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Sub-Project: Improvement & Up gradation of Anji-Panasa Road (District Reasi)

Jhelum Tawi Flood Recovery Project

(World Bank Funded)

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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 programmes. SIA is used to predict and mitigate negative impacts and identify opportunities to enhance benefits for local communities and broader society.

Project Influence Area

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

Catastrophic deluge of September 2014 caused negative impact on 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 another district 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 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 Government of India to review and assess the damages in order 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. The SIA is conducted for one of the road under package-04, which is comprises of two roads one is “Improvement and Up gradation of Anji-Panasa Road” and another is “Improvement and up gradation of Deva Mai Ohli Mandir road”. This SIA is conducted for sub-project “Improvement and Up gradation of Anji-Panasa Road” which is proposed to be upgraded for a total length of 4.265 kms.

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, size of the project and location of the project with a sensitive area criteria. The screening for the sub-project has been conducted with the objective to identify the potentially significant environmental/ social issues of the sub-project at an early stage for detailed Environmental and Social impacts.

One of the significant requirements under JTFRP is to disseminate project information by the method of “meaningful public Consultation with stakeholders and general public”. The consultation for this sub-project was conducted successfully with Gram Sabha members and local residents/ stakeholders in Anji-Panasa area on 20.06.2019 and on 23.12.2020 as well. Head of Gram Sabha along with other people were told about the proposed sub-project and revenue record was discussed with them. Only thing they requested is to provide protection walls wherever, executing agency does land cutting along the road. During consultation process, people have expressed keen interest about the proposed sub-project.

Revenue record revealed that the road proposed for up gradation fall under 03 khasra numbers viz., 96, 297 and 298. All the three khasra numbers are under government ownership (state). Evaluation of available revenue record, DPR and the site visits envisaged that the sub-project does not require land either private or government for proposed sub-project. Project Manager (Transport, Division Jammu) vide letter no PIU/T/ERA/2021/865 dated 16.03.3021 issued non-encumbrance certificate which confirms that the available existing RoW is 6.00 meters and sub-project does not require land acquisition. The existing road was constructed some 03 decades back (as told by people during public consultation) and no structure and any CPR are falling under the road alignment.

Therefore, on the basis of certificate issued by Project Manager (Transport, Division Jammu), site visits, approved DPR and notice published in the newspaper it can be said that the sub-project does not have any adverse impact on the assets such as structures, land or on livelihood of anyone. However, if during execution, there is any unanticipated impact of the sub-project on any asset, the issue shall be addressed as per the provisions of Environment & Social Management Framework (ESMF) for the project, applicable policies of the WB and that of U.T of J&K.

1. Introduction and Background

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 Kashmir region, including the capital. In many districts, the rainfall exceeded the normal by over 600%. In Jammu division also, many districts received rainfall in excess of 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 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 in order 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 practice on resilient infrastructure.

Given the Jammu and Kashmir (erstwhile state)'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, 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 Objective[1]

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.

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.

1.3 Components of the Project

The project is comprised of the following seven components:

1. Reconstruction and strengthening of critical infrastructure (US$60million).
2. Reconstruction of roads and bridges (US$80 million).
3. Restoration of urban flood management infrastructure (US$50 million).
4. Strengthening and restoration of livelihoods (US$15 million).
5. Strengthening disaster risk management capacity (US$25 million).
6. Contingent Emergency Response (US$0 million).
7. Implementation Support (US$20 million).

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

1.4 Sub- Project Background

The component 2 of "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 kms. 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 with regard to topography and hydrology (as per the guidelines of the Indian Roads Congress, the Ministry of Road Transport and Highways), and projected demographic changes.

Out of two roads under package-04 i.e. "Improvement and Up gradation of Anji-Panasa Road" and "Improvement and up gradation of Deva Mai Ohli Mandir road", the SIA is done for sub-project namely "Improvement and Up gradation of Anji-Panasa Road". The proposed road sub-project falls in Resai District of Jammu Province. The total length of the proposed road for reconstruction is 4.265 kms. It will be a single lane road with 3.75 m, carriageway.

1.5 Sub-Project Description

Project Road takes off from Km 20th of Katra-Reasi Road near Ikhar nallah and end at Panasa village. From connectivity point of view, this particular road have high importance as through this alignment people of several villages name Seela, Panasa, Dassanu, Pabbar connect with district town. It's also significant from the commercial traffic point of view, as the road passes through agricultural hub of Reasi District. The existing road is in worse condition and wherever BT surface exists, it is in dilapidated condition and full of potholes. Due to non-existence of drain, pavement badly damaged and slope eroded at several locations. It will be a single lane road with 3.75 m, carriageway.

This road connects a long valley section connecting the villages namely Seela, Panasa, Dassanu, Pabbar. Hill section continued on LHS and Ikhar Nallah passes on RHS and parallel to the sub-project road. Protection walls towards hill side missing at various locations and need to be constructed. During 2014, road blocked for 3 to 4 days due to sliding and villages were disconnected from Jammu & district town. Project Road actually connected with the agricultural hub of entire Reasi district. As per present scenario, road is having average width lesser than standard single lane, so traffic congestion is quite natural. Development of the project road is essential for overall development of the area.

