration of pollutants (32 parameters) in municipal and liquid industrial effluents discharged to inland waters, sewage treatment facilities, and the sea (three separate sets of numbers);
- Maximum allowable concentration of pollutants (16 parameters) in gaseous emissions from industrial sources;
- Maximum allowable concentration of pollutants (two parameters) in gaseous emissions from vehicle exhaust and noise emission from vehicles; and Maximum allowable noise levels.
- NEQS ensures that air, water and noise levels do not exceed their allowable limits, during project's implementation.

### **Section: 13 Administrative Framework**

The PMU-KITE-DoT will monitor and coordinate all project implementation activities including financial management, procurement, recruitment of staff, consultants and contractors, and overseeing the implementation of PCRMP.

### **Section 14 Chance Find Procedure**

Project may involve deep excavations. Therefore, the possibility of chance find cannot be ruled out. In case of any chance find, the contractor will immediately report through Supervision Consultant to Directorate of Archaeology & Museums Department, KP, to take further suitable action to preserve those antique or sensitive remains. Representative of the Directorate will visit the site and observe the significance of the antique, artifact and Cultural (religious) properties and significance of the project. The report will be prepared by representative and will be given to the Director. The documentation will be completed and if required suitable action will be taken to preserve those antiques and sensitive remains. In case any artifact, antiques and sensitive remains are discovered, chance find procedures should be adopted by contractor workers as follows:

- Stop the construction activities in the areas of chance find;

- After stopping work, the contractor must immediately report the discovery to the Supervision Consultant;
- The Director decides to take over the antiquity for purposes of custody, preservation and protection, the person discovering or finding it shall hand it over to the Director or a person authorized by him in writing;
- Delineate the discovered site or area;
- Consult with the local community and provincial Archaeological Department;
- The Director shall, constitute a team of archaeologists for undertaking preliminary investigation and will decide about further course of action in light of findings of the team;
- The suggestion of the local communities and the concerned authorities will be suitably incorporated during taking the preventive measures to conserve the antique, artifact and cultural (religious) properties; and
- Secure the site to prevent any damage or loss of removable objects. In case of removable antiquities or sensitive remain, a night guard shall be arranged until the responsible local authorities take over.

## **Section: 15 Environmental and social management plan**

This section recaps the mitigation, monitoring, and institutional measures to be taken during implementation and operation to eliminate adverse environmental and social impacts.

### **15.1 Inclusion of PCRMPs in Bidding/ Contract Documents**

The present PCRMP will be included in the bidding/ contract documents and their implementation will be a contractual binding for the contractor.

### **15.2 Institutional Arrangements**

The proposed organizational structure under Project Steering Committee (PSC) for the implementation of the PCRMP is presented in below mentioned figure and roles and responsibilities of key role players are given in the Table

Project Director -PMU-KITE-DoT is overall responsible to look after the project implementation. The Directorate of Archeology & Museums is an administrative and regulatory agency for this project.

Environmental and Social Safeguard Team is generally responsible to look after environmental and social issues Responsible for monitoring of PCRMP. Moreover, the

construction contractor is responsible for the implementation of PCRMP. The World Bank is a funding agency

### 15.3 Costs for the Implementation of PCRMP

Contractors are also required to appoint/designate the following environmental staff/focal points for the implementation of PCRMP in the field, particularly the mitigation measures. Below mentioned Table shows the positions proposed for an effective implementation of environmental and social mitigation measures and its associated costs. The Contractor will develop various plans directed towards PCRs, health, safety environment and social issues and get them approved by the E&S Team PMU-KITE-DoT. The contractor will also be responsible for communicating with and training of its staff in the PCRs/environmental/social/health & safety (occupational and community) aspects before the commencement of the construction works (as per advise of E&S team). The construction contract will have appropriate clauses to bind the contractor for the above obligations. To carry out all the duties/obligations, the contractor requires certain amount of staff.

Contractor's staff	Position	Schedule months	Cost estimates	Remarks
Social and Occupational Health & Safety Monitor	1	12	30000 x 12 = <b>360,000</b>	This staff will ensure the compliance of EHS and social SG at site
Conservation Assistant designated by DoAM	1	12	30000 x 12 = <b>360,000</b>	The assistant will oversee the conservation and preservation activities at site
Environmental Monitor	1	12	30000 x 12 = <b>360,000</b>	This staff will inspect environmental compliance at site.
<b>Sub- Total</b>			<b>1,080,000</b>	

### 15.4 Site-Specific PCRMP:

Prior to mobilization, within 30 days of commencement, the construction contractor with the consent of E&S team construction /site Specific Physical Cultural Resource Management Plan (CPCRMP), and Site Specific Health and Safety Management Plan (SSHSM), based

on the WB Physical Cultural Safeguard Policy, Guidebook and WBG EHS guidelines (refer Annex-III), which will be relevant to his chosen methodology and meet the requirement of this PCRMP. This will be submitted to DoAM for further processing; the DoAM sent it to the E&S Unit KITE.

These plans may include the following:

- Physical Cultural Resource Management Plan;
- Pollution Prevention Plan (Air/Noise/Waste/Sanitary Waste);
- Tree Plantation Plan;
- Traffic Management Plan;
- EHS Training Plan;
- Occupational Health and Safety Plan;
- Emergency Plan; and
- Site Restoration Plan.

These Plans will be submitted to the E&S team PMU-KITE-DoT for review and approval before contractor mobilization.

