



# Initial Environmental Examination

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Project Number: 40648-034  
September 2015

## IND: Infrastructure Development Investment Program for Tourism - Tranche 3

Submitted by

Program Management Unit, Government of Uttarakhand, Dehradun

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**Asian Development Bank**

SAS/SM



Govt. of Uttarakhand

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Infrastructure Development Investment Program for Tourism  
(ADB Assisted – Loan No. 2833, India)  
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Ref: 297212-10-ADB/IDIPT/3-1/2014-15

Date: 8 .09.2015

To,

The Country Director  
India Resident Mission (INRM)  
Plot No.-4 San Martin Marg,  
Chankyapuri New Delhi 110021  
PB No: 5331 (HPO)

**Sub:** IDIPT UK Tranche-III: Submission of IEE document for "Conservation of Cultural Heritage and Urban Place making in Nainital" sub-project

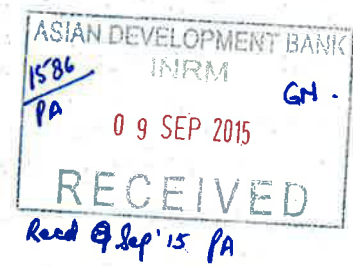
Dear Madam,

Please find herewith enclosed IEE document for "Conservation of Cultural Heritage and Urban Place making in Nainital" sub-project along with change Matrix between SAR and DPR stage for your kind perusal and approval.

Encl: As above

Your's Sincerely

  
(R K Joshi)  
Addl. Program Director



# **Environmental Assessment Document**

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**Initial Environmental Examination (IEE)**

**Loan No.: 3223 IND**

**UPDATED July 2015**

**Infrastructure Development Investment Program for Tourism,  
Uttarakhand**

**Sub-project** – Conservation of Cultural Heritage and Urban Place making  
in Nainital

## **TRANCHE III**

Prepared by the Government of Uttarakhand for the Asian Development Bank.

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## CURRENCY EQUIVALENTS

(as of 9 October 2014)

Currency unit	–	Indian rupee/s (Re/Rs)
Re1.00	=	\$0.0163
\$1.00	=	Rs61.025

## ABBREVIATIONS

ADB	-	Asian Development Bank
BOD	-	Biological Oxygen Demand
BoQ	-	Bill of Quantities
CO	-	Carbon Monoxide
CPCB	-	Central Pollution Control Board
DSC	-	Design and Supervision Consultant
EA	-	Executing Agency
EAC	-	Expert Appraisal Committee
EARF	-	Environment Assessment and Review Framework
EIA	-	Environmental Impact Assessment
EMP	-	Environment Management Plan
ES	-	Environmental Specialist
GC	-	General Conditions
KMVN	-	Kumaon Mandal Vikas Nigam Ltd
GoI	-	Government of India
GoUK	-	Government of Uttarakhand
IDIPT	-	Infrastructure Development Investment Program for Tourism
IEE	-	Initial Environmental Examination
INR	-	Indian Rupee
PIU	-	Project Implementation Unit
PMU	-	Program Management Unit
PUC	-	Pollution under Control Certificate
MLD	-	Million Liters per day
MoEF	-	Ministry of Environment and Forests
MFF	-	Multi – Tranche Financing Facility
NGO	-	Non-Governmental Organization
NO <sub>x</sub>	-	Nitrogen Oxide
PD	-	Program Director
PM	-	Particulate Matter
RP	-	Resettlement Plan
RPM	-	Respirable Particulate Matter
SC	-	Scheduled Caste
SLEC	-	State Level Expert Committee
SO <sub>2</sub>	-	Sulphur dioxide
SPM	-	Suspended Particulate Matter
SPS	-	Safeguards Policy Statement
ST	-	Scheduled Tribe

## **NOTES**

In this report, "\$" refers to US dollars.

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## EXECUTIVE SUMMARY

1. **Background.** Infrastructure Development Investment Program for Tourism (IDIPT) will develop and improve basic urban infrastructure and services in the four participating states of Himachal Pradesh, Punjab, Uttarakhand and Tamil Nadu to support the tourism sector as a key driver for economic growth. It will focus on: (i) strengthening connectivity to and among key tourist destinations; (ii) improving basic urban infrastructure and services, such as water supply, road and public transport, solid waste management and environmental improvement, at existing and emerging tourist destinations to ensure urban amenities and safety for the visitors, and protect nature and culture-based attractions. Physical infrastructure investments will be accompanied by: (iii) capacity building programs for concerned sector agencies and local communities for better management of the tourist destinations and for more active participation in the tourism-related economic activities, respectively.

2. Uttarakhand proposed 12 sub projects under Tranche 3. Nainital town subproject Package UK/IDIPT-III/BHT/01 is one of the subprojects to support conservation of heritage structures to professionally accepted standards in tourist clusters inclusive of management-plan based investments (Output 1) and improve connectivity to tourist destinations (Output 4).

3. **Executing and implementing agencies.** The executing agency is the Department of Tourism, Government of Uttarakhand and the implementing agency is the Uttarakhand Tourism Development Board (UTDB). Project Management Unit (PMU) is set up at Dehradun to coordinate the overall execution. Project Management Consultant (PMC) at Dehradun provides assistance to PMU in execution. Project Implementation Unit (PIUs) are set up in Dehradun, Bhimtal, and Kotdwar being supported by respective Design Supervision Consultant (DSC) teams. The asset owner is the District Municipal Administration.

4. **Categorization.** Nainital town sub project is classified as Environmental Category B as per the SPS 2009 as no significant impacts are envisioned. Accordingly this Initial Environmental Examination (IEE) has been prepared and assesses the environmental impacts and provides mitigation and monitoring measures to ensure no significant impacts as a result of the subproject.

5. **Subproject Scope.** The Nainital Lake Precinct is one of the main commercial and historically significant areas. It is highly visited by tourists with the lake being the central focus along with main market street and significant for its religious, institutional and heritage buildings. The area provides ample opportunities for boating/water based recreation, shopping, heritage appreciation, leisure walking, cultural events, sports etc. Nainital attracts a large number of local, domestic pilgrims as well as tourists which has the potential for developing several nature and culture based tourism products in Nainital which will cater to a wide range of visitors.

6. The major scope of this subproject as per Detailed project Report are, (i) promenade/deck-walk development along mall road (1.25 km); (ii) Mechanical car parking; (iii) development of children's park; (iv) restoration of municipal corporation building, DSA Pavilian, New Club; (v) development of Gandhi gram, Takula as a tourist attraction; (vi) façade improvement of dam wall; (vii) façade restoration and illumination of government owned heritage buildings (Bishop Shaw School, municipal library, Catholic Church, Methodist church); (viii) provision of public amenities and facilities (Rikshaw Stand, public toilet- renovation & new) at appropriate location in the Nainital Lake Precinct; (ix) integrated signage and interpretation in the lake precinct; reclamation of public and open spaces in the lake precinct; and (x) improvement of trekking trails

7. **Description of the Environment.** Project area is located at Nainital (29°24' latitude and 79°29' longitude at 1938 m above sea level) the headquarters of Nainital Lake District and Kumaon region is located 34 km from Kathgodam, the terminal point of North Eastern Railways in Uttarakhand. Nainital acts as the gateway of the Kumaon hills. It has emerged as one of the major hill resorts of North India. Subproject components are located in Nainital town area or in its immediate surroundings which were converted into urban use for many years ago and there is no natural habitat left at these sites. Nainital Lake is the famous tourist destination. The subproject components will be located in government-owned sites, public road rights-of-way (ROW). There are no protected areas, wetlands, mangroves, or estuaries in or near the subproject locations. Only Trekking trails alignment is located in forest. NOC will be required from Forest Department/ Van Panchayat for trek trail works same is under process.

8. **Environmental Management.** An environmental management plan (EMP) is included as part of this IEE, which includes (i) mitigation measures for environmental impacts during implementation; (ii) an environmental monitoring program, and the responsible entities for mitigating, monitoring, and reporting; (iii) public consultation and information disclosure; and (iv) a grievance redress mechanism. A number of impacts and their significance have already been reduced by amending the designs. The EMP will be included in civil work bidding and contract documents.

9. Locations and siting of the proposed infrastructures were considered to further reduce impacts. The concepts considered in design of the subproject are (i) design, material and scale will be compatible to the local architectural, physical, cultural and landscaping elements; (ii) preference will be given to the use of local material and labour as best as possible; (iii) for conservation, local construction material available in the nearby region as best as possible suiting to those in existence; (iv) all painting (interior and exterior) will be with environment-friendly low volatile organic compounds paints; (v) for retaining wall repair works, random rubble masonry will be used, with locally available stone to be laid in cement mortar by local skilled labour; (vi) earth backfill, if any will be done from the site excavated material; and (vii) ensuring all planning and design interventions and decisions are made in consultation with local communities and reflecting inputs from public consultation and disclosure for site selection.

10. During the construction phase, impacts mainly arise from the need to dispose of moderate quantities of waste soil/ debris; and from the disturbance of residents, businesses, and traffic. These are common impacts of construction in urban areas, and there are well developed methods for their mitigation. Measures such as conducting work in lean season and minimizing inconvenience by best construction methods will be employed. In the operational phase, all facilities and infrastructure will operate with routine maintenance, which should not affect the environment. Facilities will need to be repaired from time to time, but environmental impacts will be much less than those of the construction period as the work will be infrequent, affecting small areas only.

11. Mitigation measures have been developed to reduce all negative impacts to acceptable levels. Mitigation will be assured by a program of environmental monitoring to be conducted during construction. The environmental monitoring program will ensure that all measures are implemented, and will determine whether the environment is protected as intended. It will include observations on- and off-site, document checks, and interviews with workers and beneficiaries. Any requirements for corrective action will be reported to the ADB.

12. The stakeholders were involved in developing the IEE through discussions on-site and public consultation, after which views expressed were incorporated into the IEE and in the planning and development of the subproject. The IEE will be made available at public locations in the town and will be disclosed to a wider audience via the ADB and UTDB websites. The

consultation process will be continued and expanded during project implementation to ensure that stakeholders are fully engaged in the project and have the opportunity to participate in its development and implementation.

13. The citizens of Nainital town area will be the major beneficiaries of the project. The most noticeable net environmental benefits to the population of the town will be positive and large as the proposed subproject will improve access to reliable and adequate tourism facilities.

14. **Consultation, Disclosure and Grievance Redress.** Public consultations were done in the preparation of the project and IEE. On-going consultations will occur throughout the project implementation period. A grievance redress mechanism is described within the IEE to ensure any public grievances are addressed quickly.

15. **Monitoring and Reporting.** The PMU, PIU, PMC and DSC will be responsible for environmental monitoring. The PIU with support from the DSC will submit monthly, quarterly, semiannual monitoring reports to the PMU. The PMU will consolidate the all reports and will send it to ADB. ADB will post the environmental monitoring reports on its website.

16. **Conclusions and Recommendations.** Therefore the proposed subproject is unlikely to cause significant adverse impacts. The potential impacts that are associated with design, construction and operation can be mitigated to standard levels without difficulty through proper engineering design and the incorporation or application of recommended mitigation measures and procedures. Based on the findings of the IEE, there are no significant impacts and the classification of the subproject as Category “B” is confirmed. No further special study or detailed environmental impact assessment (EIA) needs to be undertaken to comply with ADB SPS, 2009 or Government of India EIA Notification, 2006.

## I. INTRODUCTION

### A. Background

1. Infrastructure Development Investment Program for Tourism (IDIPT) will develop and improve basic urban infrastructure and services in the four participating states of Himachal Pradesh, Punjab, Uttarakhand and Tamil Nadu to support the tourism sector as a key driver for economic growth. It will focus on: (i) strengthening connectivity to and among key tourist destinations; (ii) improving basic urban infrastructure and services, such as water supply, road and public transport, solid waste management and environmental improvement, at existing and emerging tourist destinations to ensure urban amenities and safety for the visitors, and protect nature and culture-based attractions. Physical infrastructure investments will be accompanied by: (iii) capacity building programs for concerned sector agencies and local communities for better management of the tourist destinations and for more active participation in the tourism- related economic activities, respectively.

2. Uttarakhand proposed 18 sub-projects under Tranche 3. Nainital town subproject Package No. UK/IDIPT-III/BHT/01 is one of the subprojects to support conservation of heritage structures to professionally accepted standards in tourist clusters inclusive of management-plan based investments (Output 1) and improve connectivity to tourist destinations (Output 4) and

3. **Executing and implementing agencies.** The executing agency is the Department of Tourism, Government of Uttarakhand and the implementing agency is the Uttarakhand Tourism Development Board (UTDB). Project Management Unit (PMU) is set up at Dehradun to coordinate the overall execution. Project Management Consultant (PMC) at Dehradun provides assistance to PMU in execution. Project Implementation Unit (PIUs) are set up in Dehradun, Bhimtal, and Kotdwar being supported by respective Design Supervision Consultant (DSC) teams. The asset owner is the District Municipal Administration.

4. **Subproject Scope.** The Nainital Lake Precinct is one of the main commercial and historically significant areas. It is highly visited by tourists with the lake being the central focus along with main market street and significant for its religious, institutional and heritage buildings. The area provides ample opportunities for boating/water based recreation, shopping, heritage appreciation, leisure walking, cultural events, sports etc. Nainital attracts a large number of local, domestic pilgrims as well as tourists which has the potential for developing several nature and culture based tourism products in Nainital which will cater to a wide range of visitors.

5. The major scope of this subproject as per Detailed project Report are, (i) promenade/deck-walk development along mall road (1.25 km); (ii) Mechanical car parking; (iii) development of children's park; (iv) restoration of municipal corporation building, DSA Pavilian, New Club; (v) development of Gandhi gram, Takula as a tourist attraction; (vi) façade improvement of dam wall; (vii) façade restoration and illumination of government owned heritage buildings (Bishop Shaw School, municipal library, Catholic Church, Methodist church); (viii) provision of public amenities and facilities (Rikshaw Stand, public toilet- renovation & new) at appropriate location in the Nainital Lake Precinct; (ix) integrated signage and interpretation in the lake precinct; reclamation of public and open spaces in the lake precinct; and (x) improvement of trekking trails

6. **Categorization.** An environmental assessment using ADB's Rapid Environmental Assessment (REA) checklist for urban development (**Annex 1**) was conducted. Results of the assessment as per preliminary design show Nainital town sub project Package No. UK/IDIPT-III/BHT/01 is unlikely to cause significant adverse impacts. Thus it is classified as Environmental Category B as per the SPS 2009. Accordingly this Initial Environmental Examination (IEE) has been prepared.

7. **Purpose of the IEE.** This report gives an account of the initial environmental examination (IEE) of subproject Package No. UK/IDIPT-III/BHT/01 as per SAR and preliminary design. It has been prepared in accordance with ADB SPS's requirements for environment Category B projects and provides measures to (i) ensure the environmental sustainability of subproject Package No. UK/IDIPT-III/BHT/01; (ii) integrate environmental considerations into the project preparation process; and (iii) provide for environmental management during project implementation

## **I. DESCRIPTION OF PROJECT COMPONENTS**

### **A. Project Overview**

8. The Nainital Lake Precinct is one of the main commercial and historically significant areas. Large numbers of tourists visit this area with the lake being the central focus along with main market street and significant for its religious, institutional and heritage buildings. The area provides ample opportunities for boating/water based recreation, shopping, heritage appreciation, leisure walking, cultural events, sports etc. Nainital attracts a large number of local, domestic pilgrims as well as tourists which has the potential for developing several nature and culture based tourism products in Nainital which will cater to a wide range of visitors.

9. The Nainital Lake has been adversely affected due to heavy construction activity and brazen flouting of rules as well as the trash that is being dumped into the lake by the tourists. Solid and liquid waste from small shops as well as kiosk owners near the lake is also affecting the Lake. Most of the buildings that have been constructed in Nainital are very close to the lake's shore. During the British time no construction was allowed within a belt of 50 yards above the highest water line. This was mandatory. The Lake Development Authority also does not permit construction up to 10 m from the shores of the lake, but this rule is being openly flouted in Nainital and other lake areas.

10. The proposed sub-project would bring in increased number of tourists due to the rich cultural and natural heritage of the place which would offer both cultural and recreational opportunities; the bio-diversity of the place also offer a range of eco-tourism opportunities that can attract nature lovers and adventure travelers; its unique colonial history also attracts history lovers. It has the potential for being marketed as a nature and culture based tourism destination for high-end tourists; and provide new livelihood opportunities for local people and also give impetus to local business and crafts of this region.

### **B. Present status**

11. Nainital Lake is a natural lake 1432 m long and 420 m wide with a water spread area of 48.76 h. Its maximum depth is 20 m. The lake had earlier very clear water and very little aquatic vegetation. The excessive discharge of domestic sewage from the settlements all around the lake as well as the increasing erosion on the hills due to deforestation and grazing gradually resulted in extreme eutrophication of the lake. To address this situation the Nainital Lake Region Special Area Development Authority (NLRSDA) is implementing centrally sponsored Nainital Lake Conservation and Management Project (NLCP). The quality of the lake water is expected to be improved after implementation of the NLCP. Under National lake conservation and management project, several works are under implementation at Nainital.

12. Naini Lake is the most important water body in Nainital both in terms of environment and tourist attraction. It is also recipient of storm water for large catchments. This lake is polluted due to urbanization and tourism activities. Discharge of untreated waste water, disposal of solid waste and silt deposition are the major factors that cause pollution of the lake. The quantity of MSW generation for the city varies during peak and non-peak tourist period due to variation in the number of tourist population. The major sources of MSW generations are domestic, hotels & restaurants, shops and commercial establishments, institutions, fruit and vegetable markets and construction rubbish. No primary collection exists in the present solid waste collection system. Solid waste is collected either through community bins/containers and open collection points or by street sweeping. Unfortunately, a significant part of the solid waste generated is disposed into open lands, streets, surface drains, hill

slopes etc and sometimes burnt in open, causing health hazards, public nuisance and degradation of environment and spoiling the aesthetics of the place. These aspects are however being addressed by “Mission Butterfly” an NGO and they collect the solid waste on daily basis and dispose it off. The discharges of wastes etc. are being tackled by local administration.

13. Nainital is rich in important cultural and heritage resource. Nainital boasts of some of the most revered buildings such as Raj Bhavan, High Court, etc. Other heritage structures in the city include churches such as St. Johns Church and Union Methodist Church. However, the aggressive construction phase of the past decade permeated all aspects of life in Nainital. The cement-iron based development, with no effective design nor regulatory guidelines, changed the character of this town. Repairs to old buildings, retaining walls and other elements changed the original building forms. Many houses in the old city areas are in dilapidated conditions and face the peril of breaking down. Many of the public institutions are housed in historic building but they have a poor state of conservation, repair and maintenance. The rationale for the inclusion of this sub-project in the IDIPT program are as follows:

- (i) Nainital as a historic and religious site attracts a large number of local, domestic pilgrims as well as tourists. The historic built heritage and scenic beauty of the place also brings in a substantial number of foreign tourists. Therefore Nainital caters to a wide range of visitors to the place.
- (ii) Nainital is well connected to major towns like Almora and Pithoragarh which helps bring in more number of tourists due to the rich cultural and natural heritage of the place and offers both cultural and eco-tourism opportunities.
- (iii) Nainital has a range of cultural and natural features including temples, local shrines, historic buildings, and nearby natural attractions etc which caters to people through recreation, religious rituals and adventure activities throughout the year. The bio-diversity of the place also offers a range of eco-tourism opportunities that can attract nature lovers and adventure travelers.
- (iv) Developing Nainital will further help improve and provide new livelihood opportunities for local people and also give impetus to local and crafts.

### **C. Project components**

14. The proposed subproject mainly comprises of:

#### **Sub-Package 1: Promenade Development around Nainital Lake**

##### **✓ Promenade/Deck-walk Development along mall road (1.25 Km)**

- Integrated side walk/ promenade and pedestrian movement development: The road below mall road and next to lake carries both pedestrian and rickshaws and remains packed all the time. This is inconvenient to both pedestrian traffic as well as rickshaw pullers. Segregation of traffic is planned by providing a cantilevered walkway from Tallital to mallital where walkway does not exist. Therefore proposal is to construct approximately 1.25 Km cantilevered walkway from Tallital to Mallital (astride **Central library**).

##### **✓ Mechanical car parking**

15. Car parking area at,

1. B.D. Pandey: Plot Area 352.70 Sqm (Covered area 1410.78 Sqm) – proposed 88 nos Cars

2. Nagarpalika: Plot Area 245.35 Sqm (Covered area 981.41 Sqm) – proposed 58 nos Cars
  3. Woodstock: Plot Area 535.69 Sqm (Covered area 2142.75 Sqm) – proposed 116 nos Cars
16. Facilities to be provided: (Typical for all parking areas):
- General Staff facilities.
  - Covered facility
  - D. G. Facility – 100% power backup for emergency operation
  - Central control room for security and control of parking layout.
  - CCTV
  - Ticketing station or Access Control system
  - Operators room, Toilet
  - Fire Detection & Protection system
  - Outdoor illumination
- ✓ **Development of Children's Park.**
- Installation of Play Ground Equipment
  - Provision for benches, weather shelters, railing and fencing
  - Provision of Lighting
  - Soft and hard Landscaping

#### **Sub-Package 2: Enhancement of Nainital Lake Heritage Precinct**

- ☐ **Restoration of Municipal Corporation Building, DSA Pavalian, New Club,**
  - ☐ Repair and Restoration of Building
  - ☐ Augmentation/ up gradation of building services such as electrical, sewage, water supply, etc.
  - ☐ Interior and Exterior Illumination
  - ☐ Provision of Tourist Interpretation center as necessary
  - DSA Pavalian- The main proposals include façade treatments with classical columns, extending the length of the roof on both flanks, relaying the roof and increasing the height of the ridge, adding an advertizing screen on the ridge for display of scores or advertizing, site improvements, upgrading toilets and floors, and woodwork and paintwork, internal electrification and lights, highlighting the building.
  - New Club- repair of the building roof downwards, restoration of all traditional elements, Upgradation of boundary wall, gates, site and Improvement of interiors including toilets, woodwork, electrical, ceilings, floors, walls
- ☐ **Development of Gandhi gram, Takula as a Tourist attraction**
  - ☐ Provision of entrance gate
  - ☐ Trek improvement to the village (around 300mts)
  - ☐ Interpretive and directional signage
  - ☐ Renovation of Gandhi Mandir as tourist Interpretation Center and Mahila Ashram



- ☐ Provision of Tourist view Points (20ft x 20ft)
- ☐ Landscaping of the area
- ☐ Provision of Home stays in the village
  
- ☐ **Façade improvement of Dam wall at Mallital**
  - Dismantling works - existing poor quality railing along Lower Mall and along the lake side, dismantling existing poor quality paving
  - Providing new design robust railing along Lower Mall from Tallital to Mallital and on outer side of Surface Pedestrian Promenade
  - Providing 2.4m wide paved walkway using designed pavers
  - Providing landscaped strip between walkway and Lower Mall
  - Providing LED lights along lake edge in surface walk portion
  - Renovating existing light pillars including replacing current ugly red box lights with classic design fixtures with LED lamps from Tallital to Mallital and also on Flats area
  
- ☐ **Façade restoration and Illumination of Government owned heritage buildings (Bishop Shaw School, Municipal Library, Catholic Church, Methodist church)**
  - ☐ Removal of inappropriate cladding and alterations (tile cladding or similar) from building facade.
  - ☐ External Cleaning of Stone facade
  - ☐ Reinstatement of lost elements or fabric to the façade of the building including stone work repairs, masonry re-pointing etc
  - ☐ Rendering and Rendering-Repair of building
  - ☐ Repair of Wooden features, doors and other external joinery
  - ☐ Repair of decorative iron works
  - ☐ Re-painting of building Facade
  - ☐ External illumination of Buildings
  - ☐ External building forecourt development
  - ☐ Provision of signage and street furniture
  
- ☐ **Provision of Public amenities and facilities at appropriate location in the Nainital Lake Area Precinct**
  - ☐ Up-gradation of existing public toilets and construction of new toilets at 5 locations
  
- ☐ **Integrated Signage and Interpretation in the Lake Precinct**
  - ☐ Directional Signage to important destinations and visitor facilities
  - ☐ Statutory signage or regulatory signs that convey information about local civic regulations and as traffic control devices.
  - ☐ Interpretive signage on features of interest and educate visitors about those features, which can be natural, cultural, historical, or recreational.
  
- ☐ **Reclamation of Public and Open Spaces in the Lake Precinct**
  - ☐ Removal and demolition of obsolete, unclaimed, damaged street furniture and structures

- Provision of Shed for Rickshaw parking near Mallital Rickshaw stand (Rickshaw Stand at northern end of Mall Road below Alps Hotel) (Demolition of existing wall (1.2m) from rickshaw stand on G B Pant road and construction of parking sheds for 30 rickshaws (30m in length)
- Provisions for integrated stone paved pedestrian access and pathways with adequate plantation
- Provision of street furniture (fencing work, tree guard, bollards, benches, waste bins) at appropriate locations
- Provision of weather shelters at adequate locations
- Provision of heritage type railing and integrated lake edge lighting along the lake edge.

□ **Improvement of Heritage Trekking Trails**

Nature Trail 1 - Land's End & Tiffin Top & Nature Trail 2 - Naina Peak

1. Trail 1- Tiffin Top – Lands End Trail: Length 4.5 Km From Ayar Jungle Camp to Lands End + 1.17 Kms from LandsEnd to Barapatthar
2. Trail 2 – Tanki Naina Peak: Length 3 Km starting at Tanki.
  - Repair of damaged pathways
  - Rough stone paving of steep, slushy stretches
  - Provision of railings at outer sides in vulnerable stretches
  - Wayside furniture at pause points
  - Rain shelters at viewing points
  - Camping sites
  - Provision of portable toilets at appropriate points [where water pipeline already available]
  - Signages [informative and regulatory]

17. No objection certificates from the stakeholders are attached as **Annexure 3**.

18. Nainital sub project layout plan is shown in **Annexure 4**.

**D. Project Implementation Schedule**

19. The implementation period for the proposed subproject is 24 months. Detailed design started in September 2014. Construction of all elements will begin in the 3<sup>rd</sup> quarter of the year 2015, and work will be completed by 2017.

### III. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

#### A. ADB Policy

20. ADB requires the consideration of environmental issues in all aspects of ADB's operations, and the requirements for environmental assessment are described in ADB SPS, 2009. This states that ADB requires environmental assessment of all project loans, program loans, sector loans, sector development program loans, and loans involving financial intermediaries, and private sector loans.

21. **Screening and Categorization.** The nature of the environmental assessment required for a project depends on the significance of its environmental impacts, which are related to the type and location of the project, the sensitivity, scale, nature and magnitude of its potential impacts, and the availability of cost-effective mitigation measures. Projects are screened for their expected environmental impact and are assigned to one of the following four categories:

- **Category A.** Projects could have significant adverse environmental impacts. An EIA is required to address significant impacts.
- **Category B.** Projects could have some adverse environmental impacts, but of lesser degree or significance than those in category A. An IEE is required to determine whether significant environmental impacts warranting an EIA are likely. If an EIA is not needed, the IEE is regarded as the final environmental assessment report.
- **Category C.** Projects are unlikely to have adverse environmental impacts. No EIA or IEE is required, although environmental implications are reviewed.
- **Category FI.** Projects involve a credit line through a financial intermediary or an equity investment in a financial intermediary. The financial intermediary must apply an environmental management system, unless all Projects will result in insignificant impacts.

22. **Environmental Management Plan.** An EMP which addresses the potential impacts and risks identified by the environmental assessment is prepared. The level of detail and complexity of the EMP and the priority of the identified measures and actions will be commensurate with the Project's impact and risks.

23. **Public Disclosure.** The IEE will be put in an accessible place (e.g., local government offices, libraries, community centers, etc.), and a summary translated into Hindi for other stakeholders. The following safeguard documents will be put up in ADB's website so that the affected people, other stakeholders, and the general public can provide meaningful inputs into the project design and implementation:

- ✓ For environmental category A projects, a draft EIA report at least 120 days before Board consideration;
- ✓ Final or updated EIA and/or IEE upon receipt; and
- ✓ Environmental monitoring reports submitted by the Project Management Unit (PMU) during project implementation upon receipt.

#### B. National and State Laws

24. Implementation of the subproject will be governed by the national and State of Uttarakhand environmental acts, rules, regulations, and standards. These regulations impose restrictions on activities to minimize/mitigate likely impacts on the environment. It is the responsibility of the project executing and implementing agencies to ensure subprojects are

consistent with the legal framework, whether national, state or municipal/local. Compliance is required in all stages of the subproject including design, construction, and operation and maintenance.

25. The realm of environmental regulations and mandatory requirements for the proposed sub-project is shown in **Table 1**. The Environmental Impact Assessment (EIA) notification, 2006 by the Ministry of Environment and Forests (MoEF, GoI) specifies the mandatory environmental clearance requirements. Accordingly, projects and activities are broadly categorized in two categories<sup>1</sup> - Category A and Category B, based on the spatial extent of potential impacts and potential impacts on human health and; natural and man-made resources.

**Table 1: Environmental Regulatory Compliance**

Sub-Project	Applicability of Acts/Guidelines	Compliance Criteria
Package No. UK/IDIPT-III/BHT/01 - Conservation of Cultural Heritage and Urban Placemaking in Nainital	The Environment Protection Act, 1986 - under EIA notification, 2006 (and its subsequent amendments in 2009) provides for categorization of projects into category A and B, based on extent of impacts.	The sub-project is not covered in the ambit of the EIA notification as they are not covered either under Category A or Category B of the notification. Hence, the categorization, subsequent environmental assessment and clearance requirements either from the State Government or the GoI is not triggered.
	ADB's Safeguard Policy Statement 2009	Categorization of sub-project components into A, B or C and developing required level of environmental assessment for each component. Categorized as B and IEE prepared
	The Wildlife Conservation Act, 1972, amended in 2003 and 2006, provides for protection and management of Protected Areas.	Not applicable.
	The Forest Conservation Act, 1980 and its subsequent amendments necessitate obtaining clearance from the MoEF for diversion of forest land for non-forest purposes.	The project does not involve any land diversion or tree cutting therefore, no clearance required.  <b>NOC is required from forest dept. for construction of trekking trail.</b>
	Water (Prevention and control of pollution) Act, 1974 and; Air (prevention and control of pollution) Act,	Proposed works will not require extensive use of construction materials. However, If contractor purchases the construction materials (eg. Sand, gravel) from third

<sup>1</sup> All projects or activities included as Category 'A' in the Schedule, including expansion and modernization of existing projects or activities and change in product mix, will require prior environmental clearance from the Central Government in the Ministry of Environment and Forests (MoEF) on the recommendations of an Expert Appraisal Committee (EAC) to be constituted by the Central Government for the purposes of this notification; All projects or activities included as Category 'B' in the Schedule, including expansion and modernization of existing projects or activities as specified in sub paragraph (ii) of paragraph 2, or change in product mix as specified in sub paragraph (iii) of paragraph 2, but excluding those which fulfil the General Conditions (GC) stipulated in the Schedule, will require prior environmental clearance from the State/Union territory Environment Impact Assessment Authority (SEIAA). The SEIAA shall base its decision on the recommendations of a State or Union territory level Expert Appraisal Committee (SEAC) as to be constituted for in this notification. In addition, General Condition (GC) of the notification specifies that any project or activity specified in Category 'B' will be treated as Category A, if located in whole or in part within 10 km from the boundary of: (i) Protected Areas notified under the Wild Life Protection) Act, 1972, (ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time, (iii) Notified Eco-sensitive areas, (iv) inter-State boundaries and international boundaries.

Sub-Project	Applicability of Acts/Guidelines	Compliance Criteria
	1981	materials are coming from approved quarry sites.
	The Noise Pollution (regulation and Control) Rules, 2000	The subproject shall put measures for abatement of noise including noise emanating from vehicular movements, blowing of horns, bursting of sound emitting firecrackers, use of loud speakers or public address system and sound producing instruments and ensure that the existing noise levels do not exceed the ambient air quality standards specified under these rules.
	The Ancient Monuments and Archaeological Sites and Remains Act, 1958, and the rules, 1959 provide guidance for carrying out activities including conservation, construction and reuse in and around the protected monuments. The Himachal Pradesh Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1976;	Not Applicable

26. The proposed subproject does not require statutory clearances from MoEF. All no objection certificates, CFEs and other clearances will be obtained prior to award of contract.