The geographical coordinates of the proposed road are:- Start point Lat-33° 4'11.22"N, Long-74°50'5.40"E, End point Lat-33° 3'46.07"N, Long-74°48'8.07"E (**Annexure 2**).

1.6 Benefits of the Sub-Project

The reconstruction of the proposed road will be of great help to the farmers to transport agricultural produce to the market, children and old age people to access schools, health services throughout the year. Up gradation and improvement of road will increase the movement of the people frequently to the district especially women since safe road instils a sense of safety among the vulnerable sections of the society.

The sub-project will not cause any adverse impacts to the local people including women and other vulnerable sections of the society. There is no alternative route for diverting the traffic and movement of people and people will use the same road for movement during construction and to safeguard their lives and livestock, during construction phase SMP needs to be implemented efficiently.

1.7 Need for Social Impact Assessment

Social Impact Assessment (SIA) is a tool for anticipating and mitigating the potentially temporary and permanent adverse impacts of projects. It also helps in enhancing the positive outcomes of the sub-project. 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. The agency carrying out the SIA also develops a mitigation plan to overcome the potential negative impacts on individuals and communities.

The purpose of the SIA is to ascertain whether a project proposed by the developer is truly in the public purpose, and whether the project is located at a site which is least-displacing and requires the bare minimum amount of land.

1.7.1 Need for SIA of Anji-Panasa Road

Anji-Panasa sub-project road will be improved and upgraded in government land (Annexure 3). Project Manager (Transport, Jammu division) of PIU vide letter no PIU/T/ERA/2021/865 dated 16.03.2021 issued a non-encumbrance certificate which confirms that the sub-project upgradation RoW of 6.00 meters is available and no land acquisition is required. (annexure 4). Though the sub-project does not require private land acquisition, 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 following are the objective of SIA study:

i. To gather baseline data for assessment of impacts (both direct and indirect);
ii. To do the socio-economic profiling of the project;
iii. To identify all potential adverse and positive social issues/impacts of the Project;
iv. To suggest mitigation measures to effectively manage potential adverse impacts;
v. 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 which will show the project area will be prepared. In addition, field visit to the area were undertaken on 20.6.2019 and 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 20.6.2019 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 began with screening. Screening was undertaken in the very beginning stages of project development. The purpose of screening was 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 helped 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 are no structures either commercial, residential or any CPR in the alignment of the road.

5. Carry Out Scoping in the Field

The next step was scoping. Essentially, this involved visit to the project site, and consultation with all stakeholders on 20.6.2019 and 23.12.2020. 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 helped and guided 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 mainly damaged frequently during beginning of summer due to snowmelt and due to heavy rain. Hill slopes badly damaged and sliding come on the roads as there is no such protection work exists towards hill slide slope. Even Jammu Srinagar National Highway not unturned from it.

ln September 2014, the northern region of lndia 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, main tributaries of river Jhelum vis-a vis Brengi Nallah, Vishav Nallah, Lider Nallah and Sundran Nallah started overflowing. Water level also increased in 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 than70% 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 international best practice of resilient infrastructure. Given the region's vulnerability to both flood 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. The component 2 of JTFRP is 'to restore and improve the connectivity disrupted due to the disaster through the reconstruction of damaged roads and bridges'. The project will finance the restoration and improvement of about 27 damaged roads, as per the guidelines of the Indian Roads Congress, the Ministry of Road Transport and Highways.

2.2 Sub-Project Description

Project Road takes off from Km 20th of Katra-Reasi Road near Ikhar nallah and end at Panasa village. From connectivity point of view, this particular road have high importance as through this alignment people of several villages name Seela, Panasa, Dassanu, Pabbar connect with district town. It's also significant from the commercial traffic point of view, as the road passes through agricultural hub of Reasi District. The existing road is in worse condition and wherever BT surface exists, it is in dilapidated condition and full of potholes. Due to non-existence of drain, pavement badly damaged and slope eroded at several locations. It will be a single lane road with 3.75 m, carriageway.

2.3 Project Location

Project Road takes off from Km 20th of Katra-Reasi Road near Ikhar nallah and end at Panasa village. The geographical coordinates of the proposed road are:- Start point Lat-33° 4'11.22"N, Long-74°50'5.40"E, End point Lat-33° 3'46.07"N, Long-74°48'8.07"E (annexure 2).

