

Social Impact Assessment Report

May: 2021

Project ID: P154990

Sub-Project: Improvement & Up-gradation of “Deva Mai to Ohli Mandir Road” (District Reasi)

**Jhelum Tawi Flood Recovery Project
(World Bank Funded)**

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Table of Contents

Definition of Words and Phrases	9
Affected Persons (APs)	9
1. Introduction	14
1.1 Project Background	14
1.2 Project Development Objective	15
1.3 Project Components:	15
1.4 Sub- Project Background	15
1.5 Sub-Project Description	15
1.6 Benefits of the Sub-Project	16
1.7 Need for Social Impact Assessment	16
1.7.1 Need for SIA of Deva Mai-Ohli Mandir Road	16
1.8 Objective and Scope of Social Impact Assessment	17
1.9 Methodology adopted for the SIA	17
1.10 Structure of SIA Report	18
2. Project Description	20
2.1 Description of the Project	20
2.2 Sub-Project Description	21
2.3 Project Location	21
2.4 Details of Existing Project Roads	22
2.4.1 Embankment, Carriageway, and Shoulder	22
2.4.2 Horizontal and vertical alignment	22
2.4.3 Pavement Condition	22
2.4.4 Cross Drainage Structures	25
2.4.5 Existing Pavement Composition	27
2.4.6 Existing Drains	28
2.4.7 Existing Breast Wall	28
2.4.8 Existing Retaining Wall	29
2.4.9 RoW Details of Sub-Project Road	30
2.4.10 Major Utilities Along The Existing Road	30
2.5 Proposed Activities (Improvement)	31
2.5.1 Carriage Way Improvement	31
2.5.2 Horizontal and vertical alignment	33
2.5.3 Improvement of Sight Distance	33
2.5.4 Improvement of Cross Drainage Structures	33

2.5.5	Protective Works towards Slope at Hill Side/Valley Side	35
2.5.6	Drainage Works with Drainage Capacity	35
2.5.7	Pavement Design	37
2.5.8	Rehabilitation of existing pavement	38
2.5.9	Traffic Safety and Other Appurtenances	39
3.	Legal and Regulatory Framework	43
3.1	Operational Policies of World Bank	43
3.2	World Bank's Environment Health and Safety Guidelines	43
3.3	National & State Policies	44
3.4	Other Central and State acts which may be applicable in the Sub-project:	45
4.	Socio-Economic Profile of the Project Impact Area	46
4.1	Location and size	46
4.2	Physiography	47
4.3	Drainage	47
4.4	Climate	47
4.5	Types of soil	47
4.6	Geology	48
4.7	Flora and fauna	48
4.8	Cropping patterns	48
4.9	Irrigation	49
4.10	Natural wealth	49
4.11	Animal Husbandry:	49
4.12	Fishery	49
4.13	Industries	50
4.14	Transport	50
4.15	Electricity and power	50
5.	Analysis of Alternatives	52
5.1	'Without' and 'With' Project Scenario'	52
5.1.1	'Without' Project Scenario	52
5.1.2	'With' Project Scenario	52
6.	Stakeholder's Consultation	53
6.1	Identification of Stakeholder	53
6.2	Objective of Stakeholder's Consultation	53
6.3	Approach for Consultation	54
6.4	Details of Public Consultation in sub-project road	54
6.5	Information shared	54

6.6	Feedback Received	55
7.	Analysis of Social Impacts	56
7.1	Impact on Land	56
7.2	Impacts on Structures	56
7.3	Impacts on Livelihood	56
8.	Mitigation Measures	57
8.1	Social Management Plan	57
8.2	Objectives	57
8.3	Scope	57
8.4	Context for the SMP	58
8.5	Key probable social issues and impacts that may arise during the construction stage that need to be addressed	59
8.6	Methodology for SMP preparation	Error! Bookmark not defined.
8.7	Gender Action Plan	59
8.7.1	Status of Women in J&K	64
8.7.2	Legal Provision Related to Women in J&K	66
8.7.3	Strategy	66
8.7.4	Avoiding Gender-Based Violence	67
8.8	Labour Influx and Labor Management Plan	67
8.8.1	Objectives	68
8.8.2	General Requirements	68
8.8.3	Hiring & Recruitment Procedures	69
8.8.4	Worker's Accommodation	70
8.8.5	Security	70
8.8.6	Provisions for Drinking Water	71
8.8.7	Cooking Arrangements	71
8.8.8	Waste Water Generation	71
8.8.9	Medical facilities	72
8.8.10	Impact of influx of migrant laborer	Error! Bookmark not defined.
9.	Monitoring and Evaluation	73
9.1	Safeguards Supervision	73
9.2	Concurrent Monitoring and Quarterly Reporting	73
9.3	Safeguards Monitoring Plan	73
9.4	Independent Safeguard Audits	74
9.5	Right to Information and Disclosure	74
10.	Grievance Redressal Mechanism	75

10.1	Composition of Grievance Redress Committee (GRC) at various levels of the project	75
10.2	Approach to GRC	77
10.3	Legal Options to Aggrieved persons/PAPs	78
11.	Institutional Arrangement	79
11.1	Institutional arrangement in the project	79
11.2	Implementation Stage	79
12.	Annexures:	80
	Annexure1: Environment and Social Screening Data Sheets	80
	Annexure 2: GIS MAPs of the Sub-Project Road	86
	Annexure 3: Land Records	87
	Annexure 4: Encumbrance Free Certificate	90
	Annexure 5: Strip Plan & Plan & Profile	91
	Annexure 6: Photograph of the Roads	98
	Annexure 7: Public Consultation	100

List of Tables

Table 1: Overview of the proposed road	21
Table 2: List of Existing Cross Drainage Structures	26
Table 3: Details of Existing Pavement Composition.....	27
Table 4: List of Existing Drain	28
Table 5: List of Existing Breast Wall.....	28
Table 6: List of Existing Retaining Wall.....	29
Table 7: Proposed Technical Description in the Project.....	31
Table 8:Details of Proposed Culverts	33
Table 9: Details of Proposed Drain.....	36
Table 10: Details of Retaining Wall.....	37
Table 11: Details of Road Signages.....	39
Table 12: Details of Roadside Convex Mirrors	41
Table 13: World Bank’s Operational Policies.....	43
Table 14: Cropping Patterns	48
Table 15: Social impacts & Mitigatory Measures	Error! Bookmark not defined.

List of Figures

Figure 1: Map showing location of the proposed road of “Deva Mai - Ohli Mandir Road upto Km 18+290” in Jammu District..... 22

Figure 2: Structure of GRM 77

ABBREVIATIONS

BPL	Below Poverty Line
CBO	Community Based organisations
COI	Corridor of Impact
CPR	Common Property Resources
DC	District Collector
DSC	Design & Supervision Consultant
DED	Detailed Engineering Design
EIA	Environmental Impact Assessment
EP	Entitlement/Eligible Persons
ERA	Economic reconstruction Agency
ESMF	Environment and Social Management Framework
ESSR	Environment & Social Screening Report
EM	Entitlement Matrix
GBV	Gender Based violence
GESI	Gender Equality and Social Inclusion
Govt.	Government
GRC	Grievance Redressal Cell/Committee
HP	Halqa Panchayat
IRC	Indian Road Congress
IDA	International Development Agency
IRAP	International Road Assessment Programme
JTFRP	Jhelum Tawi Flood Recovery Project
J&K	Jammu & Kashmir
DSC	Design & Supervision Consultant
DEA	Department of Economic Affairs
DPR	Detailed Project report
NGO	Non-Governmental Organization

OP	Operational Policy
PAP	Project Affected Person
PAF	Project Affected Family
PDF	Project Displaced Family
PDP	Project Displaced Person
PIU	Project Implementation Unit
PMU	Project Management Unit
PMC	Project Management Consultant
R&R	Resettlement & Rehabilitation
RAP	Resettlement Action Plan
RFCTLAR&R	Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement act, 2013
RDNA	Rapid Damage and Needs Assessment
ROW	Right of Way
RTI	Right to information Act
SAR	Social Assessment Report
SES	Socio- Economic Survey
SEO	Site Engineering Office
SH	State Highway
SIA	Social Impact Assessment
SC/ST	Schedule Caste and Schedule Tribe
SMF	Social Management Framework
SMP	Social Management Plan
SOR	Schedule of Rates

Definition of Words and Phrases

Affected Persons (APs)

Affected Persons (APs), for this Project, means all the people directly affected by a project-related land acquisition that leads to their physical relocation or loss of assets, or access to assets, with adverse impacts on livelihoods. This includes any person, household (sometimes referred to as project affected family), firms, or public or private institutions who on account of project-related land acquisition would have their ;

1. standard of living adversely affected;
2. right, title or interest in all or any part of a house, land (including residential, commercial, artisanal mining, agricultural, plantations, forest and/or grazing land), water resources or any other moveable or fixed assets acquired, possessed, restricted or otherwise adversely affected, in full or in part, permanently or temporarily; and/or
3. business, occupation, place of work or residence, or habitat adversely affected, with or without displacement. APs therefore include;

Persons affected directly by the acquisition or clearing of the right-of-way or construction work area; persons whose agricultural land or other productive assets such as mining, trees or crops are affected; persons whose businesses are affected and who might experience loss of income due to project-related land acquisition impacts; persons who lose work/employment as a direct result of project-related land acquisition; and people who lose access to community resources/property as a result of project-related land acquisition.

Census

Census means the pre-appraisal population record of potentially affected people, which is prepared through a count based on the village or other local population data or census.

Compensation

Compensation means payment in cash or kind for an asset to be acquired or affected by a project at replacement costs.

Cut-off-date

Cut-off-date means the date after which people will not be considered eligible for compensation if they are not included in the list of APs as defined by the census. Normally, the cut-off date for the titleholders is the date of the detailed measurement survey.

Displacement

Displacement means either physical relocation or economic displacement directly caused by project-related land acquisition.

Encroachers

Encroachers mean those persons who extend their property beyond that for which they hold a Title are encroachers and would not be eligible for compensation for land for which they do not possess a title.

Entitlement

Entitlement means the range of measures comprising cash or kind compensation, relocation cost, income rehabilitation assistance, transfer assistance, income substitution, and relocation which are due to /business restoration which is due to APs, depending on the type and degree nature of their losses, to restore their social and economic base.

Livelihood Restoration

Livelihood Restoration means the measures required to ensure that APs have the resources to at least restore, if not improve, their livelihoods. Restoration of livelihood of all APs is one of the key objectives of the World Bank's resettlement policy. It requires that people are given the means and assistance necessary for them to improve, or at least restore, their livelihood and living conditions to pre-project levels. Inventory of Losses means the pre-appraisal inventory of assets as a preliminary record of affected or lost assets.

Land Acquisition

Land Acquisition means the process whereby a person is compelled by a public agency to alienate all or part of the land s/he owns, possesses, or uses, to the ownership and possession of that agency, for public purposes, in return for prompt and fair compensation. This includes direct acquisition and easement.

Non-Titled

Non-titled means those who have no recognizable rights or claims to the land that they are occupying and includes people using private or state land without permission, permit, or grant.

Rehabilitation

Rehabilitation means the assistance provided to severely affected APs to supplement payment of compensation for acquired assets to improve, or at least achieve full restoration of, their pre-project living standards and quality of life to pre-project level.

Resettlement

Resettlement means all social and economic impacts that are permanent or temporary and are:

- (i) caused by the acquisition of land and other fixed assets,
- (ii) by the change in the use of land, or
- (iii) restrictions imposed on land as a result of the project.

Resettlement Plan

Resettlement Plan means the time-bound action plan with budget setting out resettlement strategy, objectives, entitlements, actions, responsibilities, monitoring, and evaluation.

Structures

Structures mean all structures affected, or to be acquired, by the project such as living quarters, wells, hand pumps, agricultural structures such as rice bins, animal pens, stores/warehouses, commercial enterprises including roadside shops and businesses.

Squatters

Squatters mean the same as a non-titled person i.e. those people without legal title to land and/or structures occupied or used by them. World Bank policy explicitly states that such people cannot be denied assistance to restore livelihoods and living conditions based on the lack of title.

Vulnerable

Vulnerable means any people who might suffer disproportionately or face the risk of being marginalized from the effects of resettlement i.e; (i) single household heads with dependents; (ii) disabled household heads; (iii) poor households; (iv) elderly households with no means of support; (v) the landless or households without the security of tenure; and (vi) ethnic minorities.

Social Impact Assessment (SIA)

Social impact assessment (SIA) is the process of identifying and managing the social impacts of industrial projects. It can also be applied to policies, plans, and programs. SIA is used to predict and mitigate negative impacts and identify opportunities to enhance benefits for local communities and broader society.

Project Area Influence

The area likely to be affected by the project, including all its ancillary aspects, such as power transmission corridors, pipelines, canals, tunnels, relocation, and access roads, borrow and disposal areas, and construction camps, as well as unplanned developments induced by the project (e.g., spontaneous settlement, logging, or shifting agriculture along access roads).

Executive Summary

The catastrophic deluge of September 2014 harmed the socio-economic aspects of the Union territory of Jammu and Kashmir (erstwhile state) and massive infrastructure damaged in which not only Srinagar was most affected but other districts as well. It left behind a trail of siltation in most of the water bodies as environmental degradation, which is always synonymous with major floods. In connection to the catastrophic flood, a mission of the World Bank visited the Union territory of Jammu and Kashmir (erstwhile state) during February 1-6, 2015 on request of the Government of India to review and assess the damages to produce a rapid multi-sectoral assessment report of the damages and needs. The RDNA estimates the total damages and loss caused by floods at about INR 211,975 million (US\$ 3,550.45), most of it to housing, livelihoods, and roads and bridges, which combined represented more than 70% of the damages in terms of value.

Based on the RDNA results, restoration works underway, and discussions with the GoJ&K, "Jhelum and Tawi Flood Recovery Project (JTFRP)" will focus on restoring critical infrastructure using international best practice on resilient infrastructure. One of the sub-projects identified under Component 2 of JTFRP is "Improvement and Upgradation of Deva Mai to Ohli Mandir Road in district Reasi. The proposed subproject has a total length of 4.990 km. From connectivity & local pilgrimage point of view, this road has high importance.

Sub-projects under "**Jhelum and Tawi Flood Recovery Project**" commonly known as JTFRP have a prior requirement of screening which is based on three categories; viz., nature of the project, the size of the project, and location of the project with sensitive area criteria. The objective of Environment and social screening is to identify the potentially significant environmental/ social issues of the sub-project at an early stage for detailed Environmental and Social impacts. The screening for the sub-project has been conducted and summary data sheets are annexed in the annexures. For dissemination of project information "meaningful public consultation with stakeholders and the general public" was conducted with the people on 11.07.2020 & 23.12.2020.

The SIA study of the sub-project shows that it will not have any adverse or irreversible negative social impacts. Impacts of the construction phase will be typical for all medium-scale construction activities, short-term/ temporary, and limited to the project site. Evaluation of revenue record revealed that the entire road stretch falls under two khasra numbers i.e. 31/1 and 798/87 and these are under the ownership of state whereas land was under the possession of the forest department.

Since the land was under the possession of forest department, Executive Engineer PWD (R&B) Division, Katra vide letter number EEK/2018-19/5459-60, addressed to Director, Technical JTFRP, intimated that an amount of 2690582.00 has been placed at the disposal of Division Forest Officer, Reasi vide office check number 846838/008469 dated 10.01.2011 for acquisition of forest land measuring 2.472 hectare (for 4 kms length beyond km 01) for the construction of road from Deva Mai ji to Ohli Mandir.

Project Manager (Transport, Jammu division) vide letter no PIU/T/ERA/2021/865 dated 16.03.2021 had issued a non-encumbrance certificate which confirms that the sub-project road does not require any land acquisition and the available RoW for the said sub-project is 6.00 meters. Further, approved DPR also did not envisage acquisition of any asset.

Therefore, SIA study revealed that the sub-project does not involved acquisition of any asset such as land or structures. All the proposed work will be carried out in the available Row which is 6.00 meters. Further, there is no structure either commercial, Religious or CPR in the alignment of the proposed road. However, during execution, if there is any unanticipated adverse impact, same shall be addressed as per the applicable ESMF, policies of World Bank and that of the Union territory of J&K.

1. Introduction

1.1 Project Background

In September 2014, Jammu & Kashmir experienced torrential monsoon rains in the region causing major flooding and landslides. The continuous spell of rains from September 2-6, 2014, caused Jhelum, Chenab, and Tawi Rivers as well as many other streams/tributaries to flow above the danger mark. The Jhelum River also breached its banks flooding many low-lying areas in the Kashmir region, including the capital. In many districts, the rainfall exceeded the normal by over 600%. In the Jammu division also, many districts received rainfall over the normal. Jammu district itself recorded over 467.3 mm of rainfall during Sept 2014, which is 339% excess of the normal. (Source-Indian Meteorological department website). The Indian Meteorological Department (IMD) records precipitation above 244.4 mm as extremely heavy rainfall, and J&K received 558mm of rain in the June- September period, as against the normal 477.4 mm.

Due to the unprecedented heavy rainfall, the catchment areas particularly the low-lying areas were flooded for more than two weeks. Some areas in urban Srinagar stayed flooded for 28 days. Water levels were as high as 27 feet in many parts of Srinagar. The areas from the main tributaries of river Jhelum vis-à-vis Brengi nallah, Vishav nallah, Lider nallah and Sandran nallah started overflowing due to the heavy rainfall causing water levels in the Jhelum River to rise. Subsequently, the discharge of the river Suran was 200 thousand cusecs as against an average of 50 thousand cusecs. With the excessive discharge of water, the river Suran affected the basin areas and also took a different course at various locations causing damages to the surrounding villages in the catchment area. Water levels also increased in the rivers of Chenab and Tawi, both of which were flowing above normal levels. Due to the rivers overflowing nearly 20 districts of the Union territory of Jammu and Kashmir (erstwhile state) were impacted.

A Joint team led by the Department of Economic Affairs (DEA), GoI, with representation from the World Bank visited J&K on October 21, 2014. Subsequently, GoI has sent a request to the World Bank on January 5, 2015, to field a Joint Rapid Damage and Needs Assessment (RDNA) Mission within the Union territory of Jammu and Kashmir (erstwhile state). In response, a mission of the World Bank visited the Jammu and Kashmir (erstwhile state) during February 1-6, 2015 to produce a rapid multi-sectorial assessment report of the damages and needs. The RDNA estimates the total damages and loss caused by floods at about INR 211,975 million (US\$ 3,550.45), most of it to housing, livelihoods, and roads and bridges, which combined represented more than 70% of the damages in terms of value. Public service infrastructure and equipment of hospitals and education centres were also severely damaged and are still not fully operational.

Based on the Rapid Damage Needs Assessment (RDNA) results, restoration works underway, and discussions with the GoJ&K, the project will focus on restoring critical infrastructure using international best practices on resilient infrastructure. Given the Jammu and Kashmir (erstwhile state)'s vulnerability to floods and earthquakes, the infrastructure will be designed with upgraded resilient features and will include contingency planning for future disaster events. Therefore, the project aims at both restoring essential services disrupted by the floods and improving the design standard and practices in the Jammu and Kashmir (erstwhile state) to increase resilience.

1.2 Project Development Objective¹

The Project Development Objective (PDO) is to support the recovery and increase disaster resilience in targeted areas of the Jammu and Kashmir (erstwhile state) and increase the capacity of the Jammu and Kashmir (erstwhile state) entities to respond promptly and effectively to an eligible crisis or emergency.

1.3 Project Components:

The project is comprised of the following seven components.

1. Reconstruction and strengthening of critical infrastructure
2. Reconstruction of roads and bridges
3. Restoration of urban flood management infrastructure
4. Strengthening and restoration of livelihoods
5. Strengthening disaster risk management capacity
6. Contingent Emergency Response
7. Implementation Support.

1.4 Sub- Project Background

Component 2 of the "Jhelum and Tawi Flood Disaster Recovery Project" is 'to restore and improve the connectivity disrupted due to the disaster through the reconstruction of damaged roads and bridges'. The component will finance and support the reconstruction of about 300 km. of damaged roads and associated drainage works, retaining walls, breast walls, and other structures to increase resilience, designed to be seismic resilient (as per the guidelines of the Bureau of Indian Standards) and concerning topography and hydrology (as per the guidelines of the Indian Roads Congress, the Ministry of Road Transport and Highways), and projected demographic changes.

1.5 Sub-Project Description

¹ Source: JTFRP- Environmental & Social Management Framework (ESMF), 2015.

