



# Environmental and Social Screening and Environmental Management Plan

## Provision/Improvement of Toilet Blocks at Selected Sites of Southern Punjab

(September 2022)



Project Management Unit (PTEGP)  
Planning and Development Board  
Government of Punjab



*A project In collaboration with Pak Green Enviro-  
Engineering Pvt. Ltd*



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## Abbreviations

Acronym	Definition
BOQs	Bill of Quantities
DG	Director General
DGA	Directorate General of Archaeology
EP	Environmental Protection
EPA	Environmental Protection Agency
ESMF	Environment and Social Management Framework
ESMP	Environment and Social Management Plan
E&S	Environmental and Social
E&SS	Environmental and Social Screening
BHU	Basic Health Unit
EA	Environmental Assessment
GOP	Government of Pakistan
GOPb	Government of Punjab
NA	Not Applicable
NOC	No objection certificate
OHS	Occupational Health and Safety
OP	Operational Policy
Pb	Punjab
PCR	Physical Cultural Resources
PDO	Project Development Objective
P&DD	Planning & Development Department
PMU	Project Management Unit
PTEGP	Punjab Tourism for Economic Growth Project
RAP	Resettlement Action Plan
RHC	Rural Health Centre
SAA	Same as Above
SDO	Sub-Divisional Officer
TDCP	Tourism Development Corporation of Punjab
TMA	Tehsil Municipal Administration
UNESCO	United Nation, Education, Scientific and Cultural Organization
USD	United States of America, Dollar
WB	World Bank



## 1 Introduction

### 1.1 Overview

The Government of Pakistan (GOP) development agenda (Vision 2025) stresses the objectives of boosting economic growth, job creation and regional cooperation in addition to bolstering the country's image abroad. Tourism is highlighted as one of the sectors of the economy that could help stimulate economic growth. Cultural and heritage tourism is a large and growing international market that Pakistan could leverage to create more and better jobs<sup>1</sup>

The Planning & Development Department, Government of Punjab (GOPb) with the financial assistance of the World Bank (WB) has launched the Punjab Tourism for Economic Growth Project (PTEGP) to increase the contribution of the tourism and related sectors to the local economic development of the province. The objectives of the project are to strengthen institutional capacity, increase private sector participation and improve infrastructure services for the tourism sector growth in the Province of Punjab<sup>2</sup>. The total funding of the Project is 55 million USD with a World Bank contribution of USD 50 million over the five-year time frame<sup>3</sup>. The Project consists of four major components<sup>4</sup>:

Component 1: Policy, Institutions and Governance for Tourism Development

Component 2: Private Investment and Entrepreneurship Promotion

Component 3: Public Investment Facility

Component 4: Project Management, Monitoring and Evaluation

The project is being implemented by a dedicated Project Management Unit (PMU) PTEGP since October 2017. The project is financing some low-scale physical interventions to provide improved access, better road conditions and public convenience facilities in selected tourists destinations located throughout the Punjab Province.

### 1.2 Project Environmental and Social Management Framework

The detail of sub-projects to be executed under the PTEGP was not available during the project initiation, so an Environmental and Social Management Framework (ESMF) was prepared for PTEGP in December 2016 according to WB Operational Policy (OP) 4.01.

The project ESMF has been approved by the WB and is available on the WB and PTEGP website for public disclosure (refer to footnote no. 4 and 5 for the web link to ESMF available on PTEGP and WB website respectively). The overall project has been assigned Category B, due to the limited environmental and social impacts only during the construction phase. The ESMF concluded that; <sup>5</sup>

Environmental and Social Screening (E&SS) shall be carried for each sub-project

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<sup>1</sup> Combined project information documents / integrated safeguards data sheet (PID/ISDS) concept stage, May 23, 2016. The document is available at <https://documents1.worldbank.org/curated/en/841201468290413656/text/PIDISDS-CON-Print-P158099-05-29-2016-1464517363920.txt>

<sup>2</sup> Financing Agreement PTEGP between Islamic Republic of Pakistan and International Development Association, dated; August 2, 2017. The document is available at <https://documents1.worldbank.org/curated/en/337281506350830259/pdf/ITK171540-201708251045.pdf>

<sup>3</sup> Adapted from [https://ptegp.punjab.gov.pk/project\\_overview](https://ptegp.punjab.gov.pk/project_overview)

<sup>4</sup> <https://ptegp.punjab.gov.pk/system/files/ESMF%20Manual.pdf>

<sup>5</sup> <https://documents1.worldbank.org/curated/en/916261483004112382/pdf/SFG2802-EA-P158099-Box396342B-PUBLIC-Disclosed-12-28-2016.pdf>





intervention/s in order out to determine the appropriate Environmental and Social category as per WB Operation Policies.

- Category-A sub-project will not be financed under this project. If Category-A sub-project is identified, sub-project will be either dropped or replaced with a Category B or C sub-project.
- Environmental and Social Management Plans (ESMPs) will be prepared for category 'B' sub- projects and clearance from WB will be a prerequisite before initiating the sub-project. The guidelines for the preparation of ESMPs are attached as Annex-8 of project ESMF.
- Sub-projects categorized as Category C, no further activity beyond screening would be required.
- PMU PTEGP will obtain necessary NOCs from the relevant departments before commencing works of any sub-project.

### 1.3 Purpose of this Document

The sub-project "provision of new and improvement of existing toilet block/s at selected tourism sites. Selected tourist's sites where provision of new or improvement in existing toilets are given below. The relevant signage in English, Urdu and images of Male/Female/Disabled will be displayed on toilets door. Sewerage system will be provided to connect the sewer generate at proposed toilet blocks and connect with nearest existing sewerage system for wastewater disposal. If there is no existing sewerage system close to the new proposed toilets, a soaking pit will be constructed for the wastewater disposal.

List of Proposed Toilets Block Southern Zone of Punjab Province, Pakistan

<i>Sr. No</i>	<i>Location</i>		<i>District</i>	<i>Land Ownership</i>
1	Derawar Fort		Bahawalpur	Archeological Department
2	Bibi Jawandi			Archeological Department
3	Lal Suhanra			TDCP
4	Gulki Mubarki		DG Khan	TDCP
5	Bharti Rest house			TDCP
6	Mubarki top			TDCP

The sub-project "provision of new and improvement of existing toilet block/s at selected tourism sites. There will be 12 sets of toilets constructed at different sites i.e. Derawar Fort; Bibi Jawandi; Lal Suhanra; District Bahawalpur and Gulki Mubarki, Bharti Rest house, Mubarki top, District DG Khan all sites are prior requirement of Environmental and Social Screening (E&SS) which is based on three aspects; viz., nature of the project, size of the project and location of the project that is a sensitive area as stated in the project ESMF. Based on this assessment, sub-projects with potentially significant environmental and social impacts are identified at an early stage for detailed environmental and social assessment.

This Environmental and Social Screening (E&SS) and Environmental Management Plan (EMP) has been prepared for the recently shortlisted/ newly added sub-project provision and improvement of toilet blocks at the above-mentioned locations. It is pertinent to mention that no land acquisition will be involved as all sites proposed by the Director General (DG), Directorate General of Archaeology (DGA) are owned by the DGA or a property of TDCP or Forest Department.



## 1.4 Methodology for E&SS and EMP

Methodology for E&SS and EMP is already defined in the project ESMF. While the relevant forms/checklists to be adopted during the E&SS process have been provided in the following sections of the project ESMF;

- Environmental and social screening form has been provided as Annexure-6.
- An involuntary resettlement screening checklist has been provided as Annexure-9.
- Guidelines for an environmental management plan EMP/ESMP (if required) has been provided as Annexure-8.
- Physical cultural resource management framework and chance find procedures (if required) has been provided in Annexure-10.

The data required for completing above mentioned forms/checklist has been obtained from both primary (field visit/s, consultations, project engineering document/s, designs etc.) and secondary sources (literature including documents/ reports/ papers/ dissertations/ encyclopaedias both available online and in printed format/s etc.).

Stakeholders' consultations have been conducted with relevant person/s, affectee/s (if any) and organisation/s during the field surveys according to WB and Pakistan Environmental Protection Agency (EPA) guidelines. Moreover, relevant applicable legislation and policies have been reviewed according to the scope of the sub-project. In the end, the conclusion of E&SS and EMP has been drawn and appropriate recommendation/s has been made (where applicable).

## 1.5 The Team

The PTEGP staff that participated in the preparation of this E&SS and EMP report includes; Ahsan Bela (Environment Specialist), Tajwar Saeed (Social Safeguard and Gender Specialist) and Arif Mukhtar Rana (Civil Engineer). Moreover, PTEGP hired Pak Green Enviro-engineering Pvt. Ltd. as a consultant to provide support in order to expediate the process of E&S screening, the team of Participants from Pak Green included, Ahmad Raza (Senior Environmentalist), Faiza Anjum (Environmentalist). and Sabeera Tauheed (Junior Environmentalist).



## 2 Project interventions

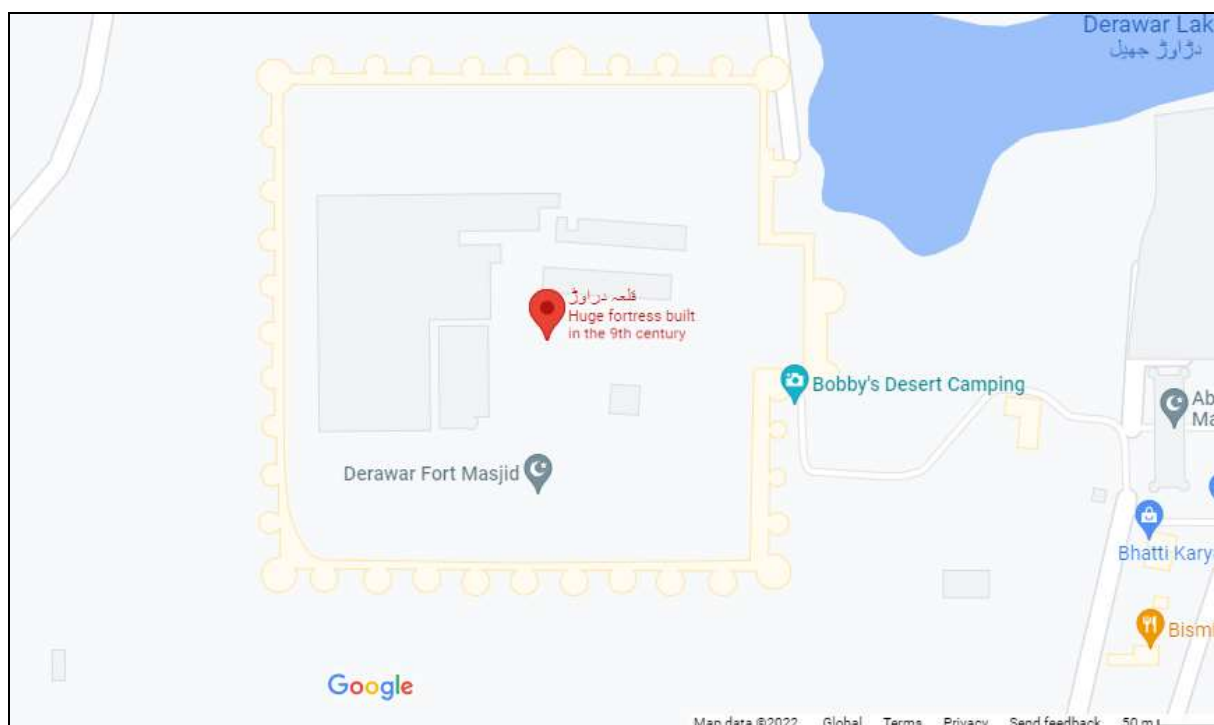
### 2.1 Derawar Fort

Derawar Fort is a large square fortress in Ahmadpur East Tehsil, Punjab, Pakistan. Approximately 130 km south of the city of Bahawalpur, the forty bastions of Derawar are visible for many miles in the Cholistan Desert. The walls have a perimeter of 1500 metres and stand up to thirty metres high.

Derawar fort was first built in the 9th century AD by Rai Jajja Solanki, a Hindu Rajput ruler of the Solanki clan, as a tribute to Rawal Deoraj Bhati, the king of Jaisalmer and Bahawalpur. The fort was initially known as Dera Rawal, and later referred to as Dera Rawar, which with the passage of time came to be pronounced Derawar, its present name.

In the 18th century, the fort was taken over by Muslim Nawabs of Bahawalpur from the Shahotra tribe. It was later rebuilt in its current form in 1732 by the Abbasi ruler Nawab Sadeq Muhammad, but in 1747 the fort slipped from their hands owing to Bahawal Khan's preoccupations at Shikarpur.[1] Nawab Mubarak Khan took the stronghold back in 1804. 1,000-year-old catapult shells were found in the debris near a decaying wall in the fort.

Figure 1: Location map of Derawar Fort, Bahawalpur



Source: Google Maps, 2022. [Accessed 09 March 2022].