## **II. DESCRIPTION OF EXISTING ENVIRONMENT**

### **A. Environmental Profile - Physical Resources**

27. Uttarakhand became a separate state carved out of hill districts and sub Himalayan regions of Uttar Pradesh in the year 2000 and is the newly formed hill state in the Indian Himalayan Region. The geographic allocation (28°43'N to 31°27'N and 77°34'E to 81°02' E) resource setting of Uttarakhand is unique and shares its borders with China and Nepal. It borders the China on the north, Nepal on the east and the Indian states of Uttar Pradesh to the South, Haryana to the West and Himachal Pradesh to the North West. The State is comprised of 13 districts, these are; Pithoragarh, Almora, Nainital, Bageshwar, Champawat, Uttarkashi, Udham Singh Nagar, Chamoli, Dehradun, Pauri, TehriGarhwal, Rudraprayag, and Haridwar. Geographically, the state lies in the northern Himalayas between 28°53'24" to 31°27'50" North latitude and 77°34'27" to 81°02'22" East longitude. The State has an area of 53,483 sq. km. and a population of about 10.08 million as per census 2011.

28. Uttarakhand has a total geographic area of 51,125 km<sup>2</sup>, of which 93% is mountainous and 64% is covered by forest. Most of the northern parts of the state are part of Greater Himalaya ranges, covered by the high Himalayan peaks and glaciers, while the lower foothills were densely forested. The difference in altitude between the lowest parts and the highest part (snow peaks of Nandadevi) is almost 7,000 meters.

#### **1. Project Area: Lake Nainital**

29. The Subproject area Nainital is situated on 29°24' latitude and 79°29' longitude at 1938m above sea level. The headquarters of Nainital Lake district and Kumaon region is located 34 km from Kathgodam, the terminal point of North Eastern Railways in Uttarakhand. Nainital acts as the gateway of the Kumaon hills. It has emerged as one of the major hill resorts of North India. It is situated in the lower Himalaya not very far from the plains. Nainital is situated in a valley of the Gagar range running east and west, which is bounded on the north by the peak of China, renamed as Naini peak that is continued by the Alma peak (presently known as Snow-View) and the Sher-Ka-Danda to the eastern extremity, where the ridge descends almost to the level of the Nainital lake. On the west is the rugged hill of Deopatha, and on the south Ayarpatha gradually diminishes towards the east. The geology of Nainital is extremely complex characterised by landslide scars and fans, and debris cover mostly associated with the Nainital Fault that separates the lake and watershed into two roughly equal parts.

30. Nainital supports a resident population of about 40,000 and about 4 lakh tourists annually within a small area of 11-12 sq km. Of this, about 5 sq km area that forms watershed of the lake is densely populated. The town is situated mainly on the slopes of the seven hills which are surrounding Nainital Lake.



**Figure 1: Location Map of Nainital in Kumaon, Uttarakhand**

31. The picturesque surroundings, together with the beauty of the lake, the majestic Himalayan view from the hill tops, its proximity to the plains and a healthy climate not unlike that of England led to the selection of Nainital as a health and recreational resort by the British in 1841 and later as an educational centre. With the turn of the century, it had come on the national tourist map satisfying the tourism needs of local national and international tourists. Today, Nainital is one of the most popular tourist resorts of the country.

32. Nainital occupies a unique position amongst the numerous lakes of the Chhakatapargana of Kumaon. Chhakata in the Sanskrit language meaning Shat-Sheti-Khat or the region of 66 lakes was known as the 'Westmoreland of Kumaon' by Englishmen. Westmoreland is the lake district of England. The charms, many and varied, compete favorably with both lake Windermore of England and Lake Lucerne of Switzerland.

33. The ancient name of Nainital is Tri-Rishi Sarovar, named after the three sages- Atri, Agastya and Pulaha. It is believed that they came here on a pilgrimage while going to Mansarovar, the holy lake in Tibet. On finding no water here for drinking, they dug a large hole and brought water from Mansarovar with their divine power. Thus the ancient Indians believed that a dip in the Naini Lake earned the same religious merit equal to a holy dip in the Mansarovar Lake. The place was considered so holy, that the snake god, nag Karkotak, blessed the area with the boon that within and outside Nainital, no one shall die of snake bite. It is not surprising that before the British occupied this place, the whole valley of Nainital was treated as a temple by the Indians and people entered the valley after bathing and removing their foot wear in respect. The second important religious reference to Nainital is as one of the 64 Shakti Peeths, i.e. centers of spiritual powers. These centers were created wherever parts of the body of Goddess Sati fell, when Lord Shiva was carrying her body in grief after intentionally insulted by Raja Dakshaprajapati, father of Sati. It is said that the left eye (Nain) of Sati fell here and gave rise to the name of local Goddess Naina and the lake as Nainital, the lake of Goddess Naina.

34. The British occupied Kumaon and Garhwal in 1815. After the British occupation, E. Gardener was appointed as the Commissioner of Kumaon Division on May 8, 1815 and G.W. Traill as his assistant. Later, he was promoted as Commissioner of Kumaon and occupied this post until 1830. During his tenure as Commissioner, Traill visited Nainital but did not popularize his visit owing to the religious importance of Nainital. He had great admiration for the traditions of the hill people and he did his best to hide the existence of Nainital. Barron came to Nainital in 1841 and credited to be the first European to have visited Nainital. He popularized his Nainital visit through the newspaper 'Englishman' and 'Agra Ukhbar'.

35. The Nainital Lake Precinct is one of the main commercial and historically significant areas. It is highly visited by tourists with the lake being the central focus along with main market street and significant for its religious, institutional and heritage buildings. The area provides ample opportunities for boating/water based recreation, shopping, heritage appreciation, leisure walking, cultural events, sports etc. Nainital attracts a large number of local, domestic pilgrims as well as tourists which has the potential for developing several nature and culture based tourism products in Nainital which will cater to a wide range of visitors.

**Figure 2: Tourist attractions in Nainital**



*Nainital Lake*



*The Flats-Parade Ground*



*Historic Mall Road*



*Thandi Sadak*





*Lake Edge Mallital Area*



*Lake Edge Tallital Area*



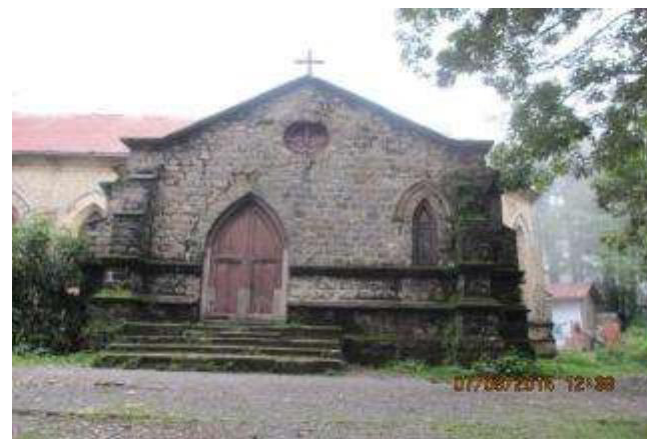
*Side Walk Mall Road Lake Edge*



*Naina Devi Temple*



*St. John's Church*



*St. Nicholas Church*

## **2. Environmental degradation**

36. In recent years, academics, geologists, concerned citizens and the judiciary have become alarmed at the rate of new construction in Nainital and its effect on the Naini Lake. As a result, efforts have been undertaken to check the deterioration of the lake and its surrounding ecosystem. De-silting of the lake and afforestation of the catchment area has been initiated; however, these measures have not been sufficient to cope with the ever increasing pressure on

its fragile ecosystem. The number of tourists, and vehicles entering the town, is rapidly increasing and this, if not checked, could turn Nainital into a disfigured and despoiled town.

37. In recent times some enlightened citizens have come forward to halt the degradation of this beautiful town. Since 2007 every 18 September is now observed as 'Clean up Nainital Day', in remembrance of devastating landslide of 18 September 1880, which consumed 151 lives. On this historic day students and other sections of society join hands to clean the town. Further, a women's group 'Maitri', does this cleaning work voluntarily now on every 18th. Taking cue from this, the Municipality and District administration have started the scheme of 'Mission Butterfly' for the solid waste management and have appointed 'Lake Wardens' from the civil society to keep an eye on the polluters.

38. In recent years with the help of government and local environmental groups the lake Aeration Project was started. The primary aim of the project was to decrease the BOD (biological oxygen demand) of the lake water. Anaerobic digestion of lake sediments is a much slower process than with aerobic digestion. Where aerobic digestion can result in the control or reduction of organic sediment levels, anaerobic digestion almost always allows organic sediments levels to increase. During anaerobic digestion, bacterial enzymes and lack of oxygen make the nutrients in the bottom sediments soluble. Then the nutrients return to the water column and are available to support new weed and algae growth. Anaerobic conditions at the lake bottom have a damaging effect on the food chain that supports fish populations as well as reducing or eliminating fish habitat, ultimately resulting in a reduction of the fish quality, size and quantity.

39. To resolve this problem and improve the quality of the lake water, many underground high pressure jets were laid near the lake bed at various places throughout the lake. The jets are supplied with highly pressurized air through a compressor located near the Golu Devta temple. This compressed air is released via a net of jets near the lake bed, the air bubbles through the water. In the process aeration the water and improving the quality of water. Today one can see the results of hard work and efforts of the past few years.

40. The lake water has become visibly cleaner and BOD levels have reduced dramatically. To complement the lake aeration project, with the help of scientist from the Govind Ballabh Pant University of Agriculture and Technology, Pantnagar. A number of plankton and algae eating fishes were introduced in the lake. This has resulted in speeding up the cleaning up process. Now unlike in the past no more dead fishes on the lake's surface. In fact now the large numbers of colourful healthy fishes are a beautiful sight to see for tourists and local alike.



**Figure 3: Issues and Concerns in Nainital Region**



*Unregulated Site Development, Nainital*



*Environmental Pollution*



*Poor Environmental Conditions along the Lake Edge*



*Solid Waste Disposal into Lake*



*Inadequate Facilities: Boat Jetties*



*Unaesthetic Built Environment*



*Inadequate Disposal of Solid Waste*



*Inappropriate Utilization of Open Spaces along the Lake edge*

### **3. Geography/ Topography**

41. In the Uttarakhand, district of Nainital lies in the Kumaun division. To its north is Almora district and to its south lies the Udham Singh Nagar district. Champawat district flanks it in the east and district of Pauri Gahwal is in the west. It is located approximately in between 80°14' and 78 ° 80' east longitudes and 29°00' and 29°05' north latitude. On the northern side lies the Himalayan ranges while on the southern side lies the plains making the resultant climate of the district enjoyable one.

42. The total geographical area of the district is 4251 Sqr. Km. Geographically the district is divided in to 2 zones viz. Hilly and Bhabar. The hilly region in outer Himalayas is known to geologist as Krol. The highest peak of the district is Baudhanstali 2623 m high near Binayak adjoining Nainital town, the hilly region of the district .The hilly region of the district used to have big & small lakes. Bhimtal, Sattal, Naukuchiatal, Khurpatal, Nainital, Malwatal, Harishtal , Lokhamtal etc. are known lakes of bigger size.

43. The foothill area of the district is known as Bhabhar. The name Bhabhar is derived from a tall growing grass growing in the region. The underground water level is very deep in this region. Kosi is the main river of the district .River Kosi arising out of Koshimool near Kausani flows on the western side of the district. There are number of smaller rivulets like Gaula, Bhakra, Dabka, Baur etc. Most of these have been dammed for irrigation purposes.

44. District Nainital is a unique district of Kumaun having tropical type, subtropical type, temperate, sub alpine and alpine zones in its lap. On one side its Tarai & Bhabhar belt contains the climate resembling with plain areas on the other the deep valleys having an elevation unto 1000 M. rear plants of hills as well as plains. The middle Himalayan ranges unto 2000 M are temperate zones growing a number of typical temperate climate plants. The sub alpine unto 2500 M grows high altitude plants and has the capacity to rear plants of alpine zones as well.

45. The Nainital Subproject area is situated in the lesser himalayas or Shivalik zone. The Subproject area has sub temperate climate with hilly terrain. The altitude of the area is between 1200 to 1900m above Mean Sea Level. This region comprises of several fresh water lakes including Nainital.

#### **4. Climate**

46. The lake basin receives an annual average rainfall of 242 cm. The average number of rainy days (i.e. days with more than 2.5 mm rainfall) in a year is about 90. About 80% of the rainfall is received under the influence of south-west monsoons i.e from June-September. The maximum and minimum temperature prevailing in the area range from 29-1.8° C. Generally, May and the early part of June are the hottest period of the year. With the onset of monsoons, there is a steady drop in the temperature. January is generally the coolest month of the year. The winds are generally light with an increase in force in summer and the south-west monsoons. The humidity is generally moderate throughout the year, except during monsoon months, when relative humidity is close to 85%. The April is the driest month of the year with relative humidity in afternoons being less than 45%. Nainital district received good rainfall in recent years. As per 2011 records total average rainfall of district was 1487.00 mm.

#### **5. Geology and Seismicity**

47. The rocks around Nainital belong to the Nagthat Formation. The rocks of the area are represented by meta-volcanics inter-bedded with quartzite. The meta-volcanics represent the oldest part of the succession and comprise amygdaloidal, vesicular and massive basalt, which are partially converted into epidiorites and amphibolite. These meta-volcanics represent an important magmatic event of the Proterozoic times. The small hillocks in the western side of the lake have thin inter-beds of greenish whitish siltstone and quartzite. The project site is located in Zone –IV as per Seismic Zoning map of India outlined in IS1893:2002.

#### **6. Geomorphology**

48. Geomorphologically the area represents a denudational ridge-valley couple with polycyclic fluvial imprints. High gradient and low drainage density within the catchments of Bhimtal, Nainital, Sattal and Khurpatal is not conducive to accumulation of clastic derivatives along the drainage lines. However, the presence of lake bodies has produced deltaic conditions at the mouth of the few streams that debouch into the water bodies. As a result of sudden break in stream regime large detritus accumulation as fans are observed in these deltaic environs. The Nauli Gad fan at the mouth of Bhimtal is very conspicuous and is a cause of concern for the life of the lake. High rate of infiltration transfers the subsurface water into intermontane depressions forming perennial water bodies. Similarly large subsurface seepage is expected from the lake bottoms through subsurface plumbing system (fractures and dislocation zones) into lower levels across the catchment ridges. High infiltration is observed as lost drainage lines and disappearance of drainage lines even in a non- carbonate terrain.

49. Predominance of sheet runoff over channelized runoff appears to be the main mechanism of surface runoff along the catchment slopes. As a result seasonal scree/debris transfer to lake rims takes place regularly; ultimately entering into the water bodies and is the main source of unnoticed ongoing siltation process in the catchment. A few landslip zones along Bhimtal, Nainital, Khurpatal though appear in nascent stage have enough potential to be a major geohazard for contributing large sediment flow into the lake bodies. Remnants of high level terraces along the lake bodies indicate the post pliestocene downward movement of the lake depressions, an indication of neotectonic movement in the area. This has bearing on the future land-water resource development in the area as far as seismicity induced damage reduction strategy is concerned.

## 7. Soils

50. The soils in the city are alluvial, riverine, non-calcareous to moderate calcareous soils and have been carved out by the fast flowing rivers draining from the Himalayas. Forest soils, which occur under coniferous and deciduous forest, have been found rich in organic matter. Mountain and/or hill soil is the collective terminology used for various types of soils occurring at very high elevations, under a wide range of forest-trees.

## 8. Air Quality

51. The ambient air quality within the town limit is generally good. Air quality is mainly influenced by the heavy traffic in the town during the tourist season. Air quality monitoring data is not readily available. Since no major industries are situated within the town limit, no serious impact on air quality is experienced in the town.

## 9. Noise

52. The noise pollution level is not significant in the town area as there is no any major noise generating activity within the town limits. During the tourist season, increase in noise during day time is expected due to influx of more traffic. Apart from the mall road, and bus and/or taxi stands, noise pollution is not being experienced in the entire Nainital town.

## 10. Surface Water

53. Naini Lake is the most important water body in Nainital both in terms of environment and tourist attraction. Uttarakhand Environment Protection and Pollution Control Board monitor the lake water quality. The GoUK, with financial assistance from the government, is implementing the “Nainital Lake Conservation Action Plan” to control pollution of water in Nainital and five other lakes in the region. The monitoring result of the lake water suggests very low level of dissolved oxygen. The lake conservation plan addresses this issue and corrective measures are under way. The summary of the water quality analysis is presented in **Table 2**.

**Table 2: Water Quality data of Nainital Lake**

Sr. No.	Parameter	Unit	Quality Criteria (IS: 10500)		Observed
			Desirable Limit	Permissible	
1.	pH	-	6.5-8.5	6.2-9.2	7.13
2.	EC	µs/cm	300	-	747
3.	Turbidity	NTU	10	25	1.6
4.	Alkalinity	mg/l	200	600	210
5.	Total Hardness	mg/l as CaCO <sub>3</sub>	300	600	328
6.	Calcium	mg/l	-	-	134
7.	Magnesium	mg/l	30	150	47.24
8.	Chlorides	mg/l	250	1000	14.2
9.	Nitrates	mg/l	45	-	1.74
10.	Fluorides	mg/l	1.0	1.5	0.034
11.	Iron	mg/l	0.03	1.0	0.02
12.	Sodium	mg/l	200(WHO)	-	7.18
13.	Free Chlorine	mg/l	0.2	-	-
14.	Bacteria	-	Absent/100 ml	Absent	Absent
15.	Coliforms	-	Absent/100 ml	Absent	Absent
16.	E. Coli	-	Absent/100 ml	Absent	Absent

EC=electrical conductivity, CaCO<sub>3</sub>=Calcium carbonate, ISI=Indian Standard Institute; IS=Indian Standard, mg/L=Milligrams per liter, WHO =World Health Organization. Source: Urban Sector project IEE for Nainital, ADB website

## 11. Groundwater

54. Due the presence of the lake, ground water is available around the periphery of the lake. The water supply system of the town depends mainly on groundwater, which is abstracted through tube wells located close to the lake periphery. The groundwater quality as obtained in the ADB website is presented in **Table 3**. The analysis data of tube wells reveal that the water is good for drinking purpose.

**Table 3: Ground Water Quality data of Nainital**

S.No.	Parameter	Unit	Quality Criteria (IS: 10500)		Observed Value	
			Desirable Limit	Permissible Limit	TW: Lake	TW: Sukhata
1.	pH	-	6.5-8.5	6.2-9.2	7.12	7.08
2.	EC	µs/cm	300	-	911	759
3.	Turbidity	NTU	10	25	2	1.2
4.	Alkalinity	mg/l	200	600	285	265
5.	Total Hardness	mg/l as CaCO <sub>3</sub>	300	600	368	432
6.	Calcium Hardness	mg/l	-	-	170.1	168
7.	Magnesium	mg/l	30	150	72.69	64.42
8.	Chlorides	mg/l	250	1000	11.36	15.62
9.	Nitrates	mg/l	45	-	2.59	2.44
10.	Fluorides	mg/l	1.0	1.5	0.037	0.0395
11.	Iron	mg/l	0.03	1.0	0.07	0.02
12.	Sodium	mg/l	200 (WHO Guideline)	-	29.4	4.38
13.	Free Chlorine	mg/l	0.2	-	-	-
14.	Bacteria	-	Absent/100 ml	Absent	Absent	Present
15.	Coliforms	-	Absent/100 ml	Absent	Absent	Absent
16.	E. Coli	-	Absent/100 ml	Absent	Absent	Absent

EC=electrical conductivity, CaCO<sub>3</sub>=calcium carbonate, ISI=Indian Standard Institute; IS=Indian Standard, mg/L= Milligrams per liter, WHO =World Health Organization. Source: Urban Sector project IEE for Nainital, ADB website

## B. Ecological Resources

55. Out of the geographical area of 6,794 sq km, the forest cover in Nainital District is 3574 sq km. vast expanse of forest exists within the town limit. Part of the water supply distribution system for the town is within the forest. The Jim Corbett National Park, located at 30 km from the town, is a prime forest reserve situated in Nainital district, but the subproject sites will not fall near this protected area. The hilly region of Nainital is covered with Sal, Pine, Oak, Buruns, Kaphal and other trees growing up to 1,830 m. along with Deodar, Surai etc., at higher altitudes. There are small tracts of cultivated lands and fruit orchards in between the forest lands. The following important trees and bushes (**Table 4**) grow in Nainital.

**Table 4: Trees and Bushes in Nainital**

Botanical Name	Common Name
<i>Quercus incana</i>	Oak (Banj)
<i>Aesculus indica</i>	Pangar
<i>Junglans regia</i>	Akhrot
<i>Populous ciliata</i>	Hill Pipal
<i>Fraxinusmiscrantha</i>	Angu
<i>Platanusorientalis</i>	Chinar
<i>Rubuslasiocarpus</i>	Hisalu
<i>Rosamoschata</i>	Kunj
<i>Berberis asiatica</i>	Kilmora
<i>Cupressustorulosa</i>	Surai
<i>Cedrus Deodara</i>	Deodar
<i>Salixac mophylla</i>	Weeping Willow
<i>Pinus roxburghi</i>	Pine

Source: Project Preparatory Technical Assistance IEE Revised Report, 2007

## C. Economic Resources

56. The people of these villages are directly dependent on tourism based activities for their livelihoods. More than 80 percent households of Nainital town are engaged in the tourism activities like boating, horse riding; taxi driving, restaurant, hotels/guest houses, tour and travel agency, photography, general store, sale of local produce etc. May-June months are the peak tourist season when majority of the tourist (8 to 10 lakh or 80%) visits the lake during the year. Around 15 lakh tourists visit area mainly during the summer and autumn.

## D. Social and Cultural Resources

### 1. Demography

57. The demographic data of Nainital District and Nainital town is summarized in the following **Table 5** and **Table 6** respectively.

**Table 5: Demographic Profile of Nainital District**

S.No	Nainital District	Total House	Populatio				
			Total	Male	Female	SC	ST
1	Rural	114954	582871	299257	283614	137906	5780
2	Urban	76429	371734	194409	177325	53300	1715
3	<b>Total</b>	<b>191383</b>	<b>954605</b>	<b>493666</b>	<b>460939</b>	<b>191206</b>	<b>7495</b>

Source: Census data, 2011 of Nainital District, Department of Statistics.



**Table 6: Demographic Profile of Nainital Sub Project Area**

S.No	Nainital District	Total House	Populatio				
			Total	Male	Female	SC	ST
1	Rural	18748	93583	48479	45104	26435	202
2	Urban	12842	56806	29886	26920	15537	391
3	<b>Total</b>	<b>31590</b>	<b>150389</b>	<b>78365</b>	<b>72024</b>	<b>42972</b>	<b>593</b>

Source: Census data, 2011 of Nainital District, Department of Statistics.

## **2. Basic Amenities and Infrastructure**

58. Due to a prime tourist destination, the project has almost all basic infrastructure facilities available. All the wards of the town are accessible by motorable roads, electricity and telephone/mobile-phone. Nainital is a major education hub from British time, therefore, all type of schools and colleges are there in Nainital. Similarly governmental medical facilities are there but for specialised medical help, people go to Haldwani (40 km). Bank, postal and other communication services are available in the project area. Nainital in itself is a major market but for big purchases, people move to Haldwani and Rudrapur market (70 km). Nainital has more than 300 small, big and five star hotels.

59. Nainital is well connected by a network of roads, railways and airways with major cities of India. Nainital is situated at a distance of 34 km from Kathgodam, the gateway of Kumaon and the terminus of north eastern railway. It is located at 304 km from Delhi, 360 km from Dehradun the state capital and 388 km from Lucknow. The city has three entry points by road. The major entry point is via Haldwani road (State Highway).

60. In the Uttarakhand Tourism Development Master Plan, Nainital comes under Zone 2, which is the main Eastern Gateway to Uttarakhand and its eastern Kumaon Region from Delhi and Uttar Pradesh by road and rail. It is also a National and International gateway by air once the Pantnagar Airport starts receiving scheduled domestic and other international flights, thus in the future there will be 2 international access points by air in the state, which together with the three up state domestic airports and the planned network of helipad at strategic locations will boost the opportunities for international tourism in Uttarakhand in general, and Zone 1 and 2 in particular. Zone 2 has traditionally been a family, leisure and second home destination focused mainly on the Lake District, the historic lake ambiance of Nainital, Kaladungi and wildlife of the Corbett National Park. Zone 2 has been the Centre of attraction for people from Delhi escaping the summer heat in the high altitude lake district or seeking adventures of all sorts in the present Corbett National Park area, the eastern part of the park is located in Zone 2. It is part of major circuit of existing tourism destinations and service centers including Ramnagar, Kaladungi, Corbett National Park East, Mukteshwar, Bhowali and Ramgarh.

## V. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

61. The assessment for environmental impacts due to the implementation of this project as per preliminary design has been carried out for potential impacts during the following stages of the project planning and implementation:

- ☐ **Location impacts.** Impacts associated with site selection, including impacts on environment and resettlement or livelihood related impacts on communities and wildlife
- ☐ **Design impacts.** Impacts arising from project design, including the technology used, scale of operations, discharge standards etc.
- ☐ **Construction impacts.** Impacts resulting from construction activities including site clearance, earthworks, civil works, etc.
- ☐ **O&M impacts.** Impacts associated with the operation and maintenance of the infrastructure built in the project.

62. **Determination of Area of Influence.** The primary impact areas are (i) sites for sub project components; (ii) main routes/intersections which will be traversed by construction vehicles; and (ii) quarries and borrow pits as sources of construction materials. The secondary impact areas are: (i) entire town area outside of the delineated primary impact area; and (ii) entire Nainital district in terms of over-all environmental improvement.

63. During the construction phase, impacts mainly arise from the need to dispose of moderate quantities of waste soil; and from the disturbance of residents, businesses, and traffic. These are common impacts of construction in urban areas, and there are well developed methods for their mitigation. Measures such as conducting work in lean season and minimizing inconvenience by best construction methods will be employed. In the operational phase, all facilities and infrastructure will operate with routine maintenance, which should not affect the environment. Facilities will need to be repaired from time to time, but environmental impacts will be much less than those of the construction period as the work will be infrequent, affecting small areas only

64. **Design considerations to avoid environmental impacts.** The following are design considerations to avoid environmental impacts:

- ☐ Design, material and scale will be compatible to the local architectural, physical, cultural and landscaping elements
- ☐ Preference will be given to the use of local material and labour as best as possible; (iii) for conservation, local construction material available in the nearby region as best as possible suiting to those in existence
- ☐ All painting (interior and exterior) will be with environment-friendly low volatile organic compounds paints
- ☐ For any retaining wall repair works, random rubble masonry will be used, with locally available stone to be laid in cement mortar by local skilled labour
- ☐ Earth backfill, if any will be done from the site excavated material
- ☐ Ensuring all planning and design interventions and decisions are made in consultation with local communities and reflecting inputs from public consultation and disclosure for site selection.

65. The results of interventions are unobtrusive and will be integral part of the ambience of the site. The physical components have been proposed with minimalist design treatment emphasising use of local materials (wood, stone, etc.) as defined in the management plan of the area.

## **A. Location Impacts**

66. **Land Acquisition and Resettlement Impacts.** The sites of subproject components are government-owned land thus will not require land acquisition. *Only NOC is required from Forest Dept. for construction of trekking trail.*

## **B. Design and Pre Construction Impacts and Mitigation Measures**

67. Impacts arising from the in appropriate designs of proposed facilities would in general include the contemporary designs for the traditional and cultural environment etc. Selection of materials, if not carefully chosen, will adversely impact the aesthetic appeal of the surroundings. The results of interventions are unobtrusive and will be integral part of the overall ambience so as to avoid impacts on the aesthetics of the site. Structural designs to be worked out in such a manner that proposed infrastructure do not affect the aesthetics of the area. All component designs will be worked out to minimize any impacts on the adjoining properties, and considering the lake & adjoining buildings. Given that there is a need for disposal of construction wastes, the contractors will be required to consult with the Project Implementation Unit (PIU) and Uttarakhand Environment Protection and Pollution Board (UEPPB) for safe disposal sites.

68. The land required for the sub-project is very less, and should be ensured that the telephone lines, electric poles and wires, water and sewer lines not affected. For areas along vulnerable to slope failures and along steep stretches, designs will include slope protection measures for uncovered slopes as pitching, vegetation, benching, etc. The storm water runoff from alterations of the site's natural drainage patterns due to landscaping, excavation works in the periphery of the lake which will be taken care in the designs. Selection of materials and construction technologies has been carefully chosen, so that it does not adversely impact the aesthetic appeal of the destinations. Designs will ensure energy conservation.

69. Construction within the lake will be taken up during minimum water level to reduce chances of contamination of lake water and safe construction.

70. Designs will be worked out in such a manner that exposed steel and concrete structures are avoided. The design brief for all components proposed will strictly conform to the Uttarakhand architecture.

71. Consents, permits, clearances, no objection certificate (NOC), etc. Failure to obtain necessary consents, permits, NOCs, etc. can result to design revisions and/or stoppage of works.

72. **Mitigation measures.** The following will be conducted during detailed design phase: Obtain all necessary consents, permits, clearance, NOCs, etc. prior to start of civil works.

- ☐ Acknowledge in writing and provide report on compliance all obtained consents, permits, clearance, NOCs, etc.
- ☐ Include in detailed design drawings and documents all conditions and provisions if necessary

73. **Erosion control.** Most of the impacts will occur due to excavation and earth movements during construction phase. Prior to commencement of civil works, the contractor will be required to:

- ☐ Apart from the archaeologists, consult a certified geologist to look into soil stability to enable contractors to employ effective soil stabilization and erosion control measures to sustain restorative measures under the subproject
- ☐ Develop an erosion control and re-vegetation plan to minimize soil loss and reduce sedimentation to protect water quality of the lake.
- ☐ Minimize the potential for erosion by balancing cuts and fills to the extent feasible.
- ☐ Identify and avoid areas with unstable slopes and local factors that can cause slope instability (groundwater conditions, precipitation, seismic activity, slope angles, and geologic structure).
- ☐ Minimize the amount of land disturbed as much as possible. Use existing roads, disturbed areas, and borrow pits and quarries when possible. Minimize vegetation removal. Stage construction to limit the exposed area at any one time.
- ☐ Design of proposed components will enable efficient drainage of the sites and maintain natural drainage patterns.

74. **Utilities.** Interruption of services (water supply, toilets, bathing areas, etc.) will be scheduled and intermittently related to localized construction activities. To mitigate impacts, PIU/DSC will:

- ☐ Identify and include locations and operators of these utilities in the detailed design documents to prevent unnecessary disruption of services during the construction phase.
- ☐ Require contractors to prepare a contingency plan to include actions to be done in case of unintentional interruption of services.
- ☐ Require contractor to obtain from the PIU and/or DSC the list of affected utilities and operators
- ☐ Require contractor to specify condition of general housekeeping (storage of construction implements, stockpiles, wastes, chemicals) in order to ensure compliance with environmental laws and provide reference for monitoring purposes

75. **Social and Cultural Resources.** There is a risk that any work involving ground disturbance can uncover and damage archaeological and historical remains. Although no such sites have been identified. For this subproject, excavation will occur in and around existing sites, RoWs and specified government land so no risk is foreseen to these structures. Nevertheless, the PIU/DSC will:

- ☐ Consult Archaeological Survey of India and/or State Department of Archaeology to obtain an expert assessment of the archaeological potential of the site.
- ☐ Consider alternatives if the site is found to be of medium or high risk.
- ☐ Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available.

- ☐ Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved.

76. **Sites for construction work camps and areas for stockpile, storage and disposal.** The priority is to locate these near the subproject sites. The contractor will be required to meet the following criteria for the sites:

- ☐ Will not promote instability and result in destruction of property, vegetation and drinking water supply systems, etc.
- ☐ Residential areas will not be considered so as to protect the human environment (i.e., to curb accident risks, health risks due to air and water pollution and dust, and noise, and to prevent social conflicts, shortages of amenities, and crime).
- ☐ Disposal will not be allowed near sensitive areas which will inconvenience the community.
- ☐ The construction camp, storage of fuel and lubricants should be avoided at the lake bank. Any construction camp site will be finalized in consultation with DSC and PIU.

77. **Sources of construction materials.** Significant amounts of gravel, sand, and cement will be required for this subproject. Extraction of materials can disrupt natural land contours and vegetation resulting in accelerated erosion, disturbance in natural drainage patterns, ponding and water logging, and water pollution. The contractor will be required to:

- ☐ Use quarry sites and sources permitted by government.
- ☐ Verify suitability of all material sources and obtain approval from PIU/DSC.
- ☐ If additional quarries are required after construction has started, obtain written approval from PIU/DSC.
- ☐ Submit to DSC on a monthly basis documentation of sources of materials.

78. It will be the construction contractor's responsibility to verify the suitability of all material sources and to obtain the approval of material from PIU & DSC. If additional quarries are required after construction is started, then the contractor obtain written approval of PIU and PMU.