Project Road takes off from km 3.2 on Nomain - Deva Mai Road (near village Nomain) which starts from km 11th on Domail Katra Road (The road starts at 1 km short of Deva Mai). From a connectivity & local pilgrim point of view, this particular road has high importance. Earlier people use to follow this stretch (Ohli Mata Deva Mai Road) which is part of the Bamiyal-Ohli-Mandir-Katra road. At present this link is disconnected but once the project stretch develop then 20% of the traffic (2 Wheeler, 4 Wheeler, Mini Bus & LCVs) diverted from NH 144 A through Akhnoor Bamiyal via Jagti – Chibba Road and connect Ohli Mandir-Katra stretch. After development of this road, traffic follows not only the shorter route but also reduce the traffic load on the present route. Moreover, due to this development, importance of old heritage route became more which enhance the economy of the entire area. Presently, earthen/Gravel surface mostly exists after 2.3 km, existing road fully collapsed during heavy rain.

1.6 Benefits of the Sub-Project

Project Road takes off from km 3.3 on Nomain - Deva Mai Road (near village Nomain) which starts from 11th km on Domail Katra Road. From a connectivity & pilgrim point of view, this particular road has high importance. The road from Bamiyal to Ohli Mandir (5.5 Km) is under construction which is the down going stretch of the project stretch. Necessary land acquisition was also completed to develop the corridor Nagrota-Bamiyal-Ohli Mandir-Katra. After the development of this road, traffic follows not only the shorter route but also reduces the traffic load on the present route. Further, people will get all weather road to approach and access basic services like schools, hospitals, PHCs and district headquarters.

1.7 Need for Social Impact Assessment

Social Impact Assessment (SIA) is a tool for anticipating and mitigating the potentially negative impacts of projects, such as dams, roads, power projects, mining, and other development projects. SIA alerts project planners (public and private bodies) as to the likely social and economic costs and benefits of a proposed project. The knowledge of the potential costs, when weighed against the likely benefits of a project, helps decision-makers in deciding whether the project should be carried out, with or without modifications, or abandoned completely. It also helps in developing mitigation plan to overcome the potential negative impacts on individuals and communities.

1.7.1 Need for SIA of Deva Mai-Ohli Mandir Road

Social Impact Assessment study was conducted to identify and assess the land requirement for the proposed sub-project besides identifying the temporary and permanent impacts. However, Deva Mai-Ohli Mandir road sub-project will be improved and upgraded only on government land (annexure 3). Therefore, no additional land is required for the improvement and up-

gradation of the road. Since the sub-project does not require land acquisition, therefore, the Social Impact Assessment was conducted to identify and assess any other impact on the people and communities due to project implementation such as any impact on private assets (of both titleholders and non-titleholders), on the livelihood of people, common property resources or any other type of impacts. Further, it will guide Executing Agency (EA) to prepare a sound Social Management Plan that will provide guidance to the contractor & PIU to manage social issues during execution and post execution.

1.8 Objective and Scope of Social Impact Assessment

The major objectives of the SIA are given below:

- To gather baseline data for assessment of impacts (both direct and indirect);
- To do the socio-economic profiling of the project;
- To identify all potential adverse and positive social issues/impacts of the Project;
- To suggest mitigation measures to effectively manage potential adverse impacts;
- To involve local people in the SIA study and project activities.

1.9 Methodology adopted for the SIA

1. Defining the Impact area

The first step is to define the Area of Impact. For defining the project area ((both directly and indirectly), a map that will show the project area will be prepared. In addition, field visit to the area were undertaken on 11.7.2019 and on 23.12.2020 to have a better understanding of the geographic limits of the area and the people living there.

2. Identifying the Information/Data Requirements and their Sources

The existing secondary data (census 2011) on impacts, likely to follow from the project has been reviewed and used for assessment purposes. This has provided disaggregated data according to caste, religion, sex and other administrative categories, such as persons below poverty line.

3. Public Consultations

Project related information has been shared with all the concerned stakeholders on 11.7.2019 and 23.12.2020. This was the first step to identify stakeholders who will be involved in the consultative processes. Since the sub-project does not envisage acquisition of assets such as land and structures and there is no adverse impact on the livelihood either, therefore, only people residing along the sub-project road were involved in the consultation. The basic questions to consider in identifying stakeholders include:

- Who will be directly or indirectly and positively and negatively affected?
- Who are the most vulnerable groups?
- Who might have an interest or feel that they are affected?
- Who supports or opposes the changes that the project will produce?
- Whose opposition could be detrimental to the success of the project?
- Whose cooperation, expertise, or influence would be helpful to the success of the project?

4. Conducting Screening

Social Impact Assessment (SIA) process begins with screening. Screening is undertaken in the very beginning stages of project development. The purpose of screening is to screen out “no significant impacts” from those with significant impacts and get a broad picture of the nature, scale and magnitude of the issues. This helps in determining the scope of detailed SIA that would be subsequently carried out. The screening for the sub-project has been carried out and it does not envisage any significant impact as the proposed road will be upgraded in the available RoW and there is no structure either commercial, residential or any CPR in the alignment of the road.

5. Carry out Scoping in the Field

The next step is scoping. Essentially, this will involve visit to the project site, and consultation with all stakeholders. It is important to confirm their understanding of key issues. The scope of the present study is to assess and identify land requirements, evaluate the temporary and permanent impacts, engaging different stakeholders in the project activities and to develop a sound social management plan on the basis of the study.

6. Developing a Mitigation Plan

SIA study helps and guides in the preparation of social mitigation and management plan for the envisaged and unanticipated impacts. In this study SMP has been prepared in consultation with the locals, PIU and other stakeholders which will serve as blueprint for managing and mitigating social issues/impacts during execution of the sub-project.

1.10 Structure of SIA Report

To present the findings of the SIA study, the information has been presented in following chapters

Executive Summary

1. Introduction & Background

2. Project Description
3. Legal and Regulatory Framework
4. Socio-Economic Profile of the Project Impact Area
5. Analysis of Alternatives
6. Stakeholder's Consultation
7. Analysis of Social Impacts
8. Mitigation Measures
9. Grievance Redressal Mechanism
10. Institutional Arrangements
11. Monitoring and Evaluation

2. Project Description

2.1 Description of the Project

The Jammu & Kashmir region owing to its geographical and geo-climatic setting is a multi-hazard prone region that has experienced natural disasters like earthquakes, floods, landslides, avalanches, high-velocity winds, and snowstorms. Most of the project roads in Kashmir Valley fall in plain terrain whereas roads under Jammu Province are passing through hilly terrain. In Kashmir, Floods and flash floods are also frequent. Floods generally occur in the summer when heavy rains are followed by snowmelt. Flooding of the river Jhelum is the main cause of floods in the region. In Jammu province, hill roads are mainly damaged frequently during the beginning of summer due to snowmelt and due to heavy rain. Hill slopes are badly damaged and sliding comes on the roads as there is no such protection work exists towards hill slide slope. Even Jammu Srinagar National Highway is not unturned from it.

In September 2014, the northern region of India experienced torrential monsoon rains in the region causing major flooding and landslides. The continuous spell of rains from September 2nd to 6th, 2014, caused Jhelum and Chenab Rivers as well as many other streams/tributaries to flow above the danger mark. Due to the unprecedented heavy rainfall, the catchment areas particularly the low laying areas were flooded for more than two weeks. As a result, the main tributaries of river Jhelum vis-a-vis Brengi Nallah, Vishav Nallah, Lider Nallah, and Sundran Nallah started overflowing. The water level also increased in the rivers of Chenab and Tawi, both of which the water flowing above normal levels. Due to the rivers overflowing nearly 20 districts were impacted. The total damage and loss caused by the flood is about INR 211,975 million, most of it to housing, livelihoods, and roads and bridges, which combined represented more than 70% of the damages in terms of value. Public service infrastructure and equipment of hospitals and education centers were also severely damaged and are still not fully operational.

The project "Jhelum & Tawi Flood Recovery Project" will focus on restoring critical infrastructure using the international best practice of resilient infrastructure. Given the region's vulnerability to both floods and earthquakes, the infrastructure will be designed with upgraded resilient features and will include contingency planning for future disaster events. Therefore, a study followed by detailed reports on flood management aims at both restoring essential services disrupted by the floods and improving the design standards and practices to increase resilience.

Based on the RDNA results, restoration works underway, and discussions with the Govt. of J&K, "Jhelum and Tawi Flood Disaster Recovery Project (JTFRP)" will focus on restoring critical infrastructure using international best practice on resilient infrastructure. Component 2 of

JTFRP is 'to restore and improve the connectivity disrupted due to the disaster through the reconstruction of damaged roads and bridges'.

2.2 Sub-Project Description

Project Road takes off from km 3.3 on Nomain - Deva Mai Road (near village Nomain). Construction of the identified road stretch under JTFRP is of high importance since it provide connectivity to other important roads such as Nomain Deva Mai and Bamyal to Ohli Mandir. Earlier days, people use to follow this route to reach Shri Mata Vaishno Devi ji temple. construction of this stretch will not only reduce the distance but also the traffic load on the present route. Existing carriageway is 2.5 to 3.0 meters and the proposal is to develop it to the configuration of single lane i.e., 3.75 m carriageway. The available RoW is 6.00 meters.

Table 1: Overview of the proposed road

Sl.No.	Description of item	Details	
1	Road length	Existing - 4.700 km.	Design - 4.990 km
2	Road Configuration	Existing:- 2.5 m to 3.0 m wide carriageway	Propose:- 3.75 m wide carriageway
3	Terrain	Hilly	
4	Land use pattern	Mixed land use between open	
5	Existing Surface of carriageway	Damaged flexible pavement	
7	Existing Formation Width	6.0 m	
8	Right of Way (ROW)	6.0 m	
9	Pavement Condition	Poor	
10	New Flexible Pavement thickness	OGPC-20 mm; BM -50 mm, WBM - 225 mm; GSB-200 mm	
11	Design CBR	5.54 % (Av CBR)	
12	Junctions	Minor- 01	
13	Traffic	T9 (15 ESAL to 20 EASL) – IRC SP 72 -2015	
14	Cross drainage structures	Existing Culvert- 12, HP Culvert – 11 Nos. Slab Culvert – 1 No (Retained)	Proposed Culvert- 20 HP Culvert-20 Nos (Reconstruction – 11, New Proposal 9)
15	Settlement	Nomain	

2.3 Project Location

The geographical coordinates of proposed road latitude are- 32°58'14.18"N (at Deva Mai-RD 0+000), 32°57'42.89"N (At Ohli Mandir- RD 4+990) and longitude is 74°53'46.85"E (At Deva Mai – RD 0+000), 74°53'27.94"E (At Ohli Mandir RD 4+990). GIS map of the road annexed as annexure 2 and photographs as annexure 6.

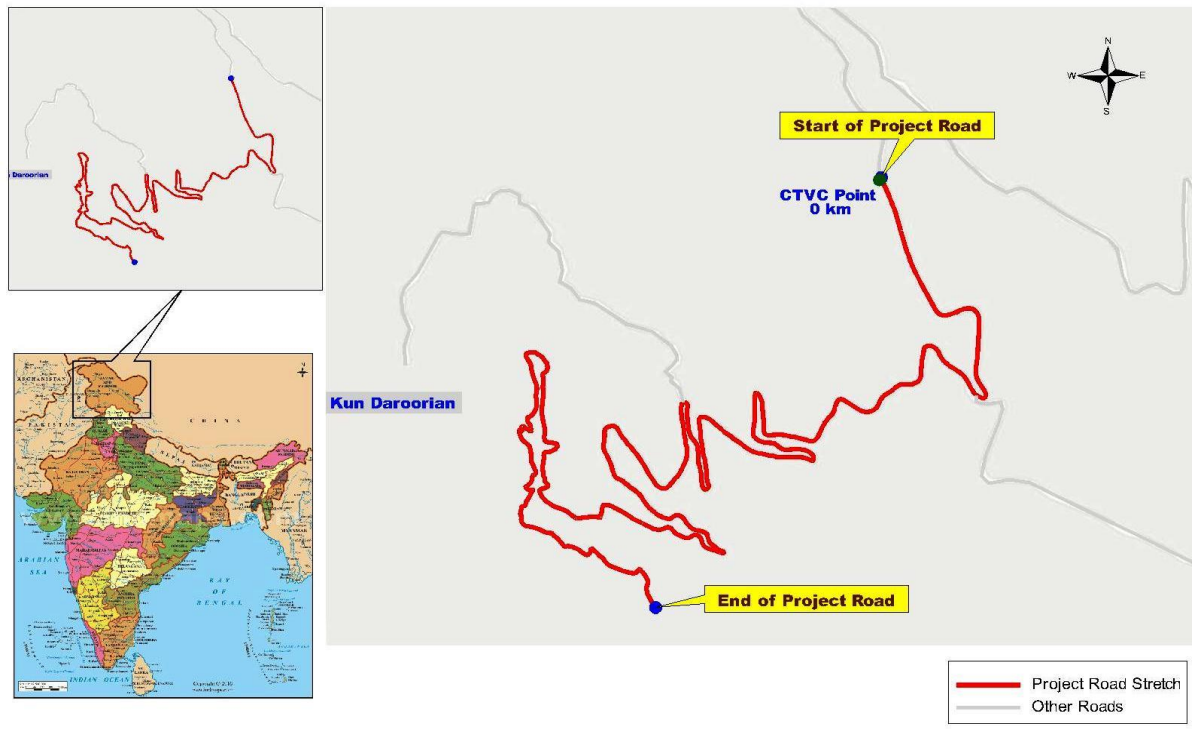


Figure 1: Map showing location of the proposed road of “Deva Mai - Ohli Mandir Road upto Km 18+290”

2.4 Details of Existing Project Roads

2.4.1 Embankment, Carriageway, and Shoulder

The average width of the existing carriageway varies from 2.75 m to 3.0 m with an average shoulder width of 1.50 m resulting in the average formation width varies from 5.75 m to 6.0 m.

2.4.2 Horizontal and vertical alignment

Project road runs in Hilly terrain and the existing alignment is fully collapsed from Km 2.45. The differences in existing vertical up to 2.45 Km stretches are within codal limitation.

2.4.3 Pavement Condition

The existing pavement is flexible up to 1.000 Km is in poor condition. From Km 1.000 to Km 2.450 Gravel Road exists, there after motorable alignment fully collapsed and continued till the end of the project stretch.



Km 2.300



Km 2.870



Km 0.500



Km 0.800



Km 1.100



Km 1.800



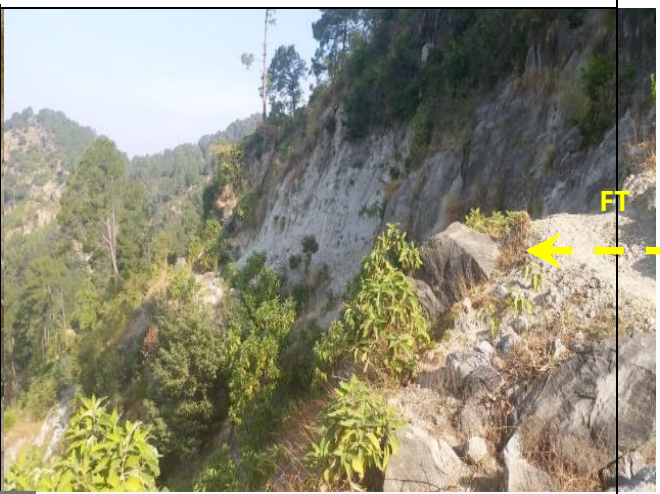
Km 2.950



Km 3.150



Km 3.400



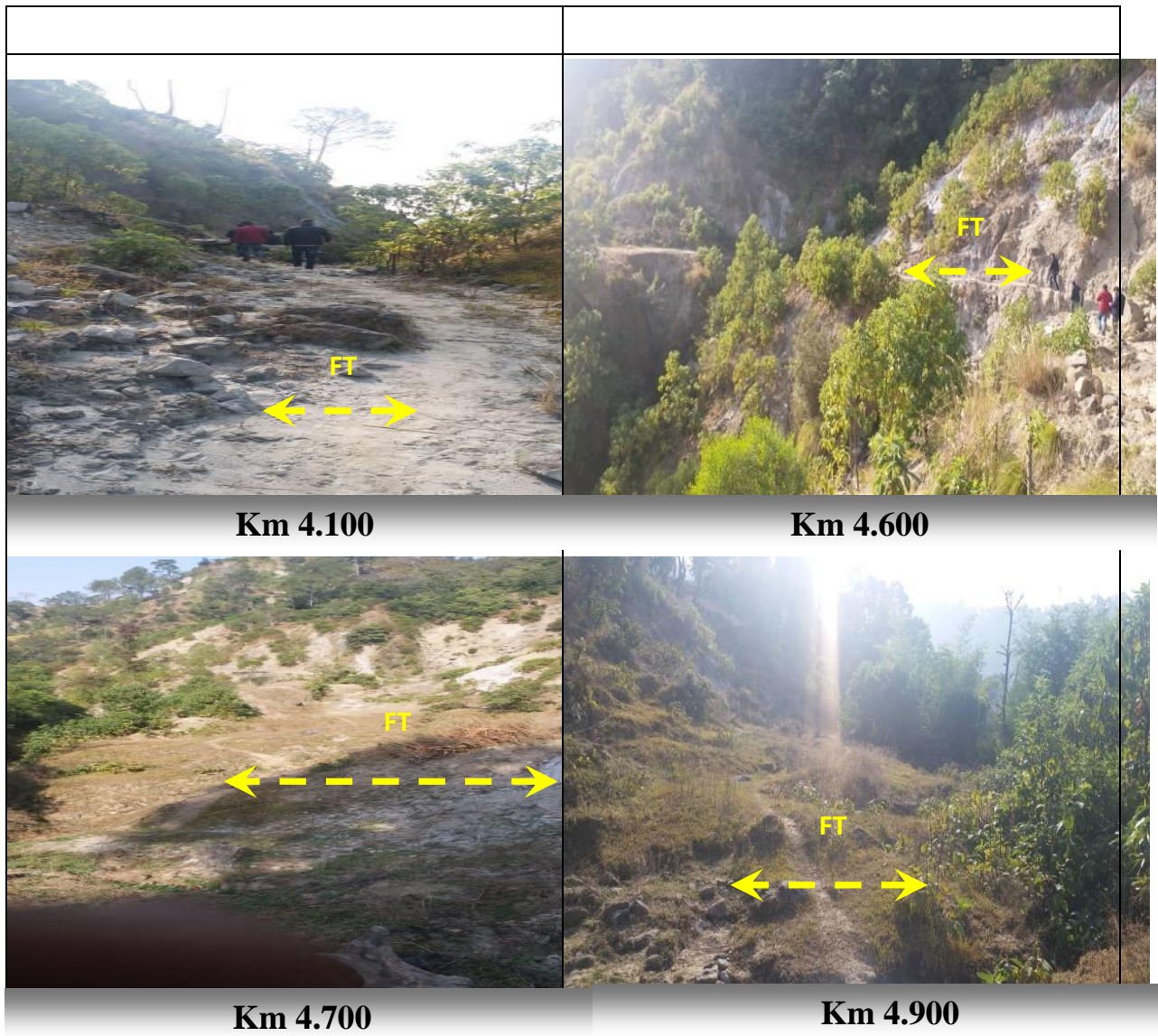
Km 3.500



Km 3.700



Km 3.900



2.4.4 Cross Drainage Structures

There are 12 nos. of CD structure in the project road, out of which 11 nos are HP culverts and 1 Slab culverts. Out of these 11 nos HP culverts are choked by siltation; need to replace by 1.2 m dia HP Culverts. The details are given in Table 2.

Table 2: List of Existing Cross Drainage Structures

Sl	Existing Structure					
	Chainage (Km)	Type of Structure	Span / Dia (m)	Total Width (m)	Width of Head/Parafet Wall (m)	Condition
1	0+330	Pipe Culvert	1 x 0.600	5.10	1.100	C&P
2	0+586	Pipe Culvert	1 x 0.600	5.05	1.100	C&P
3	0+703	Pipe Culvert	1 x 0.600	5.05	0.950	C&P
4	0+809	Slab Culvert	1 x 1.200	5.10	0.950	Retained
5	0+919	Pipe Culvert	1 x 0.600	5.30	1.050	C&P
6	1+070	Pipe Culvert	1 x 0.600	5.20	-	C&P
7	1+245	Pipe Culvert	1 x 0.600	5.20	1.050	C&P
8	1+314	Pipe Culvert	1 x 0.600	5.20	1.050	C&P
9	1+422	Pipe Culvert	1 x 0.600	5.20	1.050	C&P
10	1+520	Pipe Culvert	1 x 0.600	5.20	1.050	C&P
11	1+705	Pipe Culvert	1 x 0.600	5.20	1.050	C&P
12	1+950	Pipe Culvert	1 x 0.600	5.10	1.050	C&P

2.4.5 Existing Pavement Composition

The said road is a very old road that was initially constructed not based on traffic on the section but as a heritage route of Vaishno Devi Yatra. Afterward, several maintenances work of the different specifications have been undertaken over the road. Specification adopted for such maintenance widely varies from year to year as well as from stretches to stretches. But during heavy rain in the year 2014, the alignment is fully collapsed from Km 2.45 and as of date, only foot track exists from Km 2.45 to the end of the project road. Trial Pit Investigation has been conducted for detailing pavement composition at different locations and on an average following composition is found as existing hard crust as mentioned in table 3.