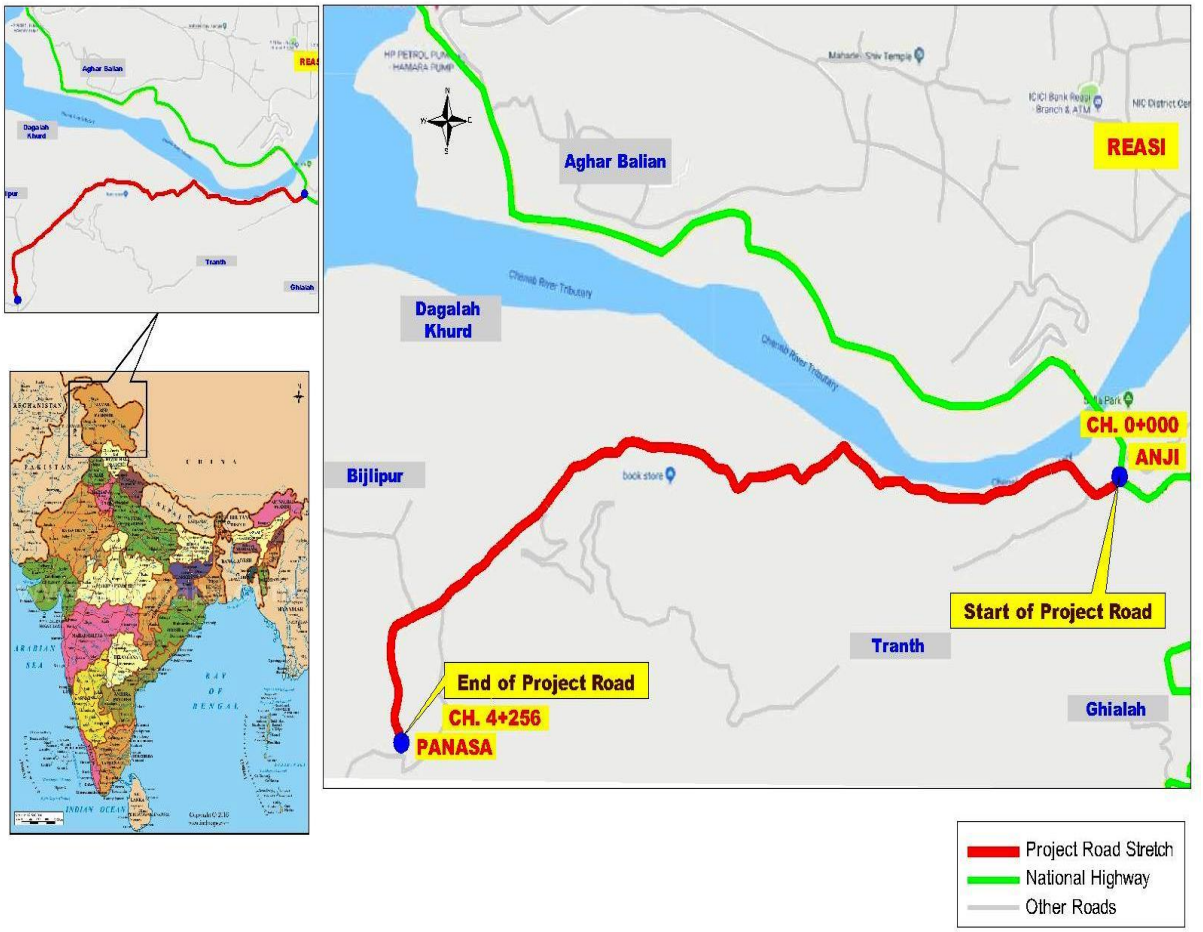

Figure 1: Overview of Proposed Road in Anji-Panasa Sub Project

2.4 Details of Existing Project Road

2.4.1 Embankment, Carriageway and Shoulder

The average width of the existing carriageway varies from 2.5 m to 3.0 m with an average shoulder width of 1.50 m resulting in the average formation width varies from 5.5 m to 6.0 m.

2.4.2 Horizontal and vertical alignment

Project road runs in Hilly terrain and the existing alignment is fair. The existing vertical gradients are very smooth and differences in gradients throughout the stretches are negligible.

2.4.3 Pavement Condition

The existing pavement is of flexible but BT surface exists on project road in a scattered way as a patch work pattern. Practically, BT surface mostly eroded and Granular Base material exposed throughout. From Ch 0.000 Km to 4.256 Km having different thickness as reflected from pavement investigation is in not in fair condition having pot holes.

2.4.4 Cross Drainage Structures

There are 30 nos. of CD structure in the project road, out of which 21 no. HP culverts, 02 nos. are Slab culverts and 7 no Causeway exists. Out of these 21 nos HP culverts 19 nos having lesser dia than 900 mm choked due to siltation and in very poor condition need to be replaced by HP of 1200 mm dia along with 7 nos of causeway. The details are given in the Table 1.

Table 1: List of Existing Cross Drainage Structures

Sl No.	Existing Structure					
	Chainage (Km)	Type of Structure	Span / Dia (m)	Total Width (m)	Width of Head/Parapet Wall (m)	Condition
1	0+122	HP Culvert	600 x 4	5.10	4.000	C&P
2	0+217	HP Culvert	600 x 2	5.05	2.000	C&P
3	0+426	HP	600 x 1	5.05	0.850	C&P