### 15.5 Consolidated E&S Budget (cost in PKR)

The cost required to effectively implement the mitigation measures is important for the sustainability of the subprojects and is summarized as under:

Items	Unit	Amount
Personal Protective Equipment cost	PKR	1,19,350
Environmental Monitoring and Testing Cost	PKR	240,000
E&S staff Cost	PKR	1,080,000
Training /Capacity Building	PKR	1,85,000
<b>Sub total</b>	PKR	<b>1,624,350</b>

## Section 16 Monitoring and Mitigation Plan:

The objective of environmental monitoring during the various phases of the proposed sub-project will be as follows:

- Ensuring that the mitigation measures included in the PCRMP are being implemented completely. Monitoring in this context involves tracking progress, compliance, and adherence to the prescribed mitigation measures. AND
- Ensuring the effectiveness of the mitigation measures in minimizing the project's impacts on social and environmental resources.

In summary, environmental monitoring during the various phases of the sub-project serves the dual purpose of ensuring that prescribed mitigation measures are being carried out and assessing how well these measures are working to reduce the project's adverse effects on the environment and society.

### Performance Indicators

A key aspect of monitoring is defining relevant indicators. A Performance Indicator is a measurable value that demonstrates how effectively the EMP is achieving its key objectives, evaluated against the criteria defined in environmental management Plan.

**Table-II: Environmental Monitoring Plan**

No.	Test	Frequency	Parameters	Location of Monitoring	Responsibility
1	Water Quality	Biannual	Compliance with all parameters as per NEQS/ WHO Guidelines /FAO applicable standards.	Subproject area	Contractor
2	Air Quality	Biannual	Monitoring of CO, CO <sub>2</sub> , SO <sub>x</sub> , NO <sub>x</sub> , HC and PM <sub>2.5</sub> PM <sub>10</sub> and compliance with NEQS and FC/WHO guidelines whichever is stringent).	Subproject area	Contractor

			Vehicular emissions as per NEQS and IFC/WHO guidelines (whichever is stringent).		
3	Noise Quality	Annually	Compliance with dBA Leq. as per NEQS and WHO guidelines whichever is stringent).	Subproject area	Contractor
4	Soil Quality	Annually	Soil contamination, uncontrolled solid waste / wastewater disposal activities at site.	Subproject area	Contractor

**Table-III: Budget for Lab Testing**

S. No.	Parameter	Mechanism	Freq.	Unit rate	Quantity	Estimated Cost (PKR)
<b>A</b>						
1.	Surface Water Quality advised by environmental Expert/ Specialist	Sampling and analysis from EPA approved laboratory	Once	30,000	1	<b>30,000</b>
2.	Drinking water	Sampling and analysis from EPA approved laboratory	Once	30,000	1	<b>30,000</b>
3.	Air Quality / Noise level	Sampling and analysis from EPA approved laboratory	Once	60,000	1	60,000
<b>B</b>						
1.	Surface Water Quality advised by environmental Expert/ Specialist	Sampling and analysis from EPA approved laboratory	Once	30,000	1	<b>30,000</b>
2.	Drinking water	Sampling and	Once	30,000	1	<b>30,000</b>

		analysis from EPA approved laboratory				
3.	Air Quality / Noise level	Sampling and analysis from EPA approved laboratory	Once	60,000	1	<b>60,000</b>
<b>Total</b>						<b>240,000</b>



**Table-IV: Monitoring and Mitigation Plan**

Activities	Mitigation Measures	Monitoring Parameters	Monitoring Frequency	Responsibility of Monitoring
General Activity	Notification to staff before the start of work and encourage them to WFH option or avail off hours	STAF	Before the start of work	DoAM /Site In charge
Preservation and Conservation work at Cultural heritage	Engage historical preservation experts and architects with experience in restoring heritage sites. Their expertise can ensure that the work is done in a historically accurate and sensitive manner. When dismantling temporary structures or walls, use temporary supports to ensure that the fort's original walls are not compromised during the process. This might include shoring or bracing systems. Adhere to the principles of conservation ethics, which prioritize minimum intervention and reversible changes. Avoid irreversible alterations to the fort's structure and appearance.	Presence of relevant and well trained staff to ensure the all compliance.	Once at the time of mobilization of contractor  Once during implementation of work.	DoAM /Site In charge
Noise Disturbance	Contractor shall provide ear plugs to the worker/ and all other PPEs for drilling purpose, such as gloves, mask, glasses	Time Restrictions and Scheduling: Sound Barriers and Enclosures: Installing physical barriers and enclosures around noisy equipment or construction activities can help contain and reduce the spread of noise.	Once at the time of mobilization of contractor  Once during implementation of work.	DoAM /Site In charge
Improper Waste management can cause social and environmental problems at construction site.	Education and Training: Provide training and awareness programs for construction workers to educate them on the importance of waste segregation. Develop a comprehensive waste management plan that outlines specific goals, procedures, and responsibilities for waste sorting. This plan should be communicated	The construction site generates a significant amount of waste, including materials like concrete, wood, metal, and packaging materials. By establishing clear guidelines	Frequent basis.	Contractor and DoAM

Activities	Mitigation Measures	Monitoring Parameters	Monitoring Frequency	Responsibility of Monitoring
	to all construction personnel.	and infrastructure for sorting these materials, can significantly reduce the amount of waste sent to landfills and minimize the environmental impact.		
Compliance with Regulations	Awareness and availability of relevant guidelines to the staff.	Ensure that your waste management practices align with local, regional, and national regulations regarding waste disposal.	Once during implementation of work.	DoAM/ PMU DoT
Dismantling and Removal of debris in heightened site	Deliver Ongoing Safety Training	Providing regular training for staff is a great way to reduce risk. Practical knowledge helps to promote a safe culture and keeps the workforce engaged and motivated	Twice a month	Contractor and PMU/DoAM
Removal of Asbestos material during dismantling	By testing the air quality	If found the asbestos particles than proper measures will be taken of.	In the start of the construction.	Contractor
Safety of installers and O&M Personnel	<p>PPE includes protective headgear, eyewear, safety footwear and hi-visibility clothing. It protects workers against the numerous hazards found on a construction site, including flying debris and machinery.</p> <p>PPEs shall be provided as follows:            Safety boots, apron, ear plugs, eye glasses, mask, rubber gloves for civil work, to the workers at site.</p>	<p>All PPE should be in good condition. If the equipment is damaged, it must be disposed of and replaced. Equipping workers with everything is a great way of getting ahead of health and safety risks.</p> <p>PPEs are available for staff handling the equipment.            Staff has been trained for proper usage of equipment.</p>	Presence of correct Equipment and visual inspection during the implementation on regular basis.	DoAM/ PMU DoT