79. **Access.** Hauling of construction materials and operation of equipment on-site can cause traffic problems and conflicts in ROWs. Construction traffic will access most work areas from the existing roads therefore potential impacts will be of short-duration, localized and can be mitigated. The contractor will need to adopt the following mitigation measures:

- ☐ Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites.
- ☐ Schedule transport and hauling activities during non-peak hours.
- ☐ Locate entry and exit points in areas where there is low potential for traffic congestion.
- ☐ Keep the site free from all unnecessary obstructions.
- ☐ Drive vehicles in a considerate manner.
- ☐ Coordinate with the Town Police for temporary road diversions and for provision of traffic aids if transportation activities cannot be avoided during peak hours.

- Prior to commencement of site activities and mobilization on ground, the Contractor will prepare and get approved by the PIU and DSC, circulation plan during construction for safe passage of tourists during construction stage, including development of alternative access routes, traffic regulations, signage, etc. during construction.
- Notify affected sensitive receptors by providing sign boards with information about the nature and duration of construction works and contact numbers for concerns/complaints.
- Provide free access to households and businesses/shops along the ROWs during the construction phase.

80. Summary of pre-construction activities is presented in **Table 7**. The responsibilities, monitoring program and costs are provided in detailed in the EMMP (Section 5). The contractor is required to update the information during detailed design phase.

**Table 7: Summary of Pre-Construction Mitigation Measures**

Parameters	Mitigation Measures
Consents, permits, clearances, no objection certificate (NOC), etc.	<ul style="list-style-type: none"> <li>• Obtain all necessary consents, permits, clearance, NOCs, etc. prior to start of civil works.</li> <li>• Acknowledge in writing and provide report on compliance all obtained consents, permits, clearance, NOCs, etc.</li> <li>• Include in detailed design drawings and documents all conditions and provisions if necessary</li> </ul>
Erosion control	<ul style="list-style-type: none"> <li>• Apart from the archaeologists, consult a certified geologist to look into soil stability to enable contractors to employ effective soil stabilization and erosion control measures to sustain restorative measures under the subproject</li> <li>• Develop an erosion control and re-vegetation plan to minimize soil loss and reduce sedimentation to protect water quality.</li> <li>• Minimize the potential for erosion by balancing cuts and fills to the extent feasible.</li> <li>• Identify and avoid areas with unstable slopes and local factors that can cause slope instability (groundwater conditions, precipitation, seismic activity, slope angles, and geologic structure).</li> <li>• Minimize the amount of land disturbed as much as possible. Use existing roads, disturbed areas, and borrow pits and quarries when possible. Minimize vegetation removal. Stage construction to limit the exposed area at any one time.</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>• Identify and include locations and operators of these utilities in the detailed design documents to prevent unnecessary disruption of services during the construction phase.</li> <li>• Require contractors to prepare a contingency plan to include actions to be done in case of unintentional interruption of services.</li> <li>• Obtain from the PIU and/or DSC the list of affected utilities and operators;</li> <li>• Prepare a contingency plan to include actions to be done in case of unintentional interruption of services.</li> <li>• If relocations are necessary, contractor will coordinate with the providers to relocate the utility</li> <li>• Require contractor to specify condition of general housekeeping (storage of construction implements, stockpiles, wastes, chemicals) in order to ensure compliance with environmental laws and provide reference for monitoring purposes.</li> </ul>

Social and Cultural Resources	<ul style="list-style-type: none"> <li>• Consult Archaeological Survey of India or State Department of Archaeology to obtain an expert assessment of the archaeological potential of the site.</li> <li>• Consider alternatives if the site is found to be of medium or high risk.</li> <li>• Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available.</li> </ul>
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Parameters	Mitigation
	<input type="checkbox"/> Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved.
Sites for construction work camps, areas for stockpile, storage and disposal	<input type="checkbox"/> Will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems, etc. <input type="checkbox"/> Residential areas will not be considered so as to protect the human environment (i.e., to curb accident risks, health risks due to air and water pollution and dust, and noise, and to prevent social conflicts, shortages of amenities, and crime) <input type="checkbox"/> Disposal will not be allowed near sensitive areas which will inconvenience the community. <input type="checkbox"/> The construction camp, storage of fuel and lubricants should be avoided
Sources of construction materials	<input type="checkbox"/> Use quarry sites and sources permitted by government. <input type="checkbox"/> Verify suitability of all material sources and obtain approval from PIU/DSC. <input type="checkbox"/> If additional quarries are required after construction has started, obtain written approval from PIU/DSC/PMU.
Access	<input type="checkbox"/> Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites. <input type="checkbox"/> Schedule transport and hauling activities during non-peak hours. <input type="checkbox"/> Locate entry and exit points in areas where there is low potential for traffic congestion. <input type="checkbox"/> Keep the site free from all unnecessary obstructions. <input type="checkbox"/> Drive vehicles in a considerate manner. <input type="checkbox"/> Coordinate with the town police for temporary road diversions and for provision of traffic aids if transportation activities cannot be avoided during peak hours. <input type="checkbox"/> Notify affected sensitive receptors by providing sign boards with information about the nature and duration of construction works and contact numbers for concerns/complaints. <input type="checkbox"/> Provide free access to households and businesses/shops along ROWs during the construction phase.

### C. Construction Impacts and Mitigation Measures

81. All construction activities to be undertaken at the site will be approved by PIU and before start of any such activity in the vicinity of the site so that the history and sanctity as well as the usability of the site by the projected number of tourists are not hampered. The construction stage impacts due to the proposed project components are generic to the construction activities. The EMP emphasizes on the construction impacts and necessary mitigation measures to be strictly followed by the contractor and supervised by the DSC and PIU. The Key impacts are

covered in the following paragraphs.

82. **Construction Schedule and Method.** As per preliminary design, construction activities will cover 2 years. The exact implementation schedule will be updated during detailed design phase and will be reflected in this IEE.

83. The infrastructures will be constructed manually according to design specifications. Excavated soil (if any) will be placed nearby. Demolished materials will be reused to the maximum extent possible. Materials will be brought to site by trucks and will be stored on unused areas and nearby vacant areas. Any excavated road will be reinstated. The working hours will be 8 hours daily, the total duration of each stage depends on the soil condition and other local features. Night works may be considered in commercial areas and high day-time traffic.

84. There is sufficient space for a staging area, construction equipment, and stockpiling of materials. However, the contractor will need to remove all construction and demolition wastes on a daily basis.

85. Although construction of these project components involves quite simple techniques of civil work, the invasive nature of excavation and the subproject sites in built-up areas where there are a variety of human activities, will result to impacts to the environment and sensitive receptors such as residents, businesses, and the community in general. These anticipated impacts are short-term, site-specific and within relatively small areas.

86. **Erosion Hazards.** The sites are in the built up area of the town therefore risk of erosion is low, limited during construction activities and not expected to have any negative impact on the drainage and hydrology of the area. Runoff will produce a highly variable discharge in terms of volume and quality, and in most instances will have no discernible environmental impact. The contractor will be required to:

- ☐ Taken of care during construction near existing jetties to avoid the soil erosion and discharge of liquid waste, so that the lake water is not affected
- ☐ Save topsoil removed during excavation and use to reclaim disturbed areas, as soon as it is possible to do so
  - Use dust abatement such as water spraying to minimize windblown erosion.
- ☐ Provide temporary stabilization of disturbed/excavated areas that are not actively under construction.
- ☐ Slope protection measures will be undertaken along slopes near lake and walkways. The work will consist of measures as per design, or as directed by the Engineer to control soil erosion, sedimentation and water pollution.
- ☐ Apply erosion controls (e.g., silt traps) along the drainage leading to the water bodies.
- ☐ Maintain vegetative cover within road ROWs to prevent erosion and periodically monitor ROWs to assess erosion.
- ☐ Conduct routine site inspections to assess the effectiveness of and the maintenance requirements for erosion and sediment control systems.

87. **Impacts on Water Quality.** Excavated materials may end up in drainages and water bodies adjacent to the subproject sites, particularly during monsoon season. Other risks of water pollution may be caused by: (i) poorly managed construction sediments, wastes and hazardous substances; and (ii) poor sanitation practices of construction workers. The contractor will be required to:

- ☐ Schedule civil works during non-monsoon season, to the maximum extent possible.



- ☐ Ensure drainages and water bodies within the construction zones are kept free of obstructions.
- ☐ Keep loose soil material and stockpiles out of drains, flow-lines and watercourses.
- ☐ Avoid stockpiling of excavated and construction materials (sand, gravel, cement, etc.) unless covered by tarpaulins or plastic sheets.
- ☐ Re-use/utilize, to maximum extent possible, excavated materials (if any).
- ☐ Dispose any residuals at identified disposal site (PIU/DSC will identify approved sites).
- ☐ Dispose waste oil and lubricants generated as per provisions of Hazardous Waste (Management and Handling) Rules, 1989.
- ☐ Develop a spill prevention and containment plan, educate workers about the plan, and have the necessary materials on site prior to and during construction.
- ☐ Refuel equipment within the designated refueling containment area away from any water body.

88. **Impacts due to stock piles of waste and top soil.** Improper stock piling of construction materials and top soil can obstruct drainage, disturb tourists, etc. Due consideration will be given for materials to be stored at construction sites such that it doesn't cause any hindrance to tourists' movement within the site. Stockpiles will be covered to protect from dust and erosion.

89. **Construction waste Management.** The construction waste could lead to siltation of the lake. In the proposed subproject, it should be made mandatory for the contractor involved in construction activities for proper disposal of the construction waste at the disposal site as designated by the PIU and DSC. It will also be ensured that no construction waste will be disposed in the lake and the site will be properly cleaned after the construction is complete. Construction waste will be done at a low-lying area (with due permission from Municipal Corporation) along with earth cover for development of vegetal cover.

90. **Impacts on Air Quality.** There is potential for increased dust particularly during summer/dry season due to stockpiling of excavated materials. Emissions from vehicles transporting workers, construction materials and debris/materials to be disposed may cause increased air pollutants within the construction zone. These are inherent impacts which are site-specific, low magnitude, short in duration and can be easily mitigated. The contractor will be required to:

- ☐ Conduct regular water spraying on earth piles and sand piles.
- ☐ Conduct regular visual inspection along alignments and construction zones to ensure no excessive dust emissions.
- ☐ Spreading crushed gravel over backfilled surfaces if re-surfacing of disturbed ROWs cannot be done immediately.
- ☐ Maintain construction vehicles and obtain "pollution under control" certificate from Pollution Control Board.
- ☐ Obtain CFE and CFO for diesel generators, if to be used in the project.

91. **Increase in noise level.** Noise level in the immediate proximity of most work sites are expected to increase during construction. The duration of this exposure will be relatively brief. This exposure represents temporary, localized, adverse residual effect of low to moderate significance for affected receptors. While building damage due to ground vibrations is unlikely, there may be annoyance to specially located receptors during construction. Noise level associated

with the sub project operations will mainly measure near the work site due to operation of construction equipment. However desired steps will be taken and equipment will be properly maintained to minimize the noise level.

92. The contractor will be required to:

- ☐ Limit construction activities in important sites to daytime only.
- ☐ Plan activities in consultation with the PIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance.
- ☐ Minimize noise from construction equipment by using vehicle silencers and fitting jackhammers with noise-reducing mufflers.
- ☐ Avoid loud random noise from sirens, air compression, etc.
- ☐ Require drivers that horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach.
- ☐ If specific noise complaints are received during construction, the contractor may be required to implement one or more of the following noise mitigation measures, as directed by the project manager:
  - Locate stationary construction equipment as far from nearby noise-sensitive properties as possible.
  - Shut off idling equipment.
  - Reschedule construction operations to avoid periods of noise annoyance identified in the complaint.
  - nearby residents whenever extremely noisy work will be occurring.
- ☐ Follow Noise Pollution (Regulation and Control) Rules, day time ambient noise levels should not exceed 65 dB(A) in commercial areas, 55 dB(A) in residential areas, and 50 dB(A) in silence zone.
- ☐ Ensure vehicles comply with Government of India noise limits for vehicles. The test method to be followed shall be IS: 3028-1998.

93. **Impacts on Flora and Fauna.** As per preliminary design, tree-cutting is not required. This will be reassessed during detailed design phase. There are no protected areas in the direct and indirect impact zones and no diverse ecological biodiversity as vegetation and animals found in the construction zones are common in built up/urban areas. The contractor will be required to:

- ☐ Conduct site induction and environmental awareness.
- ☐ Limit activities within the work area.
- ☐ Replant trees in the area using minimum ratio of 3 new trees for every 1 tree cut, if any. Replacement species must be approved by Forest dept.

94. **Impacts on cultural properties:** The proposed project does not interfere through any sites of religious, historical and/or cultural significance. However, it will help improve the overall aesthetics of Naini lakes and adjoining market places etc. However the contractor will be required to:

- ☐ Ensure no damage to structures/properties near construction zone.
- ☐ Provide walkways and metal sheets where required to maintain access of people and vehicles.

- ☐ Provide sign boards to inform nature and duration of construction works and contact numbers for concerns/complaints.
- ☐ Implement good housekeeping. Remove wastes immediately. Prohibit stockpiling of materials that may obstruct/slow down pedestrians and/or vehicle movement.
- ☐ Ensure workers will not use nearby/adjacent areas as toilet facility.
- ☐ Coordinate with DSC for transportation routes and schedule. Schedule transport and hauling activities during non-peak hours. Communicate road detours via visible boards, advertising, pamphlets, etc.
- ☐ Ensure heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites.
- ☐ Provide instructions on event of chance finds for archaeological and/or ethno-botanical resources. Works must be stopped immediately until such time chance finds are cleared by experts.

95. **Impacts on Occupational Health and Safety.** Residential accommodation for workers is not proposed. Workers need to be mindful of occupational hazards. Exposure to work-related chemical, physical, biological and social hazard is typically intermittent and of short duration, but is likely to reoccur. Potential impacts are negative and long-term but reversible by mitigation measures. Overall, the contractor should comply with IFC EHS Guidelines on Occupational Health and Safety. The contractor will be required to:

- ☐ Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.
- ☐ Develop comprehensive site-specific health and safety (H&S) plan. The overall objective is to provide guidance to contractors on establishing a management strategy and applying practices that are intended to eliminate, or reduce, fatalities, injuries and illnesses for workers performing activities and tasks associated with the project.
- ☐ Include in H&S plan measures such as: (i) type of hazards during ground works; (ii) corresponding personal protective equipment for each identified hazard; (iii) H&S training for all site personnel; (iv) procedures to be followed for all site activities; and (v) documentation of work-related accidents.
- ☐ Provide H&S orientation training to all new workers to ensure that they are apprised of the rules of work at the site, personal protective protection, and preventing injury to fellow workers.
- ☐ Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site as well as at construction camps.
- ☐ Provide medical insurance coverage for workers.
- ☐ Secure construction zone from unauthorized intrusion and accident risks.
- ☐ Provide supplies of potable drinking water.
- ☐ Provide clean eating areas where workers are not exposed to hazardous or noxious substances.
- ☐ Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted.
- ☐ Ensure moving equipment is outfitted with audible back-up alarms.

- ☐ Mark and provide sign boards in the construction zone, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate.

96. **Impacts on Socio-Economic Activities.** Manpower will be required during the 24 months construction phase. This can help generate contractual employment and increase in local revenue. Thus potential impact is positive and long-term. As per preliminary design, land acquisition and closure of roads are not required. However, construction activities may impede access of residents and customers to shops. The potential impacts are negative and moderate but short-term and temporary. The contractor will need to adopt the following mitigation measures:

- ☐ Leave space for access between mounds of soil.
- ☐ Provide walkways and metal sheets where required to maintain access to shops/businesses along trenches.
- ☐ Consult businesses and institutions regarding operating hours and factoring this in to work schedules.
- ☐ Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.
- ☐ Employ at least 50% of the labor force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available.

97. **Summary of Mitigation Measures during Construction.** Table 8 provides summary of mitigation measures to be considered by the contractor during construction phase. The detailed mitigation measures, environmental monitoring and reporting requirements, emergency response procedures, related implementation arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators are provided in the EMMP (Section 5).

**Table 8: Summary of Mitigation Measures during Construction Phase**

Potential Impact	Mitigation Measures
Erosion hazards	<ul style="list-style-type: none"> <li>• Save topsoil removed during excavation and use to reclaim disturbed areas, as soon as it is possible to do so.</li> <li>• Use dust abatement such as water spraying to minimize windblown erosion.</li> <li>• Provide temporary stabilization of disturbed areas that are not actively under construction.</li> <li>• Apply erosion controls (e.g., silt traps) along the drainage leading to the water bodies.</li> <li>• Maintain vegetative cover within road ROWs to prevent erosion and periodically monitor ROWs to assess erosion.</li> <li>• Conduct routine site inspections to assess the effectiveness of and the maintenance requirements for erosion and sediment control systems.</li> </ul>
Impacts on water quality	<ul style="list-style-type: none"> <li>• Schedule civil works during non-monsoon season, to the maximum extent possible.</li> <li>• Ensure drainages and water bodies within the construction zones are kept free of obstructions.</li> <li>• Keep loose soil material and stockpiles out of drains, flow-lines and watercourses.</li> <li><input type="checkbox"/> Avoid stockpiling of excavated and construction materials (sand, gravel, cement, etc.) unless covered by tarpaulins or plastic sheets.</li> <li><input type="checkbox"/> Re-use/utilize, to maximum extent possible, excavated materials.</li> </ul>

Potential Impact	Mitigation Measures
	<ul style="list-style-type: none"> <li><input type="checkbox"/> Dispose any residuals at identified disposal site (PIU/DSC will identify approved sites).</li> <li><input type="checkbox"/> Dispose waste oil and lubricants generated as per provisions of Hazardous Waste (Management and Handling) Rules, 1989.</li> <li><input type="checkbox"/> Develop a spill prevention and containment plan, educate workers about the plan, and have the necessary materials on site prior to and during construction.</li> <li><input type="checkbox"/> Refuel equipment within the designated refueling containment area away from water body.</li> </ul>
Impacts on air quality	<ul style="list-style-type: none"> <li><input type="checkbox"/> Conduct regular water spraying on earth piles, trenches and sand piles.</li> <li><input type="checkbox"/> Conduct regular visual inspection along alignments and construction zones to ensure no excessive dust emissions.</li> <li><input type="checkbox"/> Spreading crushed gravel over backfilled surfaces if re-surfacing of disturbed ROWs cannot be done immediately.</li> <li><input type="checkbox"/> Maintain construction vehicles and obtain "pollution under control" certificate</li> </ul>
Noise and vibrations impacts	<ul style="list-style-type: none"> <li><input type="checkbox"/> Limit construction activities at important sites to daytime only.</li> <li><input type="checkbox"/> Plan activities in consultation with the PIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance.</li> <li><input type="checkbox"/> Avoid loud random noise from sirens, air compression, etc.</li> <li><input type="checkbox"/> Require drivers that horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach.</li> <li><input type="checkbox"/> If specific noise complaints are received during construction, the contractor may be required to implement one or more of the following noise mitigation measures, as directed by the project manager: (i) locate stationary construction equipment as far from nearby noise-sensitive properties as possible; (ii) shut off idling equipment; (iii) reschedule construction operations to avoid periods of noise annoyance identified in the complaint; and/or (iv) notify nearby residents whenever extremely noisy work will be occurring.</li> <li><input type="checkbox"/> Follow Noise Pollution (Regulation and Control) Rules, day time ambient noise levels should not exceed 65 dB(A) in commercial areas, 55 dB(A) in residential areas, and 50 dB(A) in silence zones.</li> </ul>
Impacts on flora and fauna	<ul style="list-style-type: none"> <li><input type="checkbox"/> Conduct site induction and environmental awareness.</li> <li><input type="checkbox"/> Limit activities within the work area.</li> <li><input type="checkbox"/> Replant trees in the area using minimum ratio of 3 new trees for every 1 tree cut, if any. Replacement species must be approved by forest</li> </ul>

Impacts on physical resources	<ul style="list-style-type: none"> <li><input type="checkbox"/> Ensure no damage to structures/properties near construction zone.</li> <li><input type="checkbox"/> Provide walkways and metal sheets where required near the lake to maintain access of people and vehicles.</li> <li><input type="checkbox"/> Provide sign boards to inform nature and duration of construction works and contact numbers for concerns/complaints.</li> <li><input type="checkbox"/> Implement good housekeeping. Remove wastes immediately. Prohibit stockpiling of materials that may obstruct/slow down pedestrians and/or vehicle movement.</li> <li><input type="checkbox"/> Ensure workers will not use nearby/adjacent areas as toilet facility.</li> <li><input type="checkbox"/> Coordinate with DSC for transportation routes and schedule. Schedule transport and hauling activities during non-peak hours. Communicate road detours via visible boards, advertising, pamphlets, etc.</li> </ul>
Waste Management	<ul style="list-style-type: none"> <li><input type="checkbox"/> Proper disposal of the construction waste at the disposal site as designated by the PIU and DSC.</li> <li><input type="checkbox"/> It will also be ensured that no construction waste will be disposed in the lake and the site will be properly cleaned after the construction is complete.</li> <li><input type="checkbox"/> Construction waste will be done at low laying area (with due permission from Municipal Corporation) along with earth cover for development of vegetal cover.</li> </ul>
Impacts on occupational health and safety	<ul style="list-style-type: none"> <li><input type="checkbox"/> Comply with IFC EHS Guidelines on Occupational Health and Safety</li> <li><input type="checkbox"/> Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</li> <li><input type="checkbox"/> Develop comprehensive site-specific health and safety (H&amp;S) plan. The overall objective is to provide guidance to contractors on establishing a management strategy and applying practices that are intended to eliminate, or reduce, fatalities, injuries and illnesses for workers performing activities and tasks associated with the project.</li> <li><input type="checkbox"/> Include in H&amp;S plan measures such as: (i) type of hazards during ground works; (ii) corresponding personal protective equipment for each identified hazard; (iii) H&amp;S training for all site personnel; (iv) procedures to be followed for all site activities; and (v) documentation of work-related accidents.</li> <li><input type="checkbox"/> Provide H&amp;S orientation training to all new workers to ensure that they are apprised of the rules of work at the site, personal protective protection, and preventing injury to fellow workers.</li> <li><input type="checkbox"/> Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site as well as at construction camps.</li> <li><input type="checkbox"/> Provide medical insurance coverage for workers.</li> <li><input type="checkbox"/> Secure construction zone from unauthorized intrusion and accident risks.</li> <li><input type="checkbox"/> Provide supplies of potable drinking water.</li> <li><input type="checkbox"/> Provide clean eating areas where workers are not exposed to hazardous or noxious substances.</li> <li><input type="checkbox"/> Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not</li> </ul>

Impacts on socio-economic activities	<input type="checkbox"/> Leave space for access between mounds of soil. <input type="checkbox"/> Provide walkways and metal sheets where required to maintain access to shops/businesses along trenches. <input type="checkbox"/> Consult businesses and institutions regarding operating hours and factoring this in to work schedules. <input type="checkbox"/> Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints. <input type="checkbox"/> Employ at least 50% of the labor force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available. <input type="checkbox"/> “Mobility Plan” has to be chalked out in consultation with the District Administration prior to start of work.
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#### **D. Post-Construction Impacts and Mitigation Measures**

98. Site clean-up is necessary after construction activities. The contractor will be required to:

- ☐ Backfill any excavation and trenches, preferably with excess excavation material generated during the construction phase.
- ☐ Use removed topsoil to reclaim disturbed areas.
- ☐ Re-establish the original grade and drainage pattern to the extent practicable.
- ☐ Stabilize all areas of disturbed vegetation using weed-free native shrubs, grasses, and trees.
- ☐ Restore access roads, staging areas, and temporary work areas.
- ☐ Remove all tools, equipment, barricades, signs, surplus materials, debris, and rubbish. Demolish buildings/structures not required for O&M. Dispose in designated disposal sites.
- ☐ Monitor success of re-vegetation and tree re-planting. Replace all plants determined to be in an unhealthy condition.
- ☐ Request in writing from PIU/DSC that construction zones have been restored.

#### **E. Anticipated Operations and Maintenance (O&M) Impacts and Mitigation Measures**

99. Impacts on environmental conditions associated with the O&M of the subproject components pertain to impacts related to increased tourists in the areas resulting to increased vehicular movement along the roads, increased demands for services, and increased solid waste generation. These impacts can be mitigated by:

- ☐ Increased vehicular movement along the roads - speed restrictions, provision of appropriate road signage and well located rest points for pedestrians shall minimize impacts on safety of the people
- ☐ Increase demands for services – addressed through the subproject design
- ☐ Increase solid waste generation – Municipal Corporation to put in place solid waste management programs. In line with the Government targets of coverage of all urban and rural areas with environmentally safe solid waste management systems, the tourist destinations will be covered with integrated waste management facilities, including treatment and disposal, in line with the Solid Waste Handling Rules, 2000.

100. As mentioned earlier that livelihoods of the local community are directly dependent on tourism activities around Nainital. Around 150 households of surrounding villages are associated in tourism activities like boating, horse riding, restaurant, hotel/lodge, photography etc and indicative assessment shows that the project intended to develop government infrastructure and lake amelioration. Over the period of the project implementation, it is expected that about 500 households of nearby 5 villages covering 3000 population will be directly or indirectly benefited from project interventions and increase in tourist population. The project is expected to promote number of tourism value chain related enterprises which will lead to the social and economic empowerment to local community.

#### **F. Cumulative Impact Assessment**

101. The cumulative impact assessment examined the interaction between the subproject's residual effects (i.e., those effects that remain after mitigation measures have been applied) and



those associated with other past, existing, and reasonably foreseeable future projects or activities. The interaction of residual effects associated with multiple projects and/or activities can result in cumulative impacts, both positive and negative. The project's potential cumulative effects were considered with respect to valued components in environmental and socioeconomic categories, in four areas:

- (i) of any potential residual project effects that may occur incrementally over time;
- (ii) consideration of other known relevant projects or activities within the specified study area boundaries, even if not directly related to the project;
- (iii) potential overlapping impacts that may occur due to other developments, even if not directly related to the proposed subproject; and
- (iv) future developments that are reasonably foreseeable and sufficiently certain to proceed.

102. The project has identified the valued components as air quality, acoustic environment, socioeconomic and socio-community components, and human health and safety. There are no foreseeable projects that will overlap with the subproject. The spatial boundary of the subproject is the subproject component sites and the temporal boundary can be considered as the whole Nainital town.

103. It has been recommended that infrastructures be designed to the current best practice standard and notified Government of Uttarakhand Nainital codes and management plans. No negative cumulative impact and the potential long-term environmental impacts are positive; including mainstreaming climate risk reduction into infrastructure development ensures subprojects infrastructure are less vulnerable to floods, landslides and impacts of other extreme weather events.

104. **Air quality.** Emissions of common air contaminants and fugitive dust may be elevated in proximity to active work sites during construction and O&M phases, these impacts will be short-term and localized to the immediate of the sites. Greenhouse gas (GHG) emissions may increase as a result of the subproject activities (i.e., vehicle and equipment operation, concrete production, disposal of excavated material, land-filling of residual wastes). Given the subproject's relatively minor contribution to common air contaminants and GHG emissions during construction, the overall significance rating of both these potential residual and cumulative effects is considered to be negligible.

105. **Acoustic environment.** Noise levels during construction and O&M activities in immediate proximity of work sites are expected to increase. The duration of exposure will be relatively brief and imperceptible. The exposure represents a temporary, localized, adverse residual effect of low significance for affected receptors. While building damage due to ground vibrations is unlikely, there may be annoyance to spatially located receptors during construction and O&M activities. The overall significance rating of potential residual and cumulative effects is considered to be negligible.

106. **Socioeconomic and socio-community.** Concerns on existing provisions for community and church-goers will occur spatially during construction and O&M activities. Existing conditions within the subproject sites and immediate surroundings will be improved once the activities are completed. Since the subproject will be improvement of existing infrastructures, it will not conflict with existing or planned land use. However, following improvement in infrastructures and services, added residential developments, commercial, and business facilities and increased densities are expected to develop and enhance Nainital town. This can be considered a long-term cumulative benefit of the subproject.

107. Given the scale of the project it is likely that local people will obtain at least temporary socio-economic benefits, by gaining employment in the construction workforce, and thus raising

their levels of income. These benefits can bring wider social gains if they are directed at vulnerable<sup>2</sup> groups.

108. **Community and workers health and safety.** No adverse residual effects to human health will occur as a result of construction or O&M activities, and mitigation measures are in place to ensure public and worker safety, and will be closely monitored. While exposure to elevated noise levels, fugitive dust and common air pollutants will occur in proximity to work sites, due to their short-term and localized nature, these effects are expected to be minor and insignificant with no measurable effects on human health.

109. Therefore the project will benefit the general public by contributing to the long-term improvement of tourism infrastructure and community livability in Nainital town

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<sup>2</sup>Vulnerable groups as those without legal title to land and other assets; households headed by single earner females, the elderly or disabled; indigenous peoples (based on ADB OM); and households with incomes that are below the poverty line.

## VI. ENVIRONMENTAL MANAGEMENT PLAN

110. The purpose of the environmental management plan (EMP) is to ensure that the activities are undertaken in a responsible, non-detrimental manner with the objectives of: (i) providing a proactive, feasible, and practical working tool to enable the measurement and monitoring of environmental performance on-site; (ii) guiding and controlling the implementation of findings and recommendations of the environmental assessment conducted for the project; (iii) detailing specific actions deemed necessary to assist in mitigating the environmental impact of the project; and (iv) ensuring that safety recommendations are complied with (Table 8).

111. A copy of the EMP must be kept on work sites at all times. This EMP will be included in the bid documents and will be further reviewed and updated during implementation. The EMP will be made binding on all contractors operating on the site and will be included in the contractual clauses. Non-compliance with, or any deviation from, the conditions set out in this document constitutes a failure in compliance.

112. The contractor will be required to (i) establish an operational system for managing environmental impacts (ii) carry out all of the monitoring and mitigation measures set forth in the EMP; and (iii) implement any corrective or preventative actions set out in safeguards monitoring reports that PMU and PIU will prepare from time to time to monitor implementation of this IEE and EMP. The contractor shall allocate a budget for compliance with these EMP measures, requirements and actions.

### A. Institutional Arrangements for EMP Implementation

113. The institutional arrangements specify the arrangements for the implementation of environmental provisions of the entire project, and include the proposed subproject also.

114. **Project Management Unit (PMU) & Project Implementation Unit (PIU)** . The Department of Tourism, Government of Uttarakhand is the Executing Agency (EA). Project Management Unit (PMU) will be established in Dehradun for the overall project management and Project Implementation Units (PIU) have been established in Bhimtal, Kotdwar and Dehradun. The proposed sub-project will be implemented by the PIU, Bhimtal. A Safeguards Specialist within the PMU will be responsible for implementation of the resettlement and environmental safeguard provisions.

115. **Project Management Consultant (PMC) & Design and Supervision Consultants (DSC)**. Project Management Consultants (PMC) and Design and Supervision Consultants (DSC) are recruited to provide assistance to the PMU and PIUs respectively in project implementation. Within the PMC team an Environment Safeguards Specialist will provide overall direction for management of environmental issues, and will provide technical support to the PMU including implementation of the environmental requirements according to ADB requirements, and assist in monitoring impacts and mitigation measures associated with sub- projects. The Safeguards Specialist of the DSC team will be responsible for preparation and revision of the Environmental Assessment documents in line with the EARF and supervise the implementation of the EMP provisions in the various sub-projects. The PMU, will oversee the implementation of the environmental provisions related to subproject implementation, its responsibilities include preparation and updating of IEEs consistent with the ADB SPS 2009 and the environmental compliance requirements of the Government of Uttarakhand and the Government of India.

116. The DSC Safeguards Specialist will support environmental management functions including updating sub-project IEEs in respect to environmental management plans, assisting in preparing IEEs, and assist in monitoring impacts and mitigation measures associated with sub-projects. He/she will be required to include mitigation measures in designs where appropriate, and to specify other measures in construction contracts. Contractors will be required by their contracts to implement all specified mitigation, monitoring, and reporting assigned to contractors as presented in sub-project IEE. Environmental monitoring will be undertaken by the PMU supported by the DSC- Safeguards Specialist.