The average pavement thickness is 235 mm. The total thickness of the hard crust varies in between 190 mm – 270 mm where existing crust comprises of GSB consists of compacted granular materials having thickness 100 mm to 250 mm thick (average 173 mm), partly disintegrated base course with WBM materials of 0 mm to 75 mm thick (average 48 mm) and Bituminous/ Binder course varying from 0 mm to 30 mm thick (average 15 mm). From Km 2.450 to Km 4.900, no Pavement exists (only Earthen Foot track available). A detail of pit wise existing pavement compositions is provided in table 3:

Table 3: Details of Existing Pavement Composition

Location	Description of Layers	Thickness (mm)				
		Individual (mm)	Surface (Bituminous) in mm	Base Course in mm	Sub-Base Course in mm	Total
RD 0.000 / TP 1 (LHS)	Bituminous	20	20	75	175	270
	WBM	75				
	Sand & Dust	175				
RD 0.500 / TP 2 (LHS)	Bituminous	20	20	70	150	240
	WBM	70				
	Sand & Dust	150				
RD 1.000 / TP 3 (RHS)	Bituminous	20	20	70	100	190
	WBM	70				
	Sand & Dust	100				
RD 1.500 /				70	120	190

TP 4 (LHS)	WBM	70				
	Sand & Dust	120				
RD 2.000 / TP 5 (RHS)	Sand & Dust	250	0	0	250	250
RD 2.450 / TP 6 (RHS)	Sand & Dust	240	0	0	240	240
Average Thickness from Km 0.000 to Km 2.500			15	48	173	230
Minimum Thickness from Km 0.000 to Km 2.500			0	0	100	190
Maximum Thickness from Km 0.000 to Km 2.500			30	75	250	270

2.4.6 Existing Drains

In this project road from Ch 0.00 Km to Ch 4.990 Km, there are only 236 m existing PCC drain at different stretches. Existing Drains are in good condition but filled with siltation, clearance of drain is very much required. Details are shown in Table 4.

Table 4: List of Existing Drain

Sl	Starting Chainage	Ending Chainage	Length (Km)	Side	Type of Structure
1	0+205	0+318	113	LHS	PCC Open Drain
2	0+542	0+580	38	RHS	PCC Open Drain
3	1+861	1+946	85	LHS	PCC Open Drain
Total			236		

2.4.7 Existing Breast Wall

In this project road from Ch 0.00 Km to Ch 4.990 Km, there are only 239 m Breast Wall exists either in the form of stone masonry or PCC at different stretches. The existing Breast walls are in good condition. Details are shown in Table 5.

Table 5: List of Existing Breast Wall

Sl	Starting	Ending	Length (Km)	Side	Type of Structure
----	----------	--------	-------------	------	-------------------

	Chainage	Chainage			
1	0+781	0+792	11	RHS	Stone Masonry
2	1+028	1+060	32	RHS	PCC
3	1+456	1+497	41	LHS	Stone Masonry
4	1+523	1+593	70	LHS	PCC
5	1+593	1+608	15	LHS	PCC
6	1+960	2+030	70	LHS	PCC
Total			239		

2.4.8 Existing Retaining Wall

In this project road from Ch 0.00 Km to Ch 4.990 Km, there are only 1006m Retaining Wall mostly made of stone masonry at different stretches. The existing Retaining Wall is in good condition. Details are shown in Table 6.

Table 6: List of Existing Retaining Wall

Sl	Starting Chainage	Ending Chainage	Length (Km)	Side	Type of Structure
1	0+010	0+065	55	RHS	Stone Masonry
2	0+208	0+251	43	LHS	Stone Masonry
3	0+304	0+335	31	RHS	Stone Masonry
4	0+425	0+480	55	LHS	Stone Masonry
5	0+468	0+498	30	RHS	Stone Masonry
6	0+521	0+540	19	LHS	Stone Masonry
7	0+527	0+542	15	RHS	Stone Masonry
8	0+625	0+673	48	LHS	Stone Masonry
9	0+673	0+693	20	RHS	Stone Masonry
10	0+705	0+738	33	LHS	Stone Masonry
11	0+765	0+840	75	LHS	Stone Masonry
12	0+885	0+972	87	LHS	Stone Masonry

Sl	Starting Chainage	Ending Chainage	Length (Km)	Side	Type of Structure
13	1+028	1+070	42	LHS	Stone Masonry
14	1+090	1+150	60	LHS	Stone Masonry
15	1+183	1+217	34	LHS	Stone Masonry
16	1+288	1+320	32	LHS	Stone Masonry
17	1+356	1+398	42	RHS	Stone Masonry
18	1+422	1+445	23	RHS	Stone Masonry
19	1+497	1+523	26	RHS	Stone Masonry
20	1+606	1+646	40	LHS	Stone Masonry
21	1+774	1+861	87	RHS	Stone Masonry
22	1+865	1+933	68	RHS	Stone Masonry
23	2+124	2+149	25	LHS	Stone Masonry
24	2+137	2+153	16	LHS	Stone Masonry
Total			1006		

2.4.9 RoW Details of the Sub-Project Road

The existing road will be upgraded in the government land owned by R&B department (annexure 3). The R&B department, Jammu has paid an amount of Rs 26,90,582.00 to the Forest Division officer, Reasi for acquisition of forest land measuring 2.472 hectares for construction of Deva Mai ji to Ohli Mata Mandir Road (annexure 3). Project Manager, PMU JTFRP has issued an encumbrance free certificate for the project roads and confirmed that the available RoW of the sub-project road is more than 6.0 meters (annexure 4).

2.4.10 Major Utilities along the Existing Road

A detailed road inventory survey was carried out at 100 m intervals mainly the proposed alignment. Detailed information was collected and utilized for planning, design, and cost estimate.

An inventory of the project road has been carried out through dimensional measurement and visual inspection. Features like chainage, terrain and land-use, the height of fill or depth of cut, the width of pavement and shoulders, important road junctions and geometric deficiencies,

utilities, etc., were recorded. These surveys were carried out by visual observation supplemented with sample measurements using tape etc. The road inventory has been referenced to the existing km posts established along the roadside.

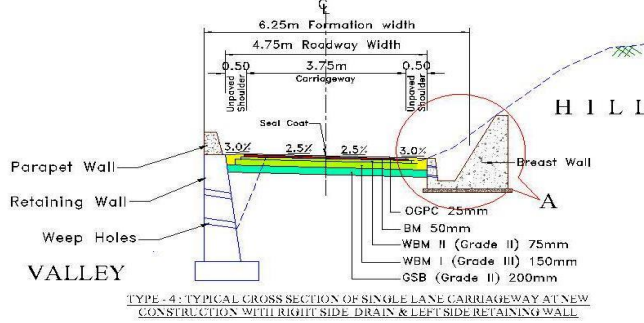
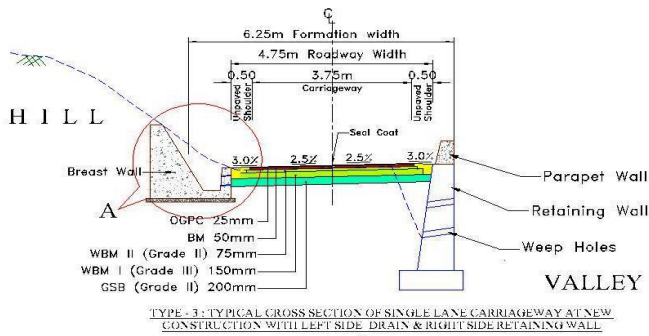
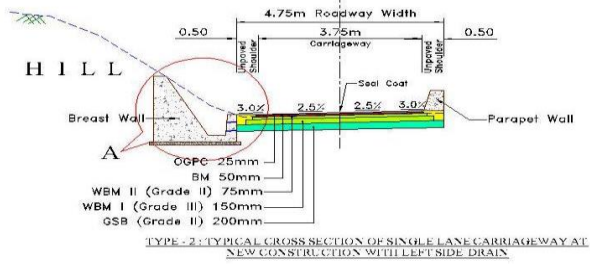
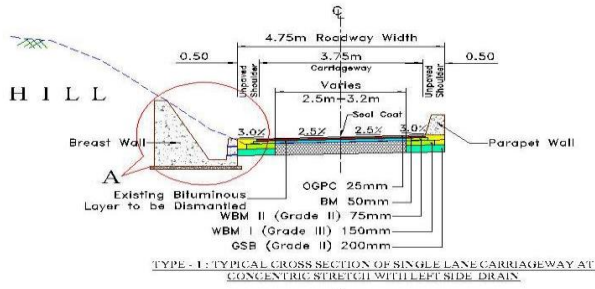
2.5 Proposed Activities (Improvement)

Table 7: Proposed Technical Description in the Project

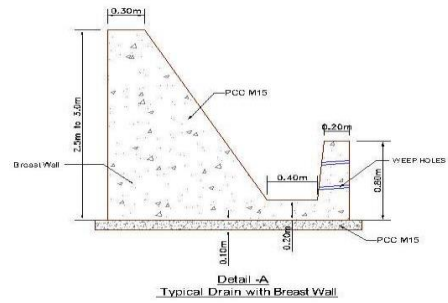
Sl.No.	Description of item	Details	
1	Road length	Existing – 4.700 km.	Design – 4.990 km
2	Road Configuration	Existing:- 2.5 m to 3.0 m wide carriageway	Propose:- 3.75 m wide carriageway
3	Terrain	Hilly	
4	Land use pattern	Mixed land use between open	
5	Existing Surface of carriageway	Damaged flexible pavement	
7	Existing Formation Width	6.0 m	
8	Right of Way (ROW)	6.0 m	
9	Pavement Condition	Poor	
10	New Flexible Pavement thickness	OGPC-20 mm; BM -50 mm, WBM - 225 mm; GSB-200 mm	
11	Design CBR	5.54 % (Av CBR)	
12	Junctions	Minor- 01	
13	Traffic	T9 (15 ESAL to 20 EASL) – IRC SP 72 -2015	
14	Cross drainage structures	Existing Culvert- 12, HP Culvert – 11 Nos. Slab Culvert – 1 No (Retained)	Proposed Culvert- 20 HP Culvert–20 Nos (Reconstruction – 11, New Proposal 9)
15	Settlement	Nomain	

2.5.1 Carriage Way Improvement

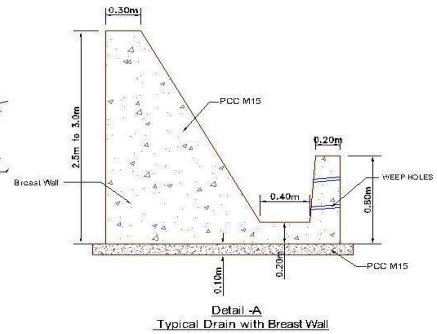
In general, the proposed cross-section comprises of 3.75 m wide carriageway with 1.000 m wide granular hard shoulder on either side of the c/w. The camber on either side of the carriageway and hard shoulder is 2.5 % & on the shoulder, it is 3.0 %. The proposed cross-sections are presented in TCS-1 & TCS - 2 having 3.75 m CW.



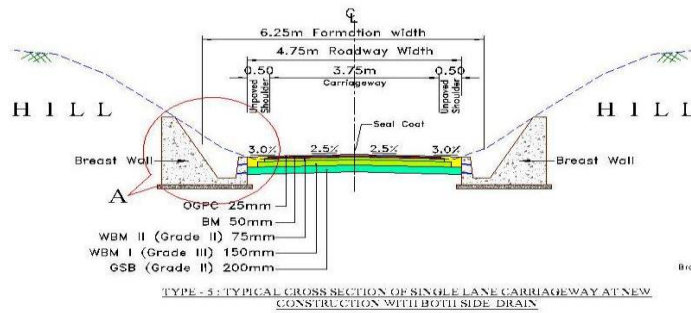
- Note:**
1. PCC upto 75mm thick shall be done by BM.
 2. PCC from 75mm to 225mm thick shall be done by WBM after dismantling Existing Bituminous Surface.
 3. PCC of thickness more than 225mm shall be done GSB after dismantling Existing Bituminous Surface.
 4. PCC shall decided based on difference in level of FRL and existing level and/or level after dismantling and recompaction of Existing Bituminous Surface.



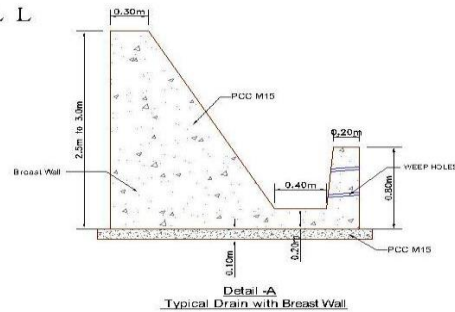
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 4. PCC shall decided based on difference in level of FRL and existing level and/or level after dismantling and recompaction of Existing Bituminous Surface.



- Note:**
1. PCC upto 75mm thick shall be done by BM.
 2. PCC from 75mm to 225mm thick shall be done by WBM after dismantling Existing Bituminous Surface.
 3. PCC of thickness more than 225mm shall be done GSB after dismantling Existing Bituminous Surface.
 4. PCC shall be decided based on difference in level of FRL and existing level and/or level after dismantling and recompaction of Existing Bituminous Surface.



TYPE - 5: TYPICAL CROSS SECTION OF SINGLE LANE CARRIAGEWAY AT NEW CONSTRUCTION WITH BOTH SIDE DRAIN



Detail -A
Typical Drain with Breast Wall

2.5.2 Horizontal and vertical alignment

Existing alignment is followed to widen and strengthen the existing road and it is found that mostly the required ruling design speed of 40 km/hour is maintained. The existing carriageway will be provided with the required grade after making the provision of a profile corrective course with proper cambers over the existing carriageway surface. Due to land constraints, most of the curve radius is less than 60, henceforth 0.6 m to 0.9 m extra widening provide at those locations as per IRC norms (details are given in annexures of DPR).

2.5.3 Improvement of Sight Distance

Improvement of sight distance on the proposed alignment has been taken care of while designing the alignment. However, a necessary road sign has to be provided where speed is restricted wherever required.

2.5.4 Improvement of Cross Drainage Structures

There are 12 nos. of CD structure in the project road, out of which 11 no. HP culverts and 1 no Slab culverts exists. Out of these 11 nos. HP culverts all are replaced by 1200 mm dia HP as existing all are choked due to siltation and in very poor condition. In addition to that, 9 nos of new Cross Drainage structure also proposed out of which 3 nos Box culvert and rest are HPC.

Table 8: Details of Proposed Culverts

Sl	Existing Structure	Proposed Structure
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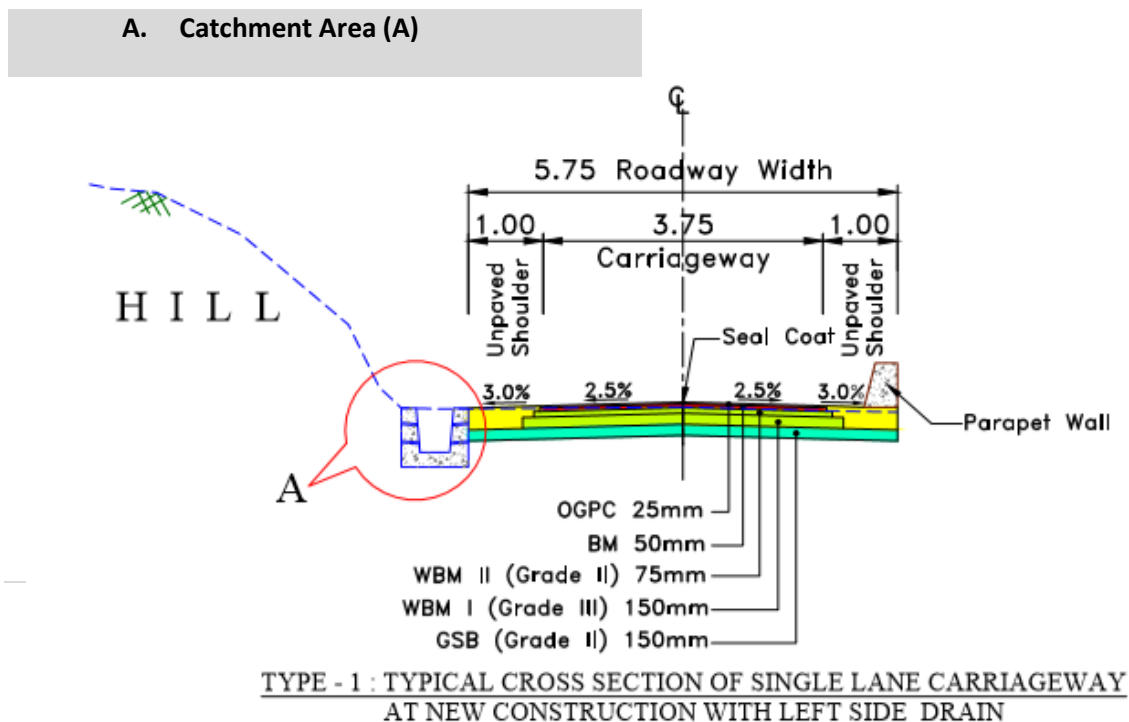
	Chainage (Km)	Type of Structure	Span / Dia (m)	Total Width (m)	Condition	Type of Structure	Span / Dia (m)	Proposal
1	0+330	HPC	1 x 0.600	5.10	C&P	HPC	1 x 1.20	R&NC
2	0+586	HPC	1 x 0.600	5.05	C&P	HPC	1 x 1.20	R&NC
3	0+703	HPC	1 x 0.600	5.05	C&P	HPC	1 x 1.20	R&NC
4	0+809	SC		5.10	Retained			Retained
5	0+919	HPC	1 x 0.600	5.30	C&P	HPC	1 x 1.20	R&NC
6	1+070	HPC	1 x 0.600	5.20	C&P	HPC	1 x 1.20	R&NC
7	1+245	HPC		5.20	C&P	HPC	1 x 1.20	R&NC
8	1+314	HPC	1 x 0.600	5.20	C&P	HPC	1 x 1.20	R&NC
9	1+422	HPC	1 x 0.600	5.20	C&P	HPC	1 x 1.20	R&NC
10	1+520	HPC	1 x 0.600	5.20	C&P	HPC	1 x 1.20	R&NC
11	1+705	HPC	1 x 0.600	5.20	C&P	HPC	1 x 1.20	R&NC
12	1+950	HPC	1 x 0.600	5.10	C&P	HPC	1 x 1.20	R&NC
13	2+139	-	-	-	-	HPC	1 x 1.20	NP
14	2+340	-	-	-	-	HPC	1 x 1.20	NP
15	2+975	-	-	-	-	HPC	1 x 1.20	NP
16	3+189	-	-	-	-	HPC	1 x 1.20	NP

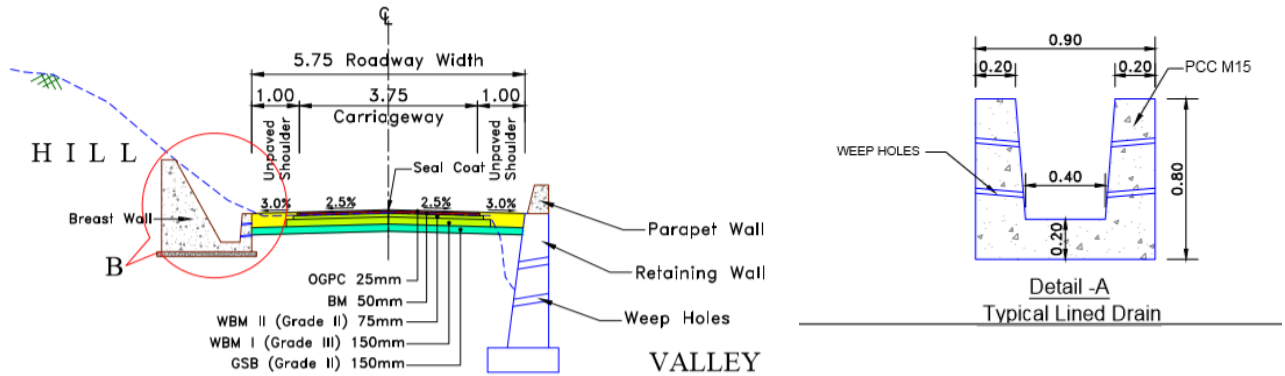
Sl	Existing Structure					Proposed Structure		
	Chainage (Km)	Type of Structure	Span / Dia (m)	Total Width (m)	Condition	Type of Structure	Span / Dia (m)	Proposal
17	3+586	-	-	-	-	Box	2.0 x 2.0	NP
18	3+856	-	-	-	-	Box	2.0 x 3.0	NP
19	4+197	-	-	-	-	Box	2.0 x 3.0	NP
20	4+560	-	-	-	-	HPC	1 x 1.20	NP
21	4+823	-	-	-	-	HPC	1 x 1.20	NP

2.5.5 Protective Works towards Slope at Hill Side/Valley Side

As the alignment is collapsed from Km 2.450 to Km 4.990, New construction concept has been adopted for the entire stretch. From Km 0.000 to Km 2.450, the Existing Protective Structure which in Good condition is retained. Apart from that, additional Protective Structures proposed at different stretches as per site condition. PCC Breast Wall required about length 1944,(Proposed 1344m for 1.5m height and 600m for 2.0m height). PCC Retaining Wall required about length 919m of height 2.0m and 160m length of 3.0m height.