		Culvert				
4	0+471	HP Culvert	600 x 1	5.10	0.850	C&P
5	0+556	HP Culvert	900 x 1	5.30	1.050	Good
6	0+725	Causeway	-	5.20	-	R&NC
7	0+872	HP Culvert	600 x 1	5.20	0.850	C&P
8	0+989	HP Culvert	600 x 1	5.20	0.850	C&P
9	1+189	HP Culvert	600 x 1	5.20	0.850	C&P
10	1+233	HP Culvert	600 x 1	5.20	0.850	C&P
11	1+305	Causeway	-	5.20	-	R&NC
12	1+420	Causeway	-	5.20	-	R&NC
13	1+555	HP Culvert	600 x 1	5.10	0.850	C&P
14	1+874	SC	2.100	5.10	2.300	Good
15	1+952	SC	2.500	5.10	2.700	C&P
16	2+112	HP Culvert	900 x 1	5.05	1.050	Good
17	2+165	HP Culvert	600 x 1	5.05	0.850	C&P
18	2+304	HP Culvert	600 x 1	5.15	0.850	C&P
19	2+337	HP Culvert	600 x 1	5.10	0.850	C&P
20	2+450	Causeway	-	5.20	-	R&NC
21	2+498	HP Culvert	900 x 1	5.10	1.050	Good

22	2+600	Causeway	-	3.25	-	R&NC
23	2+900	Causeway	-	3.25	-	R&NC
24	3+159	HP Culvert	900 x 1	5.10	1.050	Good
25	3+412	HP Culvert	600 x 1	5.15	0.850	C&P
26	3+449	HP	600 x 1	5.05	0.850	C&P
27	3+500	Causeway	-	5.20	-	R&NC
28	3+605	HP Culvert	300 x 1	5.20	-	C&P
29	3+685	HP Culvert	600 x 1	5.24	0.850	C&P
30	4+088	HP Culvert	600 x 1	13.00	0.850	C&P

* C&P – Chocked & Poor, R&NC-Replaced & New Construction

2.4.5 Existing drain

Existing Drains are in good condition but filled with siltation, clearance of drain is very much required. Details are shown in Table 2.

Table 2: List of Drain

Sl No.	Starting Chainage	Ending Chainage	Length (Km)	Side	Type of Structure
1	0	0.25	0.25	LHS	PCC Open Drain
2	0.55	0.65	0.1	LHS	PCC Open Drain
3	0.98	1.1	0.12	LHS	PCC Open Drain
4	1.3	1.45	0.15	LHS	PCC Open Drain
5	1.85	2	0.15	LHS	PCC Open Drain
6	2.75	3.05	0.3	LHS	PCC Open Drain
7	3.2	3.8	0.6	LHS	PCC Open Drain

Total	**1.67**	

2.4.6 Existing Protection work

In this project road from Ch 0.00 Km to Ch 4.000 Km, there are only 236 m Retaining Wall mostly made of stone masonry at different stretches are in fair condition. Details are shown in Table 3.

Table 3: List of Retaining Wall

Sl No.	Starting Chainage	Ending Chainage	Length (m)	Side	Type of Structure
1	113	128	15	RHS	Retaining Wall
2	298	306	8	RHS	Retaining Wall
3	379	387	8	RHS	Retaining Wall
4	423	429	6	RHS	Retaining Wall
5	441	455	14	RHS	Retaining Wall
6	533	543	10	RHS	Retaining Wall
7	600	616	16	RHS	Retaining Wall
8	669	679	10	RHS	Retaining Wall
9	751	761	10	RHS	Retaining Wall
10	850	878	28	RHS	Retaining Wall
11	1121	1134	13	RHS	Retaining Wall
12	1288	1312	24	RHS	Retaining Wall
13	1866	1876	10	RHS	Retaining Wall
14	2179	2187	8	RHS	Retaining Wall
15	2293	2307	14	RHS	Retaining Wall
16	2485	2505	20	RHS	Retaining Wall
17	3485	3507	22	RHS	Retaining Wall
		Total	**236**		

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2.4.7 Existing Pavement Composition

The said road is very old road which was initially constructed on the basis of the traffic on the section. Afterwards several maintenances work of different specification has been undertaken over the road. Specification adopted for such maintenance widely varies from year to year as well as from stretches to stretches. So, the road section does not have a homogeneous crust. 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.

Average pavement thickness is 543 mm. Total thickness of hard crust varies in between 270 mm – 765 mm where existing crust comprises of: GSB consists of compacted granular materials having thickness 150 mm to 440 mm thick (average 283 mm), partly disintegrated base course with WBM materials of 120 mm to 400 mm thick (average 251 mm) and Bituminous/ Binder course varying from 0 mm to 25 mm thick (average 10 mm). A detail of pit wise existing pavement compositions is provided below in Table 4:

Table 4: 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	240	280	540
	WBM	240				
	Sand & Dust	280				
RD 0.500 / TP 2 (LHS)	Bituminous	20	20	270	390	680
	WBM	270				
	Sand & Dust	390				
RD 1.000 / TP 3 (RHS)	Bituminous	0	0	280	440	720
	WBM	280				
	Sand & Dust	70				
	Sand & Dust	300				
	Sand & Dust	70				
RD 1.500 / TP 4 (LHS)	Bituminous	25	25	300	440	765
	WBM	300				
	Sand & Dust	300				
	Sand & Dust	140				
RD 2.000 / TP 5 (RHS)	Bituminous	0	0	400	300	700
	WBM	400				
	Sand & Dust	300				
RD 2.500 /	Bituminous	20	20	360	240	620