117. Towards addressing the environmental issues in the project components during design and implementation, the DSC will include provisions for inputs of an Environmental Specialist. In addition to addressing the issues related to environmental management in the project, the Environmental Specialist will play a central role in ensuring capability building on Environmental Management of the PMU/PIU, Contractor and Line Departments. Specific and specialized responsibilities are:

#### **Responsibilities of Contractors- Strict implementation of EMP and Supervision**

- ☐ Abide by the environmental laws formulated by the community institution (Nainital lake conservation and management society).
- ☐ Signage and wall writings along the road side for generating lake conservation awareness.
- ☐ Regularly remove trash from the site on daily basis.
- ☐ Report campfires or other inappropriate human use of the Nainital lake, and inappropriate behavior from construction workers affecting lake ecology and biodiversity.
- ☐ The area should be declared as plastic free, smoking free and silence zone and sign boards for the purpose should be displayed at work site and workers should be made aware about it by training
- ☐ Swimming, bathing and washing clothes by the workers in the lake will be strictly prohibited
- ☐ Cutting and collection of fuel wood by the construction workers from the nearby forest should be strictly prohibited
- ☐ It will be ensured by the contractor that the top soil will not be unnecessarily trafficked either before stripping or when in stockpiles. Such stockpiled top soil will be returned to cover the disturbed area and cut slopes.
- ☐ The Contractor with support of the PIU will carry out dissemination of these information and circulation plan at key entry points to the respective destinations
- ☐ The contractor will be responsible for arrangement of water in every workplace at suitable and easily accessible place for the whole construction period. Sufficient supply of cold potable water to be provided and maintained.
- ☐ The Contractor will ensure that construction activities not result in any contamination of land, water or air quality by polluting substances
- ☐ Contractor will ensure that no trees or shrubs or water side vegetation are felled or harmed except those required to be cleared for execution of work. The Contractor will protect tree and vegetation from damage to satisfaction of the engineer.

#### **Responsibilities of PIU & DSC-**

- ☐ Sponsor seminars and/or distribute educational materials to contractors and

- visitors about environmentally beneficial conservation procedures
- ☐ Organize workers' training program for the contractors for environmental management during construction works
- ☐ Educate the contractors regarding the eco-sensitivity of the area and explain how to protect bio-diversity during construction works
- ☐ Regular site visit and reporting during construction works to check whether objectives of EMP being.

118. Responsibilities for EMP Implementation: The following agencies will be responsible for EMP Implementation:

- ☐ Uttarakhand Tourism Development Board is the Executing Agency (EA) responsible for overall management, coordination, and execution of all activities funded under the loan;
- ☐ PMU is the Implementing Agency (IA) responsible for coordinating procurement and construction of the project. UTDB through its Project Management Unit (PMU) at Dehradun will be implementing the project;
- ☐ The Project Management Consultant (PMC) assists PMU in managing the project including procurement and assures technical quality of design and construction;
- ☐ The Design and Supervision Consultant (DSC) will prepare the DPR of the project and will carry out construction supervision during project implementation. Their responsibility will also include EMP implementation supervision;
- ☐ A Project Implementation Unit (PIU) has been established in Bhimtal. This PIU will look into progress and coordination of day to day construction works with the assistance of DSC; and
- ☐ The contractor will be responsible for \ execution of all construction works. The contractor will work under the guidance of the PIU Bhimtal and DSC. The environmental related mitigation measures will also be implemented by the contractor.

119. The contractor's conformity with contract procedures and specifications during construction will be carefully monitored by the PIU.

120. **Responsibility for updating IEE during detailed design.** DSC will update the IEE as per final design. PMC and PMU will review the report and finalized with the help of DSC for submission to ADB.

121. **Responsibility for monitoring.** During construction, DSC's Environmental Specialist and the designated representative engineer of the PIU will monitor the contractor's environmental performance. During the operation phase, monitoring will be the responsibility of the O & M contractor (during defect liability stage) and then by Municipal Corporation.

122. **Responsibility for Reporting.** PMU will submit to ADB semi-annual reports on implementation of the EMP and will permit ADB to field environmental review missions which will review in detail the environmental aspects of the project. Any major accidents having serious environmental consequences will be reported immediately. PMC's Environment safeguard Specialist will help in preparing monthly, quarterly, semi-annual and annual progress reports.

123. Nainital Tourism Committee (NTC) will be formed for ensuring successful project implementation and sustainability of project. It is proposed that NTC can also be involved in ensuring successful project implementation of. NTC will comprise members from activity groups, (boat association, hotel owners, restaurant owners etc) public representatives from project area villages and representatives from other project stakeholders namely District Administration,

## **B. Environmental Management Plan**

124. All works undertaken towards protection of environmental resources as part of the EMP and as part of good engineering practices while adhering to relevant specifications will be deemed to be incidental to works being carried out and no separate payment will be made unless otherwise specified explicitly. The costs towards environmental management as per EMP unless otherwise provided as a separate head, will be deemed to be part of the BoQ of the project. The scope of works of the contractor towards the implementation of the environmental provisions shall be as follows:

- ☐ Abide by all existing Environmental regulations and requirements of the Government of Uttarakhand and Government of India, during implementation,
- ☐ Compliance with all mitigation measures and monitoring requirements set out in the Environmental Management Plan (EMP)
- ☐ Submission of a method statement detailing how the subproject EMP will be complied with as per the schedule of monitoring given in subsequent paragraphs.
- ☐ Monitoring of project environmental performance and periodic submission of monitoring reports.
- ☐ Compliance with all measures required for construction activities in line with the regulatory requirements and the guidelines set forth in the management plans for these areas.
- ☐ Compliance of all safety rules and regulations applicable at work, and provision of adequate health and safety measures such as water, food, sanitation, personal protective equipment, workers insurance, and medical facilities.

125. The detailed provisions for specific environmental issues shall be as outlined in the EIMM table on impacts and mitigation measures. **Tables 9 and 10** show the potential adverse environmental impacts, proposed mitigation measures, responsible parties, and cost of implementation. This EMP will be included in the bid documents and will be further reviewed and updated during implementation.

**Table 9: Pre-Construction EMP Table**

Parameters	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of monitoring	Source of Funds to Implement Mitigation Measures
Consents, permits, clearances, no objection certificate (NOC), etc.	<ul style="list-style-type: none"> <li>Obtain all necessary consents, permits, clearance, NOCs, etc. prior to start of civil works.</li> </ul>	Consents, permits, clearance, NOCs, etc.	PMU	PMU to be reported to ADB in environmental monitoring report (EMR)	check CFEs, permits, clearance, prior to start of civil works	PMU
	<ul style="list-style-type: none"> <li>Acknowledge in writing and provide report on compliance all obtained consents, permits, clearance, NOCs, etc.</li> </ul>	Records and communications	PMU	PMU to be reported to ADB in EMR	Acknowledge upon receipt  Send report as specified in CFE, permits, etc.	PMU
	<ul style="list-style-type: none"> <li>Include in detailed design drawings and documents all conditions and provisions if necessary</li> </ul>	Detailed design documents and drawings	Contractor	PMU and PMC PIU and DSC	Upon submission by contractor	Contractor
Establishment of baseline environmental conditions prior to start of civil works	<ul style="list-style-type: none"> <li>Conduct documentation of location of components, areas for construction zone (camps, staging, storage, stockpiling, etc.) and surroundings (within direct impact zones). Include photos and GPS coordinates</li> </ul>	Records	Contractor	PMU and PMC PIU and DSC	to be included in updated IEE report	Contractor
Erosion control	<ul style="list-style-type: none"> <li>Apart from the archaeologists, consult a certified geologist to look into soil stability to enable contractors to employ effective soil stabilization and erosion control measures to sustain restorative measures under the subproject</li> <li>Develop an erosion control and re-vegetation plan to minimize soil loss and reduce sedimentation to protect water quality of the lake.</li> <li>Minimize the potential for erosion by balancing cuts and fills to the extent feasible.</li> </ul>	Erosion control and re-vegetation plan covering construction phase	Contractor	PMU and PMC PIU and DSC	to be included in updated IEE report	DSC – preliminary design stage  Contractor – detailed design stage

Parameters	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of monitoring	Source of Funds to Impleme
	<input type="checkbox"/> Identify and avoid areas with unstable slopes and local factors that can cause slope instability (groundwater conditions, precipitation, seismic activity, slope angles, and geologic structure). <input type="checkbox"/> Minimize the amount of land disturbed as much as possible. Use existing roads, disturbed areas, and borrow pits and quarries when possible. Minimize vegetation removal. Stage construction to limit the exposed area at any one time. <input type="checkbox"/> Design of proposed components will enable efficient drainage of the sites and maintain natural drainage patterns.					
Utilities	<input type="checkbox"/> Identify and include locations and operators of these utilities in the detailed design documents to prevent unnecessary disruption of services during the construction phase. <input type="checkbox"/> Require contractors to prepare a contingency plan to include actions to be done in case of unintentional interruption of services. <input type="checkbox"/> Require contractor to obtain from the PIU and/or DSC the list of affected utilities and operators <input type="checkbox"/> If relocations are necessary, contractor will coordinate with the providers to relocate the utility. <input type="checkbox"/> Require contractor to specify condition of general housekeeping (storage of construction implements, stockpiles, wastes, chemicals) in order to ensure compliance with	<p>List and maps showing utilities to be shifted</p> <p>Contingency plan for services disruption</p>	<p>- DSC to prepare preliminary list and maps of utilities to be shifted</p> <p>- During detailed design phase, contractor to (i) prepare list and operators of utilities to be shifted; (ii) contingency plan</p>	PMU and  PMC PIU and  DSC	to be included in updated IEE report	<p>DSC – preliminary design stage</p> <p>Contractor – detailed design stage</p>



Parameters	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of monitoring	Source of Funds to Impleme
	reference for monitoring purposes.					
Social and Cultural Resources	<input type="checkbox"/> Consult Archaeological Survey of India (ASI) or UK State Archaeology Department to obtain an expert assessment of the archaeological potential of the site. <input type="checkbox"/> Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available. <input type="checkbox"/> Develop a protocol for use by the construction	Chance find protocol	- PMC/PMU to consult ASI or UK State Archaeology Department - PMC to develop protocol for chance finds	PMU	to be included in updated IEE report	PMC
Sites for construction work camps, areas for stockpile, storage and disposal	<input type="checkbox"/> Will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems, etc. <input type="checkbox"/> Residential areas will not be considered so as to protect the human environment (i.e., to curb accident risks, health risks due to air and water pollution and dust, and noise, and to prevent social conflicts, shortages of amenities, and crime). <input type="checkbox"/> Disposal will not be allowed near sensitive areas which will inconvenience	List of pre-approved sites for construction work camps, areas for stockpile, storage and disposal  Waste/Spoil management plan	- DSC to prepare list of potential sites  -DSC to inspect sites proposed by contractor if not included in pre-approved sites	PMU  PIU	to be included in updated IEE report	DSC, Contract or

Parameters	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of monitoring	Source of Funds to Impleme
Sources of construction materials	<input type="checkbox"/> Use quarry sites and sources permitted by government. <input type="checkbox"/> Verify suitability of all material sources and obtain approval from PIU. <input type="checkbox"/> If additional quarries are required after construction has started, obtain written approval from PIU. <input type="checkbox"/> Submit to DSC on a	Permits issued to quarries/ sources of materials	Contractor  PMC and DSC to verify sources (including permits) if additional is requested by contractor	PMU PIU	Upon submission by contractor	PMC and DSC
Access	<input type="checkbox"/> Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites. <input type="checkbox"/> Schedule transport and hauling activities during non-peak hours. <input type="checkbox"/> Locate entry and exit points in areas where there is low potential for traffic congestion. <input type="checkbox"/> Keep the site free from all unnecessary obstructions. <input type="checkbox"/> Drive vehicles in a considerate manner. <input type="checkbox"/> Coordinate with the Town Police Department for temporary road diversions and for provision of traffic aids if transportation activities cannot be avoided during peak hours. <input type="checkbox"/> Prior to commencement of site activities and mobilization on ground, the Contractor will prepare and get approved by the PIU and DSC,	Traffic management plan	Contractor	PIU and DSC	to be included in updated IEE report	Contractor

Parameters	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of monitoring	Source of Funds to Impleme
	<input type="checkbox"/> Notify affected sensitive receptors by providing sign boards with information about the nature and duration of construction works and contact					
Occupational health and safety	<input type="checkbox"/> Comply with IFC EHS Guidelines on Occupational Health and Safety <input type="checkbox"/> Develop comprehensive site- specific health and safety (H&S) plan. The overall objective is to provide guidance to contractors on establishing a management strategy and applying practices that are intended to eliminate, or reduce, fatalities, injuries and illnesses for workers performing activities and tasks associated with the project. <input type="checkbox"/> Include in H&S plan measures such as: (i) type of hazards at the lake site; (ii) corresponding personal protective equipment for each identified hazard; (iii) H&S training for	Health and safety (H&S) plan	Contractor	PMU and PMC PIU and DSC	to be included in updated IEE report	Contractor
Public consultations	<input type="checkbox"/> Continue information dissemination, consultations, and involvement/participation of stakeholders during project implementation.	- Disclosure records - Consultations	PMU and PMC PIU and DSC Lake Development Authority Contractor	PMU and PMC	- During updating of IEE Report - During preparation of site- and activity-specific plans as per EMP	PMU  Contractor to allocate funds to support

Parameters	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of monitoring	Source of Funds to Impleme
					construction	

**Table 10: EMP During Construction Phase**

Potential Impact	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of Monitoring	Source of Funds
Erosion hazards	<p><input type="checkbox"/> Taken of care during construction near existing jetties to avoid the soil erosion and discharge of liquid waste, so that the lake water is not affected</p> <p><input type="checkbox"/> Save topsoil removed during excavation and use to reclaim disturbed areas, as soon as it is possible to do so</p> <p><input type="checkbox"/> Use dust abatement such as water spraying to minimize windblown erosion.</p> <p><input type="checkbox"/> Provide temporary stabilization of disturbed/excavated areas that are not actively under construction.</p> <p><input type="checkbox"/> Slope protection measures will be undertaken along slopes near lake and walkways. The work will consist of measures as per design, or as directed by the Engineer to control soil erosion, sedimentation and water pollution.</p>	Erosion control and re-vegetation plan	Contractor	PIU and DSC  PIU to submit EMP monitoring report to PMU	<p>- daily visual inspection by contractor supervisor and/or environment specialist</p> <p>- weekly visual inspection by DSC (more frequent during monsoon season and if corrective action is required)</p> <p>- random inspection by PMU, PIU, PMC and/or DSC</p>	Contractor

Potential Impact	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of Monitoring	Source of Funds
	for erosion and sediment control systems.					
Impacts on water quality	<input type="checkbox"/> Schedule construction activities during non-monsoon season, to the	Work schedule	Contractor	PIU and DSC  PIU to submit EMP monitoring report to PMU	- daily inspection by contractor supervisor and/or environment specialist - weekly visual inspection by DSC (more frequent during monsoon season and if corrective action is required) - random inspection by PMU, PIU, PMC and/or DSC	
	<input type="checkbox"/> Ensure drainages and water bodies within the construction zones are kept	Visual inspection				
	<input type="checkbox"/> Keep loose soil material and stockpiles out of	Visual inspection				
	<input type="checkbox"/> Avoid stockpiling of excavated and construction materials (sand, gravel, cement, etc.) unless	Visual inspection				
	<input type="checkbox"/> Re-use/utilize, to maximum extent possible,	condition in waste				
	<input type="checkbox"/> Dispose any residuals at identified disposal site (PIU/DSC will	condition in waste management				
	<input type="checkbox"/> Dispose waste oil and lubricants generated as per provisions of Hazardous Waste	condition in waste management plan				
	<input type="checkbox"/> Refuel equipment within the designated refueling containment area away from water body.	condition in list of pre-approved sites for construction work camps, areas for stockpile,				
Impacts on air quality	<input type="checkbox"/> Conduct regular water spraying on stockpiles.	- Visual inspection - No complaints from	Contractor	PIU and DSC	- daily inspection by contractor supervisor and/or environment specialist - weekly visual	Contractor
	<input type="checkbox"/> Conduct regular visual inspection in the construction zones to ensure	Visual inspection				

Potential Impact	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of Monitoring	Source of Funds
	<input type="checkbox"/> Maintain construction vehicles and obtain "pollution under control" certificate from UK pollution	PUC certificates			during dry season and if corrective action is required)	
	<input type="checkbox"/> Obtain CFE and CFO for diesel generator, if to be used in the	CTE and CTO			- random inspection	
Noise	<input type="checkbox"/> Limit construction activities at important areas to daytime only. <input type="checkbox"/> Plan activities in consultation with PIU/DSC so that activities with the greatest potential to generate noise are	Work schedule	Contractor	PIU and DSC	- daily inspection by contractor supervisor and/or environment specialist	Contractors
	<input type="checkbox"/> Minimize noise from construction equipment by using vehicle silencers and fitting jackhammers with noise-	Report on ambient noise level monitoring within direct			- weekly visual inspection by DSC (more frequent during noise-	
	<input type="checkbox"/> Avoid loud random noise from sirens, air	zero incidence			generating activities and if corrective action is required)	
	<input type="checkbox"/> Require drivers that horns not be used unless it is necessary to warn other road users or animals of the	Feedback from receptors within			- random inspection by PMU, PIU, PMC and/or DSC	
	<input type="checkbox"/> If specific noise complaints are received during construction, the contractor may be required to implement one or more of the following noise mitigation measures, as directed by the project manager: <input type="checkbox"/> Locate stationary construction equipment as far from nearby noise-sensitive properties, such as the hospital, as	- Complaints addressed satisfactorily - GRM records				

Potential Impact	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of Monitoring	Source of Funds
	<input type="checkbox"/> Notify nearby residents whenever extremely noisy work will be					
Impacts on flora and fauna	<input type="checkbox"/> Conduct site induction and environmental	Records	Contractor	PIU and DSC	- daily inspection by contractor supervisor and/or environment specialist - weekly visual inspection by DSC (more frequent if corrective action is	Contractor
	<input type="checkbox"/> Limit activities within the work area.	Barricades along				
	<input type="checkbox"/> Replant trees in the area using minimum ratio of 3 new trees for every 1 tree cut.	Number and species approved by UK Forest Department				
Impacts on physical cultural resources	<input type="checkbox"/> Ensure no damage to structures/properties adjacent to construction zone.	- Visual inspection - any impact should be addressed by	Contractor  In coordination with PIU and DSC for any structures within sub project site and construction zone	PIU and DSC	- daily inspection by contractor supervisor and/or environment specialist - weekly visual inspection by DSC (more frequent if corrective action is required) - random inspection by PMU, PIU, PMC and/or DSC	Contractor
	<input type="checkbox"/> Provide sign boards to inform nature and duration of construction works and contact numbers for	- no complaints received - photo-				
	<input type="checkbox"/> Implement good housekeeping. Remove wastes	- Visual inspection - No stockpiled/				
	<input type="checkbox"/> Ensure workers will not use nearby/adjacent areas as toilet facility.	- No complaints received - Sanitation				
	<input type="checkbox"/> Coordinate with PIU/DSC for transportation routes and schedule. Schedule transport and hauling activities during non-peak hours. Communicate road	- Approved routes in traffic management plan				

Potential Impact	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of Monitoring	Source of Funds
	<input type="checkbox"/> Ensure heavy vehicles do not use narrow local roads, except in the					
	<input type="checkbox"/> Provide instructions on event of chance finds for archaeological and/or ethno-botanical resources. Works must be stopped immediately until such	condition in chance find protocol				
Construction waste management	<input type="checkbox"/> Prepare and implement a waste management plan. <input type="checkbox"/> Mandatory for the contractor involved in construction activities for proper disposal of the construction waste at the disposal site as designated by the PIU and DSC. It will also be ensured that no construction waste will be disposed in the lake and the site will be properly cleaned after the construction is complete. Construction waste	Condition in waste management plan	Contractor	PIU and DSC	- daily inspection by contractor supervisor and/or environment specialist - weekly visual inspection by DSC (more frequent if corrective action is required) - random	Contractor
Impacts on occupational health and safety	<input type="checkbox"/> Comply with IFC EHS Guidelines on Occupational Health and Safety	- Visual inspection - Records	Contractor	PIU and DSC	- daily inspection by contractor supervisor and/or environment specialist - weekly visual inspection by DSC (more frequent if corrective action is required)	Contractor
	<input type="checkbox"/> Disallow worker exposure to noise level greater than 85 dBA for duration of more than 8 hours per day without hearing protection. The	- Visual inspection - Work schedule - Noise level monitoring in work				
	<input type="checkbox"/> Provide H&S orientation training to all new workers to ensure that they are apprised of the rules of work at the site, personal	- Records - Condition in H&S plan				



Potential Impact	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of Monitoring	Source of Funds
	<input type="checkbox"/> Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site	- Visible first aid equipment and medical supplies				
	<input type="checkbox"/> Provide medical insurance coverage for	Records				
	<input type="checkbox"/> Secure construction zone from unauthorized intrusion and accident	- Area secured - Trenches				
	<input type="checkbox"/> Provide supplies of potable drinking water.	- Supply of water				
	<input type="checkbox"/> Provide clean eating areas where workers are not exposed to	- Workers area				
	<input type="checkbox"/> Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present.	- Records - Condition in H&S plan				
	<input type="checkbox"/> Ensure moving equipment is outfitted with audible back-up alarms.	- Construction vehicles - Condition in				
	<input type="checkbox"/> Mark and provide sign boards in the construction zone, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to and easily understood by	- Visible and understandable sign boards in construction zone - H&S plan includes appropriate				
Impacts on socio-economic activities	<input type="checkbox"/> Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/	Visible and understandable sign boards in construction zone	Contractor	PIU and DSC	- daily inspection by contractor supervisor and/or environment	Contractor
	<input type="checkbox"/> Employ at least 50% of	Employment				

Potential Impact	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of Monitoring	Source of Funds
	labor force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available.	records			inspection by DSC (more frequent if corrective action is required) - random inspection by	

**Table 11: EMP Table During Post-Construction Phase**

Potential Impact	Mitigation Measures	Parameter/ Indicator of Compliance	Responsible for Implementation	Responsible for Supervision	Frequency of Monitoring	Source of Funds
Solid waste (debris, excavated soils, etc.)	<ul style="list-style-type: none"> <li>• Backfill any excavation and trenches, preferably with excess excavation material generated during the construction phase.</li> <li>• Use removed topsoil to reclaim disturbed areas.</li> <li>• Re-establish the original grade and drainage pattern to the extent practicable.</li> <li>• Stabilize all areas of disturbed vegetation using weed-free native shrubs, grasses, and trees.</li> <li>• Restore access roads, staging areas, and temporary work areas.</li> <li>• Restore roadside vegetation, if removed</li> <li>• Remove all tools, equipment, barricades, signs, surplus materials, debris, and rubbish. Demolish buildings/structures not required for O&amp;M. Dispose in designated disposal sites.</li> <li>• Monitor success of re-vegetation and tree re-planting. Replace all plants determined to be in an unhealthy condition.</li> <li>• Request in writing from PIU/DSC that construction zones have been restored.</li> </ul>	<p>Pre-existing condition</p> <p>Construction zone has been restored</p>	Contractor	<p>PIU and DSC</p> <p>PIU to submit EMP monitoring report to PMU</p>	- visual inspection by contractor supervisor and/or environment specialist	Contractor

### C. Summary of Site- and Activity-Specific Plans as per EMP

126. **Table 12** summarizes site- and activity-specific plans to be prepared as per EMP tables.

**Table 12: Site - and Activity-Specific Plans/Programs as per EMP**

To be Prepared During	Specific	Purpose	Responsible for	Responsible for
Detailed Design Phase	Environmental monitoring program as per	Indicate sampling locations, methodology	PMU/PIU and PMC/DSC	Contractor
Detailed Design Phase	Erosion control and re-	Mitigate impacts due to erosion	Contractor	Contractor
Detailed Design Phase	List and maps showing utilities to be shifted	Utilities shifting	DSC during preliminary stage Contractor as per detailed design	Contractor
Detailed Design Phase	Contingency plan	Mitigate impacts due to interruption of services	Contractor	Contractor
Detailed Design Phase	Chance find protocol	Address archaeological or historical finds	PMU and PMC	Contractor
Detailed Design Phase	List of pre-approved sites	Location/s for work camps, areas for stockpile,	PIU and DSC	Contractor
Detailed Design Phase	Waste/ Spoil	Mitigate impacts due to waste	Contractor	Contractor
Detailed Design Phase	Traffic management plan	Mitigate impacts due to transport of materials and	Contractor	Contractor
Detailed Design Phase	H&S plan	Occupational health and safety	Contractor	Contractor
Detailed Design Phase	Spill prevention and containment plan	Mitigate impacts of accidental spills of oil, lubricants, fuels, concrete, and other hazardous	Contractor	Contractor

127. Sample & contents of Spoil Management Plan is attached as **Annexure 5** and sample Traffic Management Plan is attached **Annexure 6**.

### D. Environmental Monitoring Plan

128. Environmental monitoring will be done during construction in three levels; namely monitoring development of project performance indicators will be done by the DSC Environmental Specialist, monitoring implementation of mitigation measures will be done by the Contractor; and overall regulatory monitoring of the environmental issues to be done by the PMU Environmental Specialist. The environmental monitoring plan for the project is presented in **Table 13**. The proposed monitoring of all relevant environmental parameters, with a description of the sampling stations, frequency of monitoring, applicable standards and responsible agencies are presented.

**Table 13: Indicative Environmental Monitoring Program**

Potential Impact	Parameter to be monitored	Proposed Locations	Method of Monitoring	Frequency of monitoring	Indicator of Compliance	Cost	Source of Funds
<b>1. Detailed Design Phase</b>							
Consents, permits, clearances, no objection certificate (NOC), etc.	- Consents, permits, clearance, NOCs, etc. - Records and communications - Detailed design documents and drawings	n/a	Visual inspection	check CFEs, permits, clearance,  Acknowledge upon receipt  Send report as specified in CFE, permits, etc.	Obtained prior to start of civil works  Conditions of consents, permits, clearance, NOCs, etc incorporated in detailed design	already covered under PMU and PIU	PMU
Establishment of baseline environmental conditions prior to start of civil works	Ambient air quality - particulate matter in sensitive receptors	Churches	Collection of air samples (continuously 24 hours)	prior to start of civil works	baseline data included in updated IEE report	10,000 per sample	PMU
	Noise levels – day time	Churches	Use of noise meters (once)	prior to start of civil works	baseline data included in updated IEE report	4,000 per sample	PMU
Erosion control	Erosion control and re-vegetation plan covering construction phase	n/a	Checking of erosion control and re-vegetation plan	Upon finalization of detailed design	included in updated IEE report  provided to contractor	already covered under PMU and PIU	Contractor
Utilities	List and maps showing utilities to be shifted  Contingency plan for services disruption	n/a	Checking of list and maps showing utilities to be shifted  Checking of contingency plan for services disruption	Upon finalization of detailed design	included in updated IEE report  provided to contractor	already covered under PMU/PIU and PMC/DSC	DSC – preliminary design stage  Contractor – detailed design stage
Social and Cultural Resources	Chance find protocol	n/a	Checking of chance find protocol	Upon finalization of detailed design	included in updated IEE report  copy and orientation provided to contractor	already covered under PMU/PIU and PMC/DSC	PMU
Sites for construction	List of pre-approved sites for construction	sites for construction	Visual inspection	Upon approval of site/s	included in updated IEE report		DSC

Potential Impact	Parameter to be monitored	Proposed Locations	Method of Monitoring	Frequency of monitoring	Indicator of Compliance	Cost	Source of Funds
work camps, areas for stockpile, storage and disposal	work camps, areas for stockpile, storage and disposal	work camps, areas for stockpile,			information provided to contractor		
	Waste management plan	n/a	Checking of waste management plan	Upon finalization of detailed	included in updated IEE report provided to contractor's submission	already covered under PMU/PIU	
Sources of construction	Permits issued to quarries/sources of materials	n/a	Checking of permits	Upon submission by	contractor's submission	already covered under	PMC and DSC
Access	Traffic management plan	n/a	Checking of traffic management plan as per detailed design (alignment,	Prior to start of civil works	contractor's submission	contractor's cost	Contractor
Occupational health and	Health and safety (H&S) plan	n/a	Checking of H&S plan	Prior to start of civil works	contractor's submission	contractor's cost	Contractor
Public consultations	- Disclosure records - Consultations	- locations of affected persons - locations of stakeholders	Documentation of (minutes of consultations, date/s, location/s, issue/s raised, photographs, etc.)	- During updating of IEE Report - During preparation of site- and activity-specific plans as per EMP - Prior to start of construction	included in updated IEE	already covered under PMU/PIU and PMC/DSC	PMU/PMC/DSC
<b>2. Construction Phase</b>							
Erosion hazards	Erosion control and re-vegetation plan	- Construction zone - storage areas	Visual inspection	- daily visual inspection by contractor supervisor and/or	- no erosion - erosion control in place - measures in erosion control and	Contractor's cost	Contractor

Potential Impact	Parameter to be monitored	Proposed Locations	Method of Monitoring	Frequency of monitoring	Indicator of Compliance	Cost	Source of Funds
				specialist - weekly visual inspection by DSC (more frequent during monsoon season and if corrective action is required)	Implemented		
Impacts on water quality	<ul style="list-style-type: none"> <li>- Any construction related materials</li> <li>- visible seepage of paints, oils, silts, etc. from storage areas</li> <li>- complaints related to water quality</li> </ul>	Adjacent bodies of water including drainages, canals/nallahs, etc.	Visual inspection	<ul style="list-style-type: none"> <li>- daily visual inspection by contractor supervisor and/or environment specialist</li> <li>- weekly visual inspection by DSC (more frequent during monsoon season and if corrective</li> </ul>	<ul style="list-style-type: none"> <li>- no visible change in pre-construction quality of adjacent bodies of water including drainages, canals/nallahs, etc.</li> <li>- no disposal and/or seepage to adjacent bodies of water including drainages, canals/nallahs, etc.</li> </ul>	Contractor's cost	Contractor
Impacts on air quality	<ul style="list-style-type: none"> <li>- water spraying on stockpiles</li> <li>- excessive dust emissions</li> <li>- vehicles</li> </ul>	<ul style="list-style-type: none"> <li>- Construction zone</li> <li>- Sensitive receptors site/s</li> </ul>	Visual inspection	<ul style="list-style-type: none"> <li>- daily visual inspection by contractor supervisor and/or environm</li> </ul>	<ul style="list-style-type: none"> <li>- no excessive dust emissions</li> <li>- no complaints from sensitive receptors</li> <li>- Valid pollution</li> </ul>	Contractor's cost	Contractor

Potential Impact	Parameter to be monitored	Proposed Locations	Method of Monitoring	Frequency of monitoring	Indicator of Compliance	Cost	Source of Funds
	certificate from Himachal Pradesh SPCB - CFE and CFO for hot mix plants, crushers, diesel generators, etc., if to be used in the project - complaints related to air quality			specialist - weekly visual inspection by DSC (more frequent during monsoon season and if corrective action is required)	CFE, and/or CFO		
Noise and vibrations impacts	- work schedule (limit to day time only in temple complexes and other important areas) - activities with the greatest potential to generate noise (conducted during periods of the day which will result in least disturbance) - vehicle silencers and noise-reducing mufflers	- Construction zone - Sensitive receptors site/s - silence zone/s	Visual inspection	- daily visual inspection by contractor supervisor and/or environment specialist - weekly visual inspection by DSC (more frequent during monsoon season and if corrective	- no complaints from sensitive receptors	Contractor's cost	Contractor
Impacts on flora and fauna	- site induction and environmental awareness - number of trees cut	- construction zone - sites approved by Forest	Visual inspection	- daily visual inspection by contractor supervisor	- all contractor's employees have undertaken site	Contractor's cost	Contractor

Potential Impact	Parameter to be monitored	Proposed Locations	Method of Monitoring	Frequency of monitoring	Indicator of Compliance	Cost	Source of Funds
	- survival rate of trees planted			specialist - weekly visual inspection by DSC (more frequent during monsoon season and if corrective action is required)	mobilization - approved trees to be cut - approved tree species for replantation		
Impacts on physical and cultural resources	- damage to structures/properties adjacent to construction zone - sign boards to inform nature and duration of construction works and contact numbers for concerns/complaints - number of workforce near the school/s and other sensitive receptor/s - housekeeping practices, wastes	- construction zone	Visual monitoring	- daily visual inspection by contractor supervisor and/or environment specialist - weekly visual inspection by DSC (more frequent during monsoon season and if corrective action is required)	- no damage to structures/properties adjacent to construction zone - sign boards understandable by local people - sufficient number of workforce near the school/s and other sensitive receptor/s - wastes managed according to waste management plan - clean and usable toilet facilities for	Contractor's cost	Contractor
Impact due to waste generation	- provisions of the waste management	- construction zone	Visual monitoring	- daily visual inspection	- wastes managed according to	Contractor's cost	Contractor



Potential Impact	Parameter to be monitored	Proposed Locations	Method of Monitoring	Frequency of monitoring	Indicator of Compliance	Cost	Source of Funds
	<ul style="list-style-type: none"> <li>- quantity of excavated soils</li> <li>- quantity of used oil and lubricants</li> <li>- excess construction materials, and solid waste (removed concrete, wood, trees and plants, packaging materials, empty containers, oils, lubricants, and other similar items)</li> </ul>			<ul style="list-style-type: none"> <li>supervisor and/or environment specialist</li> <li>- weekly visual inspection by DSC (more frequent during monsoon season and if corrective</li> </ul>	<ul style="list-style-type: none"> <li>- no complaints from sensitive receptors</li> </ul>		
Impacts on occupational health and safety	<ul style="list-style-type: none"> <li>- IFC EHS Guidelines on Occupational Health and Safety</li> <li>- noise level and duration of exposure</li> <li>- PPEs, high visibility vests, hearing protection, etc.</li> <li>- conduct of H&amp;S orientation training</li> <li>- qualified first aider and equipped first aid stations</li> <li>- medical insurance coverage for workers</li> <li>- security in construction zone</li> </ul>	- construction zone	<ul style="list-style-type: none"> <li>- visual monitoring</li> <li>- checking of records</li> </ul>	<ul style="list-style-type: none"> <li>- daily visual inspection by contractor supervisor or and/or environment specialist</li> <li>- weekly visual inspection by DSC (more frequent during monsoon season and if corrective action is</li> </ul>	<ul style="list-style-type: none"> <li>- conditions in H&amp;S plan</li> <li>- all workers oriented on H&amp;S plan</li> <li>- use of PPEs, etc at all times</li> <li>- max of 80 dBA and 8 hours exposure</li> <li>- visible first aid equipment and medical supplies</li> <li>- areas secured</li> <li>- trenches barricaded</li> <li>- adequate potable drinking water</li> <li>- clean eating areas away from hazardous</li> </ul>	Contractor's cost	Contractor

Potential Impact	Parameter to be monitored	Proposed Locations	Method of Monitoring	Frequency of monitoring	Indicator of Compliance	Cost	Source of Funds
	- sign boards in the construction zone						
Impacts on socio-economic activities	- % of locals in labor force - complaints/grievances	- construction zone	checking of records	- random inspection by PMU, PIU, PMC and/or DSC - during complaints/	- least 50% of the labor force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available	Contractor's cost	Contractor
<b>3. Post-construction Phase</b>							
Solid waste (debris, excavated soils, etc.)	- disturbed areas	- construction zone	visual inspection	upon completion of civil works prior to turn over to asset owner	- backfilled any excavation and trenches - reclaimed disturbed areas. - Re-established original grade and drainage pattern to the extent practicable. - stabilized all areas of disturbed vegetation using weed-free native shrubs, grasses, and trees - restored access roads, staging areas, and temporary work areas. - restored roadside vegetation, if removed - removed all tools.	Contractor's cost	Contractor

Potential Impact	Parameter to be monitored	Proposed Locations	Method of Monitoring	Frequency of monitoring	Indicator of Compliance	Cost	Source of Funds
					designated disposal sites. - success of re-vegetation and tree re- planting. Replaced all plants determined to be in an unhealthy condition. - documentation from		

## E. Capacity Building

### 1. Institutional Strengthening

129. The Department of Tourism, Government of Uttarakhand is the Executing Agency (EA). Project Management Unit (PMU) will be established in Dehradun for the overall project management. This sub-project will be implemented by the PIU, Bhimtal. A Safeguards Specialist is proposed within the PMU, and will be responsible for implementation of the resettlement and environmental safeguard provisions. Project Management Consultants (PMC) and Design and Supervision Consultants (DSC) are recruited to provide assistance to the PMU/PIUs in project implementation. Within the PMC team a Safeguards Specialist will provide overall direction for management of environmental and social issues, and will provide technical support to the PMU including implementation of the environmental and resettlement requirements according to ADB requirements, and assist in monitoring impacts and mitigation measures associated with sub-projects. The Safeguards specialist of the DSC team will be responsible to assist in preparation of IEE and EMP report and supervise the implementation of the EMP provisions in the sub-projects. The PMU will oversee the implementation of the environmental provisions related to subproject implementation, consistent with the ADBs Environmental Assessment Guidelines and the environmental compliance requirements of the Government of Uttarakhand and the Government of India.