2.5.6 Drainage Works with Drainage Capacity





TYPE - 2 : TYPICAL CROSS SECTION OF SINGLE LANE CARRIAGEWAY AT NEW CONSTRUCTION WITH DRAIN & BREAST WALL AT LEFT SIDE & RETAINING WALL AT RIGHT SIDE

Table 9: Details of Proposed Drain

Existing Structure					
Sl	Chainage From (Km)	Chainage To (Km)	Total Length (m)	Type (m)	Condition
1	0	560	560	Line Drain	Proposed
2	560	725	165	Line Drain	NR
3	725	1380	655	Line Drain	Proposed
4	1380	1630	250	Line Drain	Proposed
5	1630	1770	140	Line Drain	Proposed
6	1770	2040	270	Line Drain	Proposed
7	2020	2240	220	Line Drain	Proposed

Existing Structure					
Sl	Chainage From (Km)	Chainage To (Km)	Total Length (m)	Type (m)	Condition
8	2240	2470	220	Line Drain	NR
9	2470	3065	595	Line Drain	Proposed
10	3065	3830	765	Line Drain	Proposed
11	3830	4580	750	Line Drain	Proposed
12	4580	4920	340	Line Drain	Proposed
13	4920	4989.874	69.874	Line Drain	Proposed

Total Length =4614.874

Table 10: Details of Retaining Wall

Existing Structure				
Sl. No.	Chainage From (Km)	Chainage To (Km)	Total Length	Height Condition
570	715	290	2	570
1165	1225	60	2	1165
1370	1435	65	3	1370
1940	2065	125	2	1940
2235	2465	230	2	2235
2880	2930	50	3	2880
3025	3080	55	2	3025
3080	3175	95	2	3080
3580	3624	44	3	3580
3875	3940	65	2	3875

2.5.7 Pavement Design

After doing the pavement investigation and pavement condition survey, it has been studied thoroughly. After that pavement design has been done as per the following considerations:

- Rehabilitation on existing pavement
- Reconstruction of existing pavement

The consultants have worked out the designs for all the above cases based on results of survey/investigations concerning traffic, axle load spectrum, pavement condition, and strength, subgrade/material properties, etc.

The design life adopted in the analysis is 10 years for flexible pavement from the date of opening the road to traffic. Pavement design for various cases has been illustrated in the following paragraphs.

2.5.8 Rehabilitation of existing pavement

Strengthening design involves prudent engineering judgment and decision-making in analyzing and using the various investigations data for the purpose. It may be mentioned that deflection testing (generally use for strengthening design) is primarily related to traffic-associated fatigue cracking of a pavement. If the pavement is exhibiting deformation / without bitumen top surface / poor condition of the bituminous surface, it will be necessary to sample and test/observe component layers before deciding on an overlay/strengthening.

Design of flexible pavement for new construction has been done following "Tentative Guidelines for the Design of Flexible Pavement" (IRC: 72-2015).

The following Survey has been conducted and procedure followed for design and construction:

Conducted the Traffic Study and based on PCU, lane configuration finalized. In the case of land constraint, lane configuration has been restricted up to the availability of space between properties of both sides.

In case land availability allows to provide required lane configuration to upgrade (widening), rehabilitate, and reconstruct then only it has been considered in the sub-project stretches. For the widening portion, mostly concentric widening is considered. After both edge trimming, prepare the original ground for construction of embankment, followed by sub-grade, GSB, WMM, DBM, and BC.

Raising of Existing Carriageway is not done where roadside establishment exists. On those stretches, reconstruction has been proposed. Where lane configuration is not feasible for the upgrade, the carriageway has been restricted up to the availability of space between properties of both sides.

The existing condition of the road is poor. Hence, the BBD test was not carried out. Existing bituminous layer to be dismantled and re-compaction to be done after dismantling bituminous layer. Re-compacted level shall be compared concerning design level and WMM/GSB (depending upon the level difference of FRL and level after re-compaction). Existing Base and

Subbase layers are generally more than required thickness than that of new pavement. Widening portion to be constructed from the subgrade as per the design. The top layer of BC and DBM shall be laid simultaneously for the existing carriageway as well as the widening portion.

2.5.9 Traffic Safety and Other Appurtenances

Following road furniture and miscellaneous items have been designed keeping safety aspects in mind.

Road Markings

Road Markings on the carriageway and the objects within and adjacent to the roadway are used as a means of guiding and controlling the traffic. They promote road safety and ensure the smooth flow of traffic in the required paths of travel.

The location and type of marking lines, material, and the colour is followed using IRC: 35-2015 – “Code of Practice for Road Markings”.

The road markings were carefully planned on carriageways, intersections, and bridge locations.

Road Signs

Road signs were planned to supply information, to regulate traffic by imparting messages to the drivers. The type, locations, sizes were planned using IRC: 67-2012 “Code of Practice for Road Sign”. Details of Road Signage are given in Table 11.

Table 11: Details of Road Signages

Sl no	Sign		Size	Nos
	Fig No	Description		
1	14.02	Give Way	900 Equilateral	1
2	14.23	Overtaking Prohibited	600 Equilateral	0
3	15.01	Left Hand Curve	600 Equilateral	5
4	15.02	Right Hand Curve	600 Equilateral	5
5	15.03	Right Hairpin Curve	600 Equilateral	9
6	15.04	Left Hairpin Curve	600 Equilateral	9
7	15.05	Right Reverse Bend	600 Equilateral	0

Sl no	Sign		Size	Nos
	Fig No	Description		
8	15.06	Left Reverse Bend	600 Equilateral	2
9	15.07	Series of Bends	600 Equilateral	18
10	15.09	Side Road Right	600 Equilateral	0
11	15.10	Side Road Left	600 Equilateral	0
12	15.18, 15.19, 15.20, 15.21	Intersection	600 Equilateral	1
13	15.23	Narrow Road Ahead	600 Equilateral	0
14	15.24	Road Widens	600 Equilateral	0
15	15.34	School Ahead	600 Equilateral	0
16	15.35	Build Up Area	600 Equilateral	0
17	15.72	Chevron(Normal)		0
18	15.76	Object Hazard(Left)	90 cm x 30 cm rectangular	42
19	15.77	Object Hazard(right)	90 cm x 30 cm rectangular	42
20	16.02	Directional Sign		0
21	16.04	Directional Sign	60 cm x 90 cm rectangular	1
22	16.06	Place Identification Sign	60 cm x 45 cm rectangular	6
23	14.37	Maximum Speed Limit	600 mm dia	62
24	15.19	Major Road Ahead	600 Equilateral	0
25	15.30,15.31	Start & End of Dual Carriageway	600 Equilateral	0
26	17.07	Hospital Ahead	600 Equilateral	0
Total				203

Delineators

The role of delineators is to provide visual assistance to the driver about the alignment of the road ahead, especially at night. Reflectors are used on the delineators for better night visibility. IRC: 79-1981 "Recommended Practice for Road Delineators" was followed to plan location

details. Two types of road delineators were planned i.e. hazard markers and object markers. Hazard markers are to define obstructions like guardrails, and abutments adjacent to the carriageway, for instance at culverts and bridges. Object markers are used to indicate hazards and obstructions within the vehicle flow path, at channeling islands close to intersections.

Crash Barrier

Metal crash barriers are proposed/ provided for the safety of the traffic on the stretches on approaches of bridges. It is also proposed on the curves for the safety of traffic irrespective of embankment height as per NHAI Circular (NHAI/PH-II/NHDP/ADB/GM (NS)-I dated May 19, 2004).

Parapet Wall

Parapet walls are provided along the edge of the shoulders at the valley side throughout the project stretch excluding the settlement areas. These are provided to prevent the vehicles from toppling over.

Convex Mirror

Roadside Convex Safety Mirrors are widely used by both commercial and private properties to help eliminate blind spots on approach roads, junctions, and entrances. Convex mirrors are ideal for use in road safety applications because the domed effect of the mirror will give a wider angle view and allows the driver to see down the road from a wider range of parked positions.

Typically a 600mm diameter convex mirror is useful when viewed no more than 6 Metres or 20 feet away. Above this distance, you need to use a bigger mirror.

Table 12: Details of Roadside Convex Mirrors

Sl no.	Location	Sl no.	Location	Sl no.	Location	Sl no.	Location	Sl no.	Location
1	0+372	11	1+334	21	2+880	31	3+423	41	4+309
2	0+448	12	1+291	22	2+906	32	3+448	42	4+469
3	0+479	13	1+486	23	2+953	33	3+561	43	4+601
4	0+835	14	1+510	24	2+980	34	3+625	44	4+583
5	0+885	15	1+505	25	3+027	35	3+637	45	4+792
6	0+909	16	1+914	26	3+054	36	3+658	46	4+851
7	1+076	17	1+994	27	3+169	37	3+788	47	4+924

Sl no.	Location	Sl no.	Location	Sl no.	Location	Sl no.	Location	Sl no.	Location
8	1+172	18	2+151	28	3+199	38	4+046	48	4+981
9	1+278	19	2+342	29	3+271	39	4+217		
10	1+308	20	2+649	30	3+288	40	4+235		

3. Legal and Regulatory Framework

This section deals with the laws, regulations, and policies, of the Government of India, the State Government, and the World Bank, related to environmental and social issues. Only the laws, regulations, and policies relevant to the project are discussed here. This section needs to be updated as to when new laws, regulations, and policies are made and enforced or the existing ones are revised.

3.1 Operational Policies of World Bank

The safeguard policies, the triggers for each policy, as well as the status of their relevancy for the proposed project are presented in the table below:

Table 13: World Bank's Operational Policies

Operational Policy	Key Features	Applicability
Involuntary Resettlement (OP 4.12)	Physical relocation and land loss resulting in: (i) relocation or loss of shelter; (ii) loss of assets or access to assets; (iii) loss of income sources or means of livelihood, whether or not the affected people must move to another location.	Not Applicable The sub-project has no impact on any private assets.
Indigenous Peoples (OP 4.10)	If there are indigenous peoples in the project area, and potential adverse impacts on indigenous peoples are anticipated, and indigenous peoples are among the intended beneficiaries.	Not Applicable The sub-project does not adversely impact any schedule tribe population.
Physical Cultural Resources (OP 4.11)	The policy is triggered by projects which, prima facie, entail the risk of damaging cultural property (e.g. any project that includes large-scale excavations, movement of earth, surface environmental changes, or demolition).	Not Applicable No impact on any cultural resources.

3.2 World Bank's Environment Health and Safety Guidelines

The Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). The EHS

Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. Application of the EHS Guidelines to existing facilities may involve the establishment of site-specific targets, with an appropriate timetable for achieving them. The applicability of the EHS Guidelines should be tailored to the hazards and risks that may occur in the sub-project on the basis during pre-construction, construction, and operation phases.

3.3 National & U.T.'s Policies

Table 14: National and U.T.'s Policies

S.No.	Acts/Policies/Rules	Relevance to this project	Applicability in the sub-project
1	The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 The old act is Land Acquisition Act, 1894 and it is replaced by the new Act RFCTLARR,2013	The Act has provisions to provide fair compensation to those whose land is taken away, brings transparency to the process of acquisition of land to set up factories or buildings, infrastructural projects, and assures rehabilitation of those affected.	Not Applicable. The Sub-project does not trigger Involuntary Resettlement.
2	State Land Acquisition Act 1990 (1934 AD)	The State Land Acquisition Act 1990 (1934 AD) is in force in the state of Jammu and Kashmir. This Act provides the legal framework for land acquisition for public purposes in J&K. It enables the State Government to acquire private lands for a public purpose, and seeks to ensure that no person is deprived of land except under the Act.	Not Applicable. The sub-project does not involve private land acquisition.
5	Jammu and Kashmir Common Lands (Regulation) Act, 1956	An Act to regulate the rights in common lands. Provide relief to the user of the lands, used for common purposes like roads, streets, lanes, pathways, water channels, drains, wells, tanks, or any other source of water supply to the villagers in general. Provision for the prohibition of encroachments over such common lands and public places and eviction thereof and in case of encroachments, to restore the rights of the users. Provision for assigning land for extension of "Village Abadi", if existing	Not Applicable. The sub-project does not require any common land.

S.No.	Acts/Policies/Rules	Relevance to this project	Applicability in the sub-project
		land is in adequate for the habitation of the villagers at any point of time.	

3.4 Other Central and State acts which may be applicable in the Sub-project:

- Minimum Wages Act, 1948
- Contract Labor Act, 1970
- The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013
- The Bonded Labor System (Abolition) Act, 1976
- Child Labor (Prohibition and Regulation) Act 1996 along with Rules, 1988
- Children (Pledging of Labor) Act, 1933 (as amended in 2002)
- The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995
- The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Rules, 1996
- Untouchability Offences Act, 1955
- The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989
- The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Rules, 1995
- Disaster Management Act 2005: specifies that while providing compensation and relief to victims of disasters there shall be no discrimination on the grounds of sex, caste, community, descent or religion.
- The Jammu and Kashmir Protection of Human Rights Act 1997
- The Jammu and Kashmir Natural Calamities Destroyed Areas Improvement Act, 1955:
- The Jammu and Kashmir Right to Information Act 2004
- Backward Classes Commission Act, 1997
- Persons with Disabilities Act, 1998
- J&K Reservation Act, 2004

4. Socio-Economic Profile of the Project Impact Area

The Reasi District is centrally located in the province of Jammu. The economy of the District mainly depends on the Agriculture Sector. The District is famous for wheat and maize, but now farmers have started to diversify in horticulture & vegetable crops. District Reasi is the most sought-after place on the tourism map of Jammu and Kashmir. The district has the distinction to attract a count of tourists across the globe.

The Reasi District as per census 2011 consists of 255 census villages, out of which two are uninhabited. The villages have been grouped into two Tehsils viz., Gool GulabGarh and Reasi, four-CD Blocks viz., Mahore, Arnas, Pouni and Reasi, three Municipal Counsels viz.,Katra (MC), Reasi(MC), Purana Daroorh (MC) and two Census Towns of Talwara (CT) and Marhi (CT). The total population of the District is 3,14,667 as per census 2011. The geographical area of the District is 1719 sq. Km and the administrative center of the District is situated at Reasi which is 68 Km from Jammu. 91.4% of the population lives in rural areas and 8.6 % lives in urban areas.

The District is reported to be one of the pretty spots on the earth, because of its congenial climate, innumerable springs, streams, waterfalls, fragrant flowers, delicious fruits, and other natural sceneries. The Holy Shrine of Shri Mata Vaishno Devi is the most sacred place to attract a large number of pilgrims every year.

As per Census 2011, the average literacy rate of the District is 58.15, with a Male and Female literacy rate of 68.38% and 46.59% respectively.

4.1 Location and size

The district lies between 33° 05" north latitude and 74° 50" east longitudes. The district shares its boundaries with Udhampur district in the South, Ramban in the east, Shopian in the north, and Rajouri in the west. The district is the watershed of the River Chenab and its tributaries (Ans, Rudd, Plassu, Banganga, Pai, Anji). At the 2011 Census, the district has recorded a population of 314,667 and accounts for 2.50 percent of the total population of the State. Males and females are of the order of 1,66,461 and 1,48,206 respectively. In other words, males and females comprise 52.90 percent

and 47.10 percent respectively of the total population of the district. In terms of population, Reasi stands at 16th position among all the districts of the state. It is spread over an area of 1719 sq. km. and has a population density of 183.

4.2 Physiography

The district has an elongated shape that extends from Udhampur Siwalik in the south-east to the PirPanjal in the north. It falls in the area which can be termed as Outer Hill Region, comprising the slopes and hills of Siwalik, Lesser Himalaya, and PirPanjal. The areas within the jurisdiction of the district are hilly, comprising several off-shoots of great mountains interwoven closely. The hills are of moderate heights and are surmountable. In certain cases, the peaks rise as high as above 4,256 meters.

In general, the plain areas have a normal height ranging between 456 meters and 608 meters. The areas in the north are very high, rising to heights above 4256 meters. This region is on the southern side of the Pir Panjal.

4.3 Drainage

The main river of the district is Chenab or Chander Bhaga which enters the district from its eastern end extending upto the place where river Anas merges with Chenab. The Chenab then takes a southerly turn and enters Akhnoor tahsil of Jammu district.

Underground water resources Perennial springs of good water are numerous in the whole terrain and form the principal resource of water supply. Murree sand stones, though porous are hard and steep dipping thus cannot retain water. The system of joints, cracks, and faults, etc. let out stored water in an even continuous flow through the channel of springs.

4.4 Climate

Owing to variation in altitude, there is a wide variation in temperature in different parts of the district. Sometimes, the temperature shoots to 42° celsius and very seldom goes below 1.5° celsius in low altitude areas. May, June, and July are the hottest summer months when the mercury rises as high as 42° celsius. December, January, and February are the coldest months when the temperature in some areas comes down to 1.5° celsius. Most of the rainfall takes place during July, August, and September in summer and in January and February in winter.

4.5 Types of soil

The soil of the district is made up of the Ochrepts, Orchrepts-Orthents, and Ochrepts Orthents-Ustalfs sub-order associations. The soil viz., Ochrepts-Orthents is spread over the district in the shape of a huge linear belt extending from south-east to north-west followed in the north by

another belt of soils of Ochrepts-Orthents-Ustalfs. The soil is brown having a coarse loamy texture which is suitable for crops like maize, millets, etc.

4.6 Geology

Geologically the area can be divided into the following four rock zones:

- i. The PirPanjal Zone
- ii. Murree Zone
- iii. The Reasi Limestone Inlier and
- iv. The Siwalik belt

These four stratigraphic zones are distinct from one another in their constituent rock formation and their tectonics and intensity of metamorphism. Here, we get rocks ranging in age from Pre-Cambrian to Siwaliks of Miocene to Lower Pleistocene age.

4.7 Flora and fauna

Trees; namely; deodar, kail, fir, and pine are existing at higher altitudes, whereas in lower slopes and plain areas the trees of bamboo, tali, kher, tunu and thorny bushes are in abundance. Among fruit trees mango, apricot, guava, apple, walnut, and citrus trees are found over a large area of the district.

The vegetation consists of barberis, spirala, primsepiya, quercus and flex including sub-alpine herbs. So far as the fauna of the district is concerned, wild animals include leopard, panther, fox, wild goat, and wild cow. The pet animals, viz., cow, buffalo, goat, sheep, horse, camel, and birds like parrot, dove, cock, sparrow, peacock, hen, and duck are also found in the district. Animals like chetah, nilgai, sambar, etc. are found.

4.8 Cropping patterns

The main food crops of the district are maize and rice in Kharif and wheat in Rabi season. The most important crop is maize which is grown in the entire district, wheat ranks next. The area under rice cultivation is small (Source: Digest of Statistics J&K 2008-09). The cropping pattern during 2008-09 was as under:

Table 14: Cropping Patterns

Sl.No.	Name of the Food Crops	Area Sown (000 Ha)
1.	Maize	21259
2.	Wheat	11617
3.	Rice	1757
4.	Condiments & Spices	229
5.	Pulses	759
6.	Barley	244

7.	Bajra	414
8.	Millets	10
9.	Fruit & Vegetable	14
	Total Food & Crops	36303

High yielding varieties programme has been taken up with full vigor. High-yielding variety seeds are used in areas with increased irrigation facilities. The farmers in the district are increasingly using pesticides and plant protection material.

Apart from the above food grains the various fruit grown in the district is apple, apricot, mango, grapes, pear, plum, and citrus fruit, etc.

4.9 Irrigation

About 1.926 hectares of cropped area in the district is provided with assured net area irrigation. The main source of irrigation in the district is the canal which accounts for 1.899 hectares area. Other sources account for another 0.020 hectares. Out of the total irrigated area, rice accounts for 0.015 lac hectares, Wheat for 0.008 lac hectares (Source: Regional Digest of Statistics of Directorate of Economics and Statistics 2009-2010)

4.10 Natural wealth

Minerals have been exploited in this area and used for a variety of purposes since old times. This area has also a history of the production of base metals such as copper, zinc, and lead and common metals like iron. Clay is the basic raw material to be used for the construction of houses in villages, potteries, manufacture of bricks, roof tiles, etc. Siwaliks, Murrees, Nummulites in Katra and Reasi areas contain huge reserve of clay.