Figure 4: Front Elevation of the proposed toilet block at Derawar Fort

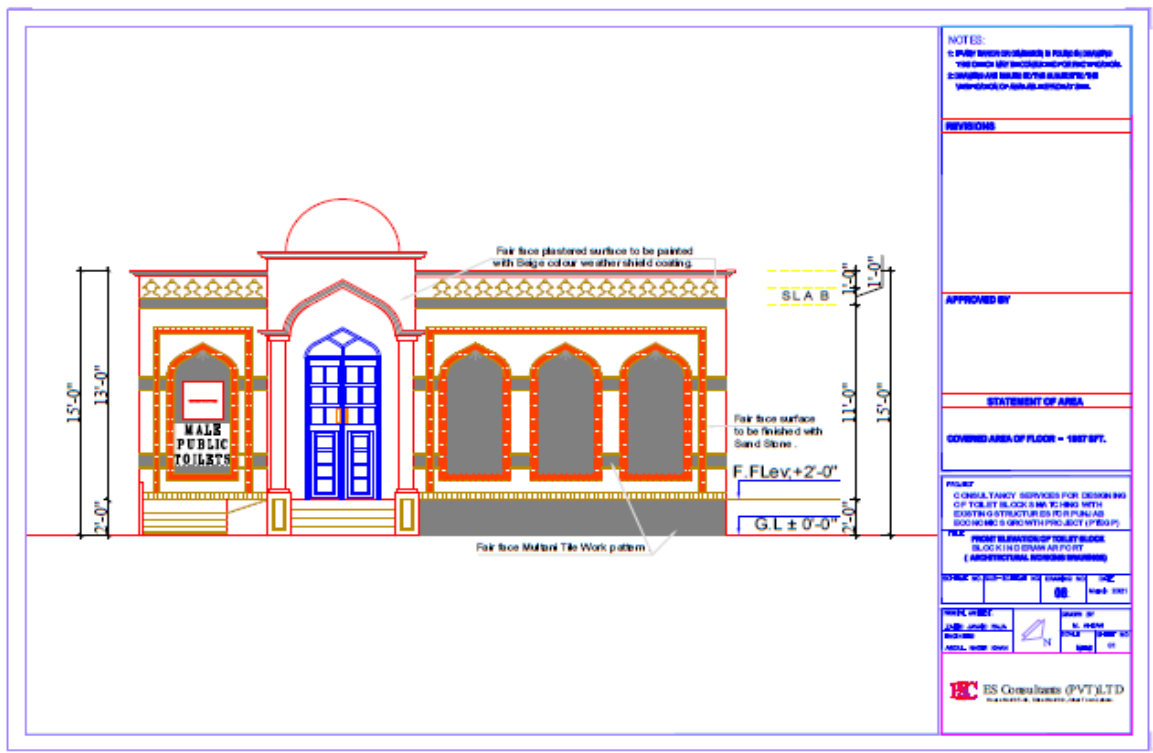


Figure 5: 3D elevation view of the proposed toilet block at Derawar Fort



Figure 6: Architecture plan of proposed toilet block at Derawar Fort

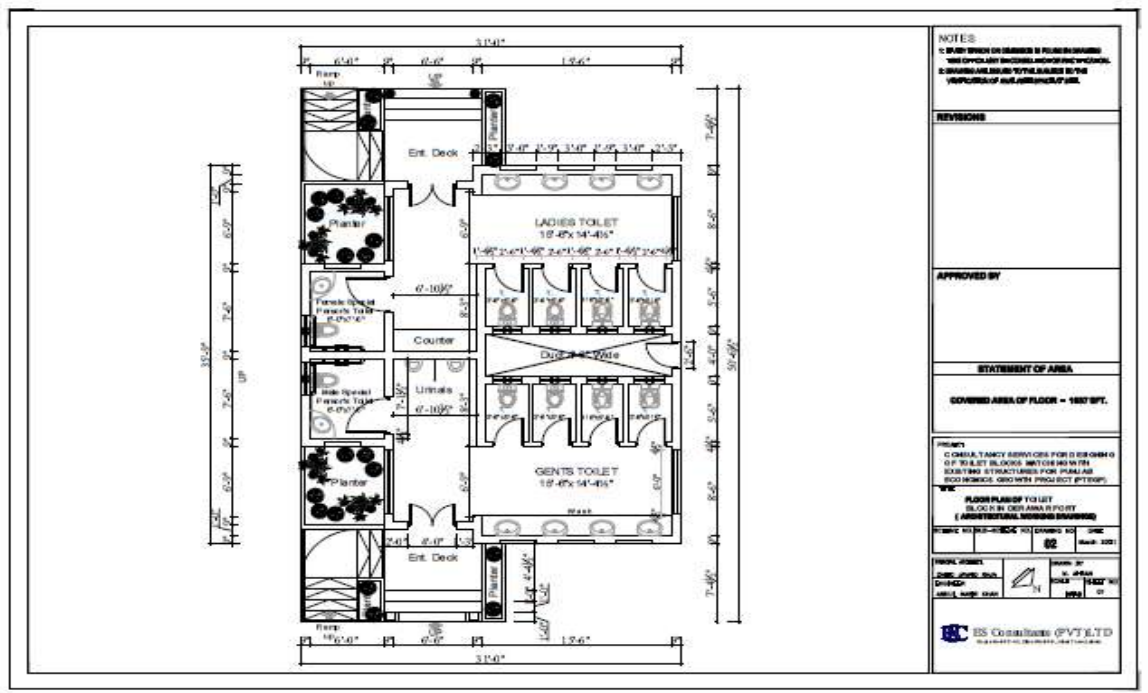


Figure 7: Proposed site for new toilet block at Derawar Fort



**2.1.2 Layout Plan of Proposed Toilet Block at Derawar Fort**

The covered area of the new proposed toilet block is 1037 sq. ft. The layout plan, front elevation and the 3D elevation of the proposed toilet block presented in Figure 4, Figure 5 and Figure 6 respectively.

**2.1.3 Construction activities**

The quantum of work and activities to be performed during the construction phase is presented in Table 3 below;

**Table 1: Activities/ tasks and estimated quantities of construction works at Derawar Fort**

Sr. #	Activity/ Task	Total Quantities
1	Excavation for foundation maximum up to 5 feet.	2486.44 Cft.
3	Brickwork	4681.08 Cft.
4	Installation of steel Chaukat	194.50 Sft
5	Fabrication of mild steel reinforcement for cement concrete i/c cutting, bending, laying in position, making joints and fastening.	2390.99 kg
6	RCC works in roofs, beams, columns and girders	909.91 Cft
7	Ceramic tile laying work	367.25 sft
8	Providing and fixing aluminium fly screen comprising of Fibber/aluminium wire gauze fixed in the aluminium frame.	180 sft.
9	Woodworks/ doors	128 sft.
10	Applying weather shield paint (2 coats)	2925.32 sft
11	Providing and laying of tuff pavers	300 sft.
12	Electrical work i.e. installation of PVC pipes; copper wires; switches; ceiling fan (4 No.); exhaust fan (10 No.); tube lights; water geyser (1No.) etc.	---
	Installation of water supply, plumbing and sanitary i.e. washbasins (6 No.); water mixer (6 No.); plastic flush tanks (4 No.); installation of tube well (1 No.) at 100 ft. depth; laying, cutting, jointing of PPRC and UPVC pipes etc.	---

Source: Sub-project

## 2.2 Tomb Bibi Javindi

The Tomb of Bibi Jawindi (Urdu: جیوندی بی بی مقبرہ) is one of the five monuments in Uch Sharif, Punjab, Pakistan, that are on the tentative list of the UNESCO World Heritage Sites. Dating back to the 15th century, the shrine was built in the spirit of the historical Sufi premier Bibi Jawindi of the Suhrawardiyyah order, a strictly hegemonistic Sunni school of theosophical thought which puts particular emphasis on the Shafi'i school of classical jurisprudence in the context of its interpretation of the Sharia. Jaw Indo was great-granddaughter to Jahaniyan Jahangasht, a famous Sufi saint in his own right.

**Figure 8: Location map of Tomb Bibi Javindi, Bahawalpur**



Source: Google Maps, 2022. [Accessed 09 March 2022].

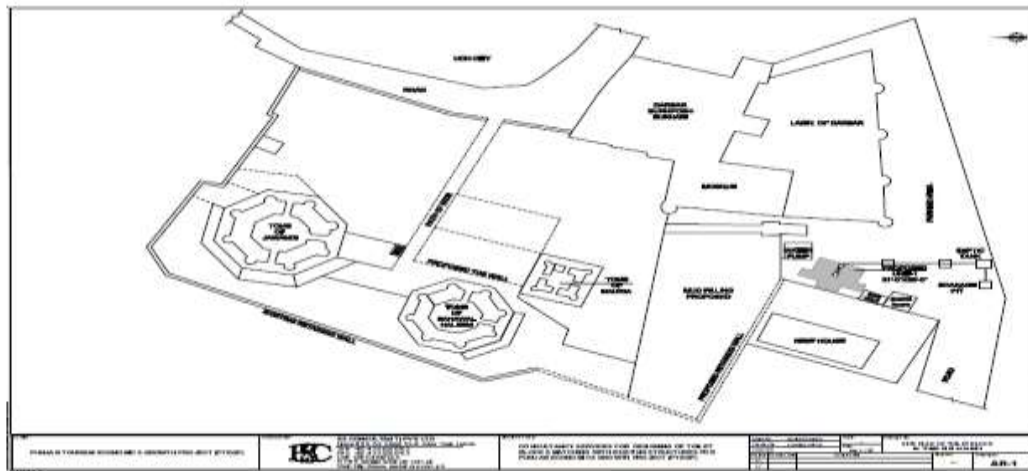
**Figure 9: Different views of Tomb Bibi Javindi, Bahawalpur**



**2.2.1 Proposed Interventions at Tomb Bibi Javindi, Bahawalpur**

The sub-project involves the construction of one (01 No.) new toilet block (single storey) in open area in front of Tomb Bibi Javindi. The boundary of Tomb Bibi Javindi and the location of the proposed toilet block is shown in Figure 10. The land required for the construction of the toilet block is the property of Archeology Department, so there is no land acquisition required. A picture of the site proposed for the new toilet block is provided in Figure 11.

**Figure 10: Location of the proposed toilet block at Tomb Bibi Javindi**





**Figure 11: Proposed site for new toilet block at Tomb Bibi Javindi**



### 2.2.2 Layout Plan of Proposed Toilet Block at Tomb Bibi Javindi

The covered area of the new proposed toilet block is 1037 sq. ft. is similar to that of Derawar Fort. Moreover, the layout plan, front elevation and the 3D elevation of the proposed toilet block presented in Figure 4, Figure 5 and Figure 6 respectively.

### 2.2.3 Construction activities

The quantum of work and activities to be performed during the construction phase is presented in Table 2 below;

**Table 2: Activities/ tasks and estimated quantities of construction works at Tomb Bibi Javindi**

Sr. #	Activity/ Task	Total Quantities
1	Excavation for foundation maximum up to 5 feet.	2486.44 Cft.
3	Brickwork	4681.38 Cft.
4	Installation of steel Chaukat	128 Sft
5	Fabrication of mild steel reinforcement for cement concrete i/c cutting, bending, laying in position, making joints and fastening.	3290.99 kg
6	RCC works in roofs, beams, columns and girders	909.91 Cft
7	Ceramic tile laying work	367.25 sft
8	Providing and fixing aluminium fly screen comprising of Fibber/aluminium wire gauze fixed in the aluminium frame.	180 sft.
9	Woodworks/ doors	128 sft.
10	Applying weather shield paint (2 coats)	2925.32 sft
11	Providing and laying of tuff pavers	300 sft.
12	Electrical work i.e. installation of PVC pipes; copper wires; switches; ceiling fan (4 No.); exhaust fan (10 No.); tube lights; water geyser (1No.) etc.	---
	Installation of water supply, plumbing and sanitary i.e. washbasins (6 No.); water mixer (6 No.); plastic flush tanks (4 No.); installation of tube well (1 No.) at 100 ft. depth; laying, cutting, jointing of PPRC and UPVC pipes etc.	---

Source: Sub-project

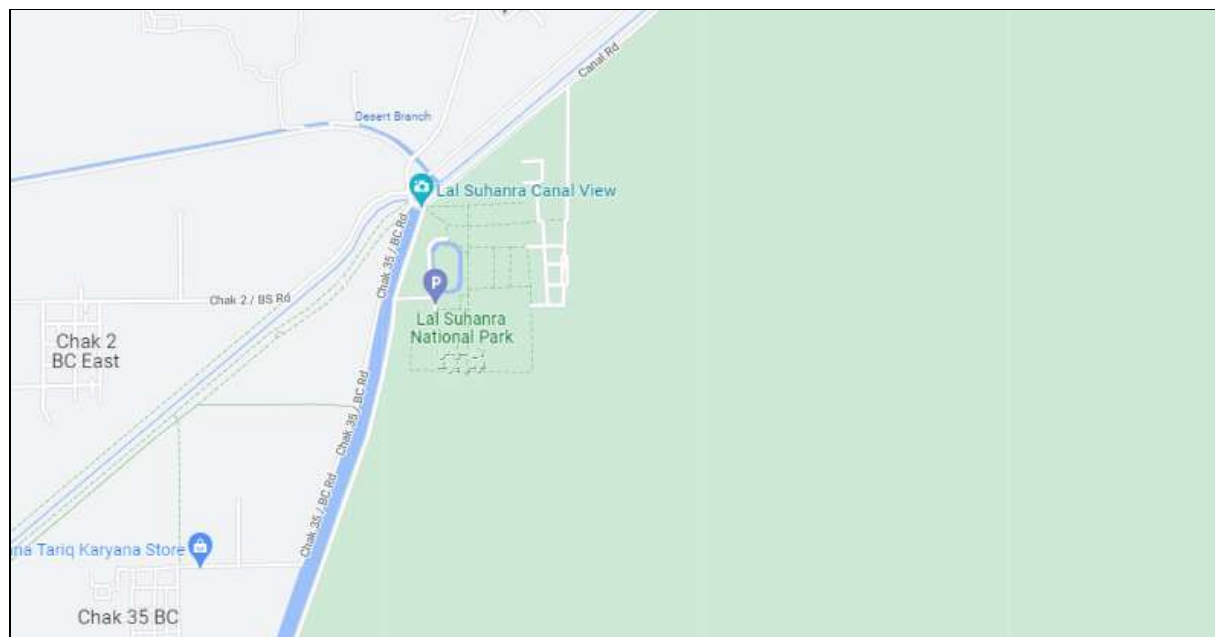
## 2.3 Lal Suhanra

Lal Suhanra is a national park in Pakistan that is situated in the Bahawalpur district of Punjab province. It is one of South Asia's largest national parks, and is a UNESCO declared Biosphere Reserve. Lal Sohanra is notable for the diversity of its landscape,



which includes desert, forest and wetland ecosystems.

**Figure 12: Location map of Lal Suhanra National Park, Bahawalpur**



Source: Google Maps, 2022. [Accessed 09 March 2022].

**Figure 13: Different views of Lal Suhanra**



### **2.3.1 Proposed Interventions at Lal Suhanra, Bahawalpur**

The sub-project involves the construction of one (01 No.) new toilet block (single storey) in open area in front of Lal Suhanra. The boundary of Lal Suhanra National Park and the location of the proposed toilet block is shown in Figure 14. The land required for the construction of the toilet block is the property of TDCP Department. A picture of the site proposed for the new toilet block is provided in Figure 18.

Figure 14: Location of the proposed toilet block at Lah

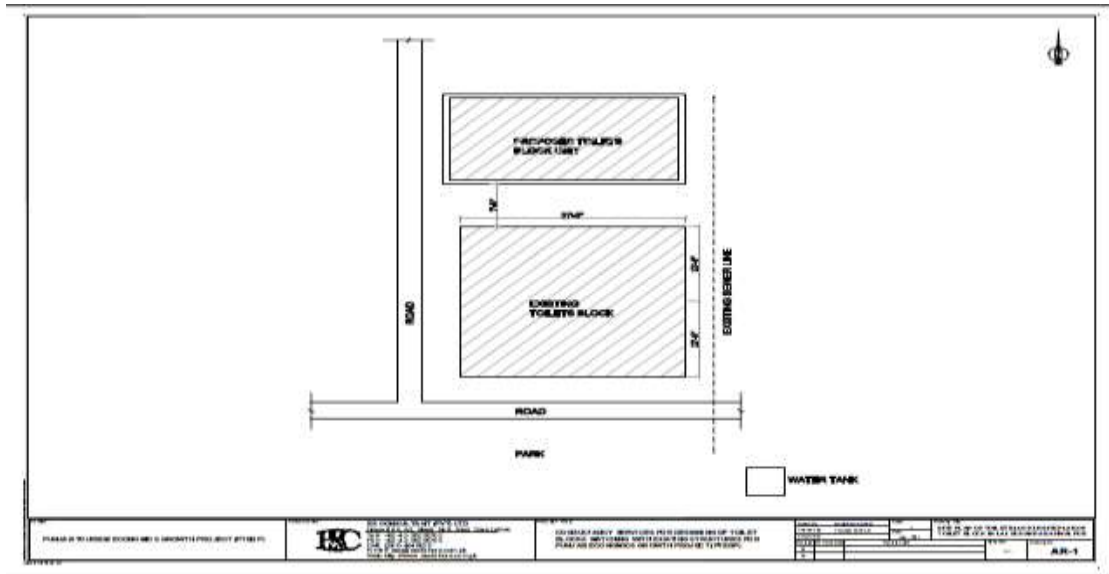
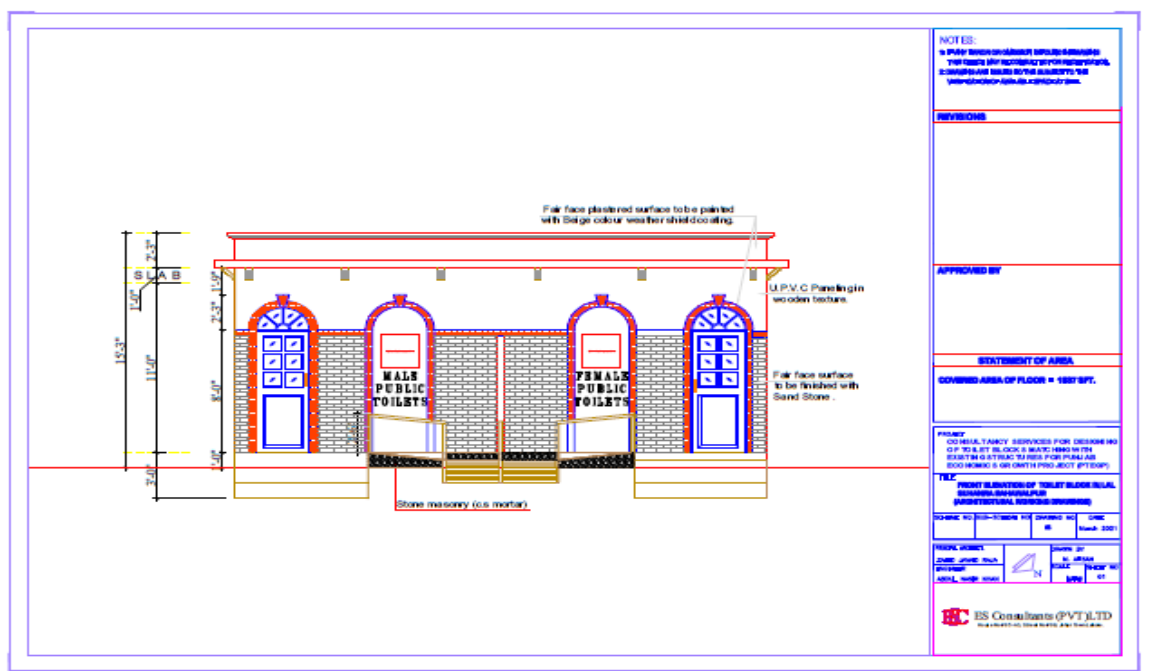