### 2. Training and Capacity Building

130. The Environmental Specialist of the PMC and DSC will provide the basic training required for environmental awareness followed by specific aspects of infrastructure improvement projects along with environmental implications for projects located within / in the vicinity of natural and cultural heritage sites. Specific modules customized for the available skill set will be devised after assessing the capabilities of the members of the Training Programme and the requirements of the project. The entire training would cover basic principles of environmental assessment and management; mitigation plans and programmes, implementation techniques, monitoring methods and tools. The proposed training program along with the frequency of sessions is presented in **Table 14** below.

**Table 14: Training Modules for Environmental Management**

Program	Description	Participants	Form of Training	Duration/ Location	Training Conducting Agency
<b>A. Pre-Construction Stage</b>					
Sensitization Workshop	Introduction to Environment: Basic Concept of environment Environmental Regulations and Statutory requirements as per Government of India and ADB	Tourism / Forest / Roads / Culture Department Officials, Project Director (PD) and Environmental Specialist (ES) of the PMU/PIU	Workshop	1 Working Day	Environmental Specialist of the PMC
<b>Session I</b>					

Module I	Introduction to Environment: Basic Concept of environment	PMU/PIU (including the ES) and	Lecture	1 Working Day	Safeguards Specialist of the PMC
	Safeguards Regulations and Statutory requirements as per Govt. of India and ADB Guidelines on cultural resources, Environmental considerations in planning, design and implementing	Engineering staff of the implementing agencies			
Module II	Environmental components impacted in construction and operation stages Activities causing pollution during construction and operation stages Environmental Management Environmental Provisions Implementation Arrangements Methodology of Assessment Good engineering practices to be integrated into contract documents	PMU/PIU (including the ES) and Engineering staff of Tourism dept	Workshop	1 Working Day	Safeguards Specialist of the PMC
Module III	Improved Co-ordination with other Departments: Statutory Permissions – Procedural Requirements Co-operation & Coordination with other	PMU/PIU (including the ES) and Engineering staff of Tourism dept	Lecture / Interactive Sessions	1 Working Day	Safeguards Specialist of the PMC
Module IV	Environmental considerations in planning, designing and implementing heritage buildings and conservation	PMU/PIU (including the ES) and Engineering staff of Tourism dept	Lecture / Interactive Sessions and site visits	2 working days	Safeguards specialist of the PMC with support from the Conservation specialist of
Module V	Environmental principles of eco-tourism (as per Uttarakhand eco tourism policies) and training and awareness on Conservation and management aspects of the	Local Community Groups, NGOs	Lecture / Interactive Sessions	1 Working Day	Specialist from DSC and PIU
<b>B. Construction Stage</b>					
<b>Session II</b>					

Module VI	Role during Construction- Roles and Responsibilities of officials / contractors / consultants towards protection of environment Implementation Arrangements Monitoring mechanisms	Engineers and staff of line departments of the Government of Uttarakhand, and PMU/PIU (including the ES)	Lecture / Interactive Sessions	1 Working Day	Safeguards Specialist of the DSC
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Program	Description	Participants	Form of Training	Duration	Training Conducting Agency
Module VII	Monitoring and Reporting System	Engineers and staff of implementing agencies, and PMU/PIU	Lecture / Interactive Sessions	1 Working Day	Safeguards Specialist of the DSC

## F. Environmental Budget

131. As part of good engineering practices in the project, there have been several measures as erosion prevention, rehabilitation of borrow areas, safety, signage, provision of temporary drains, etc., the costs for which will be included in the design costs of specific subprojects. Therefore, these items of costs have not been included in the IEE budget. Only those items not covered under budgets for construction are considered in the IEE budget.

132. This is a small construction project and there are no major structures to be constructed therefore it is not expected to cause much significant air, water and noise pollution. The main EMP cost will arise from monitoring of environmental parameters (air, water and noise).

133. The costs of personal protective equipment to construction workers shall be borne by contractor as part of conditions of contract. In addition the sources of funds for Mitigation measures during construction stage including monitoring during construction stage are also to be borne by the contractor. These are deemed to be included as part of the contract price amount quoted by the contractor for the works. The costs of components for monitoring in operation stage and the capacity building costs are to be funded by the PMU. The EMP cost is given in the **Table 15**.

**Table 15: Environmental Budget**

Sl. No.	Particulars	Stages	Unit	Total number	Rate (INR)	Cost(INR)	Source of fund
<b>A. Monitoring Measures During Preconstruction &amp; Construction Period</b>							
1	Water quality-Lake	Pre-construction & Construction	Per sample	15 samples {Twice a year (pre monsoon and Post Monsoon) at three locations}	10,000	1,50,000	Contractor
2	Air quality monitoring	Pre-construction & Construction	Per sample	21 nos. {Once in a season for 3 seasons at three locations}	9,000	1,89,000	Contractor
3	Noise Levels	Pre-construction & Construction	Per Sample	21 nos. {Once in a season for 3 seasons at three locations}	2,000	42,000	Contractor
<b>B. Monitoring Measures During Operation Phase</b>							
1	Noise Levels	Operation	Per Sample	3 samples for 1 year	2,000	6000	O& M contractor
2	Water quality-	Operation	Per sample	3 samples for 1 year	10000	30000	O& M contractor
3	Air quality monitoring	Operation	Per sample	3 samples for 1 year	9000	27000	O& M contractor
<b>Sub -Total(A+B)</b>						<b>4,44,000</b>	
<b>C. Capacity Building</b> (All the workshops and trainings will be held in Nainital)							
1	Sensitization Workshop	Pre-Construction	L.S			1,00,000	PMU
2	Training Session I	Pre - Construction	L.S			4,00,000	PMU
3	Training Session II	Construction	L.S			2,00,000	DSC
<b>Sub -Total(C)</b>						<b>7,00,000</b>	
<b>Total(A+B+C)</b>						<b>11,44,000</b>	

#### **G. Environmental Monitoring and Reporting**

134. The PMU will monitor and measure the progress of EMP implementation. The monitoring activities will be corresponding with the project's risks and impacts and will be identified in the EIAs/IEEs for the subprojects. In addition to recording information of the work, deviation of work components from original scope, the PMU and PIU will undertake site inspections and document review to verify compliance with the EMP and progress toward the final outcome.

135. DSC will submit monthly monitoring and implementation reports to PIU, who will take follow-up actions, if necessary. PIU will submit the quarterly monitoring and implementation reports to PMU who will then submit to the PD. The PMU will submit semi-annual monitoring reports to ADB. Project budgets will reflect the costs of monitoring and reporting requirements.

For subprojects likely to have significant adverse environmental impacts during operation, reporting will continue at the minimum on semi-annual basis. Monitoring reports will be posted in a location accessible to the public.

136. For projects likely to have significant adverse environmental impacts, the EA will retain qualified and experienced external experts to verify its monitoring information. The EA will document monitoring results, identify the necessary corrective actions, and reflect them in a corrective action plan. The EA, in each quarter, will study the compliance with the action plan developed in the previous quarter. Compliance with loan covenants will be screened by the EA.

137. ADB will review project performance against the EA's commitments as agreed in the legal documents. The extent of ADB's monitoring and supervision activities will be commensurate with the Project's risks and impacts. Monitoring and supervising of social and environmental safeguards will be integrated into the project performance management system. ADB will monitor projects on an ongoing basis until a project completion report is issued. ADB will carry out the following monitoring actions to supervise project implementation:

- ☐ Conduct periodic site visits for projects with adverse environmental or social impacts;
- ☐ Conduct supervision missions with detailed review by ADB's safeguard specialists/
- ☐ Officers or consultants for projects with significant adverse social or environmental impacts;
- ☐ Review the periodic monitoring reports submitted by EA to ensure that adverse impacts and risks are mitigated as planned and as agreed with ADB
- ☐ Work with EA to rectify to the extent possible any failures to comply with their safeguard commitments, as covenanted in the legal agreements, and
- ☐ Exercise remedies to re-establish compliance as appropriate; and prepare a project completion report that assesses whether the objective and desired outcomes of the safeguard plans have been achieved, taking into account the base line conditions and the results of monitoring.

138. Sample monitoring format is attached in Annexure 7.



## VII. PUBLIC CONSULTATION AND INFORMATION DISCLOSURE

### A. Process for Consultation followed

139. During Project preparation, consultations have been held with the District Administration, Department of Tourism, KMVN, LDA, Nagar Palika Parishad, public representatives of project area villages, Hotel Owners, Boat Association Members, Jal Sansthanon project orientation, issues pertaining to conservation and management of Lake Ecosystem and addressing the current gaps in provision of basic services and improvement of tourist infrastructure. These consultations provided inputs in identification of the felt needs of the communities, and the relevant stakeholders. Details of meetings of consultations are attached as **Annexure 8** with this report and summarized below.

**Table 16: Summary of few discussions**

Date	Place	Issues	Remarks/ Outcome
16.08.2014	Lake Development Authority (LDA) Campus Nainital	Presentation on sub project components was given: <ul style="list-style-type: none"> <li><input type="checkbox"/> Heritage walk was discussed</li> <li><input type="checkbox"/> Ownership of all proposed components should be clarified</li> <li><input type="checkbox"/> Lighting system/ lake illumination was explained</li> <li><input type="checkbox"/> Poor condition of signages was discussed</li> <li><input type="checkbox"/> Establishment of toilets at different locations and solid waste management system was emphasized</li> <li><input type="checkbox"/> A small track improvement work could be undertaken on forest road</li> <li><input type="checkbox"/> Gandhi Ashram in Takula could be developed as Museum</li> </ul>	Project was appreciated but respective NOCs need to be assured for different components
04.08.2014	Administrative Academy, Nainital	Projects in the existing tranche of IDIPT and proposals for the next tranche were discussed with the Commissioner Kuamon.	It was directed to the PIU Bhimtal to provide monthly PERT Charts of the subprojects implemented and proposed in the area

05.06.2014	Office of DM, Nainital	The contract status of subprojects in the existing tranche was appraised to the DM. Concept of installation of musical fountain on the Nainital lake was explained	It was suggested to incorporate the suggestions from stakeholders, public representatives and environmentalists. It was also suggested to keep environmental norms and regulations for noise in mind
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## B. Future Consultation and Information Disclosure

140. To ensure continued public participation, provisions to ensure regular and continued stakeholder participation, at all stages during the project design and implementation is proposed. A grievance redress cell will be set up within the PIU and PMU to register grievances of the people regarding technical, social and environmental aspects. This participatory process will ensure that all views of the people are adequately reviewed and suitably incorporated in the design and implementation process. Further, to ensure an effective disclosure of the project proposals to the stakeholders, an extensive project awareness campaign will be carried out.

141. The public consultation and disclosure program with all interested and affected parties will remain a continuous process throughout the project implementation, and shall include the following:

- (i) **Consultations during construction phase:** (a) public meetings with affected communities to discuss and plan work programs and allow issues to be raised and addressed once construction has started; and (b) smaller-scale meetings to discuss and plan construction work with individual communities to reduce disturbance and other impacts, and to provide a mechanism through which stakeholders can participate in project monitoring and evaluation.
- (ii) **Project disclosure:** (a) public information campaigns (via newspaper, flyers, and media) to explain the project to the wider city population and prepare them for disruptions they may experience once construction is underway; (b) public disclosure meetings at key project stages to inform the public of progress and future plans, and to provide copies of summary documents in local language; (c) formal disclosure of completed project reports by making copies available at convenient locations in the study areas, and informing the public of their availability; and (d) providing a mechanism through which comments can be made.

142. For the information and benefit of the community the summary of IEE will be translated in the local language (Hindi) and made available at: (i) Office of the PIU/PMU; and, (ii) Office of the

District Magistrate, Nainital and other relevant line departments in the District. These copies will be made available free of cost to any person seeking information on the same. Hard copies of the IEE will be available in the PMU/PIU as well as the district library at Nainital, and accessible to citizens as a means to disclose the document and at the same time creating wider public awareness. On demand, the person seeking information can obtain a hard copy of the complete IEE document at the cost of photocopy from the office of the PMU/PIU, on a written request and payment for the same to the Project Director. Electronic version of the IEE will be placed in the official website of the Tourism Department and the website of ADB after approval of the documents by Government and ADB. This will create awareness of the project implementation among the public.

### **C. Grievance Redress Mechanism**

143. The affected person/aggrieved party can give their grievance verbally or in written to the local grievances committee. Grievances of affected person will first be brought to the attention of the implementing NGO who can resolve the issue at site level. If the matter is not solved within 7 days period by the NGO or PIU, it will be brought to the Grievance Redress Committee constituted for the purpose in PIU. This GRC shall discuss the issue in its monthly meeting and resolve the issues within one month of time after receiving the grievance. If the matter is not resolved by GRC at PIU level within stipulated time, it shall be referred to GRC at PMU level by Executive Engineer of PIU.

144. GRC at PMU shall discuss the issue and try to resolve it and inform the PIU accordingly. If the matter is not resolved by the GRC at PMU level within one month of time, the aggrieved person/party can bring the matter to The Court of Law. The PIU shall keep records of all grievances received including contact details of complainant, date of receiving the complaint, nature of grievance, agreed corrective actions and the date these were affected and final outcome. The grievance redress process is shown below.

#### **1. Composition and functions of GRC**

145. Local Grievance Committee (LGC) – In this LGC has worked with NGO, SHG, Line Agency, representative of Gram Panchayat, Special invitee.

146. Grievance Redress Committee (GRC) at PIU- In each PIU there shall be one GRC, which will include Project Manager (PIU), District Tourist Officer of Department of Tourism of Govt. Of Uttarakhand, Community Development Officer of PIU, nominated representative of District Magistrate and nominated representative committee shall be headed by Project Manager (PIU). The committee will meet at least once in every month. Agenda of meeting shall be circulated to all the members and affected persons/aggrieved party along with venue, date and time; informed in written at least 7 days in advance of meeting. The matters shall remain with GRC at PIU level for one month and if grievance is not resolved within this time period, the matter shall be referred to GRC at PMU.

147. **GRC within Environmental and Social Management Cell (ESMC) at PMU-** There shall be one GRC in PMU. The matters not resolved by the GRC at PIU level within one month shall come under GRC at PMU. GRC at PMU will include Community Development Expert of PMU, Safeguard Specialist of PMU and Additional Project Director (APD) of PMU. The Committee shall be headed by APD of PMU. This committee shall look the matters, which are referred to and

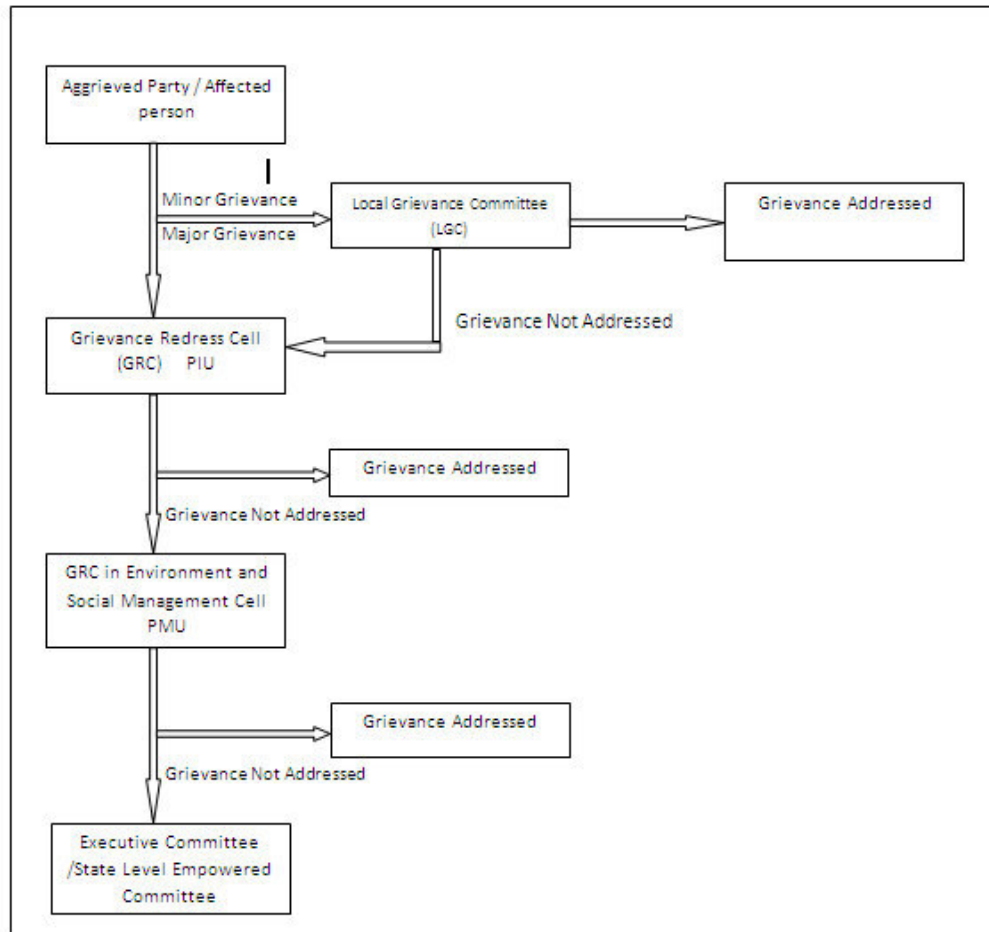
not resolved by GRC at PIU level. If the matter is not resolved by the GRC at PMU level within one month of time, the aggrieved person/party can bring the matter to The Executive Committee/State Level Empowered Committee (SLEC).

**148. Approach to GRC**

- Affected person/aggrieved party can approach to GRC for redress of his/their grievances through any of the following modes-
  - o Web based: A separate corner will be developed at the program website so that public /community/ affected person can register their complaint in the online column.
  - o Telecom based: A toll free no. Will be issued by the PMU/ PIU so that general public can register their complaint through telephone / mobile phone to the PIU/PMU office.
  - o Through implementing NGO: The local representative of the NGO appointed for the purpose will collect the problems & issues of the community or affected person and pass on the same to PIU / PMU.

**Figure 4: Grievance Redress Mechanism (IDIPT–Uttarakhand)**

**GRIEVANCE REDRESS MECHANISM (IDIPT-Uttarakhand)**



**Note:**

1. LGC - NGO, SHG, Line Agency, Representative of Gram Panchayat, Special invitee
2. GRC – PM, CDO, Engineer, DFO, DTO, SDM
3. GRC in Environment and Social Management Cell (ESMC) – PMU (APD, SS, CDS, FS), PMC (EE, CDE)

149. Sample Grievance Redress form is attached as **Annexure 9**.

## **VIII. FINDINGS AND RECOMMENDATIONS**

150. The proposed components of the project are in line with the sub-project selection criteria for the IDIPT. The subproject conforms to all GoI, GoUK and ADB regulations, policies, and standards including all necessary government permits and clearances.

151. The significance of the environmental impacts will be more due to the construction related impacts. It is to be noted that the resultant potential impacts from these proposals can be offset through provision of proven mitigation measures during the design and adoption of good engineering practices during construction and implementation. Further, the provision of environmental infrastructure will better the environmental conditions and minimize the pollution related and aesthetic quality near the tourist areas and the other destinations.

152. The specific management measures laid down in the IEE will effectively address any adverse environmental impacts due to the sub-project. The effective implementation of the measures proposed will be ensured through the building up of capacity towards environmental management within the PMU supplemented with the technical expertise of a Safeguards Specialist as part of the DSC Consultants. Further, the environmental monitoring plans provide adequate opportunities towards course correction to address any residual impacts during construction or operation stages.

## **IX. CONCLUSIONS**

153. The IEE carried out for the sub-project show that the proposed sub-components will result in net environmental benefits in terms of enhanced tourism facilities and revenue generation, and that any adverse environmental impact can be addressed through proper location, planning, and design of the proposed sub-project; control of construction activity and mitigation measures. The EMP provided for mitigation of all identified short term impacts and the contract clauses for the environmental provisions will be part of the civil works contracts. Further, the proposed designs have been consulted with the stakeholders and no significant issues requiring redress in terms of environmental safeguards exist.

Annexure 1 : Environmental Selection Criteria (as per EARF table 6)

Component	Criteria	Remarks
Overall selection criteria	1. Will be fully consistent with management plans or master plans for the area	No specific Management plan for the area. Nainital Lake Conservation and Management Project (NLCP) Is implemented for conservation of Lake
	2. Will avoid resettlement/relocation. If unavoidable the extent of resettlement will be minimized.	No such impact anticipated.(DPR under preparation)
	3. Will not result in destruction of or encroachment onto protected areas, including National Parks, Sanctuaries, Conservation Reserves and Community Reserves, environmentally sensitive zones and Biosphere reserves.	No environmentally sensitive zones in the vicinity, therefore, no destruction or encroachment onto protected areas. Only NOC from forest dept. will be required for construction of heritage trekking trail
	4. Will be in line with the Conservation Plan/management plan for the conservation and management of the Protected areas	No specific Management plan for the area.
	5. Will promote tourism related activities in protected areas, in the zones earmarked for tourism development, the scale and extent of which shall be in line with the provisions in the Management Plan	The sub project will not promote tourism related activities in protected areas. The activity area of sub project will be Nainital lake and this lake is not part of any notified protected area ( National Park, Wild life Sanctuary or Bird sanctuary)
	6. Will not result in destruction of or encroachment onto archaeological monuments/heritage sites and will be in line with the master plan proposals for the conservation and preservation of the site/monuments	Location of Nainital lake and surroundings is not close to any Archaeological Survey of India (ASI) notified archaeological monument or heritage site.
	7. Will not involve major civil works within the prohibited and regulated areas, as defined in the ASI regulations, to minimize any potential impacts on safety to the structures/monuments	Yes, construction in and around the Lake will not involve any major works within prohibited and regulated areas as no ASI notified monument/heritage site exists in the vicinity.
	8. Will reflect inputs from public consultation and disclosure for site selection	Meaningful public consultations have been done from planning phase and inputs have been considered in the project design
	9. Will not introduce any elements or components that are invasive upon the sanctity and significance of the cultural heritage site, including large scale commercial activities or creation of new land uses with potential to trigger induced development and land use changes around the sites	The sub project will not introduce any element or components that are invasive upon sanctity of cultural heritage site.



	10. Will introduce landscaping and other tourist infrastructure in line with the environmental quality of the tourist destinations, such as landscaping in harmony with the natural vegetation and diversity and not encourage introduction of species that are invasive	No new/alien species shall be introduced. Landscaping plan includes only native species.
	11. Will not result in development of physical infrastructure/ tourism amenities that would impair the environmental conditions due to lack of management capacities or high O&M costs	Provisions for O&M have been made in the EMP and responsibility entrusted to the executing department and Urban Local Bodies to ensure environment management sustainability.
	12. Will reflect inputs from public consultation and disclosure for site selection	Inputs from major stakeholders like District Authorities and local population residing close to subproject site have been incorporated in the designs and planning.
Conservation measures and excavation measures-in and around Cultural properties and protected Monuments/ Structures.	13. Will observe the principle of not altering the historic condition and shall involve treatment of damage caused by natural processes and human actions and prevention of further deterioration, using both technical and management measures.	The site is within and besides Nainital lake Effort has been made to provide a feeling of the glorified history of the region. Proposed structure will be design as per UK
	14. Will promote in situ conservation and only in the face of uncontrollable natural threats and relocation is the sole means of saving elements of a site may they be moved in their historic condition.	No protected Monument/ cultural heritage site in vicinity, therefore, this is not applicable
	15. Will ensure that intervention be minimal. Every intervention proposed shall have clear objectives and use tried and proven methods and materials.	NA as the sub project works are not close to any protected monuments/structures.
	16. Will ensure that physical remains are conserved in their historic condition without loss of evidence. Respect for the significance of the physical remains must guide any restoration. Technical interventions should not compromise subsequent treatment of the original fabric. The results of intervention should be unobtrusive when compared to the original fabric or to previous treatments, but still should be distinguishable	Not applicable because the project sites of Nainital is not close to any ASI Protected monument/ remains site.
	17. Will ensure that the adaptive reuse of any particular building of monuments/structures does not intrude or induce impacts on other areas of the monument	<i>Not applicable</i>
	18. Will ensure preservation of traditional technology and craftsmanship. New materials and techniques may only be used after they have been tried and proven, and should in no way cause damage to site.	Project designs are based on guidelines conforming to Uttarakhand architecture. The construction and operation of facilities will not have any impact

		traditional technology and craftsmanship.
	19. Will ensure that the setting of a heritage site be conserved. Natural and cultural landscapes that form part of a sites setting contribute to its significance and should be integrated with its conservation	Ensured
	20. Will ensure that during archaeological excavation care be taken to conserve the physical remains. A practical plan for the conservation of a site-both during and after excavation-should be submitted for all site programmed for excavation	Ensured
	21. Will ensure that treatment of the cultural heritage site and its environs is a comprehensive measure to prevent damage form natural processes and human actions, to reveal the historic condition of a site, and to allow its rational use. Service building should be as far as possible form the principal area of the site. Landscaping should aim to restore the site to its historic state and should not adversely affect the site: contemporary gardening and landscape concepts and designs should not be introduced.	NA, as the site is not a cultural heritage site Proposed subproject entails construction activities, which has been designed in heritage style
Conservation and habitat protection measures- in and around the natural heritage assets and protected areas.	22. Will observe the principle of not adversely impacting the habitat quality of the protected area and shall involve treatment of damage caused by natural processes and human actions and prevention of further deterioration, using both technical and management measures.	NA  Not near protected area and no significant biodiversity noticed in and around the site.
	23. Will ensure that intervention, in form of additional civil works within the protected areas, be minimal. Every intervention proposed shall have clear objectives and use tried and proven methods and materials.	NA The site is not close to the protected area
	24. Will not open up new areas of tourist movement, including opening up of new routes for boating in wetlands etc, especially in areas identified as core or zone identified for conservation in the management plan for the protected area.	Site is not in core or buffer zone of any protected area.
	25. Will ensure that the areas of significant habitat diversity habitats are conserved in their natural condition.	NA
	26. The results of intervention should be unobtrusive when compared to the original fabric or to previous treatments, but still should be distinguishable	It is tried to retain the architectural character of the old heritage structure
	27. New materials and techniques may only be used after they have been tried and proven, and should in no way cause	No new materials and techniques are proposed to be used.

	damage to the site.	
	28. Service buildings should be as far as possible from the principal area of	NA
Water supply	29. Will be taken up from existing potable treatment systems nearby, unless no	Water requirement of the project will be made from supplied water.
	30. Will not result in excessive abstraction of ground water or result in excessive groundwater pumping impairing	Not envisaged as water requirements are to be met from existing water supply system.
	31. Will ensure adequate protection from	Not Applicable
	32. Will not result in unsatisfactory raw water supply (e.g. supply with excessive pathogens or mineral constituents)	The sub project activities during construction and operation phase will not result into unsatisfactory raw water supply
	33. Will ensure proper and adequate treatment and disposal facilitates for increased volumes of wastewater	Not much waste water generation envisaged. Septic tanks/sock pits of sufficient capacity are
Sanitation and toilet facilities	34. Will ensure that the site selection for the septic tank/ or any/ or any other treatment method proposed is not close to water intake or water usage points, or areas prone to flooding or water logging	The locations of Septic tank at proposed facilities will be finalised at safe area with no chance of contamination of soil and water. The design of the septic tanks has been done to ensure that there is a difference of at least 1.5m between the bottom bed of the septic tank
	35. Will ensure that sanitation improvements proposed do not result in pollution of groundwater.	The design of the septic tanks has been done to ensure that there is a difference of at least 1.5m between the bottom bed of the septic tank and the maximum ground water level, to avoid any contamination of ground water. Further, Environmental Management and Monitoring
	36. Will not interfere with other utilities and block access to buildings, cause nuisance to neighboring areas due to noise, smell, and influx of insects, rodents, etc.	Will be ensured and since it is a tourism project, no such nuisance envisaged during the construction and operation
	37. Will not impair downstream water quality due to inadequate	Not envisaged as septic tank/sock pits of adequate capacity
	38. Will not cause overflows and flooding of surroundings, especially around the heritage sites with raw sewage.	Proposed septic tanks/ sock pits are of adequate capacity, overflow and flooding not

		quarter through a vacuum sludge truck. The responsibility of septic tank cleaning lies with the Tourism Department. Municipal Corporation will ensure that the septic tanks are cleaned every quarter.
Solid waste management	39. Will ensure that the disposal of solid wastes will not result in degradation of aesthetics in the vicinity of the proposed tourist areas	There is provision of waste segregation at source through separate Bio-degradable and Non-Biodegradable Waste bins and suitable disposal arrangements. Both types of solid wastes will be disposed off in consultations with local civic authorities.
	40. Will ensure buffer of greenbelt and earth works around the site to avoid nuisance to neighboring areas due to foul odor and influx of insects, rodents, etc.	During construction phase suitable buffer will be provided as per EMMP. Project also has provisions for landscaping and maintenance of rich green belt with native species in the vacant space
	41. Will ensure that for composting pits for protected areas, the locations are devoid of any wildlife population, especially wild boars, porcupines	NA
	42. Will ensure any on site waste management done in compliance with government regulations and in coordination with municipal authorities.	It will be ensured
Roads	43. Will ensure minimal clearing of vegetation	No vegetation will be removed due to construction activity
	44. Will ensure on dislocation and involuntary resettlement of people living in right of way.	No dislocation and involuntary resettlement envisaged. The sub project site is adjacent to the existing road.
	45. Will not lead to alteration of surface water hydrology of streams/waterways that may result in increased sediment load due to erosion from construction sites.	Erosion from construction sites will be controlled as per EMMP provisions. Road construction within the subproject complex will not have any impact on the surface water hydrology of the project region.
Drainage and flood protection	46. Will ensure improvements are identified to cater to the watershed or drainage zones and not individual drains.	No alterations to the existing drainage patterns are expected due to project interventions
	47. Will ensure adequacy of outfall of proposed drainage works, to avoid any impacts associated with flooding in downstream areas, or areas not covered	NA
	48. Will ensure effective drainage of the monument area, and provide for improved structural stability of the monuments	Not Applicable
Development of parking and other tourist infrastructure amenities	49. Will ensure no deterioration of surrounding environmental conditions due to uncontrolled growth around these facilities, increased traffic and increased	Any new growth or expansion will be within the regulations of Uttarakhand Tourism Development Board and local Civic authorities.