Location	Description of Layers	Thickness (mm)				
		Individual (mm)	Surface (Bituminous) in mm	Base Course in mm	Sub-Base Course in mm	Total
TP 6 (RHS)	WBM	360				
	Sand & Dust	240				
RD 3.000 / TP 7 (LHS)	Bituminous	0	0	160	150	310
	WBM	160				
	Sand & Dust	150				
RD 3.500 / TP 8 (RHS)	Bituminous	0	0	125	150	275
	WBM	125				
	Sand & Dust	150				
RD 4.000 / TP 9 (LHS)	Bituminous	0	0	120	150	270
	WBM	120				
	Sand & Dust	150				
Average Thickness from Km 0.0 to Km 4.265			**10**	**251**	**283**	
Minimum Thickness from Km 0.0 to Km 4.265			**0**	**120**	**150**	**270**
Maximum Thickness Km 0.0 to Km 4.265			**25**	**400**	**440**	**765**

2.4.8 RoW Details of Sub-Project Road

The revenue record revealed the improvement and up gradation work of the proposed road will be carried out in the available government land (**Annexure 3**). Project Manager (Transport) vide letter no PIU/T/ERA/2021/865 dated 16.03.3021 provided non-encumbrance certificate and certified that the available existing RoW is 6.00 meters and sub-project does not require land for the proposed up gradation (Annexure 4).

2.4.9 Major Utilities along the Existing Road

A detailed road inventory survey was carried out at 100 m intervals. Detail 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, height of fill or depth of cut, 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 5: Proposed Technical Description in the Sub-Project Road

Sl.No.	Description of item	Details	
1	Road length	Existing – 4.259 km.	Design – 4.256 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, built up and agriculture	
5	Existing Surface of carriageway	• Flexible pavement with OGPC	
7	Existing Formation Width	6.0 m	
8	Right of Way (ROW)	6.0 m	
9	Pavement Condition	Poor	
10	New Flexible Pavement thickness	BC-30 mm; DBM-50 mm; WMM-150 mm; GSB-150 mm	
11	Design CBR	8.2% at 80th percentile	
12	Junctions	Minor- 02	
13	Traffic	ADT- 452, CVPD 128, Traffic Growth 6%, MSA-2	
14	Cross drainage structures	Culvert- 30, out of which 21 no. HP culverts, 02 nos. are Slab culverts and 7 no Causeway	Proposed Culvert- Hume Pipe culvert-24, Box Culvert - 2
15	Settlement	Anji, Panasa, Sila and Dosanoon	

2.5.1 Carriageway Width

In general, the proposed cross-section comprises of 3.75 m wide carriageway with 0.5 m wide granular hard shoulder on either side of the c/w. The camber on either side of the carriageway and Un-paved shoulder is 2.5 % & on shoulder it is 3.0 %.