Figure 15: Front Elevation of the proposed toilet block at Lal Suhanra





**Figure 18: Proposed site for new toilet block at Lal Suhanra**



### 2.3.2 Layout Plan of Proposed Toilet Block at Lal Suhanra

The covered area of the new proposed toilet block is 1037 sq. ft. Moreover, the layout plan, front elevation and the 3D elevation of the proposed toilet block presented in Figure 15, Figure 16 and Figure 17 respectively.

### 2.3.3 Construction activities

The quantum of work and activities to be performed during the construction phase is presented in Table 3 below;

**Table 3: Activities/ tasks and estimated quantities of construction works at Lal Suhanra**

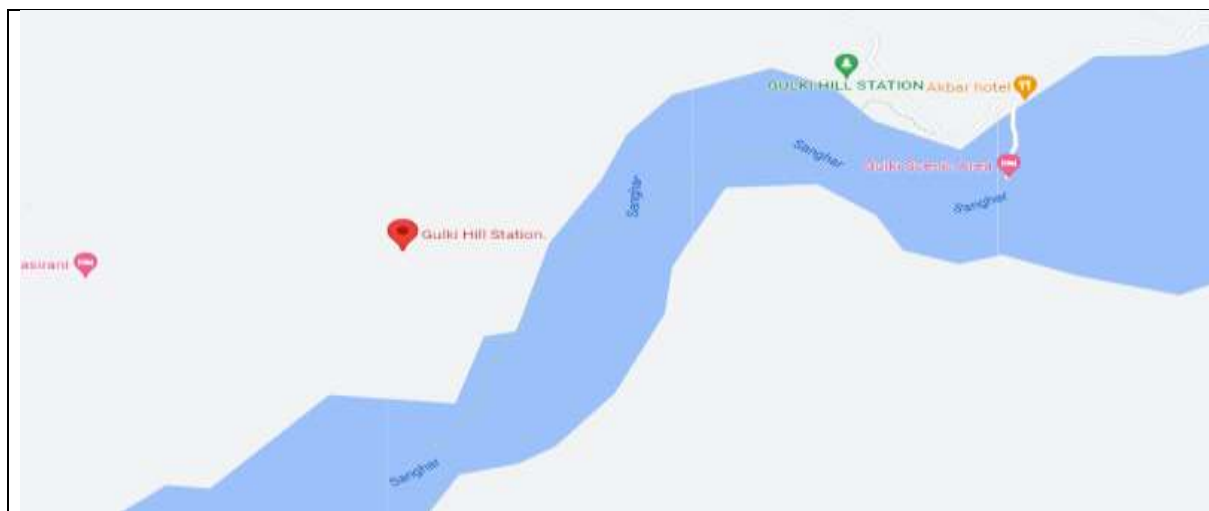
Sr. #	Activity/ Task	Total Quantities
1	Excavation for foundation maximum up to 5 feet.	1774.13 Cft.
3	Brickwork	1824.04 Cft.
4	Installation of steel Chaukat	120.71 Sft
5	Fabrication of mild steel reinforcement for cement concrete i/c cutting, bending, laying in position, making joints and fastening.	1183.02 kg
6	RCC works in roofs, beams, columns and girders	368.035Cft
7	Ceramic tile laying work	1662.899 sft
8	Providing and fixing aluminium fly screen comprising of Fibber/aluminium wire gauze fixed in the aluminium frame.	82.5 sft.
9	Woodworks/ doors	28 sft.
10	Fiber glass doors	169.42sft
11	Applying weather shield paint (2 coats)	1388 sft
12	Providing and laying of tuff pavers	300 sft.
13	Electrical work i.e. installation of PVC pipes; copper wires; switches; ceiling fan (4 No.); exhaust fan (10 No.); tube lights; water geyser (1No.) etc.	---
	Installation of water supply, plumbing and sanitary i.e. washbasins (6 No.); water mixer (6 No.); plastic flush tanks (4 No.); installation of tube well (1 No.) at 100 ft. depth; laying, cutting, jointing of PPRC and UPVC pipes etc.	---

Source: Sub-project

## 2.4 Gulki Top

Gulki in the region of Punjab is a town located in Pakistan - some 257 mi or (413 km) South-West of Islamabad, the country's capital. Gulki Hill Station is one of the popular Arts & Entertainment located in Near Mangrotha Pakistan, Taunsa listed under Local business in Taunsa.

Figure 19: Location map of Gulki Top, DG Khan



Source: Google Maps, 2022. [Accessed 09 March 2022].

Figure 20: Different views of Gulki Top



### 2.4.1 Proposed Interventions at Gulki Top

The sub-project involves the construction of one (01 No.) new toilet block (single storey) in open area in front of Gulki Hill Station. The boundary of Gulki hill station and the location of the proposed toilet block is shown in Figure 21. The land required for the construction of the toilet block is the property of TDCP Department so there is no land acquisition required. A picture of the site proposed for the new toilet block is provided in Figure 25.

Figure 21: Location of the proposed toilet block at Gulki Top

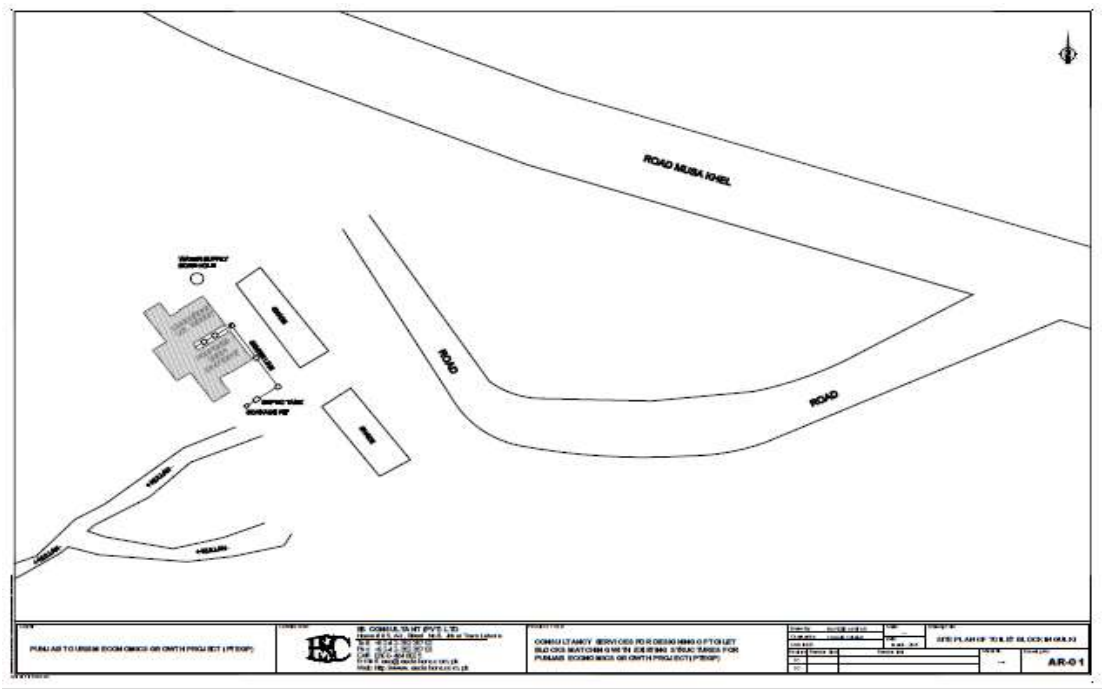
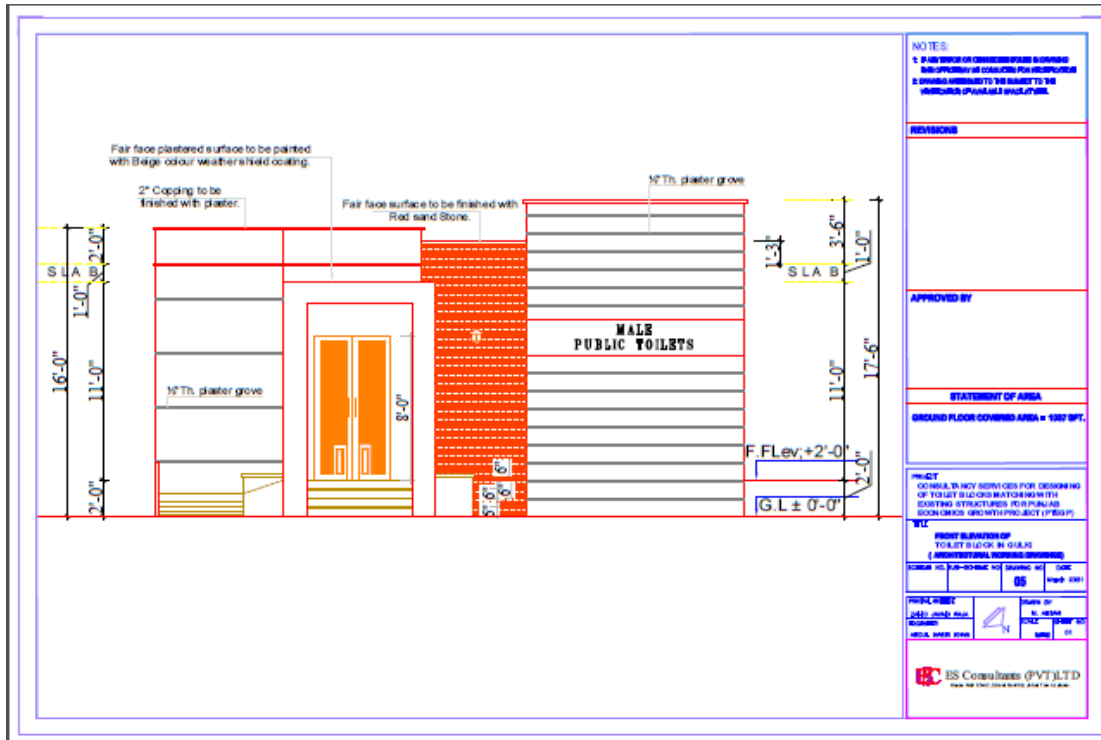


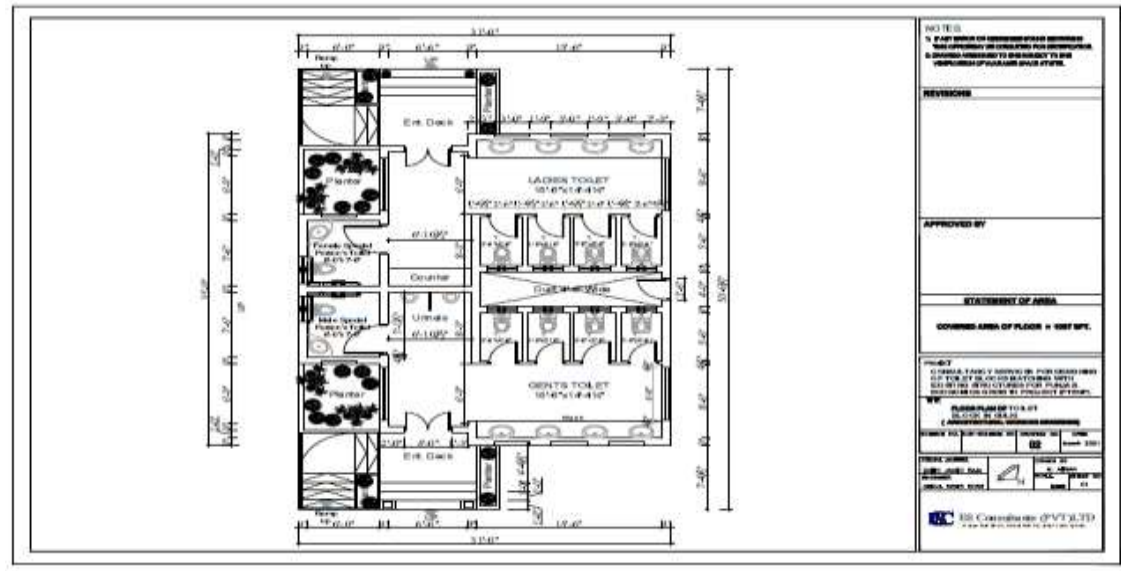
Figure 22: Front Elevation of the proposed toilet block at Gulki Top



**Figure 23: 3D elevation view of the proposed toilet block at Gulki Top**



**Figure 24: Architecture plan of proposed toilet block at Gulki Top**





**Figure 25: Proposed site for new toilet block at Gulki Top**



### 2.4.2 Layout Plan of Proposed Toilet Block at Gulki Top

The covered area of the new proposed toilet block is 1037 sq. ft. Moreover, the layout plan, front elevation and the 3D elevation of the proposed toilet block presented in Figure 22, Figure 23 and Figure 24 respectively.

### 2.4.3 Construction activities

The quantum of work and activities to be performed during the construction phase is presented in Table 4 below;

**Table 4: Activities/ tasks and estimated quantities of construction works at Gulki Top**

Sr. #	Activity/ Task	Total Quantities
1	Excavation for foundation maximum up to 5 feet.	2570.44 Cft.
3	Brickwork	4595.03 Cft.
4	Installation of steel Chaukat	1 No.
5	Fabrication of mild steel reinforcement for cement concrete i/c cutting, bending, laying in position, making joints and fastening.	3401.04 kg
6	RCC works in roofs, beams, columns and girders	1902.37 Cft
7	Ceramic tile laying work	4454.44 sft
8	Providing and fixing aluminium fly screen comprising of Fibber/aluminium wire gauze fixed in the aluminium frame.	180 sft.
9	Woodworks/ doors	128 sft.
10	Applying weather shield paint (2 coats)	1803.19sft
11	Providing and laying of tuff pavers	300 sft.
12	Electrical work i.e. installation of PVC pipes; copper wires; switches; ceiling fan (4 No.); exhaust fan (10 No.); tube lights; water geyser (1No.) etc.	---
	Installation of water supply, plumbing and sanitary i.e. washbasins (6 No.); water mixer (6 No.); plastic flush tanks (4 No.); installation of tube well (1 No.) at 100 ft. depth; laying, cutting, jointing of PPRC and UPVC pipes etc.	---

Source: Sub-project

## 2.5 Barthi Rest House

Barthi is a town and union council of Dera Ghazi Khan District in the Punjab province of Pakistan. The town is part of Taunsa Tehsil. It is located at 30°33'0N 70°22'0E and

has an altitude of 439 metres (1443 feet). The TDCP Rest house here has been recently upgraded for tourist facilitation.