	<p>waste generation resulting from improved infrastructure facilities</p> <p>50. Will not create structures or buildings that are physically or visually intrusive, in terms of size, scale, location that shall have an adverse impact on the aesthetic quality or the site, through careful designs in terms of built form, construction materials etc.</p>	<p>Developments have been planned in and around Nainital. Controlled traffic improvement during operation of subproject is expected. The Facilities will have a well planned solid waste collection and disposal system. Not envisaged. Project shall add to the aesthetic beauty of the site and enhance the visitor experience.</p>
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**Annexure 2: Rapid Environmental Assessment Checklist**

**Country/Project Title:** India/Infrastructure Development Investment Program for Tourism-  
Project III- Uttarakhand

**Sector Division** SAUW (South Asia Urban Development and Water Division)

Screening Questions		No	Remarks
<b>A. Project Siting</b> Is the subproject sites...			
<input type="checkbox"/> Densely populated?	<input type="checkbox"/>		In and around Nainital lake densely populated
<input type="checkbox"/> Heavy with development activities?		<input type="checkbox"/>	
<input type="checkbox"/> Adjacent to or within any environmentally sensitive areas?		<input type="checkbox"/>	
<input type="checkbox"/> Cultural heritage site		<input type="checkbox"/>	
<input type="checkbox"/> Protected Area		<input type="checkbox"/>	
<input type="checkbox"/> Wetland		<input type="checkbox"/>	
<input type="checkbox"/> Mangrove		<input type="checkbox"/>	
<input type="checkbox"/> Estuarine		<input type="checkbox"/>	
<input type="checkbox"/> Buffer zone of protected area		<input type="checkbox"/>	
<input type="checkbox"/> Special area for protecting biodiversity		<input type="checkbox"/>	
<input type="checkbox"/> Bay		<input type="checkbox"/>	
<b>B. Potential Environmental Impacts</b> Will the Project cause...			
<input type="checkbox"/> Impacts on the sustainability of associated sanitation and solid waste disposal systems and their interactions with other		<input type="checkbox"/>	Not anticipated.
<input type="checkbox"/> Deterioration of surrounding environmental conditions due to rapid urban population growth, commercial and industrial activity, and increased waste generation to the point that both manmade and natural systems are overloaded and the capacities to		<input type="checkbox"/>	Not anticipated.
Degradation of land and ecosystems (e.g. loss of wetlands and wild lands, coastal zones, watersheds		<input type="checkbox"/>	Not anticipated.
<input type="checkbox"/> Dislocation or involuntary resettlement of people?		<input type="checkbox"/>	Not anticipated. Land acquisition and resettlement are not required for the subprojects. RF to guide any resettlement related issues.
<input type="checkbox"/> Disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable group?		<input type="checkbox"/>	Not anticipated.
<input type="checkbox"/> Degradation of cultural property, and loss of cultural heritage and tourism		<input type="checkbox"/>	Not anticipated.
<input type="checkbox"/> Occupation of low-lying lands, floodplains and steep hillsides by squatters and low-income groups, and their exposure to increased		<input type="checkbox"/>	Not anticipated.
Water resource problems (e.g.			Not anticipated.

degradation of available water supply, deterioration for surface and ground water			
Air pollution due to urban emissions?		<input type="checkbox"/>	Not anticipated.
Risks and vulnerabilities related to occupational health and safety due to physical, chemical and biological hazards			Not anticipated.
road blocking and temporary flooding due to land excavation during			Not anticipated.
<input type="checkbox"/> Noise and dust from construction activities?			Anticipated during construction phase. However, impacts are temporary and short in duration. The EMP includes
<input type="checkbox"/> Traffic disturbances due to construction material transport and wastes?			Anticipated during construction phase. However, impacts are temporary and short in duration. The EMP includes
Temporary silt runoff due to construction?			Not anticipated.
<input type="checkbox"/> Hazards to public health due to ambient, household and occupational pollution, thermal inversion, and smog		<input type="checkbox"/>	Not anticipated.
<input type="checkbox"/> Water depletion and/or degradation?		<input type="checkbox"/>	Not anticipated.
<input type="checkbox"/> Overpaying of ground water, leading to land subsidence, lowered ground water table, and		<input type="checkbox"/>	Not anticipated.
<input type="checkbox"/> Contamination of surface and ground waters due to improper waste disposal?			Not anticipated.
<input type="checkbox"/> Pollution of receiving waters resulting in amenity losses, fisheries and marine resource		<input type="checkbox"/>	Not anticipated.
<input type="checkbox"/> Large population influx during project construction and operation that causes increased burden on social infrastructure and		<input type="checkbox"/>	Improved management systems through capacity building and institutional development will ensure reduced burden on services and
<input type="checkbox"/> Social conflicts if workers from other regions or countries are hired?		<input type="checkbox"/>	Priority in employment will be given to local residents.
<input type="checkbox"/> Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during		<input type="checkbox"/>	Not applicable. Construction will not involve use of explosives and chemicals. Excavations/trenching will be done manually. Chemicals will not be used
<input type="checkbox"/> Community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure			Operational area will be clearly demarcated and access will be controlled. Only worker and project concerned members will be allowed to visit the operational sites.

### Checklist for Preliminary Climate Risk Screening

**Country/Project Title:** IDIPT: Uttarakhand–Nainital Lake Precinct Revitalization, Enhancement and Urban Place making

**Sector :** Tourism

**Division/Department:** SAUW (South Asia Urban Development and Water Division)

Screening Questions		Score	Remarks <sup>3</sup>
<b>Location and Design of project</b>	Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather related events such as floods, droughts, storms, landslides?	0	Investments in the Nainital town will not likely be affected by climate change and extreme weather events due to the siting/location of the subprojects. No investments will be sited in flood plains etc.
	Would the project design (e.g. the clearance for bridges) need to consider any hydro-meteorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc)?	0	not applicable
<b>Materials and Maintenance</b>	Would weather, current and likely future climate conditions (e.g. prevailing humidity level, temperature) contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters likely affect the selection of project inputs over the life of project outputs (e.g. construction material)?	0	Works involving conservation and restoration will use local materials similar to the existing structures.
	Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of	1	Maintenance will not likely be affected by climate change and extreme weather events.
<b>Performance of project outputs</b>	Would weather/climate conditions and related extreme events likely affect the performance (e.g. annual power production) of project output(s) (e.g. hydro-power generation facilities) throughout their design life time?	0	Not likely to be affected by climate change and extreme weather events.

Options for answers and corresponding score are provided below:

Response	Score
Not Likely	0
Likely	1
Very Likely	2

Responses when added that provide a score of 0 will be considered low risk project. If adding all responses will result to a score of 1-4 and that no score of 2 was given to any single response, the project will be assigned a medium risk category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response will be categorized as high risk project.

**Result of Initial Screening (Low, Medium, High): Low Other Comments: None**

<sup>3</sup> If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.



## Annexure 3: No Objection Certificates

### (a) Nagar Palika, Nainital

कार्यालय नगरपालिका परिषद, नैनीताल ।  
पत्रांक : 4407/18-18 दिनांक : 12.12.2013  
सेवा में,  
प्रोजेक्ट मैनेजर,  
पीआईयू भीमताल नैनीताल ।  
विषय : मालरोड नैनीताल में सौन्दर्यकरण करने तथा म्युजिकल फाउण्टेन बनाने हेतु  
अनापत्ति दिये जाने के संबंध में ।  
महोदय,  
उक्त विषय के सम्बन्ध में आपके द्वारा प्रस्तावित पर्यटन विकास योजना के  
अन्तर्गत मालरोड के सौन्दर्यकरण एवं म्युजिकल फाउण्टेन बनाने में पालिका को कोई  
आपत्ति नहीं है ।

शुद्धीय,  
अधिसूचक/अधिकारी,  
नगरपालिका परिषद, नैनीताल ।

#### ENGLISH TRANSCRIPTS OF NOCS

##### (a) Municipal Council , Nainital

To,

Project Manager

PIU Bhimtal

Sub: No Objection Certificate for Beautification of Mall Road, Nainital.

Sir

With reference to the above subject, for your proposed Tourist Development Plan, the Nagar

Palika have **No objection** for beautification works of Mall Road in Nainital.

Executive Officer

Municipal Council, Nainital

(b) Nanital Lake Authority



कार्यालय, नैनीताल झील परिक्षेत्र विशेष क्षेत्र विकास प्राधिकरण, नैनीताल  
पत्र संख्या: 3162 /नैविप्र/2013-14 दिनांक-24/03/14

सेवा में,

परियोजना प्रबन्धक,  
पीओआईओयू,  
इन्फ्रास्ट्रक्चर डेवलपमेंट इनवेस्टमेंट प्रोग्राम फॉर टूरिज्म,  
नियर आकाश रिजर्ट, ग्राम-आणु,  
विकास भवन रोड, भीमताल-248003,  
जिला-नैनीताल।

विषय: नैनीताल में ए.डी.बी. सहायित पर्यटन विभाग आई.डी.आई.पी.टी. द्वारा प्रस्तावित  
कार्यों को कराने हेतु अनापत्ति प्रमाण-पत्र सम्बन्धित।

महोदय,

उपर्युक्त विषयक अपने पत्रांक संख्या-189Gen Corp./PIU-Bhimtal/197/1-A/2013-14  
दिनांक 25.02.2014 का संदर्भ ग्रहण करें। उक्त के सम्बन्ध में अवगत कराना है कि  
नैनीताल झील का स्वामित्व प्राधिकरण का नहीं है। अतः कार्य हेतु अनापत्ति के सम्बन्ध में  
सम्बन्धित विभाग से सम्पर्क करने का कष्ट करें।

भवदीय  
[Signature]  
सचिव,

नैनीताल झील परिक्षेत्र विशेष क्षेत्र  
विकास प्राधिकरण, नैनीताल

**ENGLISH TRANSCRIPTS OF NOCS**

**(b) Nanital Lake Development Authority**

To,  
Project Manager  
PIU Bhimtal

**Sub: ADB funded project under the Department of Tourism in Nainital- NOC  
for related activities**

Sir,

With reference of your letter No, 189/Gen Corp/PIU-Bhimtal/197/1-A/2013-14 dated  
25.02.2014, this is to inform you in relation to the ownership and authority of Nainital  
Lake, it is not under our  
jurisdiction. So in terms of clearance for works, you are requested to contact the  
concerned  
department.

Secretary  
Nainital Lake Development Authority

## (c) Public Works Dept.

**PWD**  
Uttarakhand

कार्यालय अधिशासी अभियन्ता  
प्रान्तीय खण्ड , लो०नि०वि०  
नैनीताल

Phone/Fax - 05942- 235572/233549 E-Mail:- ceepdpwdntl@gmail.com

पत्रांक :- 367 / 6 सी दिनांक :- 01.05.2014

सेवा में,  
श्री बलवंत सिंह रावल  
परियोजना प्रबन्धक  
आकाश रोस्सो के पास, ग्राम - अन्नू  
विकास भवन, भीमताल  
जिला नैनीताल (उत्तराखण्ड)

**विषय :-** नैनीताल में ए०डी०बी० सहायित पर्यटन विभाग आई०डी०आई०पी०टी० द्वारा प्रस्तावित कार्य को कराने हेतु अनापत्ति प्रमाण - पत्र सम्बन्धित।

**सन्दर्भ :-** आपका पत्रांक 208/Corp/PIU - Bhimtal/ 216/ I-4/ 2013-14 दि० 07.03.14

महोदय,  
उपरोक्त विषयक सन्दर्भित पत्र के क्रम में परियोजना कार्य की महत्त्वता को देखते हुए निम्न लिखित प्रतिबन्धों के अधीन कार्य कराने की सहमति प्रदान की जाती है।

1. कन्टीलिवर बालकर पैदल राक से का कार्य करने से पहले किसी प्रतिष्ठित संस्थान से Geological राय प्राप्त कर ली जाय। तभी कोई खुदाई का कार्य किया जाय।
2. लो०नि०वि० से सम्बन्धित संरचनाओं पर कार्य करने से पूर्व पुनः दिखा लिया जाए एवं विभाग की सहमति के अनुसार कार्य किया जाय।
3. किसी भी पूर्व निर्मित संरचना को क्षतिग्रस्त न किया जाय।
4. जॉट पर कार्य करने से पूर्व प्रतिष्ठित संस्थान के योग्य स्ट्रक्चरल इन्जीनियर की राय के अनुसार विभाग से सहमति प्राप्त कर कार्य किया जाय।
5. कार्य से निकले मलुदे का निस्तारण नगर पालिका क्षेत्र से बाहर किया जाय एवं कार्य के समय यातायात की व्यवस्था का उचित प्रकार संचालन किया जाय।

अधिशासी अभियन्ता  
प्रा०ख० लो०नि०वि०  
नैनीताल

पत्रांक :-  
प्रतिलिपि :-

1. अपर कार्यक्रम निदेशक ( आई०डी०आई०पी०टी०) देहरादून को सूचनाार्थ प्रेषित।
2. अधीक्षण अभियन्ता महोदय, द्वितीय वृत्त, लो०नि०वि०, नैनीताल को सूचनाार्थ प्रेषित।

दिनांक :-  
अधिशासी अभियन्ता  
प्रा०ख० लो०नि०वि०  
नैनीताल

**ENGLISH TRANSCRIPTS OF NOC**

To,  
Project Manager  
PIU-IDIPT, Bhimtal

Sub :ADB funded project under the Department of Tourism in Nainital - proposed actions related to NOC

Sir,

In reference to the captioned subject, consent is given below. In order of importance, they are as follows:-

- 1 For the cantilever walkway along the Lake , the feedback from a reputed institution is required for the geological condition of the area . Geological Survey might be required too. Only after satisfactory result, any excavation should be carried out for this work.
2. For the structures belonging to PWD, prior consent of the Department is required for working on any specific structure,
- 3.Any damage caused to any existing structure is not allowed.
4. The opinion of any qualified structural engineer from reputed institute must be obtained and there after consent from the State Department to be obtained.
5. During construction and post construction period, disposal of the work related debris must be undertaken outside the municipality area and during construction work , effective traffic management should be arranged to cause minimal problem to public and tourists.

Executive Engineer  
PWD, Nainital

(d) The New Club

प्रेषक **THE NEW CLUB** ☎ : 05942-235694

---

न्यू क्लब नैनीताल Naini Tal 263001

Ref.....सेवा-में..... दिनांक— 21.08.2014  
Date.....

परियोजना प्रबंधक  
पी०आई०यू० भीमताल  
आई०डी०आई०पी०टी०

महोदय,

आपके पत्रांक 355 Gen corp/PIU Bhimtal/363/18/2014-15 दिनांक 19.08.2014 के संबंध में न्यू क्लब की ऐतिहासिक महत्ता को समझते हुए इस कार्य के जीर्णोद्धार पी०आई०यू० भीमताल द्वारा ए०डी०बी० सहायतित परियोजनओं के अन्तर्गत कराये जाने में क्लब को कोई आपत्ति नहीं है।

भवदीय  
  
सचिव  
न्यू क्लब, नैनीताल  
-Secretary,  
New Club, Nainital.

**ENGLISH TRANSCRIPTS OF NOC**

To,  
Project Manager  
PIU-IDIPT, Bhimtal

**Sub: ADB funded project under the Department of Tourism in Nainital- NOC for related activities**

Sir,

With reference of your letter No, 189/Gen Corp/PIU-Bhimtal/197/1-A/2013-14 dated 25.02.2014, this is to inform you in relation to the ownership and authority of Nainital Lake, it is not under our jurisdiction. So in terms of clearance for works, you are requested to contact the concerned department.

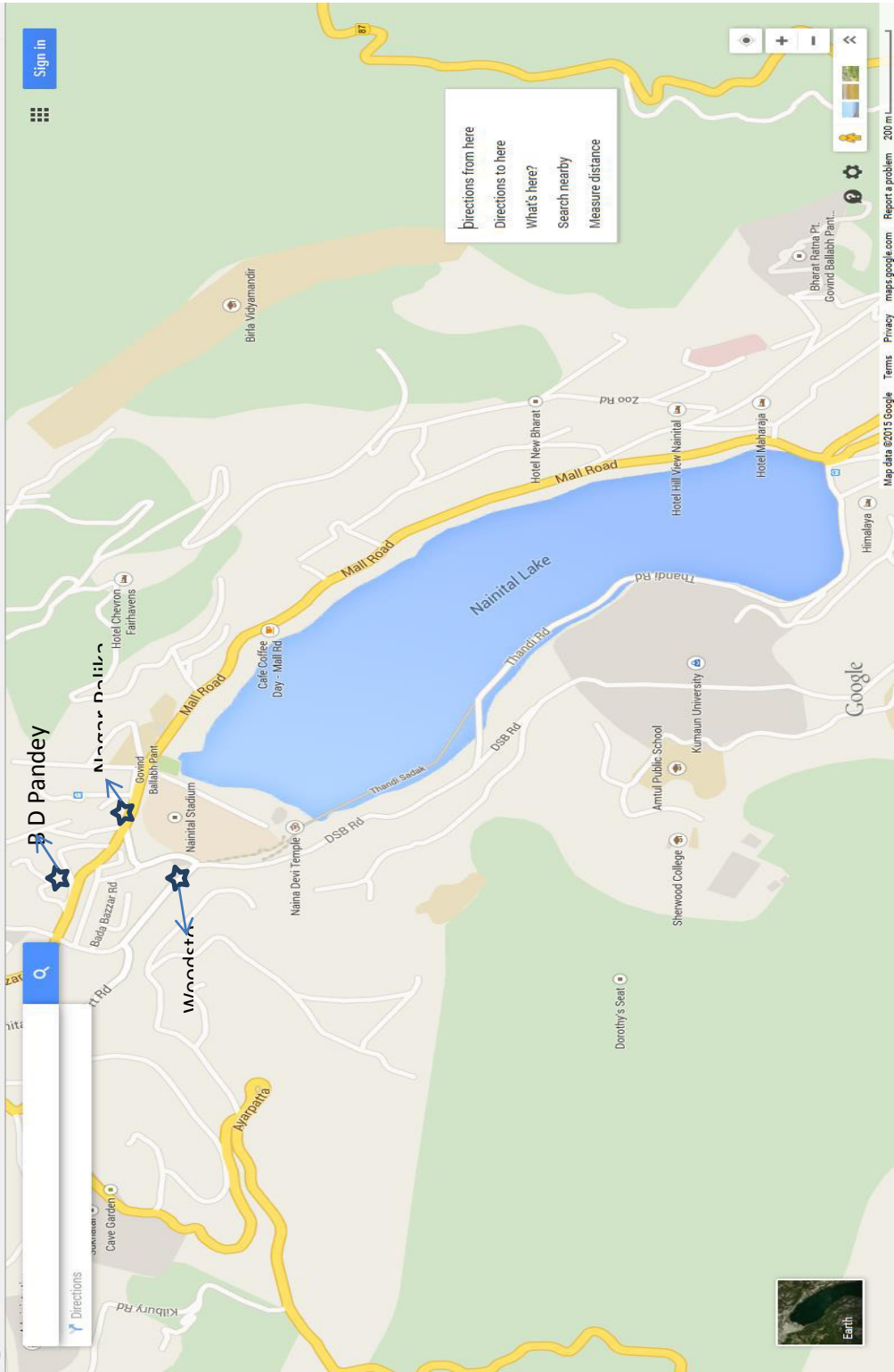
Secretary  
Nainital Lake Development Authority

**Annexure 4: Nanital Sub Project Layout**





Proposed Car Parking locations



## Annexure 5: Sample Outline of Spoil Management Plan (SMP)

### 1.0 Purpose and application:

SMP is to describe how the project will manage the spoil generated and reuse related to design and construction works. This is an integral part of EMP. The objective of SMP is to reuse of spoil from works in accordance with the spoil management hierarchy outlined in this document.

### 2.0 Objectives of SMP:

The objectives of SMP are:

- ☐ To minimize spoil generation where possible
- ☐ Maximize beneficial reuse of spoil from construction works in accordance with spoil management hierarchy
- ☐ Manage onsite spoil handling to minimize environmental impacts on resident and other receivers
- ☐ Minimize any further site contamination of land, water, soil
- ☐ Manage the transportation of spoil with consideration of traffic impacts and transport related emissions

### 3.0 Structure of SMP:

Section 1: Introduction of SMP

Section 2: Legal and other requirements

Section 3: Roles and responsibilities

Section 4: Identification and assessment of spoil aspects and impacts

Section 5: Spoil volumes, characteristics and minimization

Section 6: Spoil reuses opportunities, identification and assessment

Section 7: On site spoil management approach

Section 8: Spoil transportation methodology

Section 9: Monitoring, Reporting, Review, and Improvements

### 4.0 Aspects and Potential Impacts

The key aspects of potential impacts in relation to SMP are listed in table below

Aspect	Potential
Air Quality	Potential for high winds generating airborne dust from the stock
Sedimentation	Potential for sediment laden site runoff from spoil stockpiles and potential for spillage of spoil from truck on roads
Surface and Groundwater	Contamination of water (surface and ground water)
Noise	Associated with spoil handling and haulage and storage
Traffic	Impacts associated with spoil haulage
Land Use	Potential for spoil to be transported to a receivable site that doesn't have

<b>Aspect</b>	<b>Potential</b>
Design specifications	Limitations on opportunities to minimize spoil generation
Sustainability	Limited sites for storage, reuse opportunities

## **5.0 Spoil volumes, characteristics and minimization**

5.1 Spoil volume calculations: Estimate the volumes of spoils produced from each of the construction sites.

5.2 Characterization of spoil: Based on the type of spoil; characterization is done (sand stone, mud mix materials, reusable materials)

5.3 Adopt Spoil Reduce, Reuse Opportunities

An overview of the assessment methodology to be used is mentioned below.

- Consideration of likely spoil characteristics
- Identification of possible reuse sites
- Screening of possible reuse opportunities

5.4 Identification of possible safe disposal sites for spoil: Those spoils which can't be reuse shall be properly disposed in designated areas, such disposal areas should be identified in project locations. Such disposal areas should be safe from environmental aspects and there should be any legal and resettlement related issues. Such areas need to be identified and prior client approval should be obtained to use it as spoil disposal area. The local administration must be consulted and if required permission should be obtained from them.

5.5 Storage and stock piling

5.6 Transportation and haulage route

**6.0 Based on the above, the contractor will prepare a SMP as an integral part of EMP and submit it to the DSC for their review and approval.**



## **Annexure 6: Sample Traffic Management Plan (TMP)**

### **A. Principles**

1. One of the prime objectives of this TMP is to ensure the safety of all the road users along the work zone, and to address the following issues:
  - (i) the safety of pedestrians, bicyclists, and motorists travelling through the construction zone;
  - (ii) protection of work crews from hazards associated with moving traffic;
  - (iii) mitigation of the adverse impact on road capacity and delays to the road users;
  - (iv) maintenance of access to adjoining properties
  - (v) Avoid hazards in
  - (vi) addressing issues that may delay the project.

### **B. Operating Policies for TMP**

2. The following principles will help promote safe and efficient movement for all road users (motorists, bicyclists, and pedestrians, including persons with disabilities) through and around work zones while reasonably protecting workers and equipment.
  - (i) Make traffic safety and temporary traffic control an integral and high-priority element of every project from planning through design, construction, and maintenance.
  - (ii) Inhibit traffic movement as little as possible.
  - (iii) Provide clear and positive guidance to drivers, bicyclists, and pedestrians as they approach and travel through the temporary traffic control zone.
  - (iv) Inspect traffic control elements routinely, both day and night, and make modifications when necessary.
  - (v) Pay increased attention to roadside safety in the vicinity of temporary traffic control zones.
  - (vi) Train all persons that select, place, and maintain temporary traffic control devices.
  - (vii) Keep the public well informed.
  - (viii) Make appropriate accommodation for abutting property owners, residents, businesses, emergency services, railroads, commercial vehicles, and transit operations.

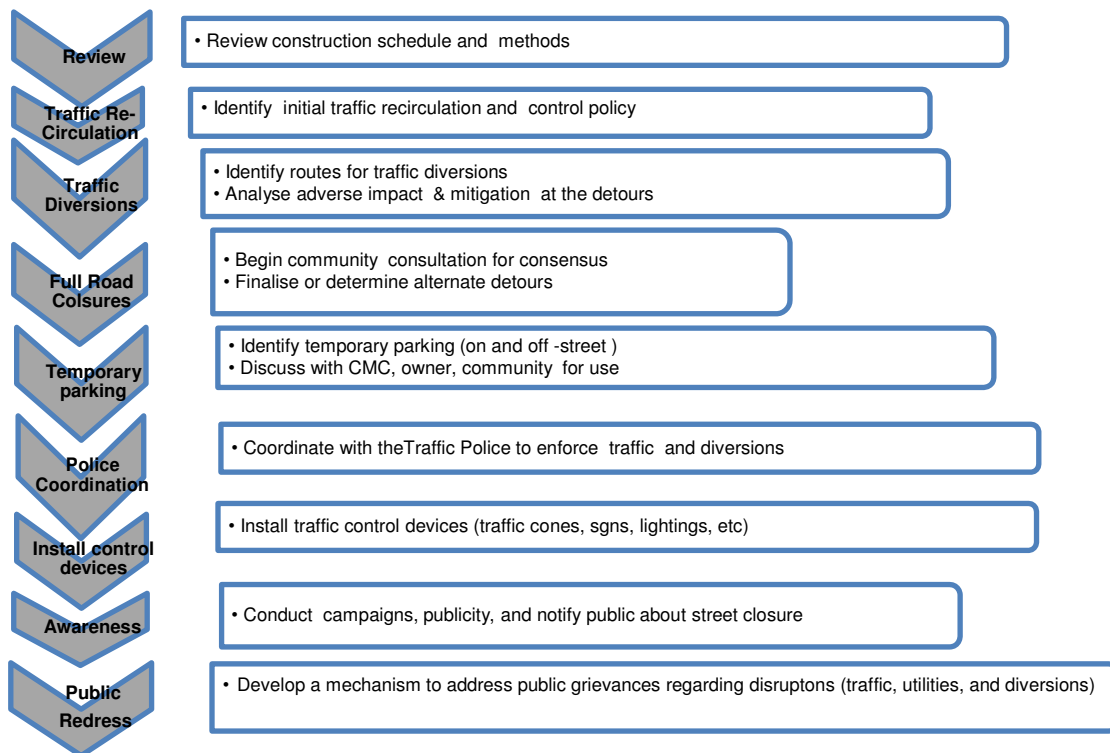
### **C. Analyze the impact due to street closure, if required**

3. Apart from the capacity analysis, a final decision to close a particular street and divert the traffic should involve the following steps:
  - (i) approval from the PIU, local administration to use the local streets as detours;
  - (ii) consultation with businesses, community members, traffic police, PWD, etc, regarding the mitigation measures necessary at the detours where the road is diverted during the construction;
  - (iii) determining of the maximum number of days allowed for road closure, and incorporation of such provisions into the contract documents;
  - (iv) determining if additional traffic control or temporary improvements are needed along the detour route;
  - (v) considering how access will be provided to the worksite;

- (vi) contacting emergency service, school officials, and transit authorities to determine if there are impacts to their operations; and
- (vii) developing a notification program to the public so that the closure is not a surprise. As part of this program, the public should be advised of alternate routes that commuters can take or will have to take as result of the traffic diversion.

4. If full road-closure of certain streets within the area is not feasible due to inadequate capacity of the Detour Street or public opposition, the full closure can be restricted to weekends with the construction commencing on Saturday night and ending on Monday morning prior to the morning peak period.

**Figure: Policy Steps for the TMP**



## **D. Public awareness and notifications**

5. As per discussions in the previous sections, there will be travel delays during the constructions, as is the case with most construction projects, albeit on a reduced scale if utilities and traffic management are properly coordinated. There are additional grounds for travel delays in the area, as most of the streets lack sufficient capacity to accommodate additional traffic from diverted traffic as a result of street closures to accommodate the works.

6. The awareness campaign and the prior notification for the public will be a continuous activity which the project will carry out to compensate for the above delays and minimize public claims as result of these problems. These activities will take place sufficiently in advance of the time when the roadblocks or traffic diversions take place at the particular streets. The reason for

this is to allow sufficient time for the public and residents to understand the changes to their travel plans. The project will notify the public about the roadblocks and traffic diversion through public notices, ward level meetings and city level meeting with the elected representatives.

7. The PIU will also conduct an awareness campaign to educate the public about the following issues:

- (i) traffic control devices in place at the work zones (signs, traffic cones, barriers, etc.);
- (ii) defensive driving behaviour along the work zones; and
- (iii) reduced speeds enforced at the work zones and traffic diversions.

8. It may be necessary to conduct the awareness programs/campaigns on road safety during construction.

9. The campaign will cater to all types of target groups i.e. children, adults, and drivers. Therefore, these campaigns will be conducted in schools and community centers. In addition, the project will publish a brochure for public information. These brochures will be widely circulated around the area and will also be available at the PIU, and the contractor's site office. The text of the brochure should be concise to be effective, with a lot of graphics. It will serve the following purpose:

- (i) explain why the brochure was prepared, along with a brief description of the project;
- (ii) advise the public to expect the unexpected;
- (iii) educate the public about the various traffic control devices and safety measures adopted at the work zones;
- (iv) educate the public about the safe road user behaviour to emulate at the work zones;
- (v) tell the public how to stay informed or where to inquire about road safety issues at the work zones (name, telephone, mobile number of the contact person; and
- (vi) indicate the office hours of relevant offices.

#### **E. Vehicle Maintenance and Safety**

10. A vehicle maintenance and safety program shall be implemented by the construction contractor. The contractor should ensure that all the vehicles are in proper running condition and it comply with roadworthy and meet certification standards of GoUK. All vehicles to be used shall be in perfect condition meeting pollution standards of GoUK. The vehicle operator requires a pre state of shift checklist. Additional safety precautions will include the requirement for:

- ☐ Driver will follow the special code of conduct and road safety rules of Government of UK.
- ☐ Drivers to ensure that all loads are covered and secured drivers to ensure operation equipment can't leak materials hauled
- ☐ Vehicles will be cleaned and maintained in designed places.

## **F. Install traffic control devices at the work zones and traffic diversion routes**

10. The purpose of installing traffic control devices at the work zones is to delineate these areas to warn, inform, and direct the road users about a hazard ahead, and to protect them as well as the workers. As proper delineation is a key to achieve the above objective, it is important to install good traffic signs at the work zones. The following traffic control devices are used in work zones:

- ☐ Signs
- ☐ Pavement Markings
- ☐ Channelizing Devices
- ☐ Arrow Panels
- ☐ Warning Lights

11. Procedures for installing traffic control devices at any work zone vary, depending on road configuration, location of the work, construction activity, duration, traffic speed and volume, and pedestrian traffic. Work will take place along major roads, and the minor internal roads. As such, the traffic volume and road geometry vary. The main roads carry considerable traffic; internal roads in the new city areas are wide but in old city roads very narrow and carry considerable traffic. However, regardless of where the construction takes place, all the work zones should be cordoned off, and traffic shifted away at least with traffic cones, barricades, and temporary signs (temporary “STOP” and “GO”).