Activities	Mitigation Measures	Monitoring Parameters	Monitoring Frequency	Responsibility of Monitoring
Covid SOPs	Covid SOPs will be strictly adhered to during work. Contract to provide PPEs, hand sanitizers etc. to workers.	Covid SOPs are being strictly adhered to during work. PPEs, hand sanitizers etc. is provided by contractor to workers.	Visual inspection during implementation	DoAM/ PMU DoT
GBV/SEA/SH	Awareness and Training: Clear Policies and Reporting Mechanisms: Site Security: Community Engagement: Supervision and Accountability: Support Services: Regular Audits and Assessments:	Addressing GBV, SEA, and SH requires a multifaceted approach, including policy development, training, awareness, and community engagement. It is essential to create a culture of respect and accountability on the construction site to ensure the safety and well-being of all workers and stakeholders.	Regular supervision and Reporting mechanism	DoAM/ PMU DoT

**Note: Implementation monitoring budget will be supported by DoAM through its own resources.**

## **Section 17 Capacity Building**

The PCR management, environmental, and social trainings will assist in ensuring that the PCRMP requirements are well understood and followed by all subproject workers. The contractor and PMU-KITE-DoT will be primarily responsible for providing these trainings to all subproject workers. The trainings will be delivered separately to different professional groups, such as managers, skilled individuals, unskilled labourers, and camp staff. The goal of capacity building will be to strengthen the PMU-KITE-DoT and operational employees in the fields of environmental management and social development. E&S team of the PMUKITE-DoT responsible for supervision of environmental and social mitigation measures would be trained in environmental engagement, environmental quality control, ecology, environmental awareness, participatory approach and social development. The contractor will also be required to provide environmental and social trainings to its staff, to ensure effective implementation of the PCRMP.

### **17.1 Training:**

To ensure the successful implementation of environmental and mitigation measures, strengthening relevant and fundamental competencies is essential. The objectives of the environmental and social training include providing basic knowledge and information on the key environmental and social issues associated with the proposed interventions to the key project personnel, including the DoAM staff, PMU staff and contractors involved in the subproject's management.

In order to comply with the expected environment and social attributes as described in PCRMP, meetings will be held with the contractor to ensure a socially acceptable and environmentally sustainable situation during the execution of the schemes.

The Contractor will also be informed on procedures and techniques for complying with environmental and social management conditions, as well as any special conditions stated in a PCRMP; a description of specific mitigation measures that will be undertaken in order to minimize adverse impacts; and a summary of all planned monitoring activities. The contractor will ensure that the proposed project activities adhere to the PCRMP, NEQS, and World Bank operational rules.

**Table V: Capacity Building**

The PMU KITE's Environmental and Social Safeguard Expert will carry out the training programs and be responsible for the overall implementation of the training plan, as well as ensuring proper applicable documentation. KITE DOT will be in charge of the budget. The following is a tentative training schedule and budget: 99000

**Training plan under PCRMP**

Description of Training	Training Module	Location	Participants	Frequency	Estimated Budget
One day training by PMU-KITE on PCR Management Plan GRM Monitoring and reporting	Implementation of PCRMP Detail about Mitigation Measures proposed in PCRMP	Once at sub-project site	Contractor and its staff, and DoAM staff,	Before start of implementation activities by the Contractor	35,000
World Bank Safeguard policies World Bank PCR Safeguard Policy, Guidebook WB ESHGS EPA Regulation	Awareness on WB operational policies and best practices on environment and social issue. Defining PCRs and Chance Finds, local sensitivity to damage to PCRs, sensitivity of cultural heritage	Once at sub-project site	Contractor and their Staff		80,000
One day training by the DoAM for the contractor and workers regarding Design and Methodology	approved project designs utilization of proper tools, materials and methodology for the developmental works	Sub-project site	Contractors, PMU Staff	Before start of implementation activities by the Contractor	20,000
One day Training on Appropriate personal protective equipment (PPE) and First Aid	What is the purpose of PPE? How important to use PPE? How to use PPE? First Aid EHS aspects Fire Fighting	PMU KITE Peshawar	Contractor and DoAM staff,	At the start of Construction	15,000
GBV/SEA/SH	Awareness and Training: Clear Policies and Reporting Mechanisms:	PMU KITE Peshawar	Contractor and DoAM staff	At the start of Construction	35,000

	Site Security: Community Engagement: Supervision and Accountability: Support Services: Regular Audits and Assessments				
<b>Sub total</b>					<b>185,000</b>

## Section 18 Mitigation and Monitoring Budget:

The cost for implementation stage mitigation activities is given in this plan will be included within the contract for this sub-project with total cost of /. After of assignment all sites will be handed over to DoAM for operations, hence, all O&M will be borne by DoAM through its own annual budget. DoAM has been observed to have adequate capacity with regards to implementation of Project O&M. the total budget for mitigation and monitoring is 60,400 PKR.