**Figure 26: Location map of Barthi Rest House**



Source: Google Maps, 2022. [Accessed 09 March 2022].

**Figure 27: Different views of Barthi rest house**



### **2.5.1 Proposed Interventions at Barthi Rest House**

The sub-project involves the construction of one (01 No.) new toilet block (single storey) in open area beside of Barthi rest house. The boundary of barthi rest house and the location of the proposed toilet block is shown in Figure 28. The land required for the construction of the toilet block is the property of TDCP Department, so there is no land acquisition required. A picture of the site proposed for the new toilet block is provided in Figure 29.

Figure 28: Location of the proposed toilet block at Barthi Rest House

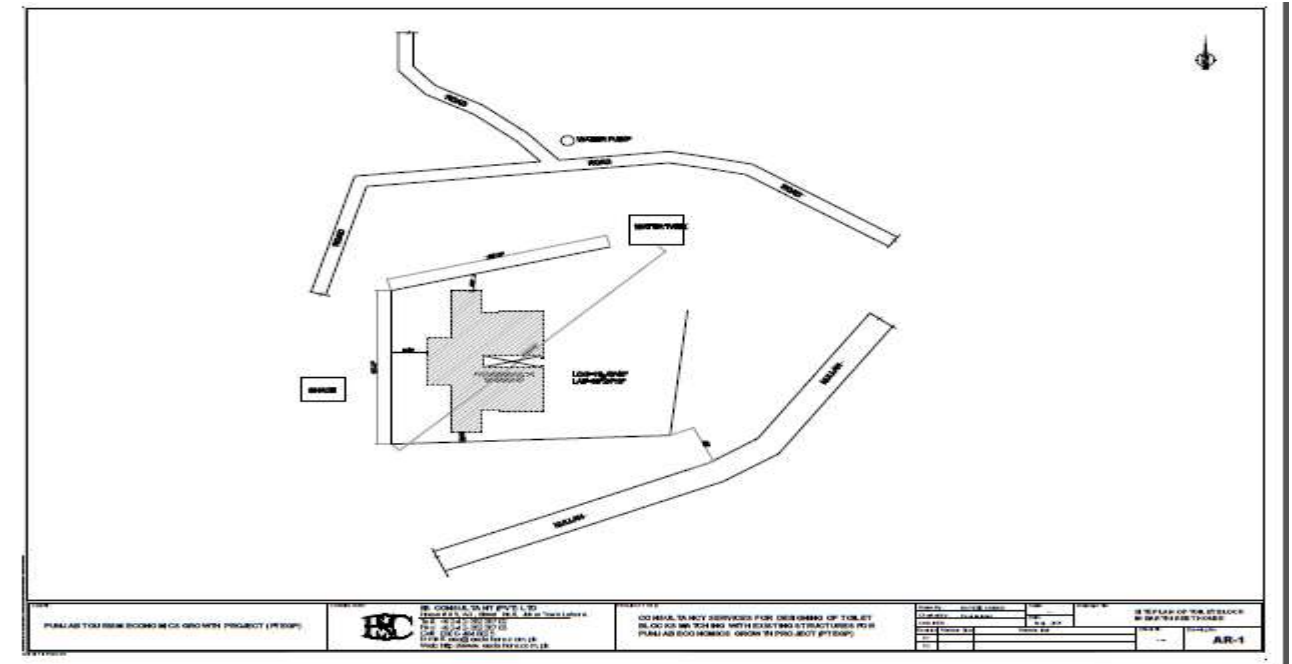


Figure 29: Proposed site for new toilet block at Bharti Rest House



### 2.5.2 Layout Plan of Proposed Toilet Block at Barthi Rest House

The covered area of the new proposed toilet block is 1037 sq. ft. is similar to that of Gulki Top. Moreover, the layout plan, front elevation and the 3D elevation of the proposed toilet block presented in Figure 22, Figure 23 and Figure 24 respectively.

### 2.5.3 Construction activities

The quantum of work and activities to be performed during the construction phase is presented in Table 5 below;

**Table 5: Activities/ tasks and estimated quantities of construction works at Barthi Rest House**

Sr. #	Activity/ Task	Total Quantities
1	Excavation for foundation maximum up to 5 feet.	2570.44 Cft.
3	Brickwork	4595.03 Cft.
4	Installation of steel Chaukat	1 No.
5	Fabrication of mild steel reinforcement for cement concrete i/c cutting, bending, laying in position, making joints and fastening.	3401.04 kg
6	RCC works in roofs, beams, columns and girders	1092.37 Cft
7	Ceramic tile laying work	4454.44 sft
8	Providing and fixing aluminium fly screen comprising of Fibber/aluminium wire gauze fixed in the aluminium frame.	180 sft.
9	Woodworks/ doors	128 sft.
10	Applying weather shield paint (2 coats)	1803.19sft
11	Providing and laying of tuff pavers	300 sft.
12	Electrical work i.e. installation of PVC pipes; copper wires; switches; ceiling fan (4 No.); exhaust fan (10 No.); tube lights; water geyser (1No.) etc.	---
	Installation of water supply, plumbing and sanitary i.e. washbasins (6 No.); water mixer (6 No.); plastic flush tanks (4 No.); installation of tube well (1 No.) at 100 ft. depth; laying, cutting, jointing of PPRC and UPVC pipes etc.	---

Source: Sub-project

### 2.6 Mubarki Top

Mubarki Top a newly developed tourist site, at Suleman Mountain Range, that is over 7,000 feet above the sea level, in Dera Ghazi Khan has been handed over to the Tourism Development Corporation of Punjab (TDCP).

**Figure 30: Location map of Mubarki Top**



Source: Google Maps, 2022. [Accessed 09 March 2022].

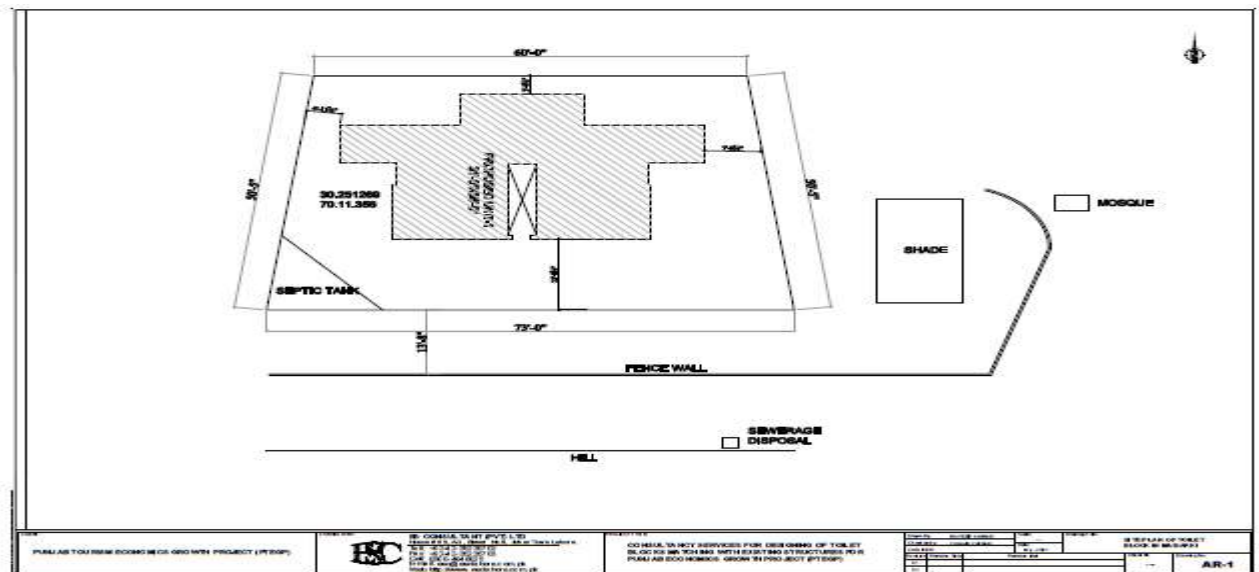
Figure 31: Different views of Mubarki Top



### 2.6.1 Proposed Interventions at Mubarki Top

The sub-project involves the construction of one (01 No.) new toilet block (single storey) in open area in front of Mubarki Top. The boundary of Mubarki top and the location of the proposed toilet block is shown in Figure 32. The land required for the construction of the toilet block is the property of TDCP Department, so there is no land acquisition required. A picture of the site proposed for the new toilet block is provided in Figure 33.

Figure 32: Location of the proposed toilet block at Mubarki Top



**Figure 33: Proposed site for new toilet block at Mubarki Top**



### 2.6.2 Layout Plan of Proposed Toilet Block at Mubarki Top

The covered area of the new proposed toilet block is 1037 sq. ft. is similar to that of Gulki Top. Moreover, the layout plan, front elevation and the 3D elevation of the proposed toilet block presented in Figure 22, Figure 23 and Figure 24 respectively.

### 2.6.3 Construction activities

The quantum of work and activities to be performed during the construction phase is presented in Table 6 below;

**Table 6: Activities/ tasks and estimated quantities of construction works at Mubarki Top**

Sr. #	Activity/ Task	Total Quantities
1	Excavation for foundation maximum up to 5 feet.	2570.44 Cft.
3	Brickwork	4595.03 Cft.
4	Installation of steel Chaukat	1 No.
5	Fabrication of mild steel reinforcement for cement concrete i/c cutting, bending, laying in position, making joints and fastening.	3401.04 kg
6	RCC works in roofs, beams, columns and girders	1092.37 Cft
7	Ceramic tile laying work	4454.44 sft
8	Providing and fixing aluminium fly screen comprising of Fibber/aluminium wire gauze fixed in the aluminium frame.	180 sft.
9	Woodworks/ doors	128 sft.
10	Applying weather shield paint (2 coats)	1803.19sft
11	Providing and laying of tuff pavers	300 sft.
12	Electrical work i.e. installation of PVC pipes; copper wires; switches; ceiling fan (4 No.); exhaust fan (10 No.); tube lights; water geyser (1No.) etc.	---
	Installation of water supply, plumbing and sanitary i.e. washbasins (6 No.); water mixer (6 No.); plastic flush tanks (4 No.); installation of tube well (1 No.) at 100 ft. depth; laying, cutting, jointing of PPRC and UPVC pipes etc.	---

Source: Sub-project

### **3 Preliminary Environmental and Social Impacts**

A survey has been conducted by PMU PTEGP Environmental and Social (E&S) staff and Pak Green Consultant team to collect the necessary information required for the E&SS and EMP of the sub-project. The detail of potential environmental and social (E&S) impacts of each site of the sub-project is presented in Table 7.



**Table 7: Potential E&S Impacts identified during E&SS process**

Sr. #	Screening Criteria	Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
<b>Environment</b>						
1.	Is the subproject in an eco-sensitive area or adjoining an eco-sensitive area or monument? (Yes/No) If Yes, which is the area? Elaborate impact accordingly.	Derawar Fort	✓		<p>However, these are located within the vicinity of an Archaeological Site of Derawar Fort is not yet listed as World Heritage Site (refer to Section 2.1 for detail).</p> <p>The location of proposed toilet blocks is suggested by DGA ensuring it does not violate Punjab Antiquity Act 1975 and amendments thereafter i.e. 2012. Moreover, NOC has also been granted by DGA (refer to Annexure A) for the proposed activities. The material used for the front elevation of the toilet blocks will be compatible with the heritage sites. The architect will make onsite visits and ensure that aesthetic of the site is not distorted. Also, most of the points selected are at a distance from main structure, or somewhat hidden.</p> <p>In addition, the construction activities/quantum of work for construction of a new block as explained in Section 2.1.3 above are minimal and will not result in any negative impact i.e. destruction/demolition, wear, removal, burial, modification, change of use, neglect, flooding, denial of access and desecration of the Archaeological Site of Derawar Fort</p>	
		Bibi jawindi	✓		<p>However, these are located within the vicinity of an Archaeological Site of Bibi Jawindi is not yet listed as World Heritage Site (refer to Section 2 for detail).</p> <p>The location of proposed toilet blocks is suggested by DGA ensuring it does not violate Punjab Antiquity Act 1975 and amendments thereafter i.e. 2012. Moreover, NOC has also been granted by DGA (refer to Annexure A) for the proposed activities. The material used for the front elevation of the toilet blocks will be compatible with the heritage sites. The architect will make onsite visits and ensure that aesthetic of the site is not distorted. Also, most of the points selected are at a distance from main structure, or somewhat hidden.</p> <p>In addition, the construction activities/quantum of work for construction of a new block as explained in Section 2.2.3 above are minimal and will not result in any negative impact i.e. destruction/demolition, wear, removal, burial, modification, change of use, neglect, flooding, denial of access and desecration of the Archaeological Site of Bibi Jawindi</p>	





Sr. #	Screening Criteria	Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
		Lal sohanra Forest	✓		<p>The site for the proposed toilet block is not located in or within the vicinity of any eco-sensitive area.</p> <p>However, it is located within the vicinity of Lal sohanra Forest see section 2.3 for details.</p> <p>The location of the proposed toilet block is suggested by TDCP, in order to provide better facilities for tourism near to the Forest reserve for leisure                      In addition, the construction activities/quantum of work for construction of a new block as explained in Section 2.3.3 above are minimal and will not result in any negative impact i.e. destruction/demolition, wear, removal, burial, modification, change of use, neglect, flooding, denial of access and desecration of the Lal sohanra Forest</p>	
		Gulki Top	✓		<p>The site for the proposed toilet block is not located in or within the vicinity of any eco-sensitive area.</p> <p>However, it is located within the vicinity of Gulki HillTop, see section 2.4 for details.</p> <p>The location of the proposed toilet block is suggested by TDCP, in order to provide better facilities for tourism near to the Forest reserve for leisure                      In addition, the construction activities/quantum of work for construction of a new block as explained in Section 2.4.3 above are minimal and will not result in any negative impact i.e. destruction/demolition, wear, removal, burial, modification, change of use, neglect, flooding, denial of access and desecration of the Gulki Top</p>	
		Barthi top	✓		<p>The site for the proposed toilet block is not located in or within the vicinity of any eco-sensitive area.</p> <p>However, it is located within the vicinity of Barthi top, see section 2.5 for details.</p> <p>The location of the proposed toilet block is suggested by TDCP, in order to provide better facilities for tourism near to the Forest reserve for leisure                      In addition, the construction activities/quantum of work for construction of a new block as explained in Section 2.5.3 above are minimal and will not result in any negative impact i.e. destruction/demolition, wear, removal, burial, modification, change of use, neglect, flooding, denial of access and desecration of the Barthi top</p>	