4.11 Animal Husbandry:

Livestock is playing a very vital role in the economic development of the state. The cattle and poultry amongst all the livestock are considered the most important tool for the development of the rural economy and serve as a boost to it. As regards animal husbandry, there were 53 veterinary institutions in the district during 2008-09. Since 1975, much emphasis has been laid on the Intensive Cattle Development Programme, especially in hillocks and high-level pastures to meet the demand of the cattle breeders in the district. The total sheep farms and sheep centres in the district as of 2008-09 were 02 and 46. The Animals treated for various diseases in the district in the year 2008-09 were 2.210 lakhs and dosed against liver fluke endo parasites were 5.289 lakh (Source: Regional digest of Statistics 2008-09).

4.12 Fishery

Due to its aromatic features and abundance of streams, Lakes, and hilly torrents, the State of Jammu and Kashmir is blessed with tremendous potential for the development of fisheries. The Kashmir "Trout" and mahaseer are famous all over the world. The number of fishing license holders of the district was 299 and the fish caught were 3614 Quintals in the year 2008-09.

4.13 Industries

From an Industrial point of view, Reasi is quite backward due to its hilly topography, non-availability of adequate raw material & good market for the sustenance of large & medium units, but there is a good scope of service sector Industries such as Hotels, Dhabas-cum-Restaurants, etc. as the world favors Holy cave shrine of MAA VAISHNO DEVI is located in the District. Besides this, there are many other Holy Shrines as NAV DEVIAN, AGHAR BABA JITTO , SHIV KHORI etc. which attract a large no. of pilgrims from all over India in the district. The SSI units registered in the district were 03 upto the year ending 2008-09.

4.14 Transport

The district is well connected with road transport to its State capital Srinagar and Jammu. The district Head Quarter is located about 100 kms from Jammu city. The District has Recorded 112 road accidents in the year 2008 in which 33 persons were killed and 228 were Injured.

4.15 Electricity and power

Power holds a key to any development's effort. It is an essential component for sustained economic growth and development. District is blessed with Salal Hydro Power Project which is located 23 km away from district. Salal Hydroelectric project constructed on river Chenab. The Project has capacity of 690 MW. The beneficiary States are UP, J&K, Punjab, Haryana, Delhi, H.P, Chandigarh & Rajasthan. The percentage of inhabited census villages electrified upto the year ending 2008-09 was 95.63 which is 241 villages out of 252 (Source RDS: 2008-09).

The socio-economic profile of the village falling under the proposed sub-project is given below.

Village Nomain- Nomain is a medium size village located in Reasi Tehsil of Reasi district, Jammu and Kashmir with total of 115 families residing. The Nomain village has a population of 591 of which 293 are males while 298 are females as per Population Census 2011.

In Nomain village population of children with age 0-6 is 104 which makes up 17.60 % of total population of village. The average Sex Ratio of Nomain village is 1017 which is higher than the

Jammu and Kashmir state average of 889. Child Sex Ratio for the Nomain as per census is 926, higher than Jammu and Kashmir average of 862.

Nomain village has a lower literacy rate compared to Jammu and Kashmir. In 2011, the literacy rate of Nomain village was 21.56 % compared to 67.16 % of Jammu and Kashmir. In Nomain Male literacy stands at 27.62 % while the female literacy rate was 15.73 %.

5. Analysis of Alternatives

For this sub-project, the analysis of alternatives has been made, considering the “with and without project scenarios” which considered the potential social impacts, both positive and negative, of the sub-project.

5.1 ‘Without’ and ‘With’ Project Scenario’

5.1.1 ‘Without’ Project Scenario

Project Road takes off from km 3.3 on Nomain - Deva Mai Road (near village Nomain) which starts from km 11th on Domail Katra Road. From a connectivity & local pilgrim point of view, this particular road has high importance. Earlier days, people use this stretch of the road to reach Shri Mata Vaishno ji temple. The road from Bamyal to Ohli Mandir (5.5 Km) is under construction which is the down going stretch of the project stretch. At present this link is disconnected but once the project stretch develops then 15% of the traffic (Mini Truck, 2Wheeler, Mini Bus, Car & Jeep) diverted from NH 144 A through Akhnoor Bamiyal via Jagti – Chibba Road and connect Ohli Mandir-Katra stretch. Without all-weather road people are not able to access the basic services such as hospital, schools and district administration. Further beyond 3.150 kms till end it’s getting black-topped for the first time and during rainy season; they struggled a lot to move out for schooling and availing other services. Therefore, without this sub-project people are not able to fully and freely able to move out of their villages.

5.1.2 ‘With’ Project Scenario

The objective of the sub-project is to restore and improve the connectivity by providing all weather road to the people living across the road. Restoration of road will also serve as supply/rescue lines in the event of a disaster. As after 3.150 kms, the road is getting black-topping for the first time, it will give them access to all services ranging from schooling to the district headquarters through-out the year. Further, the sub-project will develop one minor junction and improve and develop 20 HP culverts and 20 other culverts. Therefore, the proposed sub-project, it can be said will uplift the socio-economic conditions of the local people and will also contribute in managing the traffic flows once the major road project completed of which this is a part. The execution of the sub-project does not require any private land as the land was in possession of the forest department and now stand transferred to the R&B department, Jammu. PWD (R&B), Jammu has paid them compensation to the tune of RS. 26,90,582.00 (annexure 3). The execution of the sub-project will be done in the available RoW, which is 6.00 meters and encumbrance free (annexure 4). The RoW is devoid of any structures.

6. Stakeholder's Consultation

Stakeholder's Consultation is concerned with involving, informing, and consulting the public in planning, management implementation, and other decision-making activities. It tries to ensure that due consideration is given to public values, concerns, and preferences when decisions are made. It encompasses the public actively sharing in the decisions that government and other agencies make in their search for solutions to issues of public interest.

One of the key aims of the stakeholder engagement exercise is to ensure that all relevant stakeholders are provided with the opportunity to express their concerns and opinions, which are incorporated as early as possible in the project development: at planning, implementation, and operation phase and in the effect minimize the potential unexpected opposition of the proposed project and potential adverse effects to the environment.

6.1 Identification of Stakeholder

Stakeholder identification is the process of identifying stakeholders considering the legitimate representatives or the project-affected groups and whose views should take precedence in stakeholder consultations. Good practice suggests that as long as stakeholder groups are offering a perspective that is relevant to the project, there is no need to determine whether these stakeholder groups are the main representatives of the stakeholders or not. Design of the project along with revenue record was shared with the locals. They were consulted and transect walk also done for identifying stakeholders. Since the sub-project does not have any adverse impact in terms of land or asset acquisition, therefore, the stakeholders were the people of the Project corridor, PIU and PMU.

6.2 Objective of Stakeholder's Consultation

The main objective of this exercise is to inform stakeholders about the project and its likely effects, which in turn would incorporate their inputs, views, and concerns, and thus enable their views to be taken into account during the decision-making. The specific objectives of the consultations are geared towards:

- Informing the stakeholders about the project and its potential impacts.
- Obtaining local and traditional knowledge that may be useful in decision making.
- Facilitating consideration of alternatives, mitigation measures, and trade-offs (if any).
- Ensuring that important impacts are not overlooked and benefits are maximized.
- Reducing chances of conflict through early identification of contentious issues.

- Providing an opportunity for stakeholders to influence the Project design and operational plan in a positive manner.
- Improving transparency and accountability of decision making.
- Increasing public confidence in the SIA process.

6.3 Approach for Consultation

A very sensitive and pro people approach was adopted to engage locals in the sub-project activities. Project design and revenue record along with other project related information were shared with them in order to instil faith and confidence among them about the proposed project and its activities.

Following steps were taken to engage stakeholders.

1. Site visits and informal meetings with the local to know their views and perceptions about the sub-project.
2. Reconnaissance survey and transect walks.
3. Involving locals in the consultations.
4. Sharing of project design and revenue record with the locals.
5. Understanding their needs and requirement.
6. Collection of Baseline information.

6.4 Details of Public Consultation in sub-project road

The public consultation was conducted following the World Bank's ESMF-JTFRP requirements. The purpose and objective of the consultation is the involvement of residents/ stakeholders to make them aware of the proposed activity of the subproject. The public consultation was conducted at the project location on 11-07-2019 and thereafter on 23.12.2020 (annexure-7) with people of the Nomain and other villages. JTFRP consultants, Social Safeguards expert, officers of PIU and other were present in the consultation. People have no issue and problem with the sub-project and they are very positive about the proposal since in the lower reaches, the sub-project is going to do black-topping for the first time.

6.5 Information shared

- Project design, its source of assistance and its implementation/execution etc.
- Land Requirement and available revenue record.
- Information on perceived losses from the proposed sub-project during the execution stage in terms of inconvenience to the public etc.

- Absence of all-weather road connectivity and its impact on the education of girls and boys.
- Problems of transportation.
- Proposed Grievance Redressal Mechanism.
- Occurrence of disaster like floods, cloud burst, land slide in past.
- Social and Environment Policy of the World Bank.
- ESMP and its requirement.

6.6 Feedback Received

Locals are ready to work with the contractors since most of them are the farmers and they have free time after harvest season. Additional income from working in sub-project will add to their well-being. No issue of land extra raised by people. Major request is to provide protection walls wherever EA does hill cutting during project execution.

7. Analysis of Social Impacts

7.1 Impact on Land

The proposed sub-project does not involve any land acquisition and will not result in the loss of crops. As per the DPR, the existing formation width is 6.00 meters and available RoW is also same. Evaluation of relevant revenue record revealed that the sub-project falls under khasra number 31/1 and 798/87 and land is under the ownership of the government but within the possession of the forest department (annexure 3).

However, Executive Engineer PWD (R&B) Division, Katra vide letter number EEK/2018-19/5459-60, addressed to Director, Technical JTFRP, clearly intimated that an amount of 2690582.00 has been placed at the disposal of Division Forest Officer, Reasi vide office check number 846838/008469 dated 10.01.2011 for acquisition of forest land measuring 2.472 hectare (for 4 kms length beyond km 01) for the construction of road from Deva Mai ji to Ohli Mandir (annexure 3). Project Manager (Transport, Jammu Division) vide letter no. PIU/T/ERA/2021/865 dated 16.03.2021 issued non-encumbrance certificate and confirmed that the available existing RoW is 6.00 meters and sub-project does not require land acquisition for the proposed sub-project (annexure 4).

Therefore, SIA study revealed that sub-project does not involve private land acquisition and work will be carried out in the available RoW which is 6.00 meters. However, during execution, if there is any unanticipated adverse impact, same shall be addressed as per the ESMF for the project, applicable policies of World Bank and that of the Union territory of J&K.

7.2 Impacts on Structures

The proposed alignment is devoid of any structure i.e. residential, commercial, and religious or any CPR. Same has been verified and confirmed by site visit to the sub-project. Strip plan of the road annexed as annexure 5 also confirm that there is no structure inside the alignment of the proposed road.

7.3 Impacts on Livelihood

There is no commercial structure either temporary or permanent in the proposed alignment of the road. Further, there is no squatter on the road earning livelihood by using the available RoW and none has encroached upon the road. Therefore, sub-project has no impact on the livelihood of anyone.

8. Mitigation Measures

8.1 Social Management Plan

The Social Impact Assessment study does not envisage any significant adverse impact of the sub-project i.e., there is no involuntary displacement and land acquisition. Further, there is no temporary or permanent impact of any kind on the livelihood of people. Structures proposed shall be improved in the existing RoW. Technical department from PMU & PIU have made required modifications in design at initial stages to avoid negative impact as a part of mitigation measures.

The Social Management Plan suggests the mitigation measures needs to be adopted during execution to deal with unanticipated impact of the sub-project.

8.2 Objectives

The main objective of the Social Management Plan is to mitigate the various adverse social impacts which may arise during the pre-construction, construction, and post-construction of the sub-project. The objective of SMP in preconstruction, construction & post-construction stages are as follows:

Pre-construction Stage

It's imperative to discuss the design and technical proposal with the stakeholders in order to know their suggestions and inputs. In the pre-construction stage, it is also important to inform them about the project, its funding, land requirements, and applicable guidelines and policies of the funding agencies. It helps in ensuring engagement of the people in the sub-project activities.

Construction Stage

To ensure that the provision of the SMP (Social Management Plan) is strictly followed and implemented by strengthening implementation arrangement. To address the construction stage social impacts arising due to various project activities en route the corridor and particularly at habitations through specific measure that need to be applied across and certain specific measures that shall be determined on a case-by-case basis.

Post-construction Stage

To ensure that all the issues that arose during the construction stage shall be addressed properly. In case land and other assets utilized by the EA or contractor shall be restored to the satisfaction of communities and owners of that assets.

8.3 Scope

The Social Management Plan (SMP) in the sub-project, consists of the set of mitigation, monitoring and institutional measures to be taken during the pre-construction, construction, and operation stages of the project to eliminate adverse social impacts, to compensate them, offset them, or to reduce them to acceptable levels following the mitigation hierarchy. The plan also includes the actions needed for the implementation of these measures.

The major components of the Social Management Plan are:

- Mitigation of potentially adverse impacts;
- Integration of SMP with Project in construction and operation phases;
- Institutional Capacity Building and Training;
- Monitoring during project implementation and operations;

8.4 Context for the SMP

This Social Management Plan for Deva Mai-Ohli Mandir Road is based on the social impact study during which site visits were carried out in the project corridor. Consultation and meeting were done with people and project design was discussed and evaluated on the ground. Engaging locals in the meeting provides for effective implementation of social management measures required for addressing the potential social impacts. The sub-project does not have any impact on private land and all the construction activities will be carried out within the available ROW. There would be no impact on the private assets, CPRs and any other religious property due to any project activities. Executive Engineer PWD (R&B) has confirmed that R&B department has placed an amount of 2690582.00 at the disposal of Division Forest Officer, Reasi vide office check number 846838/008469 dated 10.01.2011 for acquisition of forest land measuring 2.472 hectare (for 4 kms length beyond km 01) for the construction of road from Deva Mai ji to Ohli Mandir (annexure 3). Project Manager (Transport, Jammu Division) vide letter no PIU/T/ERA/2021/865 dated 16.03.2021 had issued a non-encumbrance certificate which confirms that the sub-project road does not require any land acquisition (annexure 4). There can be few temporary impacts due to construction activities and to address these impacts, a Social Management Plan has been prepared which lays down mitigation measures that needs to implemented for any impact on site. SMP will be implemented by the contractor under the supervision of PMU, PIU.

8.5 Methodology for SMP Preparation

The comprehensive approach followed for the preparation of Social Management plan. It involves following key steps and processes.

- Screening of social impacts during the SIA study;

- Public consultation with the stakeholders;
- Discussion of Technical Proposal with the stakeholders;
- Transect walk and Identification of issues which can crop up during construction stage;

Development of measures aimed at avoiding, mitigating and offsetting or reducing impacts to levels that are socially accepted during implementation and operation of the project road

8.6 Probable social issues that may arise during the construction stage

- Loss of land due to land-slides resulting from hill cutting activities;
- Cracks in structures or damage due to construction works e.g., hill cutting activities;
- Temporary – short duration or prolonged disruption to services such as water supply, power supply etc.
- Temporary Disruption to traffic movement leading to time delays.
- Possibility of gender-based violence arising from influx of migrant labour for construction works.
- Labour issues such as unequal wages to men and women, discrimination in employment opportunities, Child labour etc
- Inconvenience and Nuisance to Public due to accumulation of excavated earth
- Spread of diseases at construction and camp sites due to influx of labour like HIV AIDs, COVID 19 etc.

8.7 Social Management Plan (SMP)

Based on the findings and issues identified during SIA study, Social Management Plan has been prepared for the sub-project. The mitigation measures for the potential impacts are presented in form of a matrix according to the sequential flow of activities in the project life cycle. These measures would be further updated by Contractor during the implementation of the SMP. The Social Management Plan will be a part of Bid document.

Table 15: Social Management Plan

S.No	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
Planning/Pre-construction Phase					
1	Pre-construction phase	<ul style="list-style-type: none"> • Sharing of design with the community. • Avoid & minimize land 	<ul style="list-style-type: none"> • Consultation with local community and stakeholder engagement. • Written consent from community or owner of the land 	Contractor	PIU

S.No	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
		<p>acquisition to the extent possible.</p> <ul style="list-style-type: none"> Utilization of private temporarily, if required. Strengthening of trust between contractor and the community. Provision of alternative access to the community for commuting wherever required. Restoration and relocation of Common Property Resources 	<p>required for stocking construction material temporarily.</p> <ul style="list-style-type: none"> Involving locals (Gram Sabha) wherever any issue arises. 		
Construction Phase					
2	Influx of labor	<ul style="list-style-type: none"> Construction Camp Locations Selection, Design and Lay-out. Conflict with community due to social and cultural difference with the host community. Potential impact of spreading infectious diseases from labor to the local or vice versa. Possibility of Sexual abuse and assault in the labor camps or otherwise. Drug abuse, gambling etc. 	<ul style="list-style-type: none"> Minimize labor influx as much as possible by engaging local population. Ensure separate labor camps for the labor (Away from religious places and localities to the extent possible). Awareness on the health and sanitation for the labor. Ensure least contact between the host community and the labor. Awareness on sexual assault & drug abuse. 	Contractor	PIU/ PMU Monthly Monitoring
		<ul style="list-style-type: none"> Facilities for the Labor in camp and on worksite 	<ul style="list-style-type: none"> Providing accommodation facilities to the migrant labors with proper ventilations. Provision for safe drinking water and appropriate cooking arrangement at labor camps; Provision of Separate toilet and 	Contractor	PIU/ PMU Monthly Monitoring

S.No	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
			<p>bathing facilities for men and women</p> <ul style="list-style-type: none"> • Provision of medical facility which includes first aid kit at the camp site and also ambulance facility to take patients to hospital in case of emergency. • Proper drainage facility at camp site along with water sewerage treatment facilities. No waste water should be discharge to any surrounding area without required permission and proper treatment. • Provision of prayer rooms as per the religious beliefs of the workers. • Safe storage facilities for the gas cylinder, petroleum and other chemicals, used by laborers. Proper solid waste collection and disposal system at the camp site. • The camp should have proper security arrangements, like Security fence. • Preparing a code of conduct for the migrant workers. • Conducting awareness programme about sexually transmitted diseases among the migrant workers, laborers and for community around project site; • Awareness program on COVID-19. • Provision of hand sanitizer, masks in the labor camps. • Provision a separate accommodation for COVID-19 infected labors or personal engaged by the contractor. • Provision of crèche on site for children. • Training programs for construction workers in basic sanitation and health care issues (e.g., how to avoid malaria and transmission of sexually transmitted infections (STI) 		

S.No	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
			<p>HIV/AIDS.</p> <ul style="list-style-type: none"> • Labor Registration. • Awareness program for labor rights • No employment of child labor. 		
		<ul style="list-style-type: none"> • Registration of Complaints received from labor. 	<ul style="list-style-type: none"> • Arrangement to register and redress grievance of workers. • Grievance Redressal System for the project to address such issues including sexual harassment at the workplace 	Contractor	PIU/ PMU Monthly Monitoring
		<ul style="list-style-type: none"> • Equality of opportunity to work. • Equal Pay for equal work • Preference to the Women Laborers 	<ul style="list-style-type: none"> • To be ensured throughout project cycle. • Maintenance of payment registers by the contractor. 	Contractor,	PIU/ PMU Monthly Monitoring
3	Community Health and Safety	<ul style="list-style-type: none"> • Injury & sickness due to construction work and movement of heavy vehicles, contamination or other natural or human-made hazards. 	<ul style="list-style-type: none"> • Provision of access to the community, shops, religious places during construction phase. • Better marking and signage. • Provision of alternative transportation route for vehicles and ambulances wherever required. • Undertaking regular surveillance at site to check on Hygiene conditions for disease control. • Creating mass awareness on HIV and STDs and COVID-19. • Ensure least contact between the labor and the local population. • Sharing grievance redressal system with the community and displaying contact numbers at site to register any grievances due to the project. • No contamination of water bodies due to stocking of construction material etc. • Safeguarding pedestrians' safety including women, children. • During construction of side drains provide temporary/safe 	Contractor	PIU/ PMU Monthly Monitoring

S.No	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
			access to shops, kids, hospital/clinic, religious places etc. <ul style="list-style-type: none"> Community Consultation. 		
4	Occupational health and safety	<ul style="list-style-type: none"> Injury and sickness of labor 	<ul style="list-style-type: none"> Provide training on health and safety to all the workers. Provide PPE to workers as per work requirement. Regular checking of body temperature and other symptoms among the laborers for COVID-19 and maintaining a register. Awareness program on COVID-19. Provision of hand sanitizer, masks in the labor camps and on the sites. Displaying of COVID-19 help line numbers on site as well as in labor camps. Provide separate toilets for male and female labor at the construction site Provide safe drinking water at the construction site. Providing a separate resting area at the site for breaks during the work period Provide adequate lighting in the construction area and along the roads. Conduct an initial health screening of the laborers working at construction site, especially those who are coming from outside the project area. Provide first aid facility at the construction site Provide HIV awareness programming, including STI (Sexually Transmitted Infections) and HIV information, education and communication for all workers on regular basis. Community Consultation. 	Contractor	PIU/ PMU Monthly Monitoring
5	Gender Based Violence	<ul style="list-style-type: none"> Sexual Exploitation and Abuse (SEA) Workplace 	<ul style="list-style-type: none"> Awareness program for the Contractors, Local Communities and laborers on national laws. Introducing a workers code 	Contractor	PIU/ PMU Monthly Monitoring

S.No	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
		Sexual Harassment <ul style="list-style-type: none"> Human Trafficking Non-SEA 	of conduct. <ul style="list-style-type: none"> Displaying of various legal provisions on site, in labor camps and at prominent locations in the project area. Ensure that complaints of GBV registered and confidentially maintained in a register. Strict code of conduct for workers with no tolerance for physical or verbal abuse of women or children. Community Consultation. 		
Post Construction Phase					
6		<ul style="list-style-type: none"> Handing over temporarily used private/community land to the landholders/community by the contractor without restoration work and payment of dues/ lease amount. Non-Removal of debris and other construction material from the site. 	<ul style="list-style-type: none"> Consultation with the private party or Community and restoration of their land. Removing extra left over construction material from the site. Payment of lease amount/rent, if any due, to the private party or community for utilization of their resources. 	Contractor	PIU/PMU Within one Month

8.8 Gender Action Plan

8.8.1 Status of Women in J&K

Women constitute around 47% of the total population of the State. The development of women, no doubt, has been a part of the development planning process right from the inception of Five-Year Plans but the shift in approach from welfare to development toward women took place in a focused manner in the 6th and 7th Five Year Plans. The 8th Five Year Plan promised to ensure that benefits of development do not by-pass women. The 9th Five Year Plan changed the strategy for women from development to empowerment and emphasis on preparation of a separate Women Component Plan (WCP) by identifying specific Schemes/Projects having a

direct bearing on the welfare and development of Women. The 10th Five Year Plan further strengthened the implementation of the Women Component Plan (WCP).