**Table VI: Mitigation and Monitoring Budget:**

Items	Quantity	Cost / Item (Rs.)	Estimated Total Cost (PKR)
Dust masks	5 boxes	900	4500
Safety Shoes	08 Pairs	2500	20,000
Gloves	10 Pairs	2000	20,000
First Aid Box	2 boxes	8500	16,000
Ear Plugs	20 plugs	100	2000
Safety Helmets	8 helmets	5000	40,000
Sanitizers	7 bottles	700	4900
Reflective Tape	3 tapes	650	1950
Safety Cones	5 cones	2000	10,000
<b>Sub- total</b>			<b>1,19,350</b>

## **Section 19 Grievance Redress Mechanism:**

The Grievance Redress Mechanism (GRM) is an institutional arrangement, which provides the project's stakeholders an opportunity and a structured mechanism to submit their concerns. The grievance redress mechanism will focus on the following during the implementation process:

- Record grievances, both written and oral, categorizing and prioritizing them, and providing solutions within an agreed timeframe;
- Reporting to the aggrieved parties about the resolutions regarding their grievances and the decision;
- Dissemination of various reporting channels such as complaint boxes, help desk with phone numbers, online complaint registration and proformas for complaints.
- All information about grievance procedures, grievance forms, and responses will be available in languages readily understandable to the locals.
- It is imperative to counsel the contractor's labor regarding GRM for them as well. All the labor shall have the access to the GRM boxes where they can submit their concerns if any.

KITE is committed to grievance redress. Effectively addressing grievances from people impacted by the projects is a core component of managing operational risk. The grievance Redress Mechanism (GRM) is an effective tool for early identification, assessment, and resolution of concerns, complaints and suggestions. A key emphasis will be to quickly respond to all highlighted and reported concerns or grievances, as per KITE GRM policy.

Grievance Recording: it will be made sure that all incidents and complaints/grievances are properly recorded and in a timely manner. Through initial assessment, eligibility would be made to ensure that the issue being raised is relevant to the subproject. All grievances would be resolved after verification within a stipulated time span at the respective level.

Follow-up of cases will be done to determine satisfaction with the process, resolution of complaints, etc. The PMU will provide tracking numbers to the grievances received to determine and monitor whether complaints have been redressed.



### **19.1 Composition of GRC**

The PMU DoT will develop a Grievance Redress Mechanism (GRM) at its PMU level. This GRC will be accessible to project affected persons and tourists. PMU DoT will notify the following Grievance Redress Committee (GRC) as per following:

- Project Director PMU DoT Chairman
- SDS PMU Secretary
- Co-opted Member/s of Relevant Government Departments (e.g., KDA, GDA, or Archaeology, etc.) (as required) needed to resolve the complaint.
- Invited Members (e.g., Complainant, concerned local citizen, etc.) needed to resolve complaint.

### **19.2 GRC Working Arrangements**

GRC meeting will be held in the PMU or any other location agreed by the Committee. If needed GRC members may undertake field visits to verify and review the issues of dispute. If the affected person is not satisfied with the decision of GRC at PMU DoT, then it can be referred to the Project Steering Committee for resolution. If the complainant does not accept these options or if he/she does accept but an agreement is not reached with the grieving party, the same will be stated in writing, and the case will be closed. The complainant may also seek redress through courts or other mechanisms available as a last resort.

The PSC will be the highest forum within the project for redressing the grievances received from the beneficiaries, stakeholders and other concerned. Liaison & Coordination Officer PMU DoT / E&S specialist will be designated as Secretaries to the GRC at their respective PMUs and will act as Focal Person/Complaint Handling Officers for GRC. The GRC, while handling a complaint may requisition any staff for assistance and/or may constitute a special committee if required. The GRC may also invite other relevant Government Departments or individuals as Co-opted Members or Special Invitees to assist in grievance resolution. The Project Director, with prior approval of the World Bank, may replace a single member and/or the entire GRC.

### **19.3 Procedures for Filing the Complaints**

There will be a 5-step process to resolve grievances, as follows:

When a grievance arises, the complainant (affected person/s or stakeholders) may directly contact the Project Management Unit (PMU) through either registering a complaint/s via Complaint Register Book at the PMU offices, Tourist Facilitation Hub, respective sub-project

site offices, or through filling the online grievance form available at website i.e. www.kptourism.com, or by calling the Tourism Helpline 1422.

## **Section 20 Reporting**

The contractor will prepare monthly reports covering various aspects of the PCRMP implementation including compliance and effects monitoring, capacity building, and grievance redressal during subproject implementation.

### **20.1 Reporting during implementation and operation phases**

The reporting during the implementation of the PCRMP is given in the below Table.

<b>Report</b>	<b>Contents</b>	<b>Prepared by</b>	<b>Submitted to</b>
Monthly Progress Report	Action taken at site	Contractor	Supervisory Consultant/ PMU KITE
Monthly Progress Report	Non compliances observed on site	Supervision consultant	PMU KITE
Quarterly Progress Report	Non compliances observed on site/ Implementation of PCRMP components	ESSU PMU	EPA/ World Bank

## **Section 21 Recommendations:**

The key recommendations for the proposed subprojects, particularly related to conservation, preservation, restoration, and civil works for the PCRs (Protected Cultural Resources) structure, as outlined in your provided information, are as follows:

### **21.1 Adherence to PCRMP:**

Ensure that all conservation, preservation, restoration, and civil works for the PCRs structure strictly adhere to the measures and guidelines outlined in the Protected Cultural Resources Management Plan (PCRMP). The PCRMP should be an integral part of the bidding documents for contractors, serving as a reference and guide throughout the project.

### **21.2 Contractor Qualifications:**

Award the project works exclusively to contractors who have been approved or pre-qualified by the Department of Archaeology and Museums (DoAM). These contractors should have a proven track record and experience in similar conservation and preservation projects.

### **21.3 Skilled Labor:**

Emphasize the importance of employing skilled labor with prior experience in projects related to conservation, preservation, and restoration. Skilled workers are crucial for the proper execution of delicate and historically significant work.