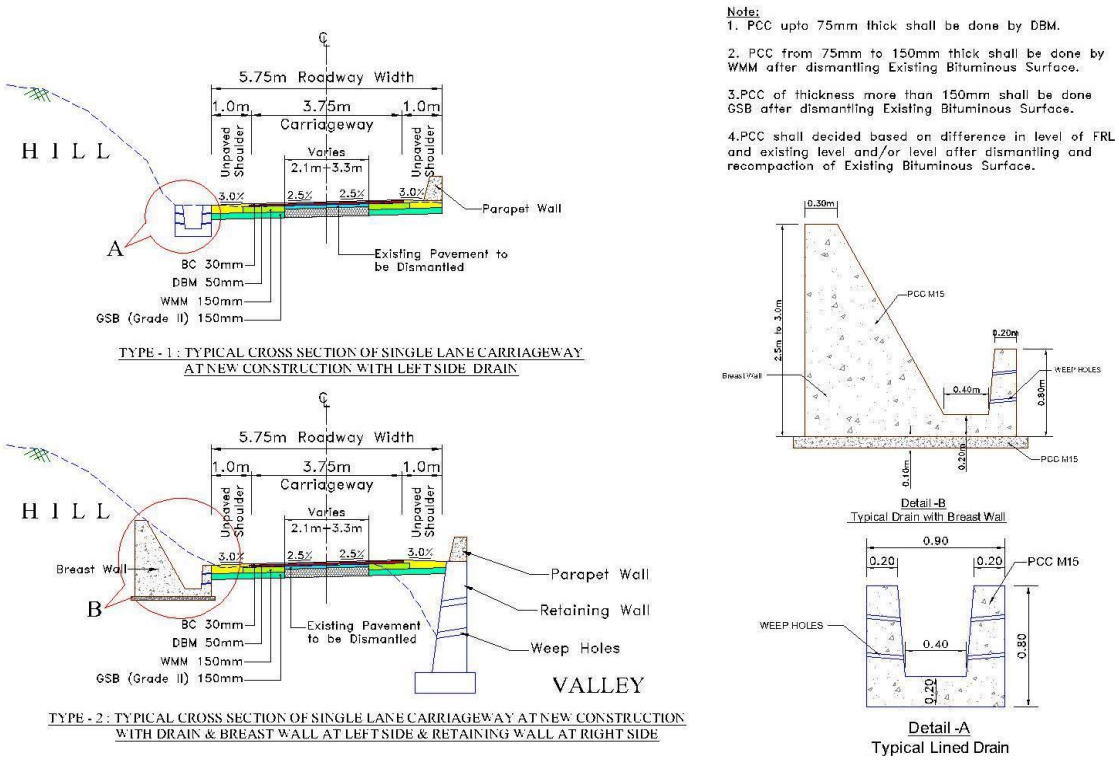


Figure 2: proposed cross-sections

Based on the available carriageway width, widening schedule prepared but widening nowhere less than 1.5 m from construction point of view irrespective of available c/w width particular at those locations. The proposed widening will be in the available RoW. The proposed details are mentioned in Table below:-

Table 6: Details of Widening and Strengthening Stretches

Sl No	From Ch	To Ch	Av. C/W width available at site	Reqd. widening width	widening considered	TCS Type	Type of Proposal	ROW/ Formation width (data provided by client)
1	0.000	0.500	2.50	1.25	1.50	TCS-1	Widening	6.0
2	0.500	1.000	2.65	1.10	1.50	TCS-1	Widening	6.0
3	1.000	1.500	2.75	1.00	1.50	TCS-1	Widening	6.0
4	1.500	2.000	2.65	1.10	1.50	TCS-1	Widening	6.0
5	2.000	2.500	2.85	0.90	1.50	TCS-1	Widening	6.0
6	2.600	3.000	2.85	0.90	1.50	TCS-1	Widening	6.0

Sl No	From Ch	To Ch	Av. C/W width available at site	Reqd. widening width	widening considered	TCS Type	Type of Proposal	ROW/ Formation width (data provided by client)
7	3.000	3.500	2.50	1.25	1.50	TCS-1	Widening	6.0
8	3.500	4.000	2.50	1.25	1.50	TCS-1	Widening	6.0
9	4.000	4.256	2.75	1.00	1.50	TCS-1	Widening	6.0

2.5.2 Horizontal and vertical alignment

Existing alignment is followed for the purpose of widening and strengthening of the existing road and it is found that mostly the required ruling design speed of 40 kmph is maintained. The existing carriageway will be provided with required grade after making the provision of profile corrective course with proper cambers over the existing carriageway surface. Due to land constraint, most of the curve radiuses are less than 60, henceforth 0.6 m to 0.9 m extra widening provides at those location 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 while designing the alignment. However, necessary road sign has to be provided where speed is restricted wherever required.

2.5.4 Improvement of Cross Drainage Structures

The road is passing parallel with Ikhar Nallah. There are 30 nos. of CD structure in the project road, out of which 21 no. HP culverts, 02 nos. are Slab culverts and 7 no Causeway exists. Out of these 21 nos HP culverts having lesser dia than 900 mm choked due to siltation are in very poor condition and need to be replaced by HP of 1200 mm dia along with 7 nos of causeway.

Table 7: Details of proposed culverts

Sl	Existing Structure					Proposed Structure		
	Chainage (Km)	Type of Structure	Span / Dia (m)	Total Width (m)	Condition	Type of Structure	Span / Dia (m)	Proposal
1	0+122	HPC	600 x 4	5.1	C&P	HPC	1200x2	R&NC

Sl	Existing Structure					Proposed Structure		
	Chainage (Km)	Type of Structure	Span / Dia (m)	Total Width (m)	Condition	Type of Structure	Span / Dia (m)	Proposal
2	0+217	HPC	600 x 2	5.05	C&P	HPC	1200x1	R&NC
3	0+426	HPC	600 x 1	5.05	C&P	HPC	1200x1	R&NC
4	0+471	HPC	600 x 1	5.1	C&P	HPC	1200x1	R&NC
5	0+556	HPC	900 x 1	5.3	Good			Retained
6	0+725	CW	-	5.2	-	HPC	1200x2	R&NC
7	0+872	HPC	600 x 1	5.2	C&P	HPC	1200x1	R&NC
8	0+989	HPC	600 x 1	5.2	C&P	HPC	1200x1	R&NC
9	1+189	HPC	600 x 1	5.2	C&P	HPC	1200x1	R&NC
10	1+233	HPC	600 x 1	5.2	C&P	HPC	1200x1	R&NC
11	1+305	CW	-	5.2	-	HPC	1200x2	R&NC
12	1+420	CW	-	5.2	-	HPC	1200x2	R&NC
13	1+555	HPC	600 x 1	5.1	C&P	HPC	1200x1	R&NC
14	1+874	SC	2.1	5.1	Good	HPC	1200x1	R&NC
15	1+952	SC	2.5	5.1	C&P	Box Culvert	1x3.0x3.0	R&NC
16	2+112	HPC	900 x 1	5.05	Good			Retained
17	2+165	HPC	600 x 1	5.05	C&P	HPC	1200x1	R&NC
18	2+304	HPC	600 x 1	5.15	C&P	HPC	1200x1	R&NC
19	2+337	HPC	600 x 1	5.1	C&P	HPC	1200x1	R&NC
20	2+450	CW	-	5.2	-	Box Culvert	1x3.0x3.0	R&NC
21	2+498	HPC	900 x 1	5.1	Good			Retained
22	2+600	CW	-	3.25	C&P	HPC	1200x2	R&NC
23	2+900	CW	-	3.25	C&P	HPC	1200x2	R&NC
24	3+159	HPC	900 x 1	5.1	Good			Retained
25	3+412	HPC	600 x 1	5.15	C&P	HPC	1200x1	R&NC