Moreover, the Women and Child Development Department in the Ministry of Social Justice and Empowerment has also enjoined upon the states to monitor closely the flow of benefits of various schemes for the empowerment of women on regular basis. These initiatives have helped in improving the status of women in various spheres to a great extent, but the imbalance still exists which needs to be addressed over the years. The 11th Plan had taken numerous steps forward. However, the targets set out could be only partially achieved. In the 12th plan, the Government's priority would be to consolidate the existing initiatives and interventions relating to women, build upon the achievements and also move beyond to respond to new challenges. The female population of J&K State slashed down from 47.15% of the total population in 2001 to 46.88% in 2011. As per details from Census 2011, Jammu and Kashmir have a population of 1.25 Crore souls over the figure of 1.01 Crore in the 2001 census. The total population of Jammu and Kashmir as per the 2011 census is 12,548,926 of which male and female are 6,665,561 and 5,883,365 respectively indicating a reduced sex ratio of 883. The corresponding figures of male and female as per Census 2001 were 5,360,926 and 4,782,774 respectively indicating a sex ratio of 892. Sex ratio (females per thousand of males) is an important indicator of the social conditions particularly concerning women's status in any society.

The low sex ratio shows indulgence of artificial interventions, distorting the biological trend and natural balance in terms of the number of females per thousand males. An important concern in the present status of Jammu and Kashmir's demographic transition relates to the adverse sex ratio. The sex-ratio as per census 2011 was 883 which is a matter of great concern and needs to be addressed on priority. Education of the women is a very effective tool for women's empowerment not only from the point of view of literacy, but it has inter-linkage with other social parameters viz. population growth, health care, education of children, etc. It enables rural women to acquire new knowledge and technology, required for improving and developing their tasks in all fields, besides availing new opportunities and combating emerging challenges of a dynamic society.

Female education is essential for higher standards of health and improved "maternal competence" which leads to lower infant mortality. It also raises women's economic productivity. Despite its linkage to so many positive outcomes and the progress made over the past 50 years, female literacy remains low in J&K State as compared to men. Jammu and Kashmir's literacy rate has increased by 13% in the last decade i.e. from 55% in the 2001 Census to 68% in the 2011 Census. While female literacy has increased from 42.22% in the 2001 Census to 58.01% in 2011. Gender differential still exists both in rural and urban areas but

it is comparatively higher in rural areas. This can be attributed to some factors viz., lack of access to schools, parents feeling insecure about sending girl children to schools, their engagement in agricultural and other domestic activities etc. Though, still being at a disadvantageous position, the women folk are breaking the barriers/shackles to get an equal share in basic human rights. With a higher growth rate than male literacy, the goal is expected to be achieved in near future.

8.8.2 Legal Provision Related to Women in J&K

- J&K Protection of Women from Domestic Violence Act, 2010
- Jammu and Kashmir Juvenile Justice (Care and Protection of Children) Act, 2013
- State Commission for Women Act, 1999

8.8.3 Strategy

Suggestive Actions to be taken in the sub-project

- Ensure participation of vulnerable groups in the project activities.
- Ensuring facilities in construction camps.
- Carrying out other responsibilities towards vulnerable groups.

Suggestions for increasing the Women's Participation in the sub-project

- Encourage women to evaluate the project outputs from their point of view and their useful suggestions should be noted for taking necessary actions for further modifications in the project creating a better and congenial situation for increasing participation from women.
- Allow women to take part in the consultation process. Ensure that the women are consulted and invited to participate in group-based activities, to gain access and control over the resources.
- Devise ways to make others vulnerable to participate in the project activities.

Ensuring Facilities in Construction Camps

Foreseeing the involvement of women, both direct and indirect in the construction activities, PMU, PIU & PMC shall ensure certain measures that are required to be taken by the construction contractor towards welfare and well-being of women and children during the construction phase such as:

- **Temporary Housing:** During the construction, the families of laborers/workers should be provided with residential accommodation suitable to nuclear families.

- **Health care facilities:** Health problems of the workers should be taken care of by providing basic health care facilities through regular health check-ups and by keeping basic first aid kit in the labour camps. There should be some arrangement of ambulance in case of emergency.
- **Day Crèche Facilities:** It is expected that among the women workers there will be mothers with infants and small children. Provision of a day crèche may solve the problems of such women, who can leave behind their children in such a crèche and work for the day in the construction activities. If the construction work involves women in its day-night schedules, the provision of such a crèche should be made available on a 24-hour basis.
- **Proper Scheduling of Construction Works:** Owing to the demand of a fast construction work, it is expected that a 24 hours-long work-schedule would be in operation. Engaging women labour during night services should be avoided by the project or can be permitted only after getting written request from the women labour. In this case crèche facilities in the construction camps must be extended to them in the night.
- **Control on Child Labor:** Minors, i.e., persons below the age of 14 years, should be restricted from getting involved in construction activities. It will be the responsibility of the Social and Environmental experts of PMU, JTFRP to ensure that no child laborer is engaged in the activities. PMU& PIU shall keep strong vigilance to ensure the cessation of such exploitation.

8.8.4 Avoiding Gender-Based Violence

The contractor will prepare and implement robust measures to address the risk of gender-based violence that include:

- Mandatory and repeated training and awareness-raising for the workforce about refraining from unacceptable conduct toward local community members, specifically women;
- informing workers about national laws that make sexual harassment and gender-based violence a punishable offense which is prosecuted;
- introducing a Worker Code of Conduct as part of the employment contract and including sanctions for non-compliance (e.g., termination), and (iv) contractors adopting a policy to cooperate with law enforcement agencies in investigating complaints about gender-based violence.

8.9 Labour Influx and Labor Management

Since the construction activities are mostly labor intensive by nature, therefore, it is also envisaged that both local and migrant labor shall be employed by the project. These migrant laborers will be accommodated in a temporary campsite within the project area.

8.9.1 Objectives

The influx of migrant labor will have both negative and positive impacts on the nearby community and local environment. The labor will be accommodated in a temporary campsite within the project area which can have a significant interface with the host community. The influx of migrant workers would lead to a transient increase of population near the project area for a limited time. This would put pressure on the local resources such as roads, fuel for cooking, water, etc. Hence, a plan has been designed to demonstrate the:

- Potential impacts associated with the influx on the host population and receiving environment are minimized;
- Provision of safe and healthy working conditions, and a comfortable environment for migrant labor; and
- To ensure compliance with the national labor laws, including guidance provided on the latest COVID 19 epidemic in the country.

8.9.2 General Requirements

All migrant workers are envisaged to be accommodated in a proper temporary campsite within the project area. If migrant workers are accompanied by their families, provisions should be made accordingly. As per the National Acts, the inclusion of requirements for labor camp to be established by contractors during the construction phase of the project. Contractor(s) shall ensure implementation of the following measures to minimise the potential negative impacts of worker accommodation and workers on local communities:

- **Cleanliness and Sanitization:** Pest extermination, vector control, and disinfection are to be carried out throughout the living facilities in compliance with local requirements and/or good practice. In light of the COVID-19 outbreak and increased risks to community health and safety and occupational health and safety, the contractor needs to put in place a COVID-19 preparedness and mitigation measures.
- **Complaints and incident reporting:** A formal Complaints Procedure will be implemented to ensure the timely and transparent response to complaints as received from labor.

- **Labor education:** The workforce will be sensitized to local social and cultural practices through the provision of an induction course for all employees that stipulates expected behaviour;
- **Labor behaviour in the campsite provided:** A Code of Behaviour governing appropriate behaviour in the accommodation facilities to be kept in place and to be strictly enforced. The contractor shall ensure implementation of the “rules of engagement” between laborers living in the campsite and community and shall be implemented by construction contractors for all engaged laborers.
- **Labor Compensation and Accommodation:** JTFRP shall ensure that laborers are provided with benefits such as leave, weekly rest day, etc. Accommodation to be provided for the construction labor which covers facilities (including catering facilities, dining areas, washing and laundry facilities, etc.) and supporting utilities.

8.9.3 Hiring & Recruitment Procedures

- The manpower wherever possible shall be locally recruited by the contractor. The following general measures shall be considered for the workforce during their employment tenure:
- The implementing agency in consultation with the PMU will include a code of conduct relating to the accommodation to be signed with the contract document of contractors.
- The contractor shall not employ any person below the age of 18 years nor will have any forced labor; The construction laborers will be provided with documented information regarding their rights under national labor and employment law such as but not limited to Factories Act, Minimum Wages Act, 1948 Trade Unions Act, and Workmen’s Compensation Act; 1923
- The first priority for employment of labor should be given those impacted by the project such as landowners who have lost land / donated land;
- No discrimination shall be done by the construction contractor concerning recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, termination of employment or retirement, and disciplinary practices;
- The contractor to ensure that work hours are set at eight hours a day, 48 hours a week, with a weekly rest day for all engaged labor;
- Every labor is entitled to a maximum of only two hours a day as Overtime (OT) work. OT pay is twice the hourly remuneration;

- The project will ensure that equal wages for male and female workers for work of equal nature or value is maintained;
- A grievance redressal mechanism for workers to be put in place by the contractor to raise workplace concerns. The workers to be informed about the grievance mechanism at the time of recruitment; and
- The Contractor to ensure that they develop and implement a procedure to review the performance of their sub-contractors.
- The procedure developed should include regular inspection of the camp sites, maintaining information about labor sourced by sub-contractors;

8.9.4 Worker's Accommodation

The EA has to supervise and monitor the activities performed by their contractor and accommodation facilities provided at the campsite. The following measures shall be provided:

- The laborers to provide with accommodation made of insulating material and locally available building material, etc. along with storage of personal belongings;
- The migrant workers with families will be provided with individual accommodation comprising bedroom, sanitary, and cooking facilities;
- The contractor shall provide a canteen facility with facility to cook food of appropriate nutritional value respecting religious/cultural backgrounds;
- All doors and windows shall be lockable and mobile partitions/curtains shall be provided for privacy;
- Dust bins to be provided for collection of garbage and to be removed daily;
- It is also required to provide first aid box in adequate numbers; and
- Ventilation should be appropriate for the climatic conditions and provide workers with a comfortable and healthy environment to rest and spend their spare time.

8.9.5 Security

The contractors shall put in place the following security measures to ensure the safety of the workers. The following measures shall be incorporated:

- Access to the campsite shall be limited to the residing workforce;
- The contractor shall be responsible for deploying an adequate number of guards;
- Adequate, day-time night-time lighting shall be provided;

- The security personnel shall be provided with training to respect the community traditions and in dealing with, use of force, etc.; and
- The rental accommodation shall be provided with firefighting equipment and portable fire extinguishers.

8.9.6 Provisions for Drinking Water

- Access to an adequate and convenient supply of free potable water is a necessity for workers. The domestic water conforming to the IS 10500:2012 supply shall be made available by the contractor.
- The direct usage of water from bore well should not be allowed;
- The Contractor(s) should regularly monitor the quality of drinking water. In case of noncompliance with the Drinking Water Specifications, additional treatment shall be provided, or alternative sources of water supply shall be arranged; and
- All storage container of drinking water to be monitored from becoming polluted or Contaminated.

8.9.7 Cooking Arrangements

- Places for food preparation are designed to permit good food hygiene practices, including protection against contamination between and during food preparation;
- Adequate personal hygiene including a sufficient number of washbasins designated for cleaning hands with clean, running water; and
- All kitchen floors, ceiling and wall surfaces adjacent to or above food preparation and cooking areas are built using durable, non-absorbent, easily cleanable, non-toxic materials;
- Food preparation tables are equipped with a smooth, durable, easily cleanable, non-corrosive surface made of non-toxic materials.
- To ensure that the fuel need of laborers in the project area does not interfere with the local requirements, necessary arrangements for the supply of fuel to the laborers shall be done by the contractor.

8.9.8 Waste Water Generation

- There will of generation of wastewater from the campsite. About 80% of the water used shall be generated as sewage/wastewater.
- Contractors to ensure that the campsite is equipped with a septic tank and soak pit for disposal of sewage. It is also recommended that the storm water and sewage system should be

separate. The surface water drainage shall include all necessary gutters, down pipes, gullies, traps, catch pits, manholes, etc.

- Sanitary and toilet facilities are constructed of easily cleanable materials. Sanitary and toilet facilities are required to be cleaned frequently and kept in working condition.

8.9.9 Medical facilities

The following medical facilities shall be provided by contractors for the construction workers:

- A first-aid centre shall be provided for the labor within the construction site equipped with medicines and other basic facilities;
- Adequate first aid kits shall be provided in the campsite in an accessible place. The kit shall contain all type of medicines and dressing material;
- The contractor shall identify and train an adequate number of workers to provide first aid during medical emergencies;
- Regular health check-ups shall be carried out for the construction laborers every six month and health records shall be maintained;
- Labors should have easy access to medical facilities and first aider; where possible, nurses should be available for female workers;
- First aid kits are adequately stocked. Where possible a 24/7 first aid service/facility is available.
- An adequate number of staff/workers is trained to provide first aid; and
- Information and awareness of communicable diseases, AIDS, etc. shall be provided to workers.

9. Monitoring and Evaluation

The Project requires detailed supervision, monitoring and evaluation of the impact on the social and environmental aspects. Monitoring is periodical checking of planned activities, which provides midway inputs, facilitate changes, if necessary and provides feedback to Project Authority for better management of project activities. It helps in making suitable changes and modifications in safeguard documents during project implementation. Evaluation on the other hand assesses whether the activities have achieved the intended goal and objectives. Thus, monitoring and evaluation are critical to measure the project performance and fulfilment of project objectives.

In order to carry out this, PMU has made specific arrangements. The executing agency has a dedicated unit to deal with the social and environmental safeguards. This unit is headed by Director Safeguards who is assisted by full-time Social Safeguards and Environmental Experts. To ensure compliance to the World Banks' social safeguard policies and guidelines, Director Safeguards through social expert will monitor and evaluate routine activities. Half-yearly Environmental and Social Audit, of ESMF implementation, will be done by the Technical Audits and Quality Control Consultants. Progress on social safeguards and other issues will be flagged in the MPR and QPRs.

9.1 Safeguards Supervision

This will be done by PMU with the support of PIU and consultants. All the sub-projects will be visited at regular intervals by PMU to check if all safeguard requirements are met and to identify any issues that need to be addressed. PMU should submit quarterly progress reports to The World Bank on safeguards implementation.

9.2 Concurrent Monitoring and Quarterly Reporting

The concurrent internal social monitoring will be done as part of the regular monitoring by the PIU, Implementing Agencies, and TAQAC. However, PMU, with the help of an in-house Social Specialist will do the regular social monitoring of sub-projects for safeguards compliance.

9.3 Safeguards Monitoring Plan

Apart from the quarterly monitoring reports submitted to the World Bank, once every year, the PMU will prepare a report of the environmental and social situation in the project districts including data and analysis of relevant parameters as given in the plan below. This report also should give a listing of relevant new legislation and regulations that have a bearing on the environmental and social performance of the project. PMU will submit this report to The World Bank.

9.4 Independent Safeguard Audits

The PMU will appoint Independent Project Implementation Quality Audit Consultants with expertise in social and environmental safeguards to conduct a half-yearly project quality audit, which will include Environmental and Social Audit of selected sub-projects for compliance with the ESMF.

9.5 Right to Information and Disclosure

The Jammu and Kashmir Right to Information Act 2004 gives the right to persons to obtain any document or information relating to the affairs of the state or public body. In addition to the provisions of the above Act, the JTFRP provides for voluntary disclosure of information and project documents in English, Hindi, and Urdu on the Government and implementing agencies' websites for public consumption.

10. Grievance Redressal Mechanism

Grievance Redressal Mechanism is a process to address people's grievances related to land acquisition, resettlement, and rehabilitation, or any other social issue arising out of the project-related activities; executing agency will establish two bodies, one at a local level (site level) and another at District level. In case, the grievances are not resolved at these two levels, then they will be forwarded to R&R Committee at the Divisional level for this project which will be established under the Divisional Commissioner, Jammu/Srinagar. The grievances will be registered at the Project site. The local level grievance committee will try to resolve the case in a maximum of 14 days. In case the aggrieved person is not satisfied with the decision delivered at the local level or the grievance/s is not resolved, the same shall be forwarded to the district level committee, headed by District Collector. No grievance can be kept pending for more than a month which means the committee has to meet every month. Executing Agency through PMU, JTFRP will monitor the implementation of the decision of the committee. In case the aggrieved party is not satisfied with the proposed redressal measures, it can approach the Divisional Level Redressal Committee, headed by Divisional Commissioner, Jammu/Srinagar. If the aggrieved party is not satisfied with the decision delivered or the committee is not successful in resolving the grievance/s, they can approach the court of law at their own expense. The committees' composition is detailed below:

10.1 Composition of Grievance Redress Committee (GRC) at various levels of the project

A. **Grievance Redress Committee at Local Level:** This committee/cell will work at the local level i.e. site level. This will comprise of the following members:

- a. Engineer from PMU
- b. Assistant Executive Engineer (PIU)
- c. Site Engineer (PIU)
- d. Local Revenue officer
- e. Social Safeguard Officer
- f. Ward Member/Halqa Panchayat member
- g. Women representative (Retired Officer/Academicians/Development Professional)

B. **Grievance Redress Committee at District Level:** In case of grievance/s are not addressed at the local level or PAP/ aggrieved person is not satisfied with the decision delivered at local level, he/she can approach to the grievance redressal committee constituted at the district level. The following will be the composition of the committee.

- a) District Collector
- b) Director/Head PIU (Convener)

- c) Nodal officer of the Project Component (PMU)
- d) Nodal Officer (Social Safeguards, PMU)
- e) Representative of PRIs
- f) a prominent Women (Retired Officer/Academicians/Development Professional)
- g) A senior representative of SC/ST Welfare Board

C. **Division Level Redressal Committee (DLC):** In case, grievance/s are not addressed at the local and district level, the same will be forwarded to the Divisional Level Redressal Committee through PMU. The committee will provide a major platform to people who might have objections concerning the decisions taken at the two previous levels. The committee will look into the grievances of the people and will assign responsibilities to implement the decisions of the committee. This Committee (after formation) will be convened by the Chief Executive Officer, ERA/JTFRP, and headed by Divisional Commissioner Jammu/Srinagar. This committee should meet every quarter to solve any grievance/s and will decide within 03 months of receiving the grievance/complaint. Nodal Officer (Social Safeguards) will coordinate the meetings. This committee will also provide policy-related directions to the Grievance Redressal Committee and the participating departments about land acquisition and resettlement and rehabilitation.

The following will be the composition of the committee:

- a. Divisional Commissioner, (Chair)
- b. Chief Executive Officer, JPFRP/JK ERA (Convener)
- c. Heads of participating departments
- d. Director Technical (PMU/JTFRP)
- e. A senior representative, one each from BC & EBC and SC & ST Welfare
- f. A senior representative of the revenue department
- g. A senior representative of the Disaster Management Department
- h. Social Safeguard Specialist (Nodal officer, PMU)
- i. A prominent woman representative (Retired/ Development Professional/Academician)
- j. A PRI representative
- k. A representative of PAPs who can articulate well.