### **21.4 Site-Specific Plans:**

Require the contractor to develop site-specific plans such as SSPCRMP (Site-Specific Protected Cultural Resources Management Plan), SSEMP (Site-Specific Environmental Management Plan), and SSHSMP (Site-Specific Safety and Health Management Plan). These plans should detail how the contractor intends to manage and mitigate risks related to cultural resources, environmental impact, safety, and health on the project site.

### **21.5 Regular Monitoring and Compliance:**

Establish a system for regular monitoring and assessment of the contractor's adherence to the PCRMP, EMP, and other site-specific plans. Non-compliance should be addressed promptly, and corrective actions should be taken as necessary.

### **21.6 Stakeholder Engagement:**

Involve relevant stakeholders, including local communities, cultural experts, and heritage preservation organizations, in the project planning and execution to ensure their perspectives are considered and valued.

### **21.7 Documentation and Reporting:**

Require the contractor to maintain comprehensive documentation of all activities, including conservation and restoration processes. Regular reporting on project progress, compliance, and any unexpected issues should be submitted to relevant authorities.

### **21.8 Quality Assurance and Control:**

Implement a rigorous quality assurance and control process to ensure that the conservation, preservation, and restoration work meets the highest standards and does not compromise the cultural significance of the structure.

### **21.9 Public Awareness:**

Promote public awareness of the project's cultural and historical significance through appropriate means, such as signage, educational materials, and community engagement events.

These recommendations aim to ensure that the conservation and restoration of the PCRs structure are carried out with the utmost care, professionalism, and consideration for cultural,

environmental, and safety concerns. By incorporating these measures into the project, you can help protect and preserve the cultural heritage while minimizing potential negative impacts.

## Pictures for Jamrud Fort



**MEETING WITH SOCIAL WELFARE OFFICER-KHYBER TMA**



**MEETING WITH ELDERS /MASHRAANS OF KHYBER DISTRICT AT DC OFFICE**



**MEETING WITH ADC- KHYBER AT HIS OFFICE**



**SCEOND MEETING WITH ADC AND ELDERS \_ KHYBER TMA**



**MEETING WITH ASSISTANT COMMISSIONER AT HIS OFFICE IN JAMRUD**



**MEETING WITH STAFF AT JAMRUD FORT –JAMRUD**



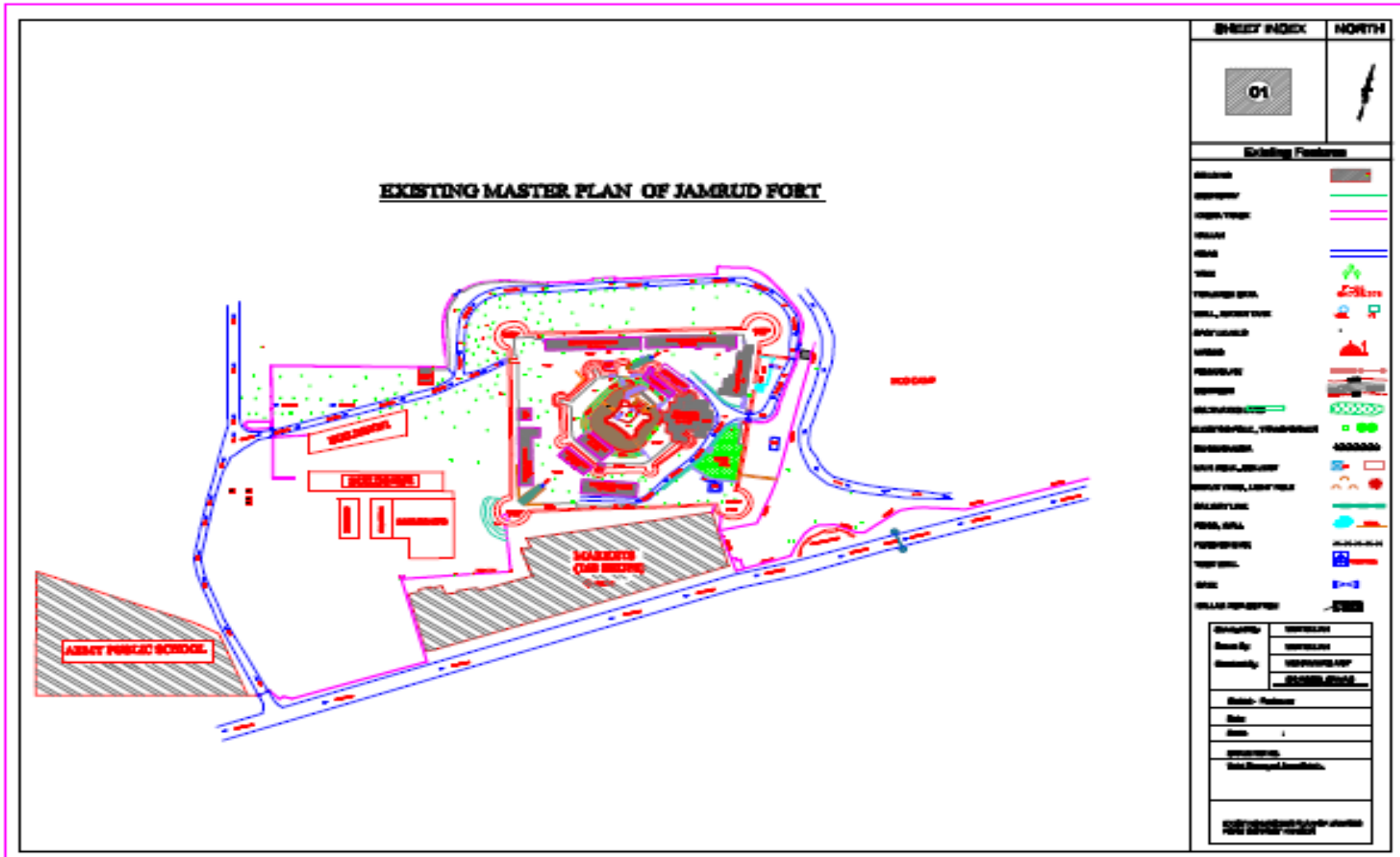
**E&S SCREENING VISIT TO JAMRUD FORT**



**MEETING WITH PVDP (NGO) STAFF AT JAMRUD**



## Annex-I: Master Plan for Jamrud Fort:



**Annex II- NOC for Jamrud Fort:**



**DIRECTORATE OF ARCHAEOLOGY AND MUSEUMS  
GOVT. OF KHYBER PAKHTUNKHWA, PESHAWAR**

Tel: 091-9211104, 9211104, 9211468

Email: [info.archaeology@kp.gov.pk](mailto:info.archaeology@kp.gov.pk)