Sr. #	Screening Criteria	Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
		Mubarki Top	✓		The site for the proposed toilet block is not located in or within the vicinity of any eco-sensitive area.  However, it is located within the vicinity of Mubarki Top, see section 2.6 for details.  The location of the proposed toilet block is suggested by TDCP, in order to provide better facilities for tourism near to the Forest reserve for leisure In addition, the construction activities/quantum of work for construction of a new block as explained in Section 2.6.3 above are minimal and will not result in any negative impact i.e. destruction/demolition, wear, removal, burial, modification, change of use, neglect, flooding, denial of access and desecration of the Mubarki Top	
2.	Will the subproject create significant/limited/no environmental impacts during the construction stage?					
	• Clearance of vegetation/ tree-cover/other	Derawar Fort		✓	No notable vegetation clearance nor any tree uprooting will be involved (refer to Figure 7). Construction will take place in a 1037 sq. ft. only.	
		Bibi jawindi		✓	No notable vegetation clearance nor any tree uprooting will be involved (refer to Figure 11). Construction will take place in a 1037 sq. ft. only.	
		Lal sohanra Forest		✓	No notable vegetation clearance nor any tree uprooting will be involved (refer to Figure 18). Construction will take place in a 1037 sq. ft. only.	
		Gulki Top		✓	No notable vegetation clearance nor any tree uprooting will be involved (refer to Figure 25). Construction will take place in a 1037 sq. ft. only.	
		Barthi top		✓	No notable vegetation clearance nor any tree uprooting will be involved (refer to Figure 29). Construction will take place in a 1037 sq. ft. only.	
		Mubarki Top		✓	No notable vegetation clearance nor any tree uprooting will be involved (refer to Figure 33). Construction will take place in a 1037 sq. ft. only.	
	• Direct discharge of construction run-off, improper storage and	Derawar Fort		✓	Total 2486.44 Cft (approx.) of spoil will be generated during excavation and all of it will be reused during backfilling. Therefore, this risk is ruled out.	-
		Bibi jawindi		✓	Total 2486.44 Cft (approx.) of spoil will be generated during excavation and all of it will be reused during backfilling. Therefore, this risk is ruled out.	-
		Lal sohanra Forest		✓	Total 1774.13Cft (approx.) of spoil will be generated during excavation and all of it will be reused during backfilling. Therefore, this risk is ruled out.	-



Sr. #	Screening Criteria	Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
	disposal of excavation spoils, wastes and other construction materials adversely affecting water quality and flow regimes.	Gulki Top		✓	Total 2570.44 Cft (approx.) of spoil will be generated during excavation and all of it will be reused during backfilling. Therefore, this risk is ruled out.	-
		Barthi top		✓	Total 2570.44 Cft (approx.) of spoil will be generated during excavation and all of it will be reused during backfilling. Therefore, this risk is ruled out.	-
		Mubarki Top		✓	Total 2570.44 Cft (approx.) of spoil will be generated during excavation and all of it will be reused during backfilling. Therefore, this risk is ruled out.	-
	• Flooding of adjacent areas.	Derawar Fort		✓	The sub-project activities are on a very limited scale, no major excavation is involved nor does the sub-project involve the construction of anyreservoir/dam or water regulating structure therefore the risk of flooding ofthe adjacent area is ruled out.	-
		Bibi jawindi		✓	Same as Above (SAA)	-
		Lal sohanra Forest		✓	SAA	-
		Gulki Top		✓	SAA	-
		Barthi top		✓	SAA	-
		Mubarki Top		✓	SAA	-
	• Improper storage and handling of substances leading to contamination of soil and water.	Derawar Fort		✓	The sub-project does not involve the use of any substance that could contaminate soil or water. Moreover, the quantities of construction materialto be used during construction is very limited therefore the risk of soil andwater contamination is ruled out.	-
		Bibi jawindi		✓	SAA	-
		Lal sohanra Forest		✓	SAA	-
		Gulki Top		✓	SAA	-
		Barthi top		✓	SAA	-
		Mubarki Top		✓	SAA	-
	• Elevated noise and dust emission.	Derawar Fort		✓	No heavy machinery (impact devices) will be required for the construction work. The construction will involve masonry works using handheld tools.	-
		Bibi jawindi		✓	SAA	-
		Lal sohanra Forest		✓	SAA	-
		Gulki Top		✓	SAA	-
		Barthi top		✓	SAA	-
		Mubarki Top		✓	SAA	-



Sr. #	Screening Criteria		Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
	•	Disruption to traffic and visitors' movements.	Derawar Fort		✓	The sub-project has a very limited scope, so do the quantities of material (refer to Table 1 for quantities of material). Therefore, it is location and	-
			Bibi jawindi		✓	SAA (refer to Table 2 for quantities of material)	-
			Lal sohanra Forest		✓	SAA (refer to Table 3 for quantities of material)	-
			Gulki Top		✓	SAA (refer to Table 4 for quantities of material)	-
			Barthi top		✓	SAA (refer to Table 5 for quantities of material)	-
			Mubarki Top		✓	SAA (refer to Table 6 for quantities of material)	-
	•	Damage to existing infrastructure, public utilities and amenities.	Derawar Fort		✓	No significant excavation is involved that could damage existing infrastructure and or public utilities nor the construction is spread over a large area therefore chance of this happening is ruled out. The area is in the custody of the Archaeology Department.	-
			Bibi jawindi		✓	SAA	-
			Lal sohanra Forest		✓	No significant excavation is involved that could damage existing infrastructure and or public utilities nor the construction is spread over a large area therefore chance of this happening is ruled out. The area is in the custody of the TDCP.	-
			Gulki Top		✓	No significant excavation is involved that could damage existing infrastructure and or public utilities nor the construction is spread over a large area therefore chance of this happening is ruled out. The area is in the custody of the TDCP.	-
			Barthi top		✓	No significant excavation is involved that could damage existing infrastructure and or public utilities nor the construction is spread over a large area therefore chance of this happening is ruled out. The area is in the custody of the TDCP.	-
			Mubarki Top		✓	No significant excavation is involved that could damage existing infrastructure and or public utilities nor the construction is spread over a large area therefore chance of this happening is ruled out. The area is in the custody of the TDCP.	-
	•	Failure to restore temporary construction sites.	Derawar Fort		✓	Temporary construction sites/ facilities i.e. labour camps etc. will not be required for the sub-project. Moreover, the construction activity itself is	-
			Bibi jawindi		✓	SAA	-
			Lal sohanra Forest		✓	SAA	-
			Gulki Top		✓	SAA	-
			Barthi top		✓	SAA	-
			Mubarki Top		✓	SAA	-



Sr. #	Screening Criteria		Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
	•	Possible conflicts with and/or disruption to local community and/or visitors.	Derawar Fort		✓	The site is owned and in the custody of the Archaeology Department. Furthermore, see explanation in Sr. No 2, bullet 6 of this table.	-
			Bibi jawindi		✓	SAA	-
			Lal sohanra Forest		✓	The site is owned and in the custody of the TDCP. Furthermore, see explanation in Sr. No 2, bullet 6 of this table.	-
			Gulki Top		✓	The site is owned and in the custody of the TDCP. Furthermore, see explanation in Sr. No 2, bullet 6 of this table.	-
			Barthi top		✓	The site is owned and in the custody of the TDCP. Furthermore, see explanation in Sr. No 2, bullet 6 of this table.	-
			Mubarki Top		✓	The site is owned and in the custody of the TDCP. Furthermore, see explanation in Sr. No 2, bullet 6 of this table.	-
	•	Health risks due to unhygienic conditions at workers camps.	Derawar Fort		✓	No labour camp is required for the work, daily labourers will be employed (14-15 labourers maximum approx.).	-
			Bibi jawindi		✓	SAA	-
			Lal sohanra Forest		✓	SAA	-
			Gulki Top		✓	SAA	-
			Barthi top		✓	SAA	-
			Mubarki Top		✓	SAA	-
	•	Safety hazards during construction.	Derawar Fort	✓		Minor occupational health and safety issues are perceived based on the scope of work (refer to Section 3.1 for detail)	-
			Bibi jawindi	✓		SAA	-
			Lal sohanra Forest	✓		SAA	-
			Gulki Top	✓		SAA	-
			Barthi top	✓		SAA	-
			Mubarki Top	✓		SAA	-
	•	Other, specify.	Derawar Fort		✓	Not Applicable (NA)	-
			Bibi jawindi		✓	NA	-
			Lal sohanra Forest		✓	NA	-
			Gulki Top		✓	NA	-
			Barthi top		✓	NA	-
			Mubarki Top		✓	NA	-
3	Will the subproject create significant/limited/no environmental impacts during the operational						



Sr. #	Screening Criteria	Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
	stage? (Significant / limited / no impacts)					
	<ul style="list-style-type: none"> <li>Flooding of adjacent areas</li> </ul>	Derawar Fort		✓	Not applicable therefore the risk of flooding of the adjacent area is ruled out.	-
		Bibi jawindi		✓	SAA	-
		Lal sohanra Forest		✓	SAA	-
		Gulki Top		✓	SAA	-
		Barthi top		✓	SAA	-
		Mubarki Top		✓	SAA	-
	<ul style="list-style-type: none"> <li>Impacts to water quality due to effluent discharge</li> </ul>	Derawar Fort		✓	Wastewater from toilet blocks will be discharged into the TMA, Bahawalpur connection. Sewerage system will be provided to connect the sewer generate at proposed toilet blocks and connect with nearest existing sewerage pipeline for wastewater disposal.	-
		Bibi jawindi		✓	Wastewater from toilet blocks will be discharged into the TMA, Bahawalpur connection. Sewerage system will be provided to connect the sewer generate at proposed toilet blocks and connect with nearest existing sewerage pipeline for wastewater disposal.	-
		Lal sohanra Forest		✓	A Septic tank will be constructed to treat the effluents from toilets. Sewerage system will be provided to connect the sewer generate at proposed toilet blocks and connect with nearest existing sewerage pipeline for wastewater disposal.	-
		Gulki Top		✓	A Septic tank will be constructed to treat the effluents from toilets. Sewerage system will be provided to connect the sewer generate at proposed toilet blocks and connect with nearest existing sewerage pipeline for wastewater disposal.	-
		Barthi top		✓	A Septic tank will be constructed to treat the effluents from toilets. Sewerage system will be provided to connect the sewer generate at proposed toilet blocks and connect with nearest existing sewerage pipeline for wastewater disposal.	-
		Mubarki Top		✓	A Septic tank will be constructed to treat the effluents from toilets. Sewerage system will be provided to connect the sewer generate at proposed toilet blocks and connect with nearest existing sewerage pipeline for wastewater disposal.	-
	<ul style="list-style-type: none"> <li>Gas emissions</li> </ul>	Derawar Fort		✓	NA	-
		Bibi jawindi		✓	NA	-



Sr. #	Screening Criteria	Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category	
		Lal sohanra Forest		✓	NA	-	
		Gulki Top		✓	NA	-	
		Barthi top		✓	NA	-	
		Mubarki Top		✓	NA	-	
	•	Safety hazards	Derawar Fort		✓	Negligible safety hazards relating to daily cleaning of the facilities. Material safety data sheet (MSDS) to be prepared during the operational stage of the sub-project by the archaeological department.	-
			Bibi jawindi		✓	SAA	-
			Lal sohanra Forest		✓	Negligible safety hazards relating to daily cleaning of the facilities. Material safety data sheet (MSDS) to be prepared during the operational stage of the sub-project by TDCP.	-
			Gulki Top		✓	SAA	-
			Barthi top		✓	SAA	-
			Mubarki Top		✓	SAA	-
•	Visual Adverse impact on cultural heritage sites	Derawar Fort		✓	- Sites for new toilets block are selected with consensus of Archeological Department and concern persons at TDCP. It was ensured that new development have no adverse impact on aesthetic and historical values of heritage sites.  Selected locations are well away and out of sight while standing next to the heritage sites. Design and material to be used for the construction were selected with care and efforts are made to match the look of new structure with heritage sites view.	-	
		Bibi jawindi		✓	SAA	-	
		Lal sohanra Forest		✓	SAA	-	
		Gulki Top		✓	SAA	-	
		Barthi top		✓	SAA	-	
		Mubarki Top		✓	SAA	-	
		4	Does the subproject involve any prior clearance from the State Forest Department for either the conversion of forest	Derawar Fort		✓	It is unlikely that uprooting of mature trees require for the proposed development. Exact location of toilet structure can be adjusted to avoid uprooting of mature tree on site. However, if uprooting is essential than prior approval is required from relevant authority i.e. Archaeological Department or TDCP (depending on site ownership)



Sr. #	Screening Criteria	Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
	land or for tree-cutting? (Yes/ No).	Bibi jawindi		✓	SAA	-
		Lal sohanra Forest		✓	SAA	-
		Gulki Top		✓	SAA	-
		Barthi top		✓	SAA	-
		Mubarki Top		✓	SAA	-
5	Will the subproject create significant/limited/ no cultural properties impacts?					
	<ul style="list-style-type: none"> <li>Involve significant excavations, demolition, movement of earth, flooding or other major environmental damages.</li> </ul>	Derawar Fort		✓	The sub-project does not involve any of these risks i.e. significant excavations, demolition, movement of earth, flooding or other major environmental damages. (refer to Section 2.1.1 and 2.1.3 for the detailed scope of work and associated construction activities)	-
		Bibi jawindi		✓	The sub-project does not involve any of these risks i.e. significant excavations, demolition, movement of earth, flooding or other major environmental damages. (refer to Section 2.2.1 and 2.2.3 for the detailed scope of work and associated construction activities)	-
		Lal sohanra Forest		✓	The sub-project does not involve any of these risks i.e. significant excavations, demolition, movement of earth, flooding or other major environmental damages. (refer to Section 2.3.1 and 2.3.3 for the detailed scope of work and associated construction activities)	-
		Gulki Top		✓	The sub-project does not involve any of these risks i.e. significant excavations, demolition, movement of earth, flooding or other major environmental damages. (refer to Section 2.4.1 and 2.4.3 for the detailed scope of work and associated construction activities)	-
		Barthi top		✓	The sub-project does not involve any of these risks i.e. significant excavations, demolition, movement of earth, flooding or other major environmental damages. (refer to Section 2.5.1 and 2.5.3 for the detailed scope of work and associated construction activities)	-
		Mubarki Top		✓	The sub-project does not involve any of these risks i.e. significant excavations, demolition, movement of earth, flooding or other major environmental damages. (refer to Section 2.6.1 and 2.6.3 for the detailed scope of work and associated construction activities)	-
	<ul style="list-style-type: none"> <li>Is located within or in</li> </ul>	Derawar Fort	✓			-
		Bibi jawindi	✓			-





Sr. #	Screening Criteria	Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
	the vicinity of a recognized cultural property conservation area or heritage site.	Lal sohanra Forest		✓		-
		Gulki Top		✓		-
		Barthi top		✓		-
		Mubarki Top		✓		-
	Is designed to support the management or conservation of cultural property.	Derawar Fort	✓		The sub-project is designed to support the management of tourists visiting the site by providing toilet facilities.	-
		Bibi jawindi	✓		SAA	-
		Lal sohanra Forest	✓		SAA	-
		Gulki Top	✓		SAA	-
		Barthi top	✓		SAA	-
		Mubarki Top	✓		SAA	-
	Other, specify.	Derawar Fort		✓	NA	-
		Bibi jawindi		✓	NA	-
		Lal sohanra Forest		✓	NA	-
		Gulki Top		✓	NA	-
		Barthi top		✓	NA	-
		Mubarki Top		✓	NA	-
	6.Does the subproject involve any prior clearance from the Archaeology Department for either the conservation or management of heritage sites or vicinities? (Yes/ No). If yes, which?	Derawar Fort	✓		The site is proposed by the Director-General (DG) DGA. NOC has already been granted by the DG DGA. (refer to Section 3.2.1 for detail)	-
		Bibi jawindi	✓		SAA	-
		Lal sohanra Forest		✓	The site owned by TDCP and NOC is obtained from TDCP for proceeding	-
		Gulki Top		✓	SAA	-
		Barthi top		✓	SAA	-
		Mubarki Top		✓	SAA	-
<b>Social</b>						
7.	Will the subproject create significant/limited/no social impacts?					
	Land acquisition	Derawar Fort		✓	No land acquisition is involved, the site proposed for the construction of toilet blocks is owned by the Archaeology Department. (refer to Figure 3	-