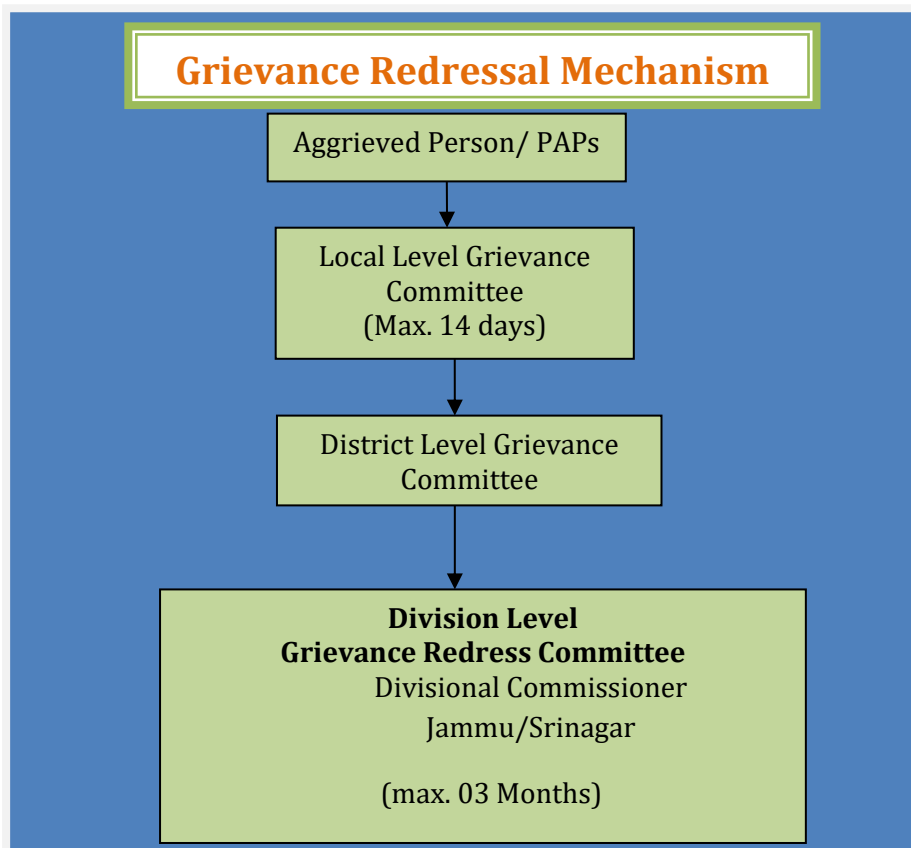


Figure 2: Structure of GRM

10.2 Approach to GRC

Project Affected Person/aggrieved party can approach GRC for the redress of their grievances through **any** of the following modes:

1. **Web-based:** The grievance corner will be provided at the website of PIU/PMU so that the affected person can register their complaint online.
2. **Telecom-based:** If needed a toll-free number will be issued by the PMU/ PIU so that affected people can register their complaints through telephone / mobile phone to the PIU/PMU office.
3. **Through LGC:** The LGC will collect the problems & issues of the community or affected persons and pass on the same to PIU/PMU and try to resolve them. A grievance register will be maintained by the contractor/PIU at each site office. The phone number of the concerned engineer shall be displayed at the site so that the aggrieved person can contact the concerned site engineer in case of emergency.
4. **Through PMU:** PAPs/aggrieved party can register/file grievance/s directly to the PMU also. PMU will enrout the same through PIU to the site engineer who will try to resolve it within the stipulated time and the rest process will follow.

Besides the grievance redress mechanism of JTFRP, the state has an online grievance monitoring system known as Awaz-A-Awam (People's voice). The PAPs can also lodge their grievance online at <http://www.jkgrievance.nic.in>.

10.3 Legal Options to Aggrieved persons/PAPs

In case PAPs are not satisfied with the decision of GRC at the local/district level and Divisional Level committee, they are free to approach the court of law on their own will and expenses at any time to redress their grievance/s. The general public and PAPs specifically will be informed about the Grievance/s redress committee and mechanism through public consultations, disclosures, and distribution of PIBs. All PIBS will be translated into Urdu and will be distributed to the PAPs.

11. Institutional Arrangement

11.1 Institutional arrangement in the project

A project steering committee has been set up for the overall strategic guidance and monitoring of the project. It is headed by Chief Secretary and comprises of all involved line departments and additionally departments of planning, environment and social welfare. A Project Management Unit (PMU) for the project (JTFRP), housed in Jammu & Kashmir Economic Reconstruction Agency (JK ERA) is responsible for the overall management of the “Jhelum Tawi Flood Recovery Project (JTFRP)”. This PMU is headed by Chief Executive Officer (CEO). Social Development Specialist has been positioned in PMU to provide assistance and support to Director Safeguards to address all safeguard-related issues during documentation, execution, and implementation of SMP/ARAP wherever required and monitoring.

The Chief Executive Officer (JKERA/JTFRP) will be responsible for overall coordination, reporting, technical assistance, monitoring, and budgeting of all the components associated with the project. The CEO will have the administrative and financial powers for the implementation of the project including the implementation of ARAP wherever required. The Chief Executive Officer (CEO) will be supported by Director Technical, Director Safeguards, Director Planning and Coordination, Director Disaster Management, Executive Engineers, AEEs, and Social Development Specialist. The PMU will be responsible for providing overall policy guidance, training, and capacity-building support to PIU (JK ERA) to ensure compliance with World Bank's Safeguard Policies and applicable Union Territories and other acts, notifications, guidelines, etc. Director Safeguards with the assistance of a Social Development Specialist in EA will ensure that all social safeguards issues are complied with as detailed out in Social Management Plan. Social issues will be coordinated by Social Development Specialist (SDS) within the PMU and PIU. PMU will be assisted by Project Management Consultants (Technical Assistance and Quality Audit Consultants) for technical support and advice, monitoring and impact evaluation, etc.

11.2 Implementation Stage

The sub-project does not involve involuntary displacement, land acquisition, and livelihood loss either temporary or permanent. The Project Implementation Unit is headed by the Project Manager (Transport) in JK ERA. Overall civil work shall be carried out under his supervision and guidance. Director Safeguards with the support of the Social Development Specialist in PMU, JK ERA will ensure compliance with the WB policies and other provisions applicable to the project. For this sub-project, Only Social management Plan needs to be implemented during the execution of the sub-project.

12. Annexures:

Annexure1: Environment and Social Screening Data Sheets

Part A: General information

1. Name of the sub-project	Improvement & Up-gradation of Deva Mai to Ohli Mandir Road in District Reasi	
2. Type of proposed activity (tick the applicable option and provide details)		
• Road	<input checked="" type="checkbox"/>	√
• Bridge	<input type="checkbox"/>	-
• Fire Station	<input type="checkbox"/>	-
• Hospital/Health Facility	<input type="checkbox"/>	-
• Educational Institute	<input type="checkbox"/>	-
• Building for Livelihoods	<input type="checkbox"/>	-
• Flood Infrastructure Related	<input type="checkbox"/>	
• Other Public Building	<input type="checkbox"/>	-.
• Any Other (Please Specify)	<input type="checkbox"/>	-
3. Location of the proposed sub-project		
• Name of the Region	Jammu(J&K State)	
• Name of the District	Reasi	
• Name of the Block	Katra	
• Name of the Settlement	Nomain village, Shapanoo	
• Latitude	32°58'14.18"N(At Deva Mai-RD 0+000), 32°57'42.89"N (At Ohli Mandir- RD 4+990)	

• Longitude	74°53'46.85"E (At Deva Mai – RD 0+000), 74°53'27.94"E (At Ohli Mandir RD 4+990)
4a. Proposed Nature of Work (tick the applicable options)	
• Minor Repairs	-
• Major Repairs/Rehabilitation	-
• Upgrading/Major Improvement	√
• Expansion of the facility	-
• New Construction	-
• Any Other	-
4b. Size of the sub-project (approx. area in sq. mt/hac or length in mtr./km, as relevant)	4.990 Km
5. Land Requirement (in ha./sq.m)	
• Total Requirement	Nil. No land needs to be acquired as the road is being upgraded in the existing RoW.
• Private Land	Nil
• Govt. Land	Nil
• Forest Land	Nil
6. Implementing Agency Details (sub-project level)	
• Name of the Department/Agency	PIU-ERA (Jammu)
• Name of the contact person	Mr. Nand Kishore Gupta
• Designation	Project Manager (Transport)
• Contact Number	9419193872
• E-mail Id	Pmjkusdipjmu2@gmail.com
7. Screening Exercise Details	
• Date on which it was carried out	11 th July, 2019/23.12.2010

• Name of the Person	Vikash Sharma/Charanjeet Singh
• Contact Number	9419125803; 9419893392
• E-mail Id	jkerasocial@gmail.com jcharan.sim@gmail.com

Part B (1): Environment Screening

Question	Yes	No	Details
1. Is the sub-project located in whole or part within 1 km of the following environmentally sensitive areas?			
a. Biosphere Reserve		No	-
b. National Park		No	-
c. Wildlife/Bird Sanctuary		No	-
d. Wildlife/Bird Reserve		No	-
e. Important Bird Areas (IBAs)		No	-
f. Habitat of migratory birds (outside protected areas)		No	-
g. Breeding/Foraging/Migratory route of Wild Animals (outside protected areas)		No	-
h. Area with threatened/rare/ endangered fauna (outside protected areas)		No	-
i. Area with threatened/rare/ endangered flora (outside protected areas)		No	
j. Reserved/Protected Forest		No	
k. Other category of Forest	Yes		Existing road passes through the forest area
l. Wetland		No	
m. Natural Lakes		No	
n. Rivers/Streams		No	
Question	Yes	No	Details

o. Swamps/Mudflats		No	-
p. Zoological Park		No	-
q. Botanical Garden		No	
2. Is the sub-project located in whole or part within 500 mts. of any of the following sensitive features?			
a. World Heritage Sites		No	-
b. Archaeological monuments/ sites (under ASI's central/state list)		No	-
c. Historic Places/Monuments/ Buildings/Other Assets (not listed under ASI list but considered locally important or carry a sentimental value)		No	
d. Religious Places (regionally or locally important)		No	-
e. Reservoirs/Dams		No	-
f. Canals		No	-
g. Public Water Supply Areas from Rivers/Surface Water Bodies/Ground Water Sources		No	-
3. What is the High Flood Level in the sub-project area?	-		
Is any scheduled/protected tree like Chinar, Mulberry or Deodar likely to be affected/ cut due to the project?		No	
Is the sub-project located in a landslide/heavy erosion prone area or affected by such a problem?		No	
Is sub-project located in an area that faces water paucity or water quality issues?		No	

Part B (2): Result/Outcome of Environmental Screening Exercise

1.	Environment Impact Assessment Required	No
2.	Environment Clearance Required	No
3.	Forest land Clearance/Diversion Required	No
4.	Tree Cutting Permission Required	No
5.	ASI (Centre/State) Permission Required	No
6.	Permission from ULB/Local Body/Department Required	No
7.	Any other clearance/permission required	Consent to Establish (CTE) and Consent to Operate (CTO) from SPCB will be required for Hot mix Plants, Wet Mix Plants, Stone Crushers, PUC's and other fitness certificates of equipment etc.

Part C (1): Social Screening

1. Does the sub-project activity require acquisition of land?			
Yes		No	√
Give the following details:	Private Land (sq.m/ha.)		Nil
	Govt. Land (sq.m/ha.)		Nil
	Forest Land (sq.m/ha.)		Nil
2. Does the proposed sub-project activity result in demolition/removal of existing structures?			
Yes		No	√
If so, give the following details:			
• Number of public structures/buildings		Nil	
• Number of common property resources (such as religious/cultural/drinking water/wells/etc.)		Nil	

• Number of private structures (located on private or public land)	Nil		
3. Does the proposed project activity result in loss of crops/trees?			
Yes		No	√
4. Does the proposed Project activity result in loss of direct livelihood/employment?			
Yes		No	√
5. Does the proposed activity result in loss of community forest/pastures on which nearby residents/local population are dependent?			
Yes		No	√
If yes, give the details of the extent of area to be lost (in acres/hect).	-		
6. Does the proposed Project activity affect scheduled tribe/caste communities?			
Yes		No	√

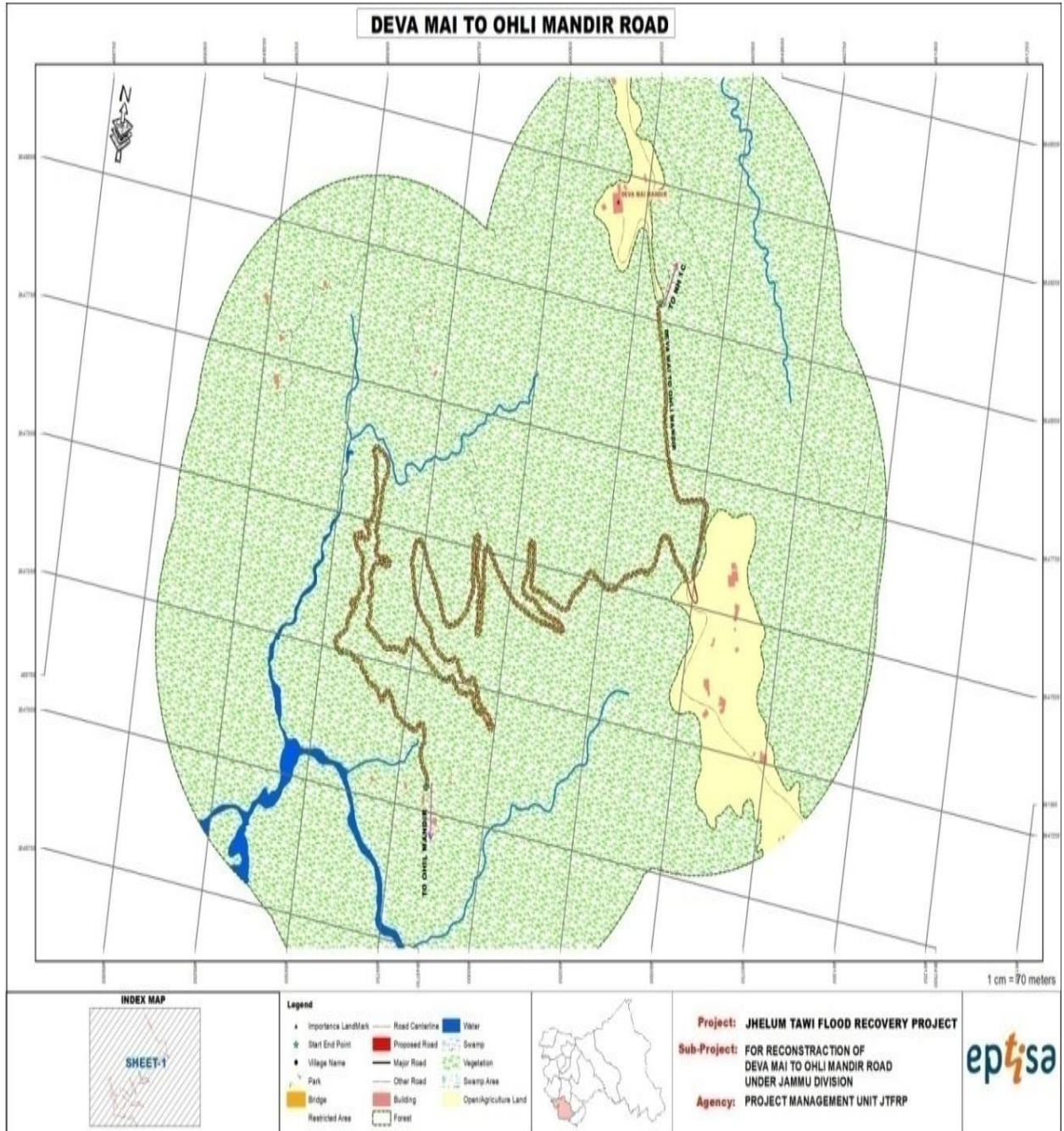
Part C (2): Result/Outcome of Social Screening Exercise

S.No.	Result/Outcome	Outcome
1.	Answer to all the questions is 'No' and only forest land is being acquired	No SIA/RAP required
2.	Answer to any question is 'Yes' and the sub-project does not affect more than 200 people (i.e. either complete or partial loss of assets and/or livelihood)	No Abbreviated RAP is required
3.	Answer to any question is 'Yes' and the sub-project affects more than 200 people (i.e. either complete or partial loss of assets and/or livelihood)	No SIA/RAP Required

Outcome of Screening:

As per the screening exercise, the proposed sub project does not have significant adverse social issues. The proposed sub-project is only the Improvement & Up-gradation of the existing road which will be done in the available RoW. It does not involve land acquisition either private or government. However, in order to assess the temporary impacts, existence of squatters and encroachers on the site, SIA required for the proposed subproject. SIA study will also assist as tool for preparation of Social Management Plan for the sub-project.

Annexure 2: GIS MAPs of the Sub-Project Road



Annexure 3: Revenue Record and R&B Communication with Forest Division Reasi

Revenue record in Urdu

The image shows a handwritten Urdu document titled 'Revenue record in Urdu'. It contains several columns of text, likely representing land records. At the bottom, there is a signature and a stamp that reads 'K. D. Singh, Patwari, Reasi'. The document is written in Urdu script.

Translated Revenue Records in Urdu

Nakal Khasra Girdawari at Village Kotli Bajalan – Tehsil – Katra District – Reasi (Devi Maa to Ohli Mandir).

1	2	3	4		6	7
			K	M		
Khasra No.	Name of the Owner	Name of the Tenant	Area		Type of Land	Existing
31/1	State	In Possession of Forest	2.472 hectare		Forest	As per letter no: EEK/2018-19/5457-60 dated: 18-12-2018 an amount of Rs: 26,90,582.00 has been placed at the disposal of Division Forest Officer, Reasi vide his cheque no: 846838/008469 dated: 10-01-2011 for acquisition of forest land measuring 2.472 hectare for the construction of road from Devi Mata Ji to Ohli Mandir.
798/87	State	In Possession of Forest, As intimated vide DFO letter no: DFO/RFD/740-43 dated: 28/05/2010, PCCF has accorded sanction for use of Forest Land for construction of road (copy of letter attached).			Forest land stands diverted to R&B deptt. for construction of Road.	

Copy is True

S/D
Patwari

Collector Land Acquisition
J&K ERA, Jammu

Letter from DFO for use of forest land for construction of road

OFFICE OF THE DIVISIONAL FOREST OFFICER, REASI FOREST DIVISION REASI

The General Manager (Project),
J&K State Forest Corporation,
Vikram Chowk,
Jammu.

No: -DFO/RFD/ 740-43 Dated 28/05/2010.

Handing over and Taking over of markings involved in the road allignment titled construction of road from NOMAIN DEVA MAI JE beyond KM-1st to OLHI MANDIR by PWD (R&B) Division Katra under (Nabard RIDF-XIV) in Reasi Forest Division.

The Pr. Chief Conservator of Forests vide order No. 106-FC of 2009 Dated 7-12-2009 has accorded sanction for use of Forest land for construction of road from NOMAIN DEVA MAI JE beyond KM-1st to OLHI MANDIR by PWD (R&B) Division Katra with a condition that the extraction of trees/poles/saplings shall be done by the State Forest Corporation/Forest Department on the basis of markings administratively approved by the Chief Conservator of Forests and the cost of extraction and transportation shall be borne by the user agency. In this regard, it is submitted that the Chief Conservator of Forests Jammu vide his office No. CCF-J/Lcase/AA/FCA/101-106 Dated 29-4-2010 has conveyed administrative approval for handing over the marked trees to the State Forest Corporation for exploitation (copy of administrative approval is enclosed herewith).

In this context you are requested to kindly direct the concerned Divisional Manager (Projects) for taking over of markings from Range Officer Katra at an earliest.

Yours faithfully

V. S.
Divisional Forest Officer 26/5/10
Reasi Forest Division
Reasi

Copy to the: -

1. Executive Engineer PWD (R&B) Division Katra for information with the request the payment may please be paid before start of construction work.
2. Divisional Manager (Projects) J&K SFC Jammu.
3. Copy to Range Officer Katra for information with the remarks that he will please handover the markings to the representative of the J&K SFC on proper receipt and handing over/taking over receipt may be furnished to this office for record purpose. The user agency be not allowed to start construction work till the payment is received and trees are removed by the Corporation

Scanned by CamSc

Letter of Acquisition of Land

GOVERNMENT OF JAMMU & KASHMIR
OFFICE OF THE EXECUTIVE ENGINEER PWD (R&B) DIVISION KATRA
(Tele- Fax No. 01921-232043, E-mail address:- eePWDkatra@gmail.com)

The Director (Technical),
JTFRP, Jammu.