No. A-139 / Archymus/ 2903-  
Dated: 8-5-2023

To

The Project Director,  
Project Management Unit, KITE DoT,  
Govt. of Khyber Pakhtunkhwa.

Subject: NOC FOR CONSERVATION, RESTORATION & DEVELOPMENT  
WORK OF JAMRUD FORT DISTRICT KHYBER.

Respected Sir,

I am directed to refer your Office letter No. PD(KITE)/DoT/Program-1/11545-15 dated 04-May-2023, on the subject cited above and to state that this Directorate has no objection regarding Conservation, Restoration & Development work of Jamrud Fort, District Khyber.

  
( Muhammad Arif )  
**LITIGATION OFFICER**

Endst. No. \_\_\_\_\_ / Archymus

Dated \_\_\_\_\_ / \_\_\_\_\_ / 2023

Copy to:

1. P.A to Director, Archaeology & Museums Govt. of Khyber Pakhtunkhwa for information.

  
**LITIGATION OFFICER**

## Annex III: Attendance Sheets



GOVERNMENT  
OF KHYBER  
PAKHTUNKHWA

KHYBER PAKHTUNKHWA  
**INTEGRATED TOURISM  
DEVELOPMENT PROJECT (KITE)**  
PROJECT MANAGEMENT UNIT (DoT)

Department of Tourism, Culture, Sports, Archaeology, Museums & Youth Affairs

Physical Cultural Resource Management Plan (PCRMP)  
24<sup>th</sup> September 2023

### Attendance Sheet

S. No:	Name	Designation	Department	Mobile #	Signature
1	Naseer Abbas	AAC	Dist Adm.		
2	Kashif Akber	Soldar. PWS	Jamrud		
3	Abdul Aziz	Gr. S	Jamrud		
4	Hamban	P. S	Jamrud		
5	Salman Shah	G.A	Archaeology Dept		
6	Faiz Akber	Asst	IC:FC		

7	Jamshed Afridi	Social Case Worker	Child Protection Unit, Social Welfare		
8	Faiz	LCO	LIFE	-	
9	Shafiq Ali	SDS	KITE		



GOVERNMENT OF KHYBER PAKHTUNKHWA

KHYBER PAKHTUNKHWA INTEGRATED TOURISM DEVELOPMENT PROJECT (KITE) PROJECT MANAGEMENT UNIT (DoT)

Department of Tourism, Culture, Sports, Archaeology, Museums & Youth Affairs

Physical Cultural Resource Management Plan (PCRMP)  
24<sup>th</sup> September 2023

Attendance Sheet

S. No:	Name	Designation	Department	Mobile #	Signature
1	Hafeezullah Afridi	(Executive Director) Asst Social Wf	Social-welfare		
2	Fahem Akmal Khan	Child Protection Officer Khyber	S.W		
3	Rahat ulah	Social organizer	PVDP		
4	SHAH FAISAL	Assistant Social Welfare Officer	Social Welfare		
5	Naveed ul Haq	Computer operator	Social welfare		
6	Arsalam Amjid	Computer operator	Social welfare		



6	Fawad Khan				Sawad Khan
7	Irfan				Irfan
8	Iqbal				K. Sawad
9	Arsalan Khan				A. Khan
10					
11					
12					
13					
14					

**Annexure -IV Photo Documentation of Issue Identified Above**

<b>S/N</b>	<b>Date of Photograph</b>	<b>Photograph Depicting Issue</b>	<b>Remarks</b>

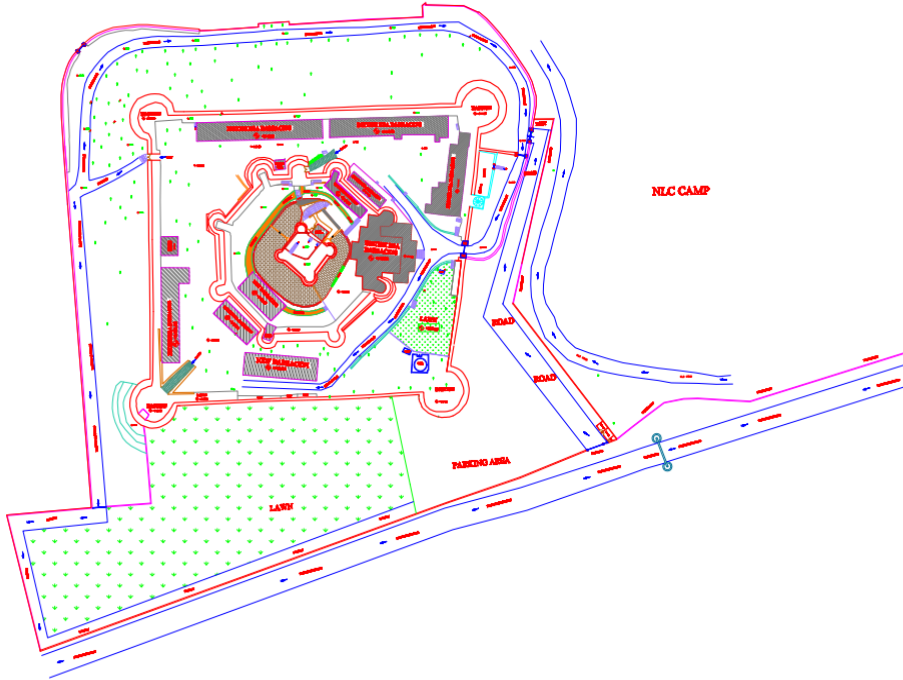
**Name of Monitoring Person:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