Sr. #	Screening Criteria	Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
	resulting in loss of income from agricultural land, plantation or other existing lands.				above for detail).	
		Bibi jawindi		✓	No land acquisition is involved, the site proposed for the construction of toilet blocks is owned by the Archaeology Department. (refer to Figure 11 above for detail).	-
		Lal sohanra Forest		✓	No land acquisition is involved, the site proposed for the construction of toilet blocks is owned by TDCP. (refer to Figure 18 above for detail).	-
		Gulki Top		✓	No land acquisition is involved, the site proposed for the construction of toilet blocks is owned by TDCP. (refer to Figure 21 above for detail).	-
		Barthi top		✓	No land acquisition is involved, the site proposed for the construction of toilet blocks is owned by TDCP. (refer to Figure 28 above for detail).	-
		Mubarki Top		✓	No land acquisition is involved, the site proposed for the construction of toilet blocks is owned by TDCP. (refer to Figure 32 above for detail).	-
	• Impact on livelihood and economic activity.	Derawar Fort		✓	NA	-
		Bibi jawindi		✓	NA	-
		Lal sohanra Forest		✓	NA	-
		Gulki Top		✓	NA	-
		Barthi top		✓	NA	-
		Mubarki Top		✓	NA	-
	• Land acquisition resulting in the relocation of households.	Derawar Fort		✓	NA	-
		Bibi jawindi		✓	NA	-
		Lal sohanra Forest		✓	NA	-
		Gulki Top		✓	NA	-
		Barthi top		✓	NA	-
	• Any reduction of access to traditional dependent communities (to areas where they earn for their primary or substantial livelihood).	Derawar Fort		✓	NA	-
		Bibi jawindi		✓	NA	-
		Lal sohanra Forest		✓	NA	-
		Gulki Top		✓	NA	-
		Barthi top		✓	NA	-
		Mubarki Top		✓	NA	-



Sr. #	Screening Criteria	Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
	• Any displacement or adverse impact on tribal settlement(s).	Derawar Fort		✓	NA	-
		Bibi jawindi		✓	NA	-
		Lal sohanra Forest		✓	NA	-
		Gulki Top		✓	NA	-
		Barthi top		✓	NA	-
		Mubarki Top		✓	NA	-
	• Adverse impacts to women, including economic and safety concerns.	Derawar Fort		✓	NA	-
		Bibi jawindi		✓	NA	-
		Lal sohanra Forest		✓	NA	-
		Gulki Top		✓	NA	-
		Barthi top		✓	NA	-
		Mubarki Top		✓	NA	-
	• Impact on infrastructure (roads, water supply, any other type of infrastructure)	Derawar Fort		✓	No impact on roads and water supply and or any other infrastructure are perceived.	-
		Bibi jawindi		✓	SAA	-
		Lal sohanra Forest		✓	SAA	-
		Gulki Top		✓	SAA	-
		Barthi top		✓	SAA	-
		Mubarki Top		✓	SAA	-
	• Other, specify.	Derawar Fort		✓	NA	-
		Bibi jawindi		✓	NA	-
		Lal sohanra Forest		✓	NA	-
Gulki Top			✓	NA	-	
Barthi top			✓	NA	-	
Mubarki Top			✓	NA	-	
<b>Overall Assessment</b>						
Subproject is declined	Derawar Fort		✓			
	Bibi jawindi		✓			
	Lal sohanra Forest		✓			
	Gulki Top		✓			
	Barthi top		✓			
	Mubarki Top		✓			
Subproject is accepted	Derawar Fort	✓				-
	Bibi jawindi	✓				-



Sr. #	Screening Criteria	Site Name	Yes	No	Explanation (In-case of Yes)	Assessment of Category
		Lal sohanra Forest	✓			-
		Gulki Top	✓			-
		Barthi top	✓			-
		Mubarki Top	✓			-
	The subproject is classified as environmental Category A and requires an in-depth Environmental and Social Impact Assessment and an Environmental Management Plan.	Derawar Fort		✓		-
		Bibi jawindi		✓		-
		Lal sohanra Forest		✓		
		Gulki Top		✓		
		Barthi top		✓		
		Mubarki Top		✓		
	The subproject is classified as environmental Category B and requires an Environmental Management Plan.	Derawar Fort	✓			B
		Bibi jawindi	✓			B
		Lal sohanra Forest	✓			B
		Gulki Top	✓			B
		Barthi top	✓			B
		Mubarki Top	✓			B
	The subproject is classified as environmental Category C and does not require an Environmental Management Plan.	Derawar Fort		✓		-
		Bibi jawindi		✓		-
		Lal sohanra Forest		✓		-
		Gulki Top		✓		-
		Barthi top		✓		-
		Mubarki Top		✓		-



### 3.1 Occupational Health and Safety (OHS) Risks

Occupational Health and Safety (OHS) risks perceived during the execution of various sub-projects tasks/activities are presented in Table 8 ;

**Table 8: Task/s and associated OHS risks**

Sr. #	Activity/ Task	H&S Risks
1	Excavation for foundation of the toilet blocks up to 5 feet.	<ul style="list-style-type: none"> <li>- No risk of cave in during excavation is perceived as the maximum excavation is up to 5 ft.</li> <li>- Low risk of falling into the excavated area during the night.</li> <li>- Low risks associated with the use of small excavator (3 ft. wide bucket), if mentioned in contractor's work plan.</li> <li>- Low risk of abrasion on hand/ feet during use of handheld tools/equipment.</li> </ul>
2	Excavation up to 10 feet. (for Septic Tanks and Soakage Pits only)	<ul style="list-style-type: none"> <li>- Minor to moderate risk of cave in during excavation.</li> <li>- Risk of falling into the excavated area during the night.</li> <li>- Risks associated with the use of a small excavator (3 ft. wide bucket), if mentioned in the contractor's work plan.</li> <li>- Low risk of abrasion on hand/ feet during use of handheld tools/equipment.</li> </ul>
3	Brickwork	<ul style="list-style-type: none"> <li>- Low risk of abrasion/cut on hand/ feet during use of handheld tools/equipment.</li> <li>- Low scaffolding related risks as the building are single storey with a maximum height of 11 ft.</li> </ul>
4	Installation of steel chaukat	<ul style="list-style-type: none"> <li>- Low risk of abrasion on hand/ feet during use of handheld tools/equipment.</li> </ul>
5	Fabrication of mild steel reinforcement for cement concrete i/c cutting, bending, laying in position, making joints and fastening.	<ul style="list-style-type: none"> <li>- Low risk of abrasion/cut on hand/ feet during use of handheld tools/equipment.</li> </ul>
6	RCC works in roofs, beams, columns and girders	<ul style="list-style-type: none"> <li>- Low scaffolding related risk as the building is single storey with a maximum height of 11 ft.</li> <li>- Ladder safety issues.</li> </ul>
7	Ceramic tile laying work	<ul style="list-style-type: none"> <li>- Low risk of abrasion/cut on hand/ feet during use of handheld tools/equipment.</li> </ul>
8	Providing and fixing aluminium fly screen comprising of Fibber/aluminium wire gauze fixed in the aluminium frame.	<ul style="list-style-type: none"> <li>- Low risk of abrasion/cut on hand/ feet during use of handheld tools/equipment.</li> </ul>
9	Woodworks/ doors	<ul style="list-style-type: none"> <li>- Low risk of abrasion/cut on hand/ feet during use of handheld tools/equipment.</li> </ul>
10	Applying emulsion paint (3 coats)	<ul style="list-style-type: none"> <li>- Low risk of irritation of skin, eyes and throat from emulsion fumes.</li> <li>- Low risk of abrasion/cut on hand/ feet during use of handheld tools/equipment.</li> <li>- Ladder safety issues.</li> </ul>
11	Laying of tuff pavers	<ul style="list-style-type: none"> <li>- Low risk of abrasion/cut on hand/ feet during use of handheld tools/equipment.</li> </ul>
12	Electrical work i.e. installation of PVC pipes; copper wires; switches; ceiling	<ul style="list-style-type: none"> <li>- Low risk of abrasion/cut on hand/ feet during use of handheld tools/equipment.</li> </ul>



Sr. #	Activity/ Task	H&S Risks
	fan (4 No.); exhaust fan (10 No.); tube lights; water geyser (1No.) etc.	- Risk of electric shock during connection to the mainline.
13	Installation of water supply, plumbing and sanitary i.e. washbasins (6 No.); water mixer (6 No.); plastic flush tanks (4 No.); installation of tube well (1 No.) at 100 ft. depth; laying, cutting, jointing of PPRC and UPVC pipes etc.	- Low risk of abrasion/cut on hand/ feet during use of handheld tools/equipment.
14	Various works activities/interactions of labourers may result in the spread of COVID-19	- Risk of COVID-19

### 3.2 Applicability of Clearances/ NOCs

#### 3.2.1 Clearance/ NOC from Directorate General of Archaeology

The majority of sub-project sites are either located; within the earthen ground of world heritage site and or national archaeological site; or within the buffer zone of the world heritage site and or national archaeological site, therefore owned and protected by the Directorate General of Archaeology under The Antiquities Act. 1975 of the Government of Punjab<sup>25</sup>.

According to the Antiquities Act. 1975 “no development plan or scheme or new construction on, or within a distance of two hundred feet of, a protected immovable antiquity shall be undertaken or executed except with the approval of the Director-General, Archaeology department.”

Keeping in view the above requirement under Antiquities Act. 1975, the No objection certificate (NOC) has already been issued by the DG Directorate General of Archaeology. Moreover, the locations of new toilet blocks have also been provided by the DG Directorate General of Archaeology ensuring these do not violate the Antiquities Act. 1975 (refer to Annexure A for detail).

#### 3.2.2 Applicability of UNESCO, World Heritage Convention (WHC) 1972,

According to the UNESCO, World Heritage Convention (WHC) 1972, each State Party (national government) is responsible for protecting its cultural and natural World Heritage properties through the development and implementation of national law/s<sup>26</sup>. The national government can delegate its powers depending upon the particular country's form of government<sup>26</sup>. In the case of the Government of Pakistan and Punjab in particular these powers are delegated to the DGA, Government of Punjab. The DG DGA is the officer authorised to ensure the implementation of The Antiquities Act. 1975<sup>27</sup> and The Punjab Special Premises (Preservation), Ordinance, 1985<sup>28</sup>.

As mentioned above the NOC required for the execution of the sub-project at all selected sites has already been issued by the DG DGA. Moreover, the locations of new toilet blocks have also been provided by the DG DGA ensuring these do not violate the Antiquities Act. 1975 (refer to Annexure A for detail).

<sup>25</sup>

[https://archaeology.punjab.gov.pk/list-of-monuments-museums?field\\_district\\_value=17&field\\_category\\_value=4](https://archaeology.punjab.gov.pk/list-of-monuments-museums?field_district_value=17&field_category_value=4)

<sup>26</sup> <http://whc.unesco.org/en/conventiontext/>

<sup>27</sup> <http://punjablaws.gov.pk/laws/1432a.html>

<sup>28</sup> <http://punjablaws.gov.pk/laws/366.html>



### **3.2.3 Clearance/ NOC from Punjab EPA**

The proposed sub-project does not fall in Schedule – I and II of the Punjab Environmental Protection Act; 2017 therefore no approval from EPA is required for the execution of this sub-project.

### **3.3 Applicability of WB OP 4.11 Physical Cultural Resource**

The majority of sub-project sites are either located; within the earthen ground of world heritage site and or national archaeological site; or within the buffer zone of the world heritage site and or national archaeological site (refer to relevant –sub-project sites information in Section 2) therefore WB OP 4.11 is triggered (Physical Cultural Resources – PCR). Following Mitigation measures are proposed in the project WB approved ESMF;

- A PCR plan in accordance with World Bank OP 4.11 will be prepared if required.
- A chance find procedure included in the ESMF will be adopted.

The negative impacts to any Cultural Heritage site include; destruction, wear, removal, burial, modification, change of use, neglect, denial of access and desecration, as defined in Section 6.5 of project ESMF (refer to Table 10 for detail about each site and associated negative impact). However, none of these negative impacts are perceived from the sub-project construction activities at any site.

However, as some of the sub-project sites are located within close proximity of the built heritage therefore, a Physical Cultural Resource Management Plan (PCRMP) has been prepared and provided as Annexure C. This PCRMP will be made part of the Civil Work Contract Agreement of all sub-project Sites Works.



**Table 9: Impact Assessment on Physical Cultural Recourse**

Sub-Project Site	Will the project will result in any of the following negative impacts on Tangible/Physical Cultural Resource (Artistic Creations, Built Heritage i.e. Buildings and Monuments)									Will the project involves conservation of Tangible/Physical Cultural Resource	Will the project involve management of tourist visiting cultural heritage resources that in turn will help in generating well-known advantages i.e. Visitor fees, concessions and donations that will ultimately help in providing funds for restoration and protection efforts of cultural resource
	Modification	Wear	Removal	Burial	Destruction	Change of Use	Neglect	Denial of Access	Desecration		
Derawar Fort	No	No	No	No	No	No	No	No	No	No	Yes through the provision of toilet facilities.
Bibi Jawindi	No	No	No	No	No	No	No	No	No	No	Same as Above (SAA)





### 3.4 Stakeholders Consultation/s

Stakeholders' consultations were undertaken with officials of DGA and tourists during the site visits conducted on March 16, 17, 18, 2022. The outcome of consultations with officials of DGA and tourists is presented below;

- Better and well-maintained toilet facilities will be a good relief for the elderly and the families with children.
- Toilet facility is essential in public places as the condition of existing toilets is poor.
- The condition inside the existing toilets is unhygienic, especially for the kids.
- Better facilities will help tourists to spend quality time at the site.

The list of persons consulted during sites visits is provided in Table 10, while the pictorial presentation of the consultation process is presented in Figure 34.

**Table 10: List of persons consulted**

Sr. #	Name	Designation
1.	Musa Kaleem	Tourist
2.	Nasrullah	Tourist
3.	Raza Kham	Tourist
4.	M Fayaz	Tourist
5.	Ali tasim	Tourist
6.	Ishfaq Ahmaf	Tourist
7.	Ejaz Butt	TDCP representative
8.	Sami Ullah	TDCP Representative
9.	Iqbal	DGA representative
10.	Mumtaz	DGA representative



**Figure 34: Pictorial Presentation of Consultations**



### **3.5 EHS Risks during Operation and Maintenance (O&M) of the Sub-Project**

Low risk of handling and use of detergents is perceived during the O&M of the sub-project sites. These could be easily mitigated with the use of appropriate PPEs and preparation of material safety data sheet and its implementation by the officials of DGA deputed at particular sub-project site. O&M staff of DGA already deputed at respective sub-project site will be responsible for day-to-day cleaning, repair and maintenance. Impact and its mitigation measures are included in table 7 under Operational Phase of the Project.