12. The work zone should take into consideration the space required for a buffer zone between the workers and the traffic (lateral and longitudinal) and the transition space required for delineation, as applicable. For the works, a 30 cm clearance between the traffic and the temporary STOP and GO signs should be provided. In addition, at least 60 cm is necessary to install the temporary traffic signs and cones.

13. Traffic police should regulate traffic away from the work zone and enforce the traffic diversion result from full street closure in certain areas during construction. Flaggers/ personnel should be equipped with reflective jackets at all times and have traffic control batons (preferably the LED type) for regulating the traffic during night time.

14. In addition to the delineation devices, all the construction workers should wear fluorescent safety vests and helmets in order to be visible to the motorists at all times. There should be provision for lighting beacons and illumination for night constructions.

15. The PIU and contractor will coordinate with the local administration and traffic police regarding the traffic signs, detour, and any other matters related to traffic. The contractor will prepare the traffic management plan in detail and submit it along with the EMP for the final approval.

**Annexure 7 Minutes of Meetings**

- Site Visit on 11<sup>th</sup> and 12<sup>th</sup> January 2014 with DSC Consultants, PIU Officials
- Site Visit on 24<sup>th</sup> to 26<sup>th</sup> January 2014 with DSC Consultants, PIU Officials
- Stakeholder meeting on 25<sup>th</sup> January 2014 with Nagar Palika, GM-KMVN, Irrigation Department
- Stakeholder Meeting on 26<sup>th</sup> January 2014 with Boat Association, PWD, Prof Ajay Rawat (Retd)
- ADB Consultants site Visit on 29<sup>th</sup> and 30<sup>th</sup> January 2014
- ADB consultants meeting with Stakeholders in the office of Nagar Palika  
(Attendees: Nagar Palika, LDA, PWD, Jal Sansthan, Irrigation Department)
- Site Visit on 6th August 2014 and Meeting with Dr. B. S. Kotalia, Geologist
  - Site Visit on 23rd August 2014 by DSC Consultants
  - Site Visit on 20<sup>th</sup> April 2015 by PMC Consultants

दिनांक 16-08-2014 को आयुक्त, कुमायूँ मण्डल, नैनीताल की अध्यक्षता में ए०डी०बी० द्वारा सहायित पर्यटन योजनाओं के सम्बन्ध में आइए बैठक का कार्यवृत्त।

स्थान — झील विकास प्राधिकरण सभागार, नैनीताल।  
उपस्थिति — संलग्न।

बैठक का शुभारम्भ करते हुए उप निदेशक पर्यटन, नैनीताल द्वारा अध्यक्ष महोदय एवं उपस्थित प्रतिभागियों का स्वागत करते हुए अवगत कराया गया कि नैनीताल नगर के सौन्दर्यीकरण एवं पर्यटन विकास हेतु एशियन डेवलेपमेन्ट बैंक सहायित पर्यटन योजनाओं का पावर प्रेजेंटेशन ए०डी०बी० की प्रोजेक्ट इम्प्लीमेंटेशन युनिट भीमताल द्वारा किया जायेगा। इस बैठक में उपस्थित सम्मान्य सज्जन परियोजनाओं के विषय में अपने सुझाव देगे। पावर प्वाइंट प्रस्तुतिकरण से पूर्व ए०डी०बी० के अपर प्रोग्राम निदेशक श्री आर०के० जोशी द्वारा आयुक्त महोदय को बताया गया कि ए०डी०बी० कार्यक्रम चार राज्यों में 2012 से शुरू हुए। उनके द्वारा बताया गया कि पावर प्वाइंट प्रस्तुतिकरण में ए०डी०बी० द्वारा सहायित पर्यटन योजनाएँ प्रस्तावित मात्र हैं। जिसके सम्बन्ध में उपस्थित सज्जनों से प्राप्त सुझावों के उपरान्त सर्वसम्मति से प्रस्तावित योजनाओं को मूर्त रूप दिया जायेगा।

पी०आई०यू० भीमताल द्वारा सर्वप्रथम पावर प्वाइंट प्रेजेंटेशन के माध्यम से बताया गया कि हैरीटेज वाक सम्बन्धी योजना में तल्लीताल से प्रारम्भ होकर राजमवन-आलसेन्ट्स स्कूल-शेरवुड कॉलेज-गर्नीहाउस-सेन्टजोन्स चर्च से होकर मल्लीताल तक का मार्ग प्रस्तावित है। इस पर आयुक्त महोदय का अभिमत था कि हैरीटेज वाक हेतु प्रस्तावित भवनों में पर्यटकों के प्रवेश की अनुमति नहीं होने से इस प्रकार हैरीटेज वाक का कोई औचित्य नहीं जान पड़ता। मात्र गिरजाघरों को देखने से हैरीटेज वाक की सार्थकता सिद्ध नहीं होती है। इस पर श्री आर०के० जोशी, अपर कार्यक्रम निदेशक, द्वारा सहमति व्यक्त की गई।

(कार्यवाही — अपर कार्यक्रम निदेशक, पी०एम०यू०, यू०टी०डी०बी० देहरादून)

पावर प्वाइंट प्रेजेंटेशन के माध्यम से यह भी बताया गया कि लोअर माल रोड के साथ नैनी झील के किनारे पैदल मार्ग बनाया जाना है, इस प्रकार का पथ तल्लीताल से अल्फा होटल तक बना है, जिसे कैनेडी रोड के नाम से भी जाना जात है, इसी प्रकार मल्लीताल तक पैदल पथ विकसित किया जा सकता है। आयुक्त महोदय द्वारा यह पूछे जाने पर कि दुर्गा लाल शाह लाइब्रेरी क्वालिटी रेस्टोरेंट व शीतापुर आई हॉस्पिटल पर किस प्रकार पथ विकसित होगा। इस पर श्री जोशी द्वारा बताया गया कि इस पर सम्बन्धित पक्षों से वार्ता कर निर्णय लिया जायेगा, आयुक्त महोदय द्वारा तत्पुनः कार्यवाही हेतु निर्देशित किया गया।

(कार्यवाही — अपर कार्यक्रम निदेशक, पी०एम०यू०, यू०टी०डी०बी० देहरादून)

पी०आई०यू० भीमताल द्वारा पावर प्वाइंट प्रेजेंटेशन के माध्यम से बताया गया कि कैपिटल सिनेमा के पीछे की तरफ आर्ट गैलरी की तरह विकसित किया जा सकता है। इस पर आयुक्त महोदय द्वारा सचिव झील विकास प्राधिकरण को निर्देश दिये गये कि वह कैपिटल सिनेमा भवन तथा रिक हॉल के स्वामित्व की अद्यतन स्थिति ज्ञात करें, तभी प्रस्ताव को सहमति दी जा सकेगी।

(कार्यवाही — सचिव झील विकास प्राधिकरण नैनीताल)

पावर प्वाइंट प्रेजेंटेशन के माध्यम से श्री जोशी, अपर कार्यक्रम निदेशक, ए०डी०बी० द्वारा नैनी झील में तल्लीताल डाट के नीचे आर्क प्रोजेक्शन के साथ झील में लाइटिंग सिस्टम लगाने की जानकारी दी गयी, उनके

कमरा:.....2

**Date 16-08-2014: Minutes of the Meeting held under the Chairmanship of Commissioner Kumaun. Nainital to review ADB assisted Tourism Project**

Place: Conference Hall, Lake Development Authority (LDA), Nainital

Present: Attached

The meeting was started with the welcome address given by Deputy Director Tourism, Nainital, who informed that PIU Bhimtal will make a presentation on the upcoming schemes and the subprojects, which are being introducing in Nainital under ADB assisted project. The participants were invited to give their suggestions on the concept. The Addl. Program Director, IDIPT introduced the project overview and objectives of IDIPT that it is being implemented in 04 states in India. He informed that the subprojects will be finalized once the stakeholders are agreed on their proposal and their suggestions will be incorporated while finalizing the concept/plan.

PIU Bhimtal made a presentation and explained that a subproject related to Heritage Walk is proposed which will starts from Tallital to Raj Bhavan-Allcents School-Sherwood college-Garni House-Saintjohns Church to Mallital route. The Commissioner Kumaon Region raised his concern that the tourists are not being permitted to enter into these respective buildings therefore there is no use of proposing such heritage walk in the subproject. Mere watching Churches, the heritage walk does not complete effectively. The Addl Program Director, Mr RK Joshi had shown his agreement on the suggestion.

(Action: APD, PMU-UTDB Dehradun)

It was informed that a pedestrian road is proposed along the Naini Lake on Lower Road, needs to be made similar to a pedestrian road built from Tallital to Alfa Hotel which is called Kanady Road. Similarly pedestrian road can be stone pitched to Mallital. Commissioner, Kumon asked, what type of road will be developed from Durga Lal Shah Library Quality Restaurant and Sitapur Eye Hospital. It was informed by Mr RK Josh that the decision will be taken after due consultation with the concerned department. The outcome will be informed to the Chairperson of the meeting. (Action: APD, PMU-UTDB Dehradun)

It was informed by the PIU Bhimtal that the development work for tourism purpose from Capital Cinema to Art Gallery can be carried out. In this connection Commissioner Kumaon Region directed Secretary LDA to enquire the current status of the ownership of Capital Cinema building to Ring Hall area. The permission on the proposal will be granted accordingly.

(Action: Secretary, LDA Nainital)

Mr RK Joshi, Addl Program Director explained the concept of installation of lighting system in Naini Lake below Tallital dat along the arch projection. He ensured that there will be no structural change in the present landscape. Everybody in the meeting agreed jointly.

(Action: APD, PMU-UTDB Dehradun)

(2)  
द्वारा बताया गया कि मूल स्वरूप से छेड़छाड़ नहीं की जानी है। प्रस्ताव पर सर्वसम्मति से सहमति दी गयी।  
(कार्यवाही — अपर कार्यक्रम निदेशक, पी०एम०यू०,यू०टी०डी०बी० देहरादून)

पावर प्वाइंट प्रेजेंटेशन के माध्यम से बताया गया कि रिक्शा स्टैंड मल्लीताल के समीप शेड बनाने सम्बन्धी योजना प्रस्तावित है। पूर्व से बने शेड में स्थानाभाव के कारण सुलभ शौचालय से सटे स्थान पर रिक्शा शेड का विस्तार किया जाना तय किया गया।

नैनीताल में पार्किंग की गम्भीर समस्या के विषय में एक बहुमंजिली पार्किंग मल्लीताल प्लैट में न्यू क्लब के समीप बनाने हेतु आयुक्त महोदय द्वारा सुझाव दिये जाने पर बैठक में सर्वसम्मति से सहमति दी गयी, इस पर समाजसेवी श्री गंगा प्रसाद साह द्वारा बताया गया इस प्रकार के पार्किंग बहुत उपयोगी होगी। इस सम्बन्ध में आयुक्त महोदय द्वारा श्री जोशी, अपर कार्यक्रम निदेशक को निर्देशित किया गया कि वह सचिव डी०एस०ए०, सचिव न्यू क्लब तथा नगर पालिका परिषद के साथ बैठक कर शीघ्र अवगत कराये।

(कार्यवाही — अपर कार्यक्रम निदेशक, पी०एम०यू०,यू०टी०डी०बी० देहरादून)

बैठक में श्री अनूप साह, प्रख्यात फोटो आर्टिस्ट एवं पर्यावरणविद द्वारा बताया गया कि नैनीताल में बारापत्थर-लेण्ड्सएण्ड-टिफिन टॉप मार्ग खराब हो चुका है इन स्थानों पर साइनेज आदि भी नहीं लगे हैं पूर्व में लगे साइनेज खराब हो गये हैं इन्हें ठीक कराया जाना आवश्यक है। इस पर बैठक में सर्वसम्मति से सहमति दी गयी।

(कार्यवाही — पी०आई०यू० भीमताल)

पावर प्वाइंट प्रेजेंटेशन के माध्यम से टॉयलेट की आवश्यकता एवं गारवेज निस्तारण के बारे में बताया गया। बैठक में माउण्टटिफिन सेन्टर के समीप, एवं टूटा पहाड़ भवाली रोड में टॉयलेट निर्माण हेतु निर्णय लिया गया। माल रोड में टॉयलेट निर्माण हेतु भूमि नगर पालिका द्वारा उपलब्ध कराई जायेगी एवं टूटा पहाड़ भवाली रोड में टॉयलेट निर्माण हेतु केन्ट बोर्ड से एन०ओ०सी० प्राप्त करनी होगी। इसके अतिरिक्त नेशनल होटल, नया बाजार तल्लीताल के समीप एवं मोहन को० चौराहे मल्लीताल के समीप टॉयलेट के खुद्वार का निर्णय लिया गया।

(कार्यवाही — पी०आई०यू०,ए०डी०बी० भीमताल/नगर पालिका परिषद,नैनीताल)

पावर प्वाइंट प्रेजेंटेशन के माध्यम से बताया गया कि तल्लीताल एवं मल्लीताल वोट स्टैंड में जैटीज प्रस्तावित हैं। जिस पर श्री साह डी०एस०ए० द्वारा बताया गया कि नैनी झील के किनारे जगह-जगह जैटीज का निर्माण किया जा चुका है। इसकी कोई आवश्यकता नहीं है। जैटीज निर्माण हेतु बैठक में असहमति व्यक्त की गयी।

(कार्यवाही — पी०आई०यू०,ए०डी०बी० भीमताल)

श्री अनूप साह द्वारा बताया गया कि टिफिन टॉप जाने वाले मार्ग से पहले जंगल के रास्ते जाने वाली वन विभाग की बटिया (रास्ता) खराब हो चुके हैं इनको ठीक कराया जाय, इस सम्बन्ध में प्रभागीय वनाधिकारी नैनीताल द्वारा बताया गया कि ठीक कराने से पूर्व वन विभाग से अनुमति लेनी होगी, इस पर श्री जोशी, अपर कार्यक्रम निदेशक, ए०डी०बी० द्वारा बताया गया कि वन विभाग अगर इन्हें स्वयं ठीक करवाना चाहें तो वन विभाग को स्वीकृत धनराशि दी जा सकती है। इस पर आयुक्त महोदय द्वारा यथोचित कार्यवाही हेतु निर्देश प्रभागीय वनाधिकारी नैनीताल को दिये गये।

(कार्यवाही — अपर कार्यक्रम निदेशक, पी०एम०यू०,यू०टी०डी०बी० देहरादून/प्रभागीय वनाधिकारी,नैनीताल)

कमरा.....3

It was explained that a shade is proposed near Rikshaw stand, Mallital. It was decided to extend the already constructed shade placed adjacent of Sulabh Toilet.

Keeping the crises of parking in Nainital, Commissioner, Kumaon suggested to build a multiplex parking at Mallital Flat near New Club, which was agreed by all. Mr Ganga Prasad Shah, Social Worker appreciated the concept of multiplex the parking as it will be beneficial to locals as well as tourists. In this regards, the Commissioner, Kumaon Region directed to Mr RK Joshi, Addl. Program Director that he should arrange a meeting with Secretary DSA, Secretary New Club and Municipality Nainital and inform the outcome of meeting to him.

(Action: APD, PMU-UTDB Dehradun)

Mr Anup Shah, the famous photographer and environmentalist informed that the route from Barapather-Landsand-Tiffin Top in Nainital is damaged at most of the places also there are no signage displayed. Vintage signage are in damaged and in poor condition which needs to be replaced immediate. All were agrred on the point.

(Action: PIU, Bhimtal)

The problem of garbage disposal and need of toilets were raised during presentation. It was decided that toilets will be constructed near Mount Training Centre and at broken hill, Bhawali Road. To do this the NOC will be obtained from Municipal Council, Nainital to construct toilet at Mall Road and NOC from Cantt Board to constrcut toilet at broken hill Bhawali Road. In addition to this it was also decided that the repair of toilets will be carried out at National Hotel, near New Bazar Tallital and Mohan Ko Chowraha, Mallital.

(Action: PIU Bhimtal and Municipal Council Nainital)

It was explained that laying of jetties at boat stand are proposed at Tallital and Mallital. Mr Shah DSA commented that a numbers of jetties were already built along the Naini lake. Therefore, it was decided that new jetties are not needed.

(Action: PIU Bhimtal)

Mr. Anup Shah informed that the forest route of Tiffin Top is damaged and need to be repaired, for which NOC will be needed from the forest dept. APD informed if forest dept. Can do its own the money can be reimbursed to them for the work.

(Action: APD, PMU-UTDB Dehradun/Divisional Forest Officer Nainital)

(3)

आयुक्त महोदय द्वारा अपेक्षा की गयी कि बारपथर से लैण्डसाण्ड होते हुए टिफिन टॉप ट्रैक एवं झेनेज का सुधार, टंकी से चायनापीक ट्रैक का सुधार हेतु प्रस्ताव पी०आई०यू०ए०डी०बी० (पर्यटन) भीमताल द्वारा तैयार किया जाय। रनोव्यू की दूरबीन तथा राजभवन के हेरिटेज सुदृढीकरण हेतु भी प्रस्ताव तैयार किये जायें।


(कार्यवाही — पी०आई०यू०ए०डी०बी० भीमताल)

आयुक्त महोदय द्वारा यह अपेक्षा भी की गयी कि जू से कैलाखान वन वे मार्ग के सुधार का प्रस्ताव तैयार कर लिया जाय तथा इस हेतु विद्युत विभाग के साथ पी०आई०यू० भीमताल संयुक्त निरीक्षण कर आवश्यक कार्यवाही करेगा।

(कार्यवाही — पी०आई०यू०ए०डी०बी० भीमताल)

पावर प्वाइंट प्रेजेंटेशन के माध्यम से बताया गया कि नैनीताल-हल्द्वानी मार्ग पर ताकुला में गोंधी आश्रम को संग्रहालय के रूप में विकसित किया जा सकता है। इस पर बैठक में सहमति दी गयी।

बैठक के अन्त में क्षेत्रीय विधायक श्रीमती सरिता आर्या द्वारा उपस्थित महानुभावों का उनके द्वारा दिये गये सुझावों के लिए धन्यवाद दिया गया, तथा बैठक की सफलता के लिए आयुक्त कुमायूँ मण्डल नैनीताल का आभार व्यक्त किया गया। अन्त में बैठक सघन्यवाद विसर्जित की गयी।

  
(अवेनेन्द्र सिंह नयाल)  
आई०ए०एस०  
आयुक्त, कुमायूँ मण्डल,  
नैनीताल।

Commissioner, Kumaon Region expected to prepare a detailed proposal by PIU Bhimtal for repair work of drainage system from Barapathar - Landsand to Tiffin Top track and repair of Tanki to Chinapeak track. Also prepare a proposal to procure Snow view Telescope and Raj Bhavan heritage renovation work under the subproject.

(Action: PIU Bhimtal)

Commissioner, Kumaon Region also desired to prepare a plan for repair work of one way route from Zoo to Kailakhan, for which a joint inspection should be done by PIU Bhimtal with Electricity Department.

(Action: PIU Bhimtal)

It was agreed to develop museum at Gandhi Ashram situated at takula at Nainital-Haldwani road.

(Action: PIU Bhimtal)

At the end of meeting, regional MLA Smt Sarita Arya thanked to all participants for their meaningful participation and suggestions. She also thanked to Commissioner, Kumaon Region for organizing such a successful consultation meeting. Meeting was closed with thank to the chairperson.

(Avenedra Singh Nayal) IAS  
Commissioner Kumaun Region, Nainital



दिनांक 04.08.2014 को आयुक्त महोदय, कुमायूँ मण्डल नैनीताल की अध्यक्षता में  
आहूत एशियन डेवलपमेंट बैंक द्वारा सहायित पर्यटन योजनाओं की समीक्षा बैठक का कार्यवृत्त।

स्थान : उत्तराखण्ड प्रशासन अकादमी, नैनीताल।

उपस्थिति : 1. श्री जे.सी. बेरी, उप निदेशक, पर्यटन, नैनीताल  
2. श्री एच.सी. शर्मा, सहायक अभियन्ता, पी.आई.यू., पर्यटन, भीमताल  
3. श्री जगत सौंठियाल, कम्युनिटी डेवलपमेंट आफीसर, पी.आई.यू., पर्यटन, भीमताल

#### बैठक का कार्यवृत्त

बैठक का आरम्भ करते हुए आयुक्त महोदय कुमायूँ मण्डल नैनीताल द्वारा बैठक में उपस्थित प्रोजेक्ट इम्प्लीमेंटेशन यूनिट, पर्यटन भीमताल के द्वारा ए.डी.बी. सहायित प्रस्तावों की प्रगति की जानकारी चाही गयी। कम्युनिटी डेवलपमेंट आफीसर तथा श्री एच.सी. शर्मा, सहायक अभियन्ता, पी.आई.यू. भीमताल द्वारा विस्तारपूर्वक ए.डी.बी. सहायित योजनाओं की जानकारी चरणबद्ध रूप में निम्नवत दी गई।

एशियन डेवलपमेंट बैंक सहायित 'पर्यटन विकास योजना' में स्वीकृत कार्यों की प्रगति -

प्रथम चरण के कार्य :

ए.डी.बी. द्वारा सहायित पर्यटन योजनाओं की कार्यदायी संस्था के सम्बन्ध में कम्युनिटी डेवलपमेंट आफीसर श्री जगत सौंठियाल द्वारा आयुक्त महोदय को अवगत कराया गया कि ए.डी.बी. सहायित पर्यटन योजनाओं की कार्यदायी संस्था कुमायूँ मण्डल में पी.आई.यू. (प्रोजेक्ट इम्प्लीमेंटेशन यूनिट) भीमताल है। जो अप्रैल 2013 से भीमताल में स्थापित है तथा उत्तराखण्ड पर्यटन विकास परिषद मुख्यालय में गठित पी.एम.यू. (प्रोजेक्ट मैनेजमेंट यूनिट) के परियोजना निदेशक से निर्देश प्राप्त करती है। पी.आई.यू. भीमताल द्वारा टेण्डर प्रक्रिया अपनाते हुए ठेकेदार से निर्माण कार्य कराये जायेंगे। निर्माण कार्यों का सुपरविजन, डिजाइन एवं सुपरविजन कन्सल्टेंट वापकोस (WAPCOS) नामक संस्था द्वारा किया जायेगा।

1. पर्यटक आवास गृह परिचय के भवन का नवीनीकरण/उच्चीकरण-  
सहायक अभियन्ता पी.आई.यू. भीमताल श्री एच.सी. शर्मा द्वारा बैठक में बताया गया कि पर्यटक आवास गृह परिचय के भवन का नवीनीकरण/उच्चीकरण स्वीकृत लागत 439.00 के कार्य की निविदा कराये जाने के उपरान्त दिनांक 7 जुलाई 2014 से निर्माण कार्य प्रारम्भ कर दिया गया है। योजना का कार्य 18 माह में पूर्ण करा लिया जायेगा।

(कार्यवाही- प्रोजेक्ट मैनेजर, पी.आई.यू.)

2. नौकुचियाताल झील का एअरेशन एवं बायोमैनुपुलेशन-  
योजना की स्वीकृत लागत रु 1291.00 लाख बतायी गयी। सहायक अभियन्ता श्री शर्मा द्वारा बताया गया कि ठेकेदार द्वारा निर्माण कार्यों के अन्तर्गत पम्प हाउस का निर्माण कार्य दिनांक 16.08.2014 से आरम्भ कर दिया जायेगा। योजना का कार्य 09 माह में पूर्ण करा लिया जायेगा।

(कार्यवाही- प्रोजेक्ट मैनेजर, पी.आई.यू.)

### **REVIEW MEETING OF ADB ASSISTED PROJECTS UNDER THE CHAIRMANSHIP OF COMMISSIONER KUMAON MANDAL ON 04 AUG 2014**

Venue : Uttarakhand Administration Academy, Nainital  
Attendance : Sh JC Beri, Deputy Director, Tourism, Nainital  
Sh HC Sharma, Support Engineer, PIU Bhimtal  
Sh Jagat Sonthiyal, Community Development Officer, PIU Bhimtal

On commencement of the meeting, Commissioner, Kumaon Mandal as the Chairman seeks the progress of all the ADB assisted projects from the present members. Sh Jagat Sonthiyal, Community Development Officer, and Sh HC Sharma, Support Engineer, PIU Bhimtal briefed the tranche wise progress of works of ADB assisted projects as per succeeding paragraphs.

Progress of sanctioned works for Tourism Development Scheme under ADB Assisted Tranche II

Sh Jagat Sonthiyal, Community Development Officer, PIU Bhimtal informed that PIU Bhimtal is functioning under the guidance of Program Director, PMU, ADB (IDIPT), Uttarakhand Tourism Development Board since Apr 2013. PIU Bhimtal is an implementing unit for execution of works through bidding process. Supervision and designing of construction works is being executed by DSC Bhimtal (WAPCOS).

Renovation of Tourist Rest House, Parichay Building

Sh HC Sharma, Support Engineer, PIU Bhimtal intimated that on completion of bidding process, renovation works of Tourist Rest House, Parichay has been started from 07 Jul 2014 with a sanctioned cost of Rs 439.00 lakhs. The project work shall be completed in 18 months.

(Action – Project Manager, PIU Bhimtal)

Aeration and Bio-manipulation of Naukuchiatal Lake

Sanctioned amount for the sub project is Rs 1291.00 lakh. Sh Sharma intimated that work of pump house in construction work has been started from 16 Aug 2014. The project work shall be completed in 09 months.

(Action – Project Manager, PIU Bhimtal)

3. पिथौरागढ़ से चण्डाक ट्रेक/पैदल मार्ग एवं व्यू प्वाइंट्स का विकास-

सहायक अभियन्ता पी.आई.यू. भीमताल द्वारा आयुक्त महोदय को बताया गया कि इस योजना की स्वीकृत लागत रु 85.00 लाख है। निर्माण कार्य 06.06.2014 से प्रारम्भ किया जा चुका है। योजना के कार्य 12 माह में पूर्ण करा लिये जायेंगे।

(कार्यवाही- प्रोजेक्ट मैनेजर, पी.आई.यू.)

4. मोस्टमनू मंदिर क्षेत्र का पर्यटन स्थल के रूप में विकास-

सहायक अभियन्ता पी.आई.यू. भीमताल द्वारा बताया गया कि योजना की स्वीकृत लागत रु 81.00 लाख है। योजना के निर्माण कार्य 06.06.2014 को प्रारम्भ किए गए हैं। योजना 12 माह में पूर्ण कर ली जायेगी।

(कार्यवाही- प्रोजेक्ट मैनेजर, पी.आई.यू.)

5. पिथौरागढ़ किले का संरक्षण तथा सौंदर्यीकरण-

योजना की स्वीकृत लागत रु 445.00 लाख बतायी गयी। पी.आई.यू. भीमताल द्वारा बताया गया कि निविदा के प्रपत्र तैयार करके अनुमोदन हेतु ए.डी.बी. को प्रेषित किए गए हैं। निविदा की कार्यवाही हो जाने के पश्चात् योजना के कार्य 12 माह में पूर्ण करा लिए जायेंगे।

(कार्यवाही- प्रोजेक्ट मैनेजर, पी.आई.यू.)

द्वितीय चरण के कार्य:

1. नैनीताल में मॉलरोड तथा नैनी झील का सौंदर्यीकरण-

पी.आई.यू. भीमताल के कम्युनिटी डेवलपमेंट ऑफिसर श्री जगत सौंडियाल द्वारा आयुक्त महोदय को बताया गया कि योजना पर सब प्रोजेक्ट एप्रेजल रिपोर्ट (एस.ए.आर.) तैयार की जा चुकी है। अनुमोदन हेतु उत्तराखण्ड पर्यटन विकास परिषद, देहरादून को भेजा जाना है। यू.टी.डी.बी. के अनुमोदनोपरान्त डी.पी.आर. के गठन की कार्यवाही की जायेगी।

(कार्यवाही- प्रोजेक्ट मैनेजर, पी.आई.यू.)

2. हरिश् ताल एवं लोक संस्कृति संग्रहालय भीमताल का पर्यटन दृष्टि से विकास-

योजना की सब प्रोजेक्ट एप्रेजल रिपोर्ट तैयार किए जाने हेतु सर्वेक्षण कार्य जारी होना बताया गया।

(कार्यवाही- प्रोजेक्ट मैनेजर, पी.आई.यू.)

Development of Chandak Trek/Pedestal Route and view points

Support Engineer, PIU Bhimtal informed the chairman that sanctioned cost of the sub project is Rs 85.00 lakhs. Work of the project has been started from 06 Jun 2014 and project shall be completed in 12 months.

(Action – Project Manager, PIU Bhimtal) Development of Mostmanu Temple Area as Tourist Destination

Support Engineer, PIU Bhimtal informed the chairman that sanctioned cost of the project is Rs 81.00 lakhs. Work of the project has been started from 06 Jun 2014 and project shall be completed in 12 months.

(Action – Project Manager, PIU Bhimtal)

Beautification and conservation of Pithoragarh Fort

Sanctioned cost of the project work is Rs 445.00 lakhs. PIU Bhimtal informed the chairman that DPR and bidding documents has been prepared and forwarded to ADB for sanction. On receipt of approval the work shall be completed in 12 months.

(Action – Project Manager, PIU Bhimtal) Tranche

- III

Beautification of Mall Road and Naini Lake in Nainital

Sh Jagat Sonthiyal, Community Development Officer, PIU Bhimtal informed the chairman that SAR of the project has been prepared by them and the same is required to be forwarded to Uttarakhand Tourism Development Board for Approval. On getting approval, DPR shall be prepared.

(Action – Project Manager, PIU Bhimtal) Development of Harish Tall and Lok Sanskriti Sangrahalaya, Bhimtal for Tourism View SAR of the project is to be prepared after completion of survey.

(Action – Project Manager, PIU Bhimtal)

3. बौर जलाशय में साहसिक क्रीड़ा एवं पर्यटन विकास-  
पी.आई.यू. भीमताल द्वारा बताया गया कि योजना पर सब प्रोजेक्ट एप्रैजल रिपोर्ट (एस.ए.आर.) तैयार की जा चुकी है। अनुमोदन हेतु उत्तराखण्ड पर्यटन विकास परिषद, देहरादून को भेजा जाना है। यू.टी.डी.बी. के अनुमोदनोपरान्त डी.पी.आर. के गठन की कार्यवाही की जायेगी।

(कार्यवाही- प्रोजेक्ट मैनेजर, पी.आई.यू.)

4. जागेश्वर मंदिर/परिक्षेत्र में पर्यटन विकास-  
पी.आई.यू. भीमताल द्वारा बताया गया कि योजना पर सब प्रोजेक्ट एप्रैजल रिपोर्ट (एस.ए.आर.) तैयार की जा चुकी है। अनुमोदन हेतु उत्तराखण्ड पर्यटन विकास परिषद, देहरादून को भेजा जाना है। यू.टी.डी.बी. के अनुमोदनोपरान्त डी.पी.आर. के गठन की कार्यवाही की जायेगी।

(कार्यवाही- प्रोजेक्ट मैनेजर, पी.आई.यू.)

5. अल्मोड़ा किले का संरक्षण तथा सौंदर्यीकरण-  
पी.आई.यू. भीमताल द्वारा बताया गया कि योजना पर सब प्रोजेक्ट एप्रैजल रिपोर्ट (एस.ए.आर.) तैयार की जा चुकी है। अनुमोदन हेतु उत्तराखण्ड पर्यटन विकास परिषद, देहरादून को भेजा जाना है। यू.टी.डी.बी. के अनुमोदनोपरान्त डी.पी.आर. के गठन की कार्यवाही की जायेगी।

(कार्यवाही- प्रोजेक्ट मैनेजर, पी.आई.यू.)

आयुक्त महोदय द्वारा पी.आई.यू. भीमताल को स्पष्ट निर्देश दिए गए कि वह ए.डी.बी. सहायतित पर्यटन योजनाओं का पर्ट चार्ट उप निदेशक पर्यटन नैनीताल को उपलब्ध कराते हुए समस्त कार्यो की मासिक प्रगति आख्या नियमित रूप से भेजना सुनिश्चित करें।

ए.डी.बी. द्वारा सहायतित पर्यटन योजनाओं की समीक्षा के दौरान पी.आई.यू. भीमताल द्वारा आयुक्त महोदय के संज्ञान में लाया गया कि पर्यटक आवास गृह परिचय के परिसर में सिंचाई विभाग द्वारा स्थापित 06 टैंट में से तीन टैंट को रिलोकेट (Relocate) करके कुमायूँ मण्डल विकास निगम के परामर्शानुसार अन्यत्र स्थानान्तरित किया जाना है। स्थानान्तरित टैंट के स्थान पर लैंडस्केपिंग तथा कैफेडेक का निर्माण 'परिचय' भवन के नवीनीकरण/उच्चीकरण योजना के अन्तर्गत किया जायेगा।

(कार्यवाही- प्रोजेक्ट मैनेजर, पी.आई.यू.)