# Annexure –V Proposed Master Plan

## PROPOSED MASTER PLAN OF JAMRUD FORT



SHEET INDEX	NORTH
01	
<b>Existing Features</b>	
BUILDING	
BOUNDARY	
KAGHA TRACK	
HALLAH	
ROAD	
TREE	
TRANSVERSE DATA	
WELL, WATER TANK	
SPOT LEVEL	
MASJID	
POWER LINE	
CONTOUR	
CULTIVATED LAND	
ELECTRIC POLE, TRANSFORMER	
CENTER MESA	
MAN HOLE, CULVERT	
GRIVE YARD, LIGHT POLE	
RAILWAY LINE	
POND, WALL	
FENCING WIRE	
TUBE WELL	
BRIDGE	
HALLAH TOP/BOTTOM	
Surveyed by:	MUTTI ULLAH
Drawn by:	MUTTI ULLAH
Checked by:	MUHAMMAD AFRIF
Approved by:	DR. ABIDUL BAKHSH CHIEF ENGINEER AND HONORARY COMMISSIONER
Date:	
Scale:	
DRAWING NO.	
Total Sheet and Area Detail:	
PROPOSED MASTER PLAN OF JAMRUD FORT	



## **Annexure-VI: Tree Plantation Plan**

For tree plantation, the contractor will develop the list of the damaged trees/shrubs and will re-plant ten (10) plants per damaged/cut tree.

The contractor will obtain quotation from nurseries, forest department or agriculture department, and will discuss with project director (PD), E&S Environmental and Social Expert/ Specialist and will prepare a tree plantation plan, and this will be approved from PMU. In this subproject there will be no tree cutting however it is advised to grow more trees there to provide the shade to visitors during hot weather.

## **Annexure-VII Chance Find Procedures**

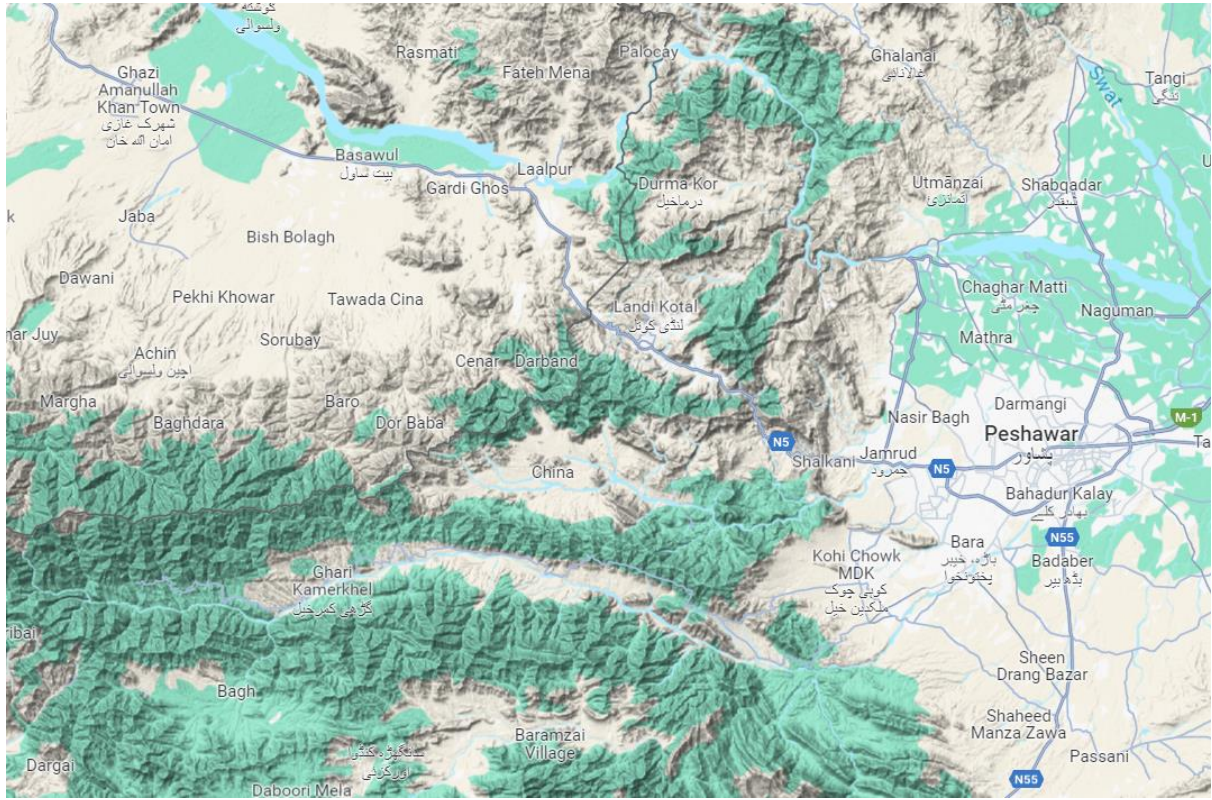
Project may involve deep excavations. Therefore, the possibility of chance find cannot be ruled out. In case of any chance find, the contractor will immediately report through Supervision Consultant to Directorate of Archaeology & Museums Department, KP, to take further suitable action to preserve those antique or sensitive remains. Representative of the Directorate will visit the site and observe the significance of the antique, artefact and Cultural (religious) properties and significance of the project. The report will be prepared by representative and will be given to the Director. The documentation will be completed and if required suitable action will be taken to preserve those antiques and sensitive remains.