Sl	Existing Structure					Proposed Structure		
	Chainage (Km)	Type of Structure	Span / Dia (m)	Total Width (m)	Condition	Type of Structure	Span / Dia (m)	Proposal
26	3+449	HPC	600 x 1	5.05	C&P	HPC	1200x1	R&NC
27	3+500	CW	-	5.2	C&P	HPC	1200x1	R&NC
28	3+605	HPC	300 x 1	5.2	C&P	HPC	1200x1	R&NC
29	3+685	HPC	600 x 1	5.24	C&P	HPC	1200x1	R&NC
30	4+188	HPC	600 x 1	13.00	C&P	HPC	1200x1	R&NC

Table 8: Details of Proposed Breast Wall Drain

Chainage From	Chainage to	Length
300	550	250
650	980	330
1175	1320	145
1700	1820	120
		845

Table 9: Details of Proposed Retaining Wall

Height	Chainage From	Chainage to	Length
1.5	115	140	25
1.2	195	210	15
1.5	370	415	45
2	485	515	30
2.5	570	600	30
1.5	740	780	40
2	830	880	50
1.5	1125	1181	56
3	1355	1395	40
2.2	1455	1470	15
2.5	1550	1580	30
1.5	1600	1620	20
2.5	1660	1700	40
1.5	1720	1740	20
1.5	1770	1790	20
1.5	1945	2005	60
2	2085	2205	120
2	2440	2500	60

2.5	2555	2635	80
1.5	2730	2750	20
1.5	3075	3155	80
1.5	3314	3354	40
Total length of Retaining Wall proposed			**936**

2.5.5 Protective works of the Embankment

As the Ikhar Nallah flows parallel with the project road, henceforth Retaining wall required at several location at valley side. In addition to that, Breast Wall also provide at some stretches. Total length of required Retaining and Breast Wall are 700 m & 845m respectively.

2.5.6 Drainage Works and drainage Capacity

In this project road from Ch 0.000 Km to Ch 4.256 Km, there are 1.670 m existing PCC drain at different stretches. In addition to that, 1710 m length of line drain and 845m breast wall drain is required at different stretches.

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 following considerations:

- Rehabilitation on existing pavement
- Reconstruction of existing pavement

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 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: 37-2018).

2.5.9 Traffic Safety and Other Appurtenances

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

I. Road Markings

Road Markings on the carriageway and on the objects within and adjacent to the roadway are used as a means of guiding and hilly traffic. They promote road safety and ensure smooth flow of traffic in the required paths of travel. The location and type of marking lines, material and 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.

II. 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".

III. Delineators

The role of delineators is to provide visual assistance to driver about 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 locations 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.

IV. Crash Barrier

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

V. 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.1280m length are provided along the project stretches including painting of the parapet wall.

VI. 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 Meters or 20 feet away. Above this distance you need to use a bigger mirror.

3. Legal and Regulatory Framework

This section deals with the laws, regulations and policies, of Government of India, the Union Territory of Jammu and Kashmir and the World Bank, related to social issues. Only the laws, regulations and policies relevant to the project are discussed here. This sections needs to be updated as 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 10: 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 asset
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 & Policies of Union Territories of J&K

Table 11: National & U.Ts. Provisions

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 replace by 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 will not trigger Involuntary Resettlement.
2	State Land Acquisition Act 1990 (1934 AD)	The Sate Land Acquisition Act 1990 (1934 AD) is in force in 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 will not trigger Involuntary Resettlement
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 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 land is in adequate for habitation of the villagers at any point of time.	Not Applicable The sub-project will not use any common land.

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

- Minimum Wages Act, 1948
- Contract Labour Act, 1970
- The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013
- The Bonded Labour System (Abolition) Act, 1976
- Child Labour (Prohibition and Regulation) Act 1996 along with Rules, 1988
- Children (Pledging of Labour) 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 most sought after place on the tourism map of Jammu and Kashmir. The district has distinction to attract a count of tourists across the globe.

The Reasi District as per census 2011 consists of 255census villages, out of which two are un-inhabited. 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. Holy Shrine of Shri Mata Vaishno Devi is 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 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 watershed of the River Chenab and its tributaries (Ans, Rudd, Plassu, Banganga, Pai, Anji). At 2011 Census, the district has recorded a population of 314,667 and accounts for 2.50 per cent 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 per cent and 47.10 per cent respectively of the total population of the district. In terms of population Reasi stands at 16thposition among all the districts of the state .It is spread over an area of 1719 sq.kms. and having a population density of 183.