#### 4 Environmental Management and Monitoring Approach

Beyond general OHS minor risks, no further impacts are perceived during the execution of the sub- project at all sites. The environmental management and monitoring approach to be adopted during the construction and operational phase of the sub-project sites is presented in Table 23 below. Approximate cost of implementation of EMP during construction phase of the project is 2% of the total project cost (toilets block for northern zone of Punjab) i.e. 3.8million PKR. Approximate cost per site is 0.21million PKR (total number of sites under northern zone is 18).

Table 11: Environmental Management and Monitoring Approach

Sr. #	Activity/ Task	Mitigation/ Monitoring requirements	Responsibility	
			Implementation	Monitoring
<b>Construction Phase</b>				
1	Excavation up to 5 feet.	<ul style="list-style-type: none"> <li>• General excavation related SOPs to be adopted i.e.                             <ul style="list-style-type: none"> <li>- provision of barricading around the excavation,</li> <li>- no unauthorised entry,</li> <li>- use of PPEs</li> <li>- housekeeping</li> <li>- green cover around the excavated area to avoid unauthorised entry and avoid visual access.</li> </ul> </li> <li>• Implementation of COVID-19 SOPs for construction sites issued by GOPb.</li> </ul>	Contractor	Daily by Supervision Consultants & monthly or quarterly by PTEGP E&S Staff.
2	Excavation up to 10 feet.	<ul style="list-style-type: none"> <li>• Permit to Work System to be implemented in case of excavation for septic tank and soakage pit.</li> <li>• General excavation related SOPs to be adopted i.e.                             <ul style="list-style-type: none"> <li>- provision of barricading around the excavation,</li> <li>- no unauthorised entry,</li> <li>- use of PPEs</li> <li>- housekeeping</li> <li>- green cover around the excavated area to avoid unauthorised entry and avoid visual access.</li> </ul> </li> <li>• Implementation of COVID-19 SOPs for construction sites issued by GOPb.</li> </ul>	Same as Above (SAA)	SAA



3	Brickwork	<ul style="list-style-type: none"> <li>• General occupational H&amp;S SOPs related to masonry works i.e. Use of PPEs, housekeeping etc.</li> <li>• Implementation of scaffolding safety SOPs i.e. installation of scaffolding on a level and hard surface, prior inspection by a competent person.</li> <li>• Ladder safety SOPs i.e. placing on a hard and level surface, three-point contact etc.</li> <li>• Green cover around the construction site to avoid unauthorised entry and avoid visual access.</li> </ul>	SAA	SAA
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Sr. #	Activity/ Task	Mitigation/ Monitoring requirements	Responsibility	
			Implementation	Monitoring
		<ul style="list-style-type: none"> <li>• Implementation of COVID-19 SOPs for construction sites issued by GOPb.</li> </ul>		
4	Installation of steel chaukat	<ul style="list-style-type: none"> <li>• General occupational H&amp;S SOPs related to masonry works i.e. Use of PPEs, housekeeping etc.</li> <li>• Implementation of COVID-19 SOPs for construction sites issued by GOPb.</li> </ul>	SAA	SAA
5	Cutting, bending, laying and fastening of mild steel bars.	SAA	SAA	SAA
6	RCC works in roofs, beams, columns and girders	SAA	SAA	SAA
7	Ceramic tile laying work	SAA	SAA	SAA
8	Fixing aluminium fly screen.	SAA	SAA	SAA
9	Woodworks/ doors	SAA	SAA	SAA
10	Providing and laying of tuff pavers	SAA	SAA	SAA
11	General electrical work i.e. installation of PVC pipes; wires; switches; ceiling fan etc.	<ul style="list-style-type: none"> <li>• General occupational H&amp;S SOPs related to electrical works i.e. Use of PPEs, housekeeping etc.</li> <li>• Ladder safety SOPs i.e. placing on a hard and level surface, three-point contact etc.</li> <li>• Implementation of COVID-19 SOPs for construction sites issued by GOPb.</li> </ul>	SAA	SAA
12	Applying emulsion paint (3 coats)	<ul style="list-style-type: none"> <li>• Ladder safety SOPs i.e. placing on a hard and level surface, ensuring three-point contact etc.</li> <li>• Use of appropriate PPE i.e. gloves and mask etc.</li> <li>• Implementation of COVID-19 SOPs for construction sites issued by GOPb.</li> </ul>	SAA	SAA
<b>Operational Phase</b>				



1	General cleaning	<ul style="list-style-type: none"> <li>• General OHS SOPs relating to cleaning i.e. use of appropriate PPEs, preparation of material safety data sheet and its implementation.</li> </ul>	Site staff of DGA	Incharge of site deputed by DGA
2	Wastewater, Solid Waste, adequate drainage, Cleaning Issues	<ul style="list-style-type: none"> <li>• Land owner of the site i.e. Archeological Department or TDCP are responsible of maintaining improved or new toilet block constructed under this project.</li> <li>• Toilet blocks should be inspected on regular basis by the above authorities and ensure that they are in working conditions in hygienic way.</li> <li>• Septic tank should be pumped as per the recommendation of the designer.</li> <li>• Solid waste bins should be provided at toilets. These bins should be empty at end of every busy day (usually busy during weekend and public holidays).</li> </ul>		



#### 4.1 HSE Training and Associated Cost

On site hands-on training will be provided by the Environmental Expert (EE) of Construction Supervision Consultants (CSC) to Contractor’s staff during mobilisation of contractor at each sub-project site therefore no additional cost is perceived beside regular remuneration of EE CSC. Detail of training/s to be imparted during the construction phase of the sub-project is provided in Table 13 below.

Two percent of total sub-project cost has been added as EMP implementation cost in all Contract Agreement.

However, it is pertinent to mentioned here the contractor and or every employer is bound to provide its employees necessary PPEs and training free of cost according to The Punjab Occupational Safety and Health Act 2019. The Punjab OHS Act 2019, clearly states that *“Every employer shall; take all possible and reasonably practicable measures to ensure safety and health of the employees at the workplace; arrange for training of safety and health representatives every year to attend health and safety training as approved by the Government and shall bear all expenses thereof; and, provide where necessary to the employees, at his own expense, if hazards cannot otherwise be eliminated or controlled, adequate protective clothing and protective equipment as may be approved by the Government, to prevent every risks of harm and of adverse effects on health.”*

##### Training Plan

Sr. #	Topic	Duration	Trainees	Trainer
1	EMP Training	Once during contractor’s mobilisation at each sub-project site for maximum 1hr.	Contractor Staff & Labourers	Environmental Expert of Supervision Consultants
2	Toolbox Talk	Twice a week for maximum of 10 min on selected topics based on site observations made by Environment Specialist of PTEGP..	Labourers	Contractor’s Senior Staff/ Site Incharge



## 5 Findings

Following are the finding of the E&SS process;

- The majority of sub-project sites are either located; within the earthen ground of world heritage site and or national archaeological site; or within the buffer zone of the world heritage site and or national archaeological site but will not result in any negative impact whatsoever i.e. destruction, wear, removal, burial, modification, change of use, neglect, denial of access and desecration. However, keeping in view the requirement as per WB OP 4.11, a Physical Cultural Resource Management Plan (PCRMP) has been prepared and provided as Annexure C. This PCRMP will be made part of the civil works contract agreement of all sub-project site works.
- NOC required for the execution of the sub-project is already issued by the DG DGA. The site/s for new toilet block/s in all sub-project sites are proposed by the DG DGA.
- The proposed sites are government land/ the property of the Directorate General of Archaeology, therefore no land acquisition is involved.
- The sub-project will have no adverse environmental and social (E&S) impacts. General OHS related issues are perceived as limited to masonry works.
- All proposed toilet blocks have access to disabled.
- The execution of the sub-project will not involve any tree cutting and removal of vegetation.
- Effluents generated during the operation phase will be disposed into the existing WASA/TMA connection and or into the septic tanks that will be constructed for its treatment.
- In addition, the proposed sub-project does not fall in Schedule – I and II of the Punjab Environmental Protection Act; 2017 therefore no approval from EPA is required for the execution of this sub-project.





## Annexure A: NOC from Archaeological Department



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Secretary Tourism  
Dy. No. 1526  
Dated: 24/9/21  
• ADDL. SECRETARY  
• DY. SECRETARY (ADMIN)  
• DY. SECRETARY (P)

No. DGA- I (225)/Arch/2021/1869  
DIRECTORATE GENERAL OF ARCHAEOLOGY  
GOVERNMENT OF THE PUNJAB  
TOURISM DEPARTMENT  
OLD FORT LAHORE

Dated the 13th September, 2021

To,

The Secretary,  
Tourism Department,  
Government of the Punjab,  
Lahore.

Dr. No. 2/c2.

Date: 14/09/2021

R&I Tourism Department

**Subject: - PROVISION AND IMPROVEMENT OF TOILETS, CAFÉ, SOLAR PANELS, TOURIST INFORMATION CENTERS AND ROHTAS MUSEUM GALLERY**

Kindly refer to meeting held under the Chairmanship of Secretary Tourism Department in the Committee Room of Tourism Department dated 10.03.2021 on the subject cited above.

It is submitted that during the meeting the Chair directed as follows:

- PTEGP will provide new toilets (international standard) and make improvement in the existing ones. The design of toilets will be in harmony with specific heritage site.
- The Director General of Archaeology will provide locations for new toilets (international standards) at Shalamar Garden, Jahangir's Tomb, Harappa Museum, Hiran Minar, Rohtas Fort, Taxila Museum and Wah Garden.
- The PTEGP will also make a plan for the improvement of Rohtas Fort museum gallery in consultation with Archaeology department which includes improvement of the museum gallery building, display of objects and lighting system etc.
- The PTEGP will also design and provide tourist information centers (TICs) at key heritage sites for which Directorate General of Archaeology will specify location and provide requisite area for the purpose.



- v. The Directorate General of Archaeology will also nominate focal person for identifying locations for Washrooms, Cafe, Solar Panel and TIC to facilitate the PTEGP for an early execution.

In pursuance of the directions of the Chair, the Directorate General of Archaeology has no objection for provision of above tourist facilities at above mentioned sites and the detail of various activities alongwith location coordinates are submitted herewith for kind perusal, please.

*[Signature]*  
 13/10/21  
 DIRECTOR GENERAL ARCHAEOLOGY

The detail of various activities alongwith location with coordinates are as under:

Name of the Activity	Shalamar Gardens	Jahangir's Tomb	Birsa Minar	Rohtas Fort	Harappa Museum	Taxila Museum	Wah Garden
	1	2	3	4	5	6	7
Provision for New Toilet Blocks	31.58524 74.38472	31.62138 74.30119	31.44103 73.95742	32.96403 73.57461	30.628894 72.86908	--	33.80072 72.83182
Improvement of Existing Washroom	31.58524 74.38472	--	--	32.96403 73.57461	30.628894 72.86908	33.74595 72.81838	--
Solar Panels	31.58410 74.38072	31.62181 74.29823	31.73994 73.95665 & 31.741065 73.95369	32.9636 73.5744	30.62529 72.86117	33.74801 72.81821	33.800561 72.69856
Cafeteria	31.58623 74.38362	31.62100 74.30103	Improvement of existing	32.96378 73.57321	30.62579 72.86610	30.627003 72.86797	33.80701 72.83092
Tourist Information Centre	--	--	--	32.9625 73.5736	30.62511 72.86687	33.74595 72.81844	33.80102 72.69872
Focal Person	Mr. Atiq-ur-Rehman Deputy Director E&M/Mr. Mukhtar Ahmad SDO	Mr. Atiq-ur-Rehman Deputy Director E&M/Mr. Qazi Ashraf Archaeological Conservator	Mr. Atiq-ur-Rehman Deputy Director E&M/Mr. Waqas Sub-Engineer	Mr. Imran Zahid, SDO	Muhammad Hassan Deputy Director/Mr. Alimud Nawaz, Assistant Curator	Mr. Iqbal Khan, Deputy Director/Mr. Ali Gohar, Archaeological Conservator	Mr. Iqbal Khan Deputy Director/M Ali Gohar Archaeological Conservator



## NOC from TDCP

FAX/URGENT



042-99059304

No.22(23)PTEGP/RP/P&D/2022  
**GOVERNMENT OF THE PUNJAB  
PLANNING & DEVELOPMENT BOARD**

Dated Lahore, the 23<sup>rd</sup> February, 2022

To

The Secretary, -  
Government of the Punjab,  
Finance Department,  
Lahore.

*Attention: Section Officer (P&D)*

**Subject: DDSC MEETING OF SCHEME TITLED "CONSTRUCTION /  
RENOVATION OF TOILET BLOCKS AT DIFFERENT HERITAGE &  
TOURIST SITES IN CENTRAL, NORTH & SOUTH ZONES UNDER  
PUNJAB TOURISM FOR ECONOMIC GROWTH PROJECT  
(PTEGP)"**

I am directed to enclose herewith minutes of subject meeting for your  
information and further necessary action.

(MUHAMMAD SALEEM ILYAS)  
ASSISTANT CHIEF (RP)

No. & Date Even:-

A copy is forwarded for information and further necessary action to the:-

1. Sr. Chief (YASAT), Planning & Development Board, Lahore.
2. Chief (Tech.), Planning & Development Board, Lahore.
3. Chief (ECA), Planning & Development Board, Lahore.
4. Project Director, Punjab Tourism Economic Growth Project, 184-A Upper Mall, Lahore.


ASSISTANT CHIEF (RP)

C.C:

Secretary, P&D Board, Lahore.

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	<b>GOVERNMENT OF THE PUNJAB          PLANNING &amp; DEVELOPMENT BOARD          (RP/P&amp;D SECTOR)</b>
<b>MINUTES OF DDSC MEETING OF SCHEME TITLED "CONSTRUCTION / RENOVATION OF TOILET BLOCKS AT DIFFERENTHERITAGE &amp; TOURIST SITES IN CENTRAL, NORT &amp; SOUTH ZONE UNDER PUNJAB TOURISM FOR ECONOMIC GROWTH PROJECT (PTEGP)"HELD UNDER THE CHAIRMANSHIP OF SECRETARY, P&amp;D BOARD ON 17.02.2022</b>	
Venue:	CR-III
Participants	List Attached at Annex-A

**Agenda Item 1: "Construction / Renovation of Toilet Blocks at Different Heritage & Tourist Sites in Central Zone Under Punjab Tourism for Economic Growth Project (PTEGP)"**

Opening the discussion, Chief (RP), P&D Board informed that Punjab Tourism for Economic Growth Project (PTEGP) is a World Bank funded project for generating the economic activities through rehabilitation/construction of Tourism spots in Punjab. The instant case has been submitted by PTEGP to construct / renovate the toilet blocks at different heritage and tourist sites in the 4 districts of Central Zone i.e. Lahore, Sheikhpura, Kasur, Sahiwal with the technical support of C&W Department. The cost estimates/PC-Is were prepared by C&W Department in consultation with Archaeology Department. These estimates are based on 1<sup>st</sup> Bi-Annual 2022 MRS rates at total cost of Rs.88.103 million with gestation period of 6 months (April, 2022 to September, 2022). The required finds would be provided out of the ADP 2021-22 allocation of the umbrella PC-I of PTEGP.