In case any artefact, antiques and sensitive remains are discovered, chance find procedures should be adopted by contractor workers as follows:

- Stop the construction activities in the areas of chance find;
- After stopping work, the contractor must immediately report the discovery to the Supervision Consultant;
- The Director decides to take over the antiquity for purposes of custody, preservation and protection, the person discovering or finding it shall hand it over to the Director or a person authorized by him in writing;
- Delineate the discovered site or area;
- Consult with the local community and provincial Archaeological Department;
- The Director shall, constitute a team of archaeologists for undertaking preliminary investigation and will decide about further course of action in light of findings of the team;
- The suggestion of the local communities and the concerned authorities will be suitably incorporated during taking the preventive measures to conserve the antique, artifact and cultural (religious) properties; and
- Secure the site to prevent any damage or loss of removable objects. In case of removable antiquities or sensitive remain, a night guard shall be arranged until the responsible local authorities take over.
- The contact Address of Archaeology Department is given below:

**Directorate of Archeology & Museums,  
Saddar Road opposite Governor House,  
Peshawar. Tel: 091-9210985**

# Annexure-VIII Map



## Annex –IX PCRMP Check List

<b>Heritage Site's Name</b>		Jamrud Fort
<b>Total Budget</b>		PKR 98 million
<b>Assessment Date</b>		13/09/2023
<b>Name of Accessor</b>		Shafqat Ali Khan
<b>Designation of Accessor</b>		SDS
<b>Project Implemented By</b>		Department of Tourism, Khyber Pakhtunkhwa Integrated Tourism Development Project
<b>Project Monitored By</b>		Department of Tourism through its PMU, Khyber Pakhtunkhwa Integrated Tourism Development Project
<b>Consultation Undertaken</b>		Yes, with local people and district administration and Fort officials (Nauman Khan, Adnan Khan, Asif Khan and Suliman)
<b>Heritage Site's Name</b>		Jamrud Fort
<b>1.</b>	<b>Location:</b>	
	Latitude	34.0034° N, 71.3784° E
	Longitude	34.0034° N, 71.3784° E
	Tehsil/District	Jamrud, District Khyber (NMD)
	Province	Khyber Pakhtunkhwa
<b>2.</b>	<b>Ownership</b>	
	Government	✓
	Private individual	
<b>3.</b>	<b>Type of Heritage site</b>	
	General	✓
	Site	
<b>4.</b>	<b>Size/Area</b>	
	Total area	78.2 Kanal
	Covered area	
<b>5.</b>	<b>Present Condition of PCR</b>	
	Intact	
	Damaged	✓
	Missing	
<b>6.</b>	<b>Physical Requirement</b>	
	Restoration	✓
	Conservation	✓
	Beautification	
<b>7.</b>	<b>Assessment/Requirement</b>	
	Development	✓
	Repair	✓
	Renovation	✓
	Conservation	✓
	Any other	
<b>8.</b>	<b>Clearance</b>	
	Exposed features	Nil
	Damaged features	Nil
	Suspected sub surface features	Nil

<b>9.</b>	<b>Excavations</b>			
	Subsurface features/structures	Nil		
	Deep digging/Profiling	Nil		
<b>10.</b>	<b>Significance of PCR</b>			
	Historical	The well-known Sikh General, Sardar Hari Singh Nalwa (1791–1837), suggested the building of a large fort at Jamrud. The plan was opposed; however, General Hari Singh Nalwa laid the foundation of the remaining fort on 18 December 1836, and the construction was finished in 54 days. Built with 10 foot (3 m) thick walls, Jamrud is noted for its fort. In 1836 one of Ranjit Singh's commanders, the Sikh Hari Singh Nalwa, was originally named Fatehgarh to celebrate the Sikh victory over the disunited tribes.		
	Archaeological	The Jamrud fort was built on a high mound from which parts of Khyber, Mohmand and Bara could be seen, then the fort was called Fatehgarh (the victory site). Two other forts were also designed to combat assaults from Afghanistan through Mohmand and assault by Afridi tribes from the Tirah Valley from Khyber, one in Bara and Shabqadar respectively.		
<b>11.</b>	<b>Facilities</b>			
		Existing	Required	Comments
	Washrooms		✓	All will be upgraded
	Lawn/Plantation		✓	
	Electrification		✓	
	Walk/pathways		✓	
	Wash rooms improvement		✓	
<b>12.</b>	<b>Security/Protection Measures of PCR</b>			
	Fencing/boundary wall	✓		
	Barbed wire			
<b>13.</b>	<b>Conservation/Restoration Assessment of PCR</b>			
	Identification of areas	Nil		
	Material availability	Nil		
	Impacts	Nil		
<b>14.</b>	<b>Nature and Extent of Potential Impacts on PCRs during restoration/conservation</b>			
	Physical	Improved		
	Social	Improved		
	Environmental	Both Social and environmental impact assessed and PCRMP drafted.		
	Economic	Beneficial		
	Academic	Might be used for students to study the historical perspective of the heritage,		
<b>15.</b>	<b>Potential Causes of Damages to the PCRs during restoration/conservation</b>			
		Assessment	Mitigation measures	Irreversibility
	Walk/Pathways	X		
	Drainage	X		
	Access/Approach	X		
	Electrification	X		
	Lawns/Plantation	X		

<b>16.</b>	<b>Extent of Potential Damage</b>	
	Structures	X
	Area	X
	Access	X
	Beauty	X
	Any other	X

## **Annex-X WBGEHS**

<https://documents1.worldbank.org/curated/en/157871484635724258/pdf/112110-WP-Final-General-EHS-Guidelines.pdf>