No:- EEK/2018-19/5457-60

Dated:- 18/12/18

Subject:- Acquisition of land for construction of road from Deva Mai Ji to Ohli Mandir.
Length = 5.00 Kms.

Sir,

With reference to your office letter on the subject cited above, it is intimated that the construction of road from Deva Mai Ji to Ohli Mandir has been approved for funding under World Bank Assistance of Jammu Provision (JTFRP). Length = 5.00 Kms for an amount of Rs. 388.00 lacs.

It is further intimated that an amount of Rs. 2690582.00 has been placed at the disposal of Division Forest Officer, Reasi vide this office cheque No. 846838/008469 dated 10.01.2011 for acquisition of forest land measuring 2.472 hectare (for 4.00 Km length beyond Km 1st) for the construction of road from Deva Mai Ji to Ohli Mandir.

Submitted for favour of further necessary action at your end please.

Yours faithfully,

Rhjan Gupta
[Er. Rhjan Gupta]
Executive Engineer,
PWD (R&B) Division,
Katra.

Copy to the:-

1. Chief Engineer, PW (R&B) Department, Jammu for favour of information please.
2. Superintending Engineer, PWD (R&B) Circle, Udhampur for favour of information please.
3. Asstt. Executive Engineer, PWD (R&B) Sub Division-II, Katra for information.

Mail Address:

dir@pwdk@qmail.com.

Annexure 4: Encumbrance Free Certificate



Office of the Project Manager (Transport)
J&K Economic Reconstruction Agency
 2nd Floor, JKPC Building, Rail Head Complex
 Jammu



To Whom It May Concern

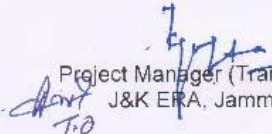
Subject: Non-encumbrance certificate.

Certified that the below mentioned sub-projects are being upgraded in the existing available Right of Way under World Bank funding for already existing established roads taken over from PW(R&B) Department. Further, no acquisition of land is required under the sub-projects:

S.No.	Name of the road/Sub-project	Length	ROW information	Remarks
1	Sidhra-Surinsar road (Lot-1)	18.290 Kms.	15 m	It stands notified vide prevention of Ribbon development Act 2007, SRO 106 of 1969
2	Chirala Link Road	10.139 kms	10 m	Handing over note of Executive Engineer (PWD(R&B) Division Bhandarwah (Enclosed)
3	Malaini to Chakrabatti road	10.06 Kms	10m	-Do -
4	Deva Mai to Ohli Mandir Road	4.9 kms	6.0m	As per records 2.472 ha of land has been acquired from forest deptt. for 4 kms of road length (copy enclosed)
5	Anji Panasa Road	4.25 kms	6.0 m	Information provided by then SE/Nodal Officer vide email dated: 01-05-2019 (enclosed)
6	Tutan Di Khuei to Khada Madana Road	11.0 Kms	6.0 m	-Do -
7	Gulati to Shahdra Sharief road	27.280 kms	6.5 m	Information provided by then SE/Nodal Officer vide email dated: 01-05-2019 (enclosed). However as per the revenue record provided by the Land Collector ERA, Jammu, the ROW is 10 mtrs from Shahadra to Gambhir Muglan

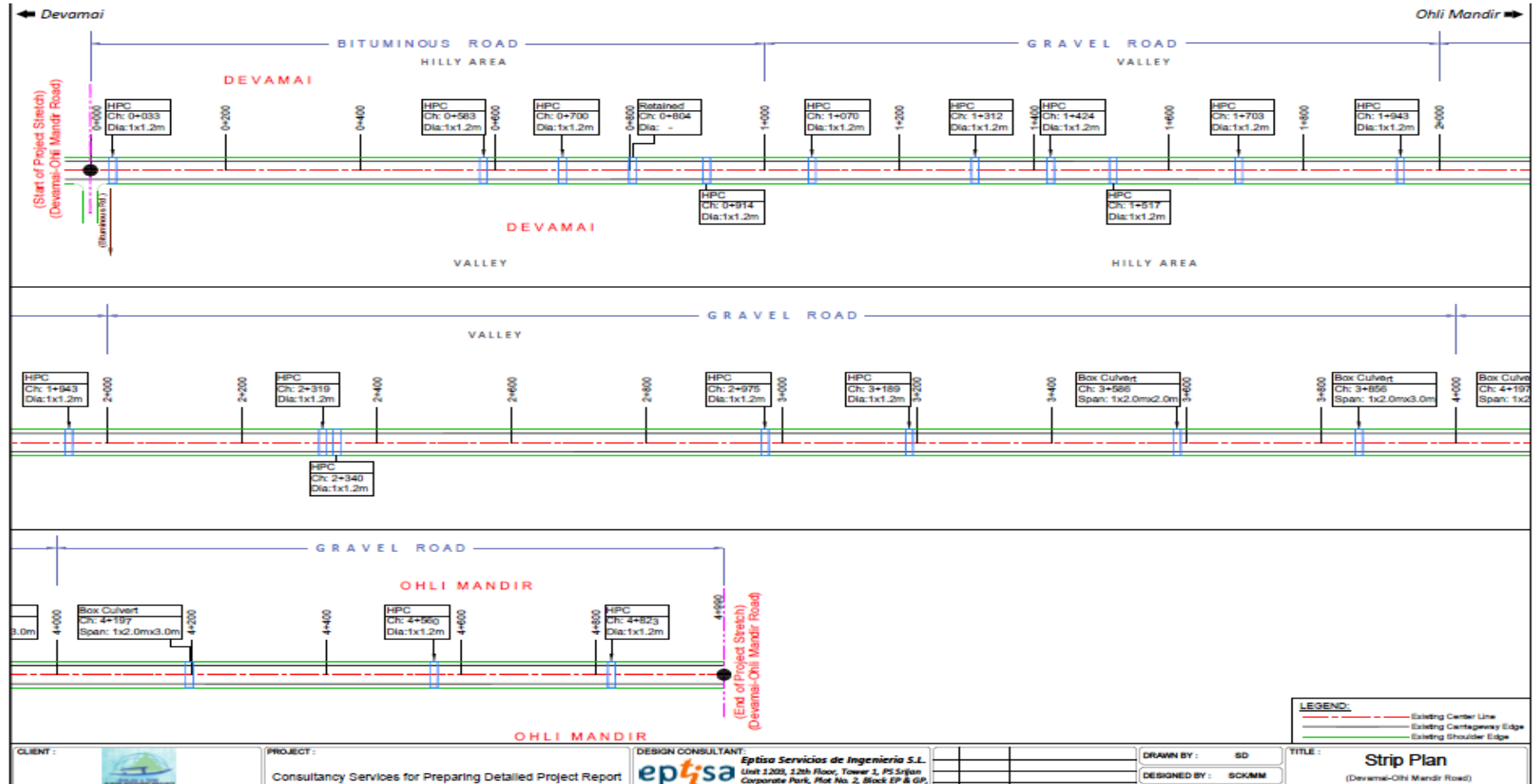
Hence the RoW is encumbrance free.

No: PW/T/ERA/2021/865
 Date: 16.03.2021.

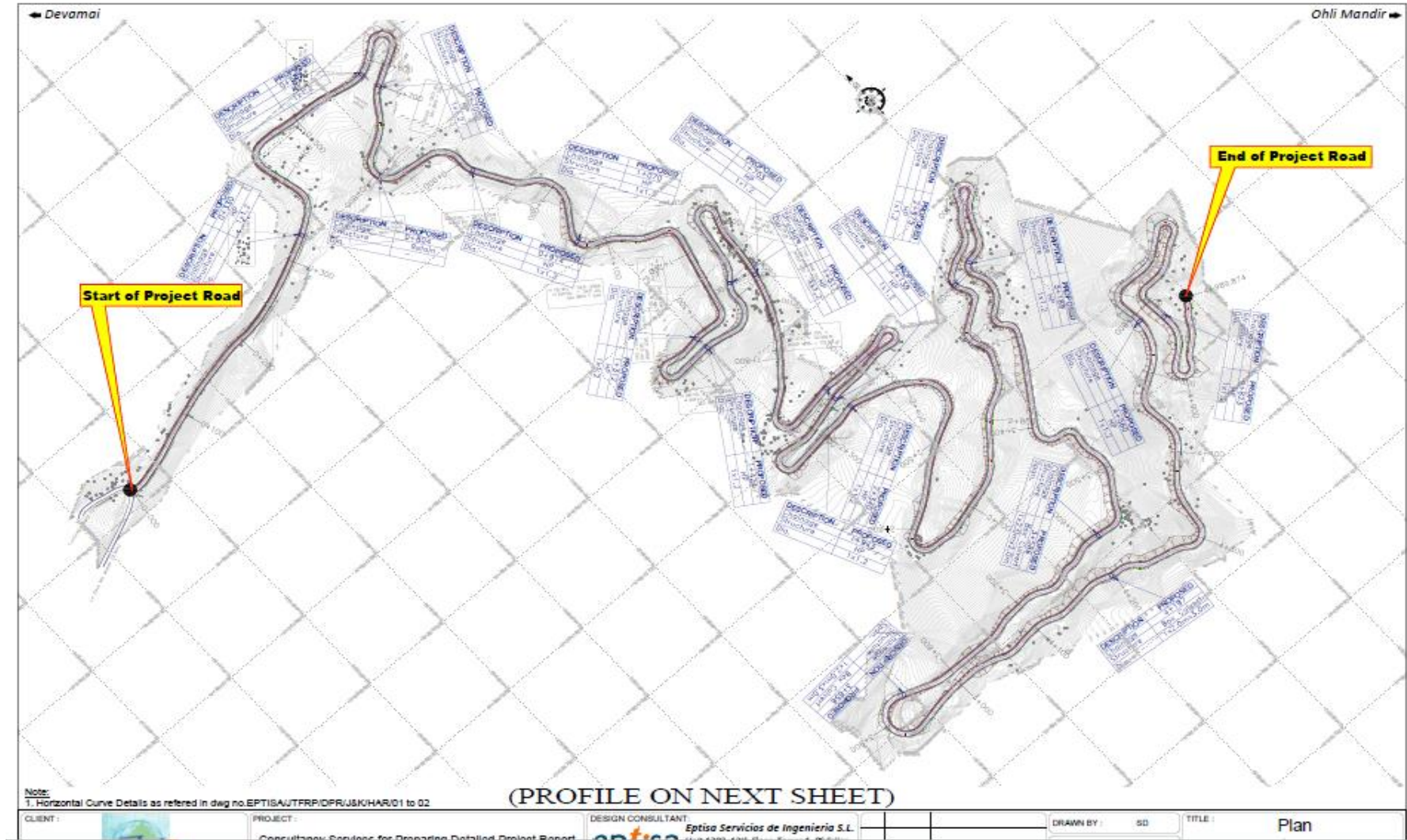

 Project Manager (Transport)
 J&K ERA, Jammu
 T.O

Annexure 5: Strip Plan & Plan & Profile

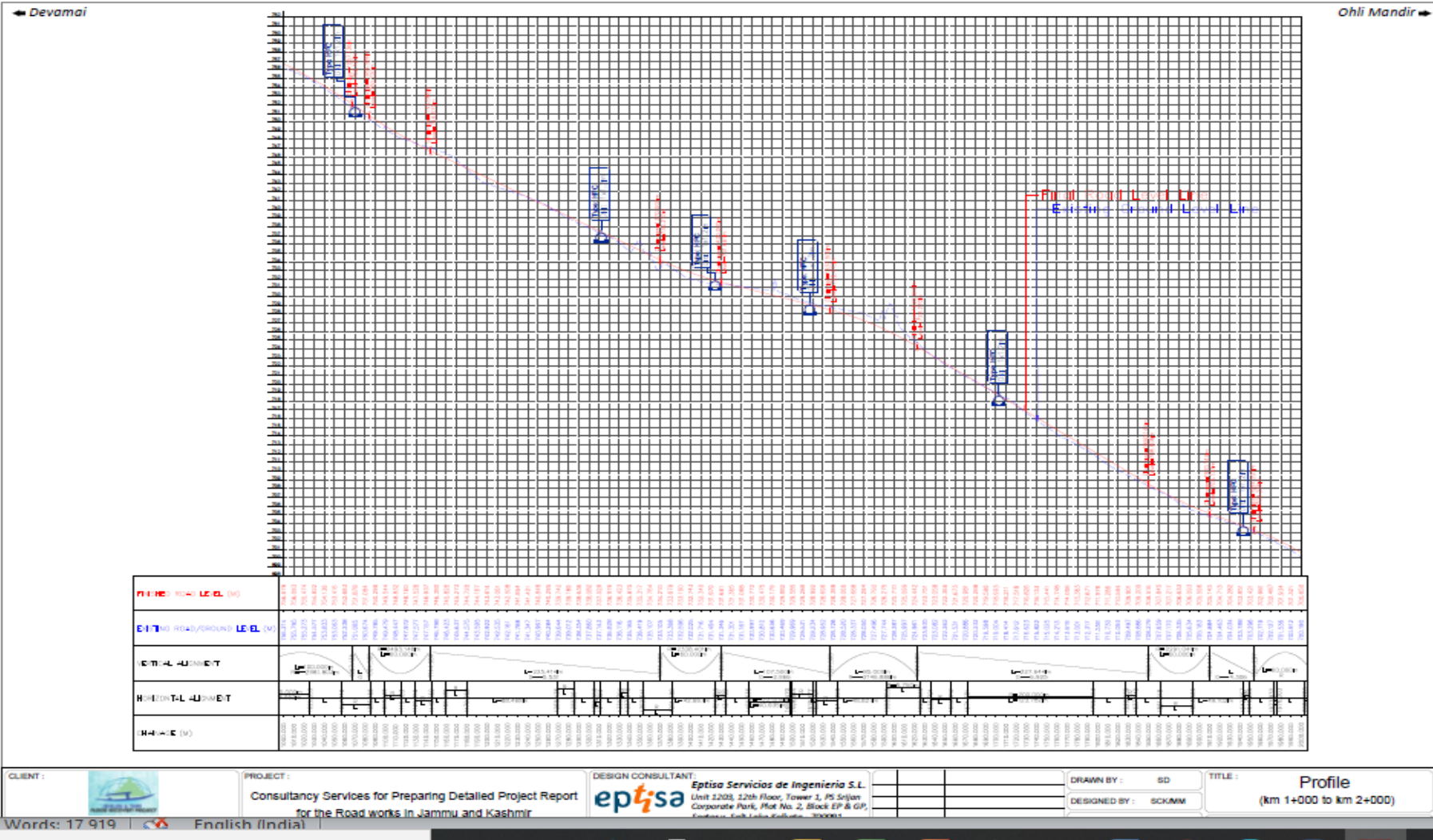
Strip Plan



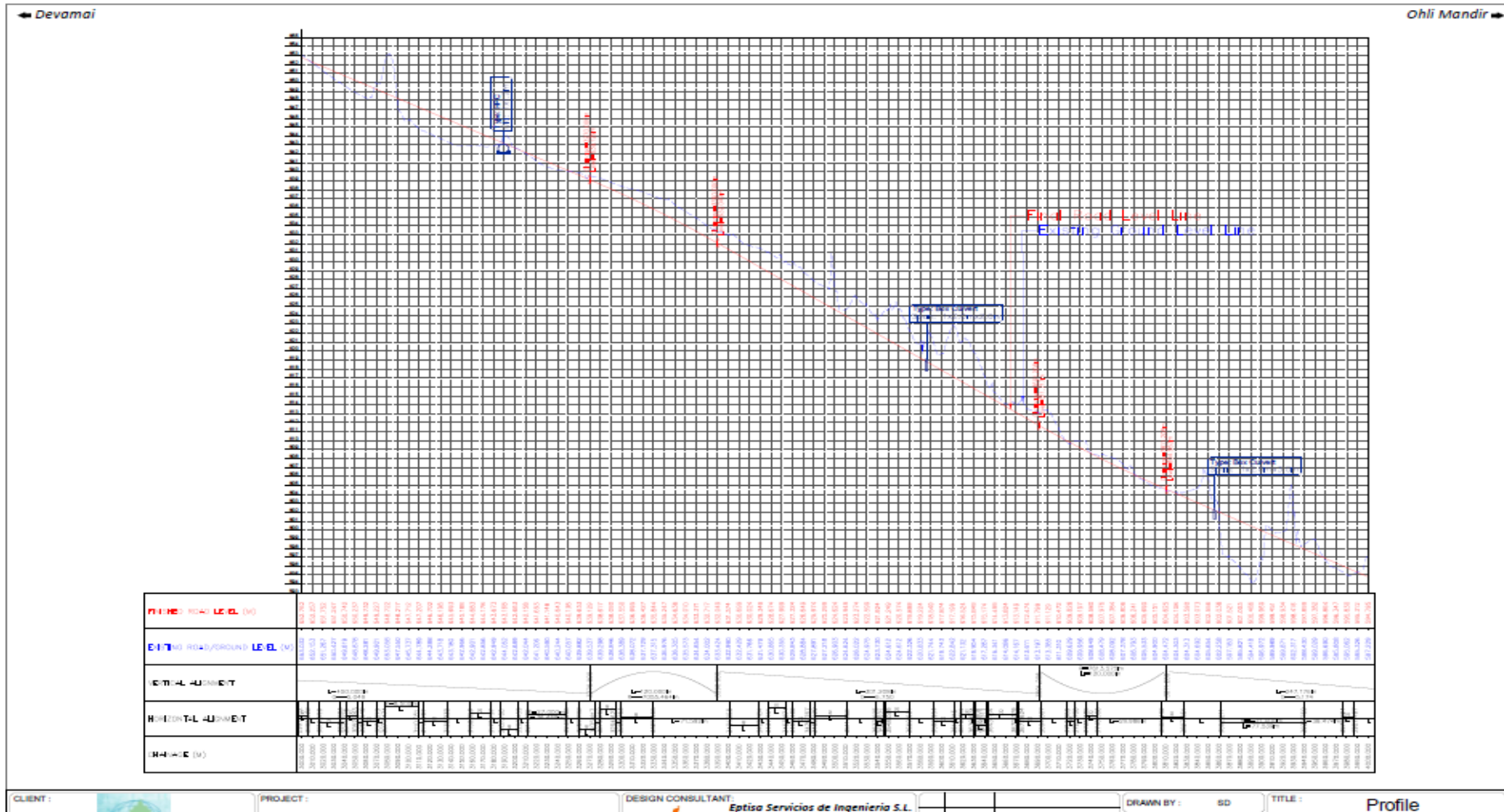
Plan & Profile



Plan & Profile Contd.



Plan & Profile Contd.



Annexure 6: Photograph of the Roads



The project road starting point at Ch 0.000 Km



The project road starting point at Ch 0.000 Km



Road passes through the forest area



Poor Road conditions at Ch 0..400 Km



Land slide area at Ch 1.500 Km(RHS)



Poor Road condition at Ch 1.700 Km



Poor Road condition at Ch 2.200 Km



Poor Road condition at Ch 2.500 Km



Very poor Road condition at Ch 2.700 Km



Foot track Road at Ch 3.500 Km



Foot track Road (Landslide prone) and landslide area at Ch 3.700 Km



Foot track Road (Landslide prone) at Ch 3.800 Km

Annexure 7: Public Consultation (11.7.2019 & 23.12.2020)

Signature Sheet

Public Consultation Attendance Sheet

Date: 11/7/2019 Name of Village: Nomaini.

Name of the Road: Devo Mai Ohki Mandhir

Sr. No	Name of person	Contact No	Signature	Remarks
1.	Ravi kumar	9906210465		
2.	Amit Sharma	7006648958		SanPanch
3.	Ohm Singh	9906279432		
4.	Rajiv mashi	1006093064		
5.	Kuldeep Danday	8492913106		
6.	Kal Chand			
7.	Ramesh Lal.	8492988377		
8.	Anam Singh	9858209617		
9.	Shatter Singh	9796832211		
10.	Taj Bhai Sharma	705181502		
11.	Chorav Sharma	9796729999		
12.	Manjeet Singh	9070769280		
13.	Rohit Sharma			
14.	Arvinder Singh			
15.	Sukhvinder Singh.			

Public Consultation (23.12.2020)

Public Meeting! Date 23/12/2020.

Road: Dera Mai - Ohli mata (Ressi)

<u>Name</u>	<u>Occupation</u>	<u>Address</u>	<u>Sign</u>
Bashir	Farmer/Labour		شیر
Rehmat	labour		شیر
Zahid	Driver		شیر
Ram Manohar	labour		शिर
Om prakash	Farmer		शिर मन्हा
Zakir	Farmer/labour		शिर

Public Consultation/ Meeting Photographs (11.7.2019 & 23.12.2020)



Public consultation at DevaMaiChowk (Katra-Domel road) -Nomain



Public consultation at DevaMai Chowk (Katra-Domel road)- Nomain

Consultation on 23.12.2020