2. The site wise cost of each PC-I is as under: -

Sr. No	No. of Sites	Location	Districts	No. of Sets	No. of Seats	Cost (M)	Remarks
<b>Central Zone</b>							
1.	1	Shalamar Gardens	Lahore	2	10	10,449	1- One Set for Ladies and Gents  2- One set in each set is for Special Persons and remaining for Normal Persons.
2.		Site-II		2	10	10,548	
3.	2	Jahangir Tomb		2	10	10,449	
4.	3	Noor Jahan Tomb		2	10	10,001	
5.	4	TDCP Sightseeing Bus Terminal		2	2	3,836	
6.	5	Hiran Minar	SKP	2	10	9,291	
7.	6	Sheikhpura Fort		2	10	9,264	
8.	7	Harappa Museum	Sahiwal	2	10	14,327	
9.	8	TDCP Changa Manga Resort,	Kasur	2	10	9,938	
<b>G. Total-</b>				<b>18</b>	<b>82</b>	<b>88,103</b>	

*Handwritten signature*

Approved with Govt. Secretary



3. On the query of Member, PSD/Sr.Chief (YASAT), P&DB regarding the NOC of Archeology Department and O&M of these facilities, Project Director (PTEGP) apprised the house that all the proposed facilities and respective location have been proposed by the Archeology Department and the future O&M would also be the responsibility of their Department. Member, PSD/Sr.Chief (YASAT), P&DB has inquired about the final sewage disposal of these toilets. PD, PTEGP responded that disposal facility available at the site would be used, whereas, on sites where the sewage disposal system is not available, it would be constructed, which results in variation in cost at different proposed locations. He further informed that the detailed designs were prepared by the Design Consultant of PTEGP in consultation with all the stakeholders as per their demand.

4. Chief (RP), P&DB further apprised that in compliance to observations of P&D Board, PTEGP has submitted amended PC-I and cost has been reduced from Rs.88.103 million to Rs.81.458 million after deletion of 1% horticulture charges, 2% Design consultancy charges, 12.5% Departmental charges and 2% Supervision consultancy charges.

5. Member, (Edu.)/Sr. Chief (RP), P&DB inquired whether the proposed gestation period i.e. 6 months would be sufficient to complete these assignments. The representative of C&W Department replied that although the quantum of each facility/construction work is not a lengthy process but the proposed gestation period does not seem justified. Member (PSD/Sr. Chief (YASAT), P&DB endorsed the point of view of C&W Department and recommended to enhance the gestation period from 6 to 8 months.

#### Decision

The scheme was approved at total cost of Rs.81.458 million subject to the following conditions: -

- i. Gestation Period may be increased from 6 to 8 months (April, 2022 to November, 2022).
- ii. Operation & Maintenance would be the responsibility of Tourism/ Archeology Department.

#### *Agenda Item 2: "Construction / Renovation of Toilet Blocks at Different Heritage & Tourist Sites in North Zone under Punjab Tourism for Economic Growth Project (PTEGP)"*

6. Chief (RP), P&DB informed the house that under the instant project PTEGP has planned to provide the toilet facility in 5 districts of Punjab of Northern Zone i.e. Attock, Rawalpindi, Jhelum, Chakwal, Mianwali. The district wise details of cost estimates are as under:-



Sr. No.	No. of Sites	Location	Districts	No. of Sets	No. of Seats	Cost (M)	
1.	1	Lala Rukh Tomb	Attock	2	6	6.339	
2.	2.	Wah Gardens		2	6	4.652	
3.	3	Sirikap Taxila		2	6	5.066	
4.	4	Mohra Muradu Taxila		2	6	4.906	
5.	5	Dharam Rajika Taxila		2	6	5.470	
6.	6	Patriate Hill Station	Rawalpindi	Start-point	2	6	9.557
7.	Mid-point			2	6	9.557	
8.	Top-point			2	6	9.557	
9.	7	Mall Road Murree		2	8	9.821	
10.	8			2	6	6.601	
11.		Site-II		2	6	6.686	
12.	9	Tench Bhatta Bazaar		1	5	2.679	
13.		Taxila Museum (Male Set)		1	5	2.050	
14.	10	TDCP Dhanio Rest House Kotli Sattian		2	6	9.685	
15.	11	TDCP Khajot Stopover		Male	1	4	8.910
16.				Female	1	3	7.157
17.	12	TDCP Sight Seeing, Bus Terminal,		2	6	6.494	
18.				2	6	6.514	
19.	13	Dharabi Lake		2	10	14.085	
20.	14	Katas Raj		2	10	14.336	
21.	15	TDPC Resort Kallar Kahar,	Chakwal	2	5	4.475	
22.	16	TDCP Dhok Talian,		2	10	14.341	
23.	17	Rohtas Fort	Jhelum	2	10	11.430	
24.	18	TDCP Daud Khel,	Mianwali	2	10	10.579	
		<b>Grand Total</b>		<b>44</b>	<b>158</b>	<b>190.951</b>	

7. Cost has been reduced from Rs.190.951 million to Rs.182.836 million due to deletion of 1% horticulture charges, 2% Design consultancy charges, 12.5% Departmental charges and 2% Supervision consultancy charges.

**Decision**

The scheme was approved at total cost of Rs.182.836 million subject to the following conditions:

- i. Gestation Period may be increased from 6 to 8 months (April, 2022 to November, 2022).
- ii. Operation & Maintenance of these toilets would be the responsibility of Tourism/ Archeology Department.

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**Agenda Item 3: "Construction / Renovation of Toilet Blocks at different Heritage and Tourist Sites in South Zone under Punjab Tourism for Economic Growth Project (PTEGP)"**

8. PTEGP is going to provide the subject facility in 2 districts of Southern Zone i.e. DG Khan and Bahawalpur. The district wise details of cost estimates are as under:-

*(Rs. In million)*

Sr. No.	Location	District	Cost
1	Derawar Fort	Bahawalpur	10.997
2	Tomb Bibi Jiwandi	Bahawalpur	10.921
3	TIDCP Lal Suhanra	Bahawalpur	5.997
4	Barhi	Bahawalpur	15.405
5	Mubarki Top	DG Khan	16.353
6	Gulki Top	DG Khan	14.740
<b>Total</b>			<b>74.414</b>

8. The scheme was discussed in detail and it was agreed to provide the facility on the same analogy as it is planned in Central and North Zone. Cost has been reduced from Rs.74.414 million to Rs.67.208 million due to deletion of 1% horticulture charges, 2% Design consultancy charges, 12.5% Departmental charges and 2% Supervision consultancy charges.

**Decision**

The scheme was approved at total cost of Rs.67.208 million subject to the following conditions:

- i. Gestation Period may be increased from 6 to 8 months (April, 2022 to November, 2022).
- ii. Operation & Maintenance of these toilets would be the responsibility of Tourism/ Archeology Department.

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Annex-A

**LIST OF PARTICIPANTS**

<b><u>NAME OF THE OFFICERS</u></b>		<b><u>DESIGNATION</u></b>
<b><u>PLANNING &amp; DEVELOPMENT BOARD</u></b>		
1.	Mr. Mujahid Sherdil	Secretary, P&D Board
2.	Mr. Khalid Sultan	Member (Edu./Health)/Sr. Chief (RP)
3.	Mr. Ifitkhar Shami	Member (PSD)/Sr. Chief (YASAT)
4.	Dr. Muhammad Arif Raza	Chief (RP)
5.	Mr. Muhammad Saleem Ilyas	Assistant Chief (RP-I)
6.	Mr. Yaser Arif	Assistant Chief (Technical)
7.	Ms. Nayab Zahra	Planning Officer (RP-II)
<b><u>FINANCE DEPARTMENT</u></b>		
8.	Ms. Robeela Shaheen	Section Officer (Energy/P&D)
<b><u>PUNJAB TOURISM FOR ECONOMIC GROWTH PROJECT</u></b>		
9.	Mr. Waqas Malik	Project Director
10.	Dr. Muhammad Arif	Civil Engineer
<b><u>COMMUNICATION &amp; WORKS DEPARTMENT</u></b>		
11.	Mr. Saeed Ahmed	Additional Secretary (Technical-I)

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## Annexure B: COVID-19 SOPs for Construction Sites



Communication & Works Department  
Government of the Punjab  
Lahore

### احتیاطی ہدایات برائے (COVID-19) کورونا وائرس انفیکشن

یہ احتیاطی ہدایات تمام کنسٹرکشن سائٹس پر نافذ العمل ہوں گی اور محکمہ تعمیرات و مواصلات کے کنٹریکٹرز اور سپروائزرز ان پر عمل درآمد کو یقینی بنائیں گے۔

۱۔ یہ ہدایات، تمام کنسٹرکشن سائٹس جن پر کام جاری ہے، یہ نمایاں طور پر پینٹڈ اور سٹریٹریزی صورت میں آویزاں کی جائیں گی۔

۲۔ تمام حکمیداران اپنی کنسٹرکشن سائٹس پر جسمانی درجہ حرارت چیک کرنے کیلئے ٹمپریچر گن کی دستیابی یقینی بنائیں گے

۳۔ کنسٹرکشن سائٹس پر کام کرنے والے تمام عملے بشمول مزدور، ٹیکنیکل سٹاف، ڈرائیور، سپروائزر، سٹاف کالمپریچر روزانہ کام شروع کرنے سے پہلے چیک کیا جائے گا اور ایئر پھوڈر ڈال دیا جائے گا۔

۴۔ کسی بھی مزدور یا دیگر عملے میں وائرس کی علامات ظاہر ہونے کی صورت میں فوری طور پر طبی انتظامیہ کو مطلع کیا جائے گا۔

۵۔ ایسے کسی بھی شخص کو جس میں گلے یا ناک کی بیماری مشابہت ہو، کھانسی، نزلہ و خیر و زہ کو کام پر آنے کی اجازت نہ ہوگی۔

۶۔ کنسٹرکشن سائٹس پر ہاتھ دھونے کے انتظامات بشمول پانی و صابن کی دستیابی متعلقہ حکمیداران کی ذمہ داری ہوگی۔

۷۔ حکمیداران اس بات کو یقینی بنائیں گے کہ صبح کام شروع کرنے سے پہلے تمام عملے صابن سے ہاتھ دھوئے گا۔ اور ہر ایک کھینٹے بعد کام پر موجود ہر فرد اپنے ہاتھ صابن سے دھوئے گا۔

۸۔ جس جگہ پر عملے کام کر رہے ہوں وہاں پر کلورین سے پانی سے روزانہ سپرے کیا جائے گا تاکہ وہ علاقہ جراثیم اور وائرس سے پاک رہے۔

۹۔ جہاں تک ممکن ہو اس بات کو یقینی بنایا جائے کہ مزدور اور دیگر عملے کام ختم ہونے کے بعد گھر جانے سے پہلے صابن سے لہا کر جائے اور کام والے کپڑے وہیں چھوڑ کر جائے

۱۰۔ اگر مزدور یا دیگر عملے کنسٹرکشن سائٹس پر ہی رہائش پذیر ہے تو ان کی رہائش پر مناسب سماجی فاصلے کو یقینی بنایا جائے۔

۱۱۔ کنسٹرکشن سائٹس پر جراثیم کش محلول (Hand Sanitizers / Hand Wash etc) کی دستیابی اور استعمال یقینی بنایا جائے گا



## **Annexure C: Physical Cultural Resource Management Plan (PCRMP)**

### **Executive Summary**

The sub-project activities will not have any negative impacts to any Cultural Heritage site i.e. destruction, wear, removal, burial, modification, change of use, neglect, denial of access and desecration.

As the majority of sub-project sites are either located; within the earthen ground of world heritage site and or national archaeological site; or within the buffer zone of the world heritage site and or national archaeological site therefore WB OP 4.11 is triggered (Physical Cultural Resources – PCR).

Keeping in view the requirement under WB OP 4.11, this Physical Cultural Resources Plan has been prepared and will be made part of the Civil Contract Agreement of all sub-project sites.

### **Mitigation Measures/ Precautions**

#### **Pre-Construction:**

- Technical Design: Incompatible layout plan, engineering design and improper repair methods of the subproject's structures can undermine the historical value of PCRs, overall aesthetic beauty and ambience of the subproject areas. Therefore, the technical design of the proposed subprojects must incorporate the historical and aesthetic considerations meeting the local context and best international practices in project design; and the proponent must review and validate all the design and repair works considering the possible impacts before the start of civil works.
- Seismic Hazard Consideration: The proposed structures should be designed to withstand high intensity earthquakes. Contractor should dopt Seismic Building Code of Pakistan 2007 (SBC-07) to mitigate the seismic hazard for subprojects design. This code specifies minimum requirements for seismic safety of buildings and has to be applied and used by engineers in conjunction with the necessary understanding of the concepts of structural, geotechnical and earthquake engineering.

#### **1) Electrical Hazard Consideration**

- Appropriately grounded and double insulation of every single piece of equipment, machine and device should be kept in the design.
- Proper installation checks and periodic maintenance by a competent electrician should be planned; and
- All power strips should be planned in the design to place in well-ventilated areas for adequate heat dispersion

#### **2) Ecological Consideration:**

During design, sites should be properly selected to avoid and minimize the cutting of trees, shrubs and herbs;

- The critical areas of animal breeding and nests should be avoided (if any);
- Tree planation must be formulated; and
- It should be properly planned in the design to avoid any impacts on green cover of the subproject sites which may be direct or indirect.



### **Construction Phase Cordon Off**

- Cordon off work areas of civil works where necessary. Visitors should not be allowed in the subproject site area during civil works.

### **Civil Works:**

- Inventory of PCR close to the subproject area of influence, to be at risk of damage or disturbance should be prepared.
- Avoid, redirect the activities so that they do not endanger any archaeological site;
- Avoid extensive demolition works near or within the PCRs;
- Ensures that the relevant signs for protection of known PCRs are displayed where and when required; and
- Experienced skilful agent will be responsible for conducting the demolition activities, if any.
- Issues of Soil Erosion and Contamination, vibration, noise, air quality, wastewater and solid waste should be handled as per given in ESMP report prepared for the sites.
- For excavation works Chance find procedure as given below will be adopted for the site.
- All excavation is to be carried out with great care in order that any old masonry or other remains buried in the earth may not be damaged., any such remain should be left untouched when found and if liable to weather decay, it should be covered;
- It is important that responsible person from DGA, as mentioned by DG DGA in his NOC (refer Annexure A) must be present whenever excavations are carried out in or around the PCR, in case of discovery of any immovable antiquity during execution of work, he shall take charge and register it to further inform higher ups. Secure the site to prevent any damage or loss to movable objects. In cases of movable antiquities or sensitive remains, a night guard shall be present until the responsible authorities take over.

### **Chance Find Procedures**

Project may involve deep excavations. Therefore, the possibility of chance find is not ignorable. In case of any chance find, the contractor will immediately report through Supervision Consultant to DG Directorate General of Archaeology, Punjab, to take further suitable action to preserve those antique or sensitive remains. Representative of the Director 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, artefact 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.
- Avoid the use of heavy construction machinery during the excavation process; and
- The Contractor staff must have relevant qualification and experience of similar projects.

**Plaster and Painting Works:** New Plaster, painting walls and other roof treatment should consider the original colour scheme, layout and design to keep the aesthetic and visual impact of the site.

**Operational Phase:** The authority responsible for the O & M of sub project activities will be responsible for housekeeping of the facilities and shall prepare and adopt SOPs for O & M of the subproject facilities. PTEG E&S experts/specialists will ensure that O&M plan is operationalized and will do monitoring visits for compliance of O & M plans.

**Training and Capacity Building:** The civil work activities shall be carried out by Pre-qualified trained Contractor under supervision of technical staff of DG AD. The Contractors shall contain team of skilled labours having past experience in similar works. Trainings of the work force should be conducted before start of civil works and during project implementation by the PMU safeguards specialists and Contractor's as per training plan given in ESS report.

**Monitoring and Supervision:** Strict Monitoring and supervision as per monitoring plan given in ESS report should be enforced during works.

**GRM:** The record of any complaints as per GRM mechanism of the project should be implemented.