आयुक्त महोदय के संज्ञान में यह भी लाया गया कि सिंचाई विभाग के द्वारा 'परिचय' परिसर में स्थापित 06 टैंट का हस्तान्तरण पर्यटन विभाग/कुमायूँ मण्डल विकास निगम को नहीं किया गया है तथा लगाए गए टैंट की गुणवत्ता भी खराब प्रतीत होती है। इस पर आयुक्त महोदय द्वारा उप निदेशक पर्यटन नैनीताल को निर्देश दिए गए कि वह खराब गुणवत्ता के लिए सम्बन्धित कार्यदायी संस्था का दायित्व निर्धारित करें।

(कार्यवाही- उप निदेशक पर्यटन, नैनीताल)

## Development of Tourism and adventures games in Bour Jalsay

PIU Bhimtal intimated that SAR of the project has been prepared by them and the same is required to be forwarded to Uttarakhand Tourism Development Board for Approval. On getting necessary approval, DPR shall be prepared.

(Action – Project Manager, PIU Bhimtal)

## Development of Jageshwar Temple/Area

PIU Bhimtal intimated that SAR of the project has been prepared by them and the same is required to be forwarded to Uttarakhand Tourism Development Board for Approval. On getting necessary approval, DPR shall be prepared.

(Action – Project Manager, PIU Bhimtal)

## Beautification and restoration/conservation of Almora Fort

PIU Bhimtal intimated that SAR of the project has been prepared by them and the same is required to be forwarded to Uttarakhand Tourism Development Board for Approval. On getting necessary approval, DPR shall be prepared.

(Action – Project Manager, PIU Bhimtal)

The chairman has given clear directions to provide the part chart of ADB Assisted project to Deputy Director, Tourism, Nainital and ensure timely submission of monthly progress report of all the project.

During the review meeting of progress of ADB Assisted Project, PIU Bhimtal informed that as per the opinion of GMVN, out of 06 tents established by Irrigation Department in the premises of Paryatak Awas Grah, Parichay, 03 tents are to be relocated in other place. In these places landscaping and cafedeck work is to be carried under the renovation work of Parichay.

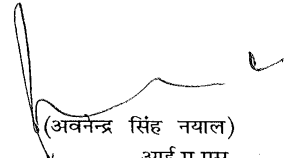
(Action – Project Manager, PIU Bhimtal)

It has also been bring to the notice of chairman that 06 tents established by Irrigation Department in the premises of Parichay has not been transferred to Tourism Department/KMVN and quality of the tents are poor. In this regard, chairman directed the Deputy Director Tourism Nainital to fix the responsibility of the implementing agency for poor quality.

(Action – Project Manager, PIU Bhimtal)

आयुक्त महोदय द्वारा पी.आई.यू. भीमताल को उप निदेशक पर्यटन नैनीताल के सहयोग से यथाशीघ्र जनपरामर्श बैठक आयोजित करने के निर्देश दिए गए। इस बैठक के लिए दिनांक 16 अगस्त 2014 की तिथि निर्धारित की गई।

बैठक के दौरान आयुक्त महोदय द्वारा अपेक्षा की गई कि पी.आई.यू. (पर्यटन) भीमताल द्वारा कार्यों की गुणवत्ता एवं गति बनाए रखी जाय। यदि कोई समस्या कार्यों की प्रगति में आती है तो उसे उनके संज्ञान में लाया जाय। अंत में बैठक सधन्यवाद विसर्जित की गई।



(अवनेन्द्र सिंह नयाल)  
आई.ए.एस.  
आयुक्त,  
कुमायूं मण्डल, नैनीताल

The chairman has further directed PIU Bhimtal to organize a janpramarsh meeting with assistance of Deputy Director, Tourism, Nainital. Date fixed for the meeting was 16 Aug 2014.

During the meeting, chairman expect PIU Bhimtal to maintian the progress and quality of works. In case of arise of any problem in the project works, the same is to be being to the notice of Chairman.

Meeting end with vote of thanks to the chair.

दिनांक 05.06.2014 को अध्यक्ष मॉनिटरिंग कमेटी नैनीताल की अध्यक्षता में एशियन डेवलपमेंट बैंक (ए.डी.बी.) द्वारा सहायित पर्यटन योजनाओं की आहुत बैठक का कार्यपुस्त।

स्थान — जिलाधिकारी सभागार नैनीताल।

उपस्थिति —

1. श्री अक्षत गुप्ता (आई.ए.एस.) अध्यक्ष मॉनिटरिंग कमेटी/जिलाधिकारी, नैनीताल।
2. श्री आर.के.जोशी अपर कार्यक्रम निदेशक, (आई.डी.आई.पी.टी.), देहरादून।
3. डा. आर.एस.चौहान एच.ओ.डी. एक्वाकल्चर जी.वी.पन्त विश्वविद्यालय, पन्तनगर।
4. श्री अनिल मणिक डी.जी.एम. प्राइमरवर्ल्ड।
5. श्री सी.एम.साह परियोजना अभियन्ता, एल.डी.ए., नैनीताल।
6. श्री बलवन्त सिंह रावल परियोजना प्रबन्धक, पी.आई.यू., भीमताल।
7. श्री हरिश चन्द्र शर्मा सहायक अभियन्ता, पी.आई.यू., भीमताल।
8. श्री राजा जोशी सहायक अभियन्ता, पी.आई.यू., भीमताल।
9. श्री बी.सी.त्रिवेदी, स्वागती, पर्यटन कार्यालय, नैनीताल।

1. बैठक का शुभारम्भ करते हुए अपर कार्यक्रम निदेशक, (आई.डी.आई.पी.टी.), देहरादून ने अध्यक्ष महोदय की तरफ से सभी सदस्यों का स्वपरिचय कराया तत्पश्चात परियोजना क्रियान्वयन इकाई के परियोजना प्रबन्धक, पी.आई.यू., भीमताल द्वारा एशियन डेवलपमेंट बैंक (ए.डी.बी.) सहायित कार्यक्रम नैनीताल जिले में वर्तमान चरण एवं आगामी चरण में प्रस्तावित परियोजनाओं की वर्तमान स्थिति से अवगत कराया गया। परियोजना प्रबन्धक द्वारा बताया गया कि प्रथम चरण के अन्तर्गत कार्य निम्न है —

2. (क) परिचय रिपोर्ट का उन्नीकरण।  
(ख) नौकुचियाताल झील में एयरेशन का कार्य।

उपरोक्त कार्यों के कोन्ट्रैक्ट आर्वाइड हो चुके हैं, एवं कार्य शीघ्र प्रारम्भ होने हैं।

चरण द्वितीय में प्रस्तावित कार्य, नैनीझील में म्युजिकल फाउन्टेन, मालरोड का सौन्दर्यकरण, सी वर्ष से अधिक आयु वाले मुख्य भवनों का फासाद इल्युमिनेशन एवं उपरोक्त भवनों तक हेरिटेज वॉक, पाइन्स घाट का सौन्दर्यकरण ताकुला आश्रम को म्युजियम के तर्ज पर विकसित करना, लोक संस्कृत संग्रहालय खुटानी को विकसित करना। एवं परियोजना प्रारम्भ करने से पूर्व इसके संचालन एवं रखरखाव (O&M) का विशेष ध्यान रखा जाय।

द्वितीय चरण के कार्यों की एस.ए.आर. प्रगति पर है।

3. अध्यक्ष महोदय द्वारा डा.आर.एस.चौहान एच.ओ.डी. एक्वाकल्चर जी.वी.पन्त विश्वविद्यालय, पन्तनगर को निर्देशित किया कि नौकुचियाताल झील में एयरेशन से पूर्व झील के पानी की गुणवत्ता एवं एक्वाकल्चर का कम से कम तीन माह तक अध्ययन किया जाए।

4. अध्यक्ष महोदय को आई.डी.आई.पी.टी. पर्यटन विभाग के विशेषज्ञ श्री अनिल मणिक द्वारा नैनीताल झील में प्रस्तावित म्युजिकल फाउन्टेन का डाटा प्रजेंटेशन का अवलोकन कराया गया। संस्था के प्रोजेक्ट को देखने के बाद अध्यक्ष महोदय ने कार्यवाही संस्था पर्यटन विभाग के अधिकारियों को निर्देश दिए कि प्रस्तावित म्युजिकल फाउन्टेन में ध्वनि विद्युत का उचित ध्यान रखा जाए एवं ठन्डी सड़क स्थित मंदिरों की दृश्यता प्रभावित न हो, प्रजेंटेशन में कुमाऊँ की संस्कृति, लोक गीत संगीत समेत नैनीताल के पौराणिक, धार्मिक पर्यटन स्थलों का समावेश करें। इसमें नगर के ऐतिहासिक भवनों को भी ध्यान मिले। इस दौरान जनप्रतिनिधियों, समाजसेवियों, खेल प्रेमियों, प्रशासनिक अधिकारियों आदि से संपर्क व अन्य रायशुमारी के बाद एक माह के भीतर इसका सोबा प्रजेंटेशन किया जाए।

## **Minutes of Meeting under chairmanship of Chairman-Monitoring Committee for ADB assisted Tourism Infrastructure Development Sub-projects held on 05.06.2014**

Venue – District Magistrate office Conference Hall , Nanital

List of member's presents in meeting

S.No.	Name	Designation
1.	Mr. Akshat Gupta (IAS)	Chairman- Monitoring Committee/ District Magistrate, Nanital
2	Mr. R K Joshi	APD, IDIPT, Dehradun
3	Dr. R S Chouhan	HOD, Aquacultural G V Pant University, Pantnagar
4	Mr. Anil Madik	DGM- Primer world
5	Mr. C.M.Sah	Project Engineer, LDA, Nanital
6	Mr. Balwant Singh Rawal	Project Manager, PIU-Bhimtal
7	Mr. Harish Chandra Sharma	Support Engineer. PIU-Bhimtal
8	Mr. Raja Joshi	Support Engineer, DSC-Bhimtal
9	Mr. B C Trivedi	Reception In charge, Tourism Office, Nanital

1. Inauguration of the meeting was done by Additional Program Director (IDIPT) Dehradun by self-introduction by all members of the committee to the Chairman. After this Program Implementation Unit- Bhimtal updated about the status of ongoing as well as up coming Tourism projects in Nainital. Project Manager informed the committee that the in the first phase , the following works are going on—

2 A. Up-gradation of TRH Parichay Resort

B. Aeration works in Naukuchiatal Lake Above works are already awarded and works will start very soon.

Second phase of proposed works also include Musical Fountain in Nani Lake, Beautification of Mall Road, Illumination and heritage works on Heritage buildings (Above 100 years old), Beautification of Pines Ghat, Development of Takula Ashram as a Museum and Development of Lok Sanskrit Museum- Khutani and also there will be focused approach towards the proper O&M of all sub-projects before initiation of any project.

For second phase of works preparation of SARs are in process.

3 Chairman Sir, instructed Dr. R S Chauhan, HOD-Aquaculture, G V Pant University, Pantnagar to monitor water quality of Naukuchiatal Lake for at least three months before aeration of Naukuchiatal Lake.

5. अध्यक्ष महोदय ने निर्देशित किया कि नैनीझील एवं उस के आस-पास प्रस्तावित सौन्दर्यकरण के कार्यों में यदि माननीय उच्च न्यायालय नैनीताल का कोई आदेश को हो तो उस का पालन सुनिश्चित किया जाए एवं झील में लगाये जाने म्युजिकल फाउन्टेन एवं प्रमुख भवनों में किए जाने वाले फशद इल्युमिनेशन पर विद्युत खर्च से अवगत कराएँ।
6. अध्यक्ष महोदय ने निर्देशित किया कि नैनाताल शहर में पूर्व में 11 हाई मारक लाइटें लगी है जो कि वर्तमान में बंद पड़ी है। इन हाई मारक लाइटों को एल.ई.डी. के माध्यम से पुनः चालु करवाने का प्रस्ताव भी वर्तमान कार्य के साथ जोड़ा जाए। तथा वर्तमान चरण एवं अगमि चरण में प्रस्तावित परियोजनाओं का संचालन एवं रखरखाव कराने जाने हेतु उचित विभाग को चिन्हित किया जाय ताकि परियोजनाओं के लाभ दीर्घ काल तक सुनिश्चित हो सके।

अक्षत गुप्ता (आई.एस.) 05/06/14  
अध्यक्ष मॉनिटरिंग कमेटी / जिलाधिकाारी,  
नैनीताल।

296 पत्रांक:.....Gen Corp./PIU-Bhimtal/2014/03/2014-15

दिनांक: 05.06.2014

प्रतिलिपि बैठक में उपस्थित समस्त महानुभावों एवं अधिकारियों व अन्य सम्बन्धितों को सूचनाार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

अक्षत गुप्ता (आई.एस.) 05/06/14  
अध्यक्ष मॉनिटरिंग कमेटी / जिलाधिकाारी,  
नैनीताल।

4 There was also a presentation by IDIPT Tourism Expert Mr. Anil Madik on proposed Musical Fountain on Nanital Lake to the Chairman Sir. After the presentation Chairman Sir instructed Executing Agency (Tourism Department) to take proper care on intensity of sound and also ensure that there should be no visibility issue on Temples situated in "Thandi Sadak". Chairman Sir also emphasized that this presentation should also include Cultural heritage of Kumaon Region such as Folk Songs etc. and also incorporate ancient religious tourism sites. There should be ample space for old historical building to this project. Mean while, there will be second presentation on this topic within one month time after consulting peoples representatives, social workers, sports enthusiasts and administrative officers.

5 Chairman Sir further directed that if there is any order by Honorable High Court regarding beautification works of Nanital Lake and other proposed works, then it should be strictly followed and also estimate electricity expenses on Musical fountain and illumination of Heritage Building.

6 It was also directed that there are 11 High Mask Lights in the Nainital City which are non functional at present. These lights have to be changed into LED lights and proposal of the same should be included in the current project. Additionally, there should be proper identification of Executing Agency for O&M of ongoing projects as well as upcoming proposed projects so that long term benefits can be reaped.

Akshat Gupta (IAS)  
Chairman Monitoring Committee  
/ District Magistrate – Nanital

A Meeting held at D.M.'s Meeting Hall at Nadiatal-  
and following people participated in the  
Meeting.

Sl. No.	Name	Designation	Contact No.	Sign
1)	B. S. Akshat Gupta	DM, NH.	9811159955	[Signature]
2)	R. K. Joshi	APD, Ddun.	9458175350	[Signature]
3)	Prof. R. S. Chankhan	HOD, Aquaculture Pantnagar Univ.	9411159955	[Signature]
4)	A. Mailly	DGM, Fountain, Premierworld Technology Kolkata	9836282822	[Signature]
5)	Anil Manik	DGM (M&T) Premierworld Technology Ltd	9811875648	[Signature]
6)	Kamlesh Chandra	Chief Operating Officer Premierworld Technology Ltd. Kolkata	09830088804	[Signature]
7)	H. C. Sharma	Support Engineer P10 Bhubaneswar	9411196708	[Signature]
8)	Rajendra Joshi	Support Engineer P10 Bhubaneswar	9410517109	

आज दिनांक 10 मार्च 2014 को श्रीमान ए.एस.नयाल (IAS) आयुक्त कुमाँऊ मण्डल नैनीताल की अध्यक्षता में सम्पन्न ए.डी.बी. सहायित आर्इ.डी.आई.पी.टी.द्वारा नैनीताल के सौन्दर्यीकरण के संबंध में आहुत बैठक का चर्यवृत।

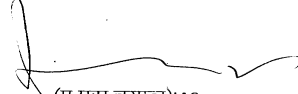
उपस्थिति —:

- 1—श्री आर.के.जोशी  
अपर कार्यक्रम निदेशक, (आर्इ.डी.आई.पी.टी.)
- 2—श्री बलवन्त सिंह रावल  
परियोजना प्रबन्धक, (पी.आई.यू. भीमताल)
- 3—श्रीमती आभा भट्ट  
उप निदेशक पर्यटन कुमाँऊ मण्डल, (नैनीताल)
- 4—श्री हरीश चन्द्र शर्मा  
सपोर्ट ई. (पी.आई.यू. भीमताल)
- 5—श्री राजा जोशी  
सपोर्ट ई. (पी.आई.यू. भीमताल)
- 6—श्रीमती सुनीता शाह  
पी.सी.ओ., (कु.म.वि.नि.)
- 7—श्री डी.के.शर्मा  
टी.डी.ओ., (कु.म.वि.नि.)

बिन्दु —:

1. महोदय को अपर कार्यक्रम निदेशक द्वारा चरण द्वितिय में चलने वाली परियोजनाओं जैसे नौकुचियाताल झील का एयरेशन, टी.आर.एच. परिवय नौकुचियाताल का जीर्णोद्धार, मोस्टमानु मंदिर पिथोरागढ़ से चण्डाक तक पैदल मार्ग का विकास, तथा पिथोरागढ़ फोर्ट का जीर्णोद्धार एवं सौन्दर्यीकरण के अलावा अग्रिम चरण में प्रस्तावित कार्यों यथा नैनीताल में माल रोड का सौन्दर्यीकरण तथा नैनीझील में म्यूजिकल फाउन्टेन लगाना। झील के चारों ओर स्थित सरकारी भवनों का इलुमिनेशन, तल्लीताल गौंधी जी की मूर्ति के नीचे डॉट का सुधार (Facade Improvement) 100 वर्ष से अधिक आयु वाले मुख्य भवनों तक हेरिटेज वॉक के बारे में अवगत कराया गया।
2. महोदय द्वारा उपरोक्त कार्यों हेतु अनापत्ति प्रमाण पत्र तथा अशोक सिनेमा, कैपिटोल सिनेमा के स्वामित्व सम्बंधित विवाद को सुलझाने में वाछित सहयोग प्रदान करने का आश्वासन दिया गया।  
उपरोक्त के अलावा महोदय द्वारा निम्न सुझाव दिये गये—
3. अल्मोडा स्थित मल्ला महल (कलैक्टर कार्यालय) को पिथोरागढ़ फोर्ट की तर्ज पर विकसित करना।
4. अपर निदेशक दूरिज्म को निर्देशित किया कि दूरिज्म को प्रोत्साहित करने के लिए यदि कोई प्रस्ताव उनके पास है तो ए.डी.बी. सहायित आर्इ.डी.आई.पी.टी. को भेजें।

पत्रांक स0213PIU-Bhimtal/IDIPT/MOM/221/03/2013-14

  
(ए.एस.नयाल)IAS  
आयुक्त कुमाँऊ मंडल

**Minutes of Meeting under chairmanship of Shri A S Nayal (IAS) Commissioner – Kumaun Region, Nainital for ADB assisted Tourism Infrastructure Development Sub-projects on beautification of Nainital held on 10.03.2014**

Attendees –

1. Shri R K Joshi APD (IDIPT)
2. Shri Balwant Singh Rawal PM-PIU, Bhimtal
3. Smt. Abha Bhatt Dy. Director-Tourism, Kumaon Region, Nainital
4. Shri Harish Chandra Sharma Support Engineer, PIU-Bhimtal
5. Smt. Sunita Sah PCO (KMVN)
6. Shri D K Sharma TDO (KMVN)

Points:-

1. APD IDIPT informed all about the various projects of Tranch –II (Aeration works in Naukuchiatal Lake, Up-gradation of TRH Parichay Resort, Mostmanu Temple, Development of Trek Trail from Pithoragarh to Chandak, Restoration & beautification of Pithoragarh Fort) and Tranch-III (Beautification of Mall Road, Musical Fountain in Nainital Lake, Illumination of Govt. building, Façade improvement of Gandhi Statue in Talli Taal and heritage walk of buildings about 100 years old).
2. Commissioner Kumaou Division assured of all assistances with regards to procurement of all NOCs and Settlement of Ownership issue with Capital Cinema/Ashok Cinema Complex.

In Addition to above the following suggestion is also made:



**Meeting with Executive Officer, Nagarpalika, Nainital      Date: 24-01-2014 Time: 4.00 p.m.**

A presentation regarding musical fountain and beautification of Mall Road/ lake premises given by the consultants of DSC. During discussion following suggestions given by the EO and Chairman-

1. They assured that maintenance and operation work can be carried out by Nagarpalika.
2. The maintenance cost of musical fountain can be generated by the entrance toll from the visitors.
3. They suggested that cost can be generated through the advertising of different companies.
4. All the members of Nagarpalika appreciated the proposed plan regarding Nainital sub projects. Nagarpalik has no objection for the proposed work under IDIPT.

**Meeting with Boat Association, Nainital      Date: 25-01-2014    Time: 11-00 a.m.**

A discussion regarding musical fountain and beautification of Mall Road/ lake premises was made with the members of the boat association. The DSC and PIU officials informed in detail about the projected activities under tourism development. About 15 members including secretary and treasurer of boat association participated in the meeting. The association assured for their full cooperation in the future. They are confident that the livelihood of the boat men will be definitely improved by the tourism development in the region.

**Meeting with Irrigation Dept., Nainital Date: 25-01-2014    Time: 1.00 p.m.**

During discussion regarding musical fountain and beautification of Mall Road/ lake premises the Asstt. Engr. of Irrigation Dept. Sh. Hem Joshi informed that the O&P of lake and mall road is in control of PWD. The dept. will provide full cooperation an NOC, whenever it required.

**Meeting with Executive Engr. PWD, Nainital Date: 25-01-2014    Time: 5.00 p.m.**

A presentation regarding musical fountain and beautification of Mall Road/ lake premises given by the consultants of DSC. During discussion following suggestions are given by the EE, PWD-

1. He advised to develop master plan for the regulation of traffic during the peak season keeping in mind of deconsetion.
2. To promote tourism by development of website.
3. Strengthening of upper and lower mall road which is facing the problem of settling
4. Provisioning to increase the number of off season tourist in Nainital.
5. He assured for their cooperation and sharing of related documents/ data, which are available to PWD.

## **NAINITAL SAR REPORT OF PROJECTS UNDER IDIPIT, TOURISM (ADB Assisted)**

- i. Musical Fountain in Naini Lakes
- ii. Beautification of Mall Road Nainital

### MINUTES OF MEETING WITH STAKEHOLDERS

A team experts from WAPCOS and PIU Bhimtal visited Nainital from 24- 26 Jan. 2014 regarding the sub projects of Nainital. The purpose of meeting was to consult all the stakeholders and make them aware about the sub projects i.e. musical fountain and beautification of mall road/ lake premises, which is proposed under IDIPT. During the meeting many important suggestions are given to the consultants by the stakeholders. The minutes of meeting with different stakeholders are as follows-

#### **Meeting with GM, KMVN Nainital**

**Date: 24-01-2014 Time: 11-00 a.m.**

A presentation regarding musical fountain and beautification of Mall Road/ lake premises given by the consultants of DSC. During discussion following suggestions are given by the GM-

1. He advised that maintenance and operation work can be carried out by Nagarpalika or KMVN.
2. He advised to share the plan of Dist.Tourism Officer regarding floating garden, widening of Masjid Tiraha and development of public amenities.
3. Provision of signage at Kathgodam Railway Station to give necessary information to tourist about the tourist destination.
4. To develop website for the promotion of tourism in Kumoun region.
5. To establish tourist hub near Kathgodam Railway Station.
6. He suggested that the boat house under possession of KMVN at Tallital can be utilised for the maintenance and operation of the musical fountain.

#### **Meeting with Project Engineer LDA, Nainital Date: 24-01-2014 Time: 2.00 p.m.**

A presentation regarding musical fountain and beautification of Mall Road/ lake premises given by the consultants of DSC. During discussion following suggestions given by the Project Engineer, LDA.

1. He advised that the provision of Operation / Maintenance should be kept in mind before implementing it.
1. He assured that with the implementation of fountain there will be no impact on aquatic life.
2. He advised to check the technical feasibility of musical fountain in Nainital lake.
3. The NOC will be provided by the LDA.
4. He will share all available information regarding the lake of Nainital.


Attended by;

**DSC and PIU Team:**

- |                              |                                    |
|------------------------------|------------------------------------|
| 1. Sh. Tushar Chakravarty    | Consultant, DSC                    |
| 2. Ms. Paromita Desarkar     | Consultant, DSC                    |
| 3. Sh.V. Arun Dev            | Project Manager, DSC               |
| 4. Mr. Raja Joshi            | Support Engineer, PIU              |
| 5. Mr. Harish Chandra Sharma | Support Engineer, PIU              |
| 6. Dr. Jagat Sontiyal        | Community Development Officer, PIU |

**Stakeholders/ Govt. Departments:**

- |                            |                                |
|----------------------------|--------------------------------|
| 1. Sh. Shish Kumar (PCS)   | GM, KMVN                       |
| 2. Sh. Mohan Bhatt         | AE, KMVN                       |
| 3. Sh. C.M. Shah           | Project Engr. LDA              |
| 4. Sh. Rohitash Sharma     | Executive Officer, Nagarpalika |
| 5. Sh. Shyam Narayan       | Chairman, Nagarpalika          |
| 6. Ms. Sadaf Shah          | JNNURM, Nagarpalika            |
| 7. Sh. I.S. Rautela        | JE, Nagarpalika                |
| 8. Sh. Hem Joshi           | AE, Irrigation Deptt.          |
| 9. Sh. J.K. Tripathi       | Executive Engineer, PWD        |
| 10. Sh. M. P. Kalakoti     | AE, PWD                        |
| 11. Sh. Nain Singh Chauhan | Secretary, Boat Association    |
| 12. Sh. Puran Singh Bohra  | Treasure, Boat Association     |

  
Project Manager  
PIU, Bhimtal

Cc: For information please-




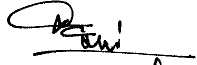
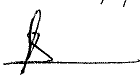
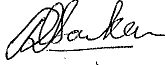

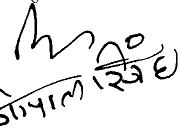


1. District Magistrate, Nainital
2. Program Director, IDPIT, Dehradun
3. Additional Program Director, , IDPIT, Dehradun
4. Team Leader, DSC, Bhimtal

  
Project Manager  
PIU, Bhimtal

## Minutes of Meeting

A meeting held with Boat Association regarding SAR of  
Nainital Subprojects dated 25/1/2014.

### List of Participants

1. Mr. Purn Singh Bora - Treasurer Boat Association 
2. Mr. Pramod Singh - 9412017383
3. Mr. Divesh Singh 
4. Mr. Navneet Ch. Goshwami 
5. Mr. Main Singh Chakran - Secretary Boat Union  8859906515
6. Jagat Sontiyal PIU 
7. Pavamika Desarkar DSC 
8. Tushar Chakravarti DSC
9. Raju Joshi PIU 
10. Harish Sharma PIU 
11. Gopal Singh
12. Neeraj Kumar
13. Santosh Saurav 
14. Amar Kumar Photographer 

## Minutes of Meetings

A meeting held with PWD officials of Mainital  
regarding SAR of Mainital Subprojects under IDIPT  
(Tourism Dept of U.K Govt) on dated 25-1-2014.








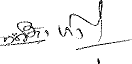




### List of Participants

1. Ex J.K. Talpathi  
E.E. PWD Mainital 25.1.14
2. Ex. M.P. Kalakoti  
A.E. PWD Mainital H.D.
3. Mrs Promita Dev Sarkar DSC
4. Mr Tushar Chakravarti DSC Tushar
5. " Rajarajee Kulshrestha DSC Raj
6. " Jagat Sanyal PIU B
7. H.C. Sharma PIU M
8. " Raja Joshi PIC Raja

## Minutes of Meeting

A Meeting with the following Govt officials including  
of D.S.C Experts on dated 24/11/2014 regarding  
Nainital SAR Projects.

### LIST OF PARTICIPANTS:

1. Sh. Rohitash Sharma, EO, Nagar Palika. 
2. Sh. Tushar Chakravarti, DSC
3. Ms. Paromita Desarkar, DSC 
4. Sh. V. Arun Dev (Om), DSC 
5. Sh. Raja Joshi, PIU 
6. Sh. Jugat Sontiyal, PIU 
7. Sh. HARISH SHARMA, PIU 
8. Ms. Sadaf Shah, Jn NURM, PIV, NH 
9. Sh. Rohitash Sharma, EO, Nagar Palika, NH
10. Dr. Kamlesh Joshi, ~~Dr~~ RAY, PIV, NH 
11. I. S. Pantale, Jr. Engineer, Nagar Palika. 
12. Sh. Shyam Narayan, Chairman, Nagar Palika, 
13. श्रीमती नील जोशी - सभासद नगरपालिका परिषद 
14. Sh. K. A. Joshi - 

## Minutes of Meeting

A meeting with the following Govt officials  
including DSC Experts on dated 24/1/2014  
regarding Naantal SAR Project

Fr. C.M. Sah (P.M.) L.D.A



Chandramohan Sah  
(@ richff mail. com.)

Mr Tushor Chakravarty

M/s Promita Dey Sankar

Mr. H.C. Sheorey

Mr. Rajiv Joshi



H.C. Sheorey (SEPIU)

(SEPIU)



### Minutes of Meeting

A meeting held with the following Govt officials including DSC Experts on dated 24/1/2014 regarding Narnital Project.

Mr. Shaish Kumar (P.C.S.)  
GM. KMVN




Mr. Mohan Bhatt  
A.E. KMVN




Mr. Tushar Chakravarty

 Heritage Mgmt. Specialist

Mrs. Paromita Deb Sarkar

 Conservation Architect

Mr. H. C. Sharma



S-E P-I-U

Mr. Raja Joshi



S-E P-I-U



A meeting held at DSA office Mallital NTL  
following persons were Present. Dt - 17-08-2014

AJAY SAH. Hony. Gen. Secretary. THE N.T.G.S. D.S.A. N.T.L. → 9837347959

1. Ganga Prasad Sah *Gangasah*
2. Dhruv Bishit Hony. Joint Secretary The N.T.G.S. D.S.A. (N.T.L) D.S.A. → 9720162888
3. Tribhuvan Phartiyal Nominal Member Nagar Palika Mallital → 9897107275
4. J.C. BERRY Dy. Director Tourism Mallital → 9720294334  
→ 9412998513
5. Debnanda Lal Sah S. D.S.A. → 9917244127
6. V. Arun Dev, Project Manager, DSC Bhimtal, 9568714510 *V Arun*
7. Ghanashyam Lal Sah, Ex Hony General Secy D.S.A. President Sharda Sah *G*  
→ 9412906502
8. R.K. Joshi Add. Program Di- *RK*
9. Brajwant Singh Project Manager P.W. Bhimtal *Bt*
10. H.C. Shastri P.W. Bhimtal *H*

Joint Site Visit on 23rd August 2014 by DSC and PMC safeguard experts



Consultation with DSC at Mall Road- Flats



Highest point of Heritage Walk



Proposed site -Cantilever walkway



Stake holder Consultation

## Site Visit Report - Dr. Ardhendu Mitra, Environment Safeguard Specialist PMC

(19 April 2015 – 22 April 2015)

- ✓ On 19<sup>th</sup> April, 2015 started from Dehradun and visited Nakuchtatal and TRH Parichaya project sites. Both the projects under implementation. Status of application of EMP by the contractors is noted. After that Safeguard induction training program has been conducted for contractor, supervisor engineer on safeguard issues and application of Environmental Management Plan (EMP) at both the project locations.



- ✓ On 20<sup>th</sup> April first visited Nainital Lake project site and visited few new locations (additional work components), carried out environmental screening and after that started for Almora and visited proposed site for new Collectorate office at Almora. Carried out environmental screening. Then travelled to Pithoragarh and stay at Pithoragarh.



Proposed Champawat Tehsil Building site



Proposed Almora DM Office site



- ✓ On 21<sup>st</sup> April visited Pithoragarh fort for understanding work components under phase 1, then visited phase 2 (Tranche 3) project sites like Tehsilder office and proposed residence site, proposed car parking location. Also visited Trekking trail and Mostmanu project locations, where implementation of the project is undergoing. Then after visit safeguard induction training



program has been conducted for contractor and supervisor engineer on safeguard issues and application of Environmental Management Plan (EMP) at both the project locations. On same day visited to Champhwat Fort project site for understanding the project components. Later visited for environmental screening for proposed Tehsil building.

- ✓ Return back to Dehradun on 22<sup>nd</sup> April evening.