4.2 Physiography

The district has an elongated shape which 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 inter-woven 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 metres and 608 metres. The areas in the north are very high, rising to heights of above 4256 metres. This region is on the southern side of the PirPanjal.

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 southernly 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 wide variation in temperature in different parts of the district. Sometimes, the temperature shots 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 Flora and fauna

Trees; namely; deodar, kail, fir and pine are existing in higher altitude, 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, primsepia, qurrcus 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.

4.6 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. The cropping pattern during 2008-09 was as under:

Table 12: 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

(Source: Digest of Statistics J&K 2008-09)

High yielding varieties programme has been taken up with full vigour. High yielding variety seeds are used in areas with increased irrigation facilities. The farmers in the district are increasingly using the pesticides and plant protection material. Apart from the above food grains the various fruit grown in the district are apple, apricot, mango, grapes, pear, plum and citrus fruit etc.

4.7 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

4.8 Animal Husbandry

Livestock is playing very vital role in the economic development of the state. The cattle and poultry amongst all the livestock are considered most important tool for the development of rural economy and serve as 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 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 on 2008-09 were 02 and 46. The Animals treated for various diseases in the district in 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).

4.9 Industries

From Industrial point of view,Reasi is quite backward due to its hilly topography, non-availability of adequate raw material & good market for sustenance of large & medium units, but there is 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 attracts 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.

The socio economic profile of the village falling under the proposed sub-project is given below:[2]

Village Anji- Anji is a medium size village located in Reasi Tehsil of Reasi district, Jammu and Kashmir with total 55 families residing. The Anji village has population of 368 of which 194 are males while 174 are females as per Population Census 2011. In Anji village population of children with age 0-6 is 62 which makes up 16.85 % of total population of village. Average Sex Ratio of Anji village is 897 which is higher than Jammu and Kashmir state average of 889. Child Sex Ratio for the Anji as per census is 879, higher than Jammu and Kashmir average of 862.

Anji village has lower literacy rate compared to Jammu and Kashmir. In 2011, literacy rate of Anji village was 50.33 % compared to 67.16 % of Jammu and Kashmir. In Anji Male literacy stands at 57.14 % while female literacy rate was 42.76 %.

Village Dosanoon- Dosanoon is a medium size village located in Reasi Tehsil of Reasi district, Jammu and Kashmir with total 111 families residing. The Dosanoon village has population of 618 of which 322 are males while 296 are females as per Population Census 2011.

[2] Source: https://www.census2011.co.in/data/village/5365-anji-jammu-and-kashmir.html

In Dosanoon village population of children with age 0-6 is 88 which makes up 14.24 % of total population of village. Average Sex Ratio of Dosanoon village is 919 which is higher than Jammu and Kashmir state average of 889. Child Sex Ratio for the Dosanoon as per census is 796, lower than Jammu and Kashmir average of 862.

Dosanoon village has lower literacy rate compared to Jammu and Kashmir. In 2011, literacy rate of Dosanoon village was 47.74 % compared to 67.16 % of Jammu and Kashmir. In Dosanoon Male literacy stands at 50.92 % while female literacy rate was 44.36 %.

Village Sila- Sila is a large village located in Reasi Tehsil of Reasi district, Jammu and Kashmir with total 371 families residing. The Sila village has population of 2577 of which 1657 are males while 920 are females as per Population Census 2011.

In Sila village population of children with age 0-6 is 308 which makes up 11.95 % of total population of village. Average Sex Ratio of Sila village is 555 which is lower than Jammu and Kashmir state average of 889. Child Sex Ratio for the Sila as per census is 901, higher than Jammu and Kashmir average of 862.

Sila village has higher literacy rate compared to Jammu and Kashmir. In 2011, literacy rate of Sila village was 81.49 % compared to 67.16 % of Jammu and Kashmir. In Sila Male literacy stands at 88.96 % while female literacy rate was 67.05 %.

Village Panasa- Panasa is a medium size village located in Reasi Tehsil of Reasi district, Jammu and Kashmir with total 381 families residing. The Panasa village has population of 1951 of which 1044 are males while 907 are females as per Population Census 2011.

In Panasa village population of children with age 0-6 is 355 which makes up 18.20 % of total population of village. Average Sex Ratio of Panasa village is 869 which is lower than Jammu and Kashmir state average of 889. Child Sex Ratio for the Panasa as per census is 878, higher than Jammu and Kashmir average of 862.

Panasa village has lower literacy rate compared to Jammu and Kashmir. In 2011, literacy rate of Panasa village was 46.80 % compared to 67.16 % of Jammu and Kashmir. In Panasa Male literacy stands at 57.54 % while female literacy rate was 34.41 %.

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

The Anji Panasa Road is the heart of all agricultural activity for the entire Reasi District. This road connects a long valley section connecting the villages namely Seela, Panasa, Dassanu, Pabbar. Hill section continued on LHS and Ikhar Nallah passes on RHS and parallel to the project road. BT surface mostly eroded and granular base material came out. Protection wall towards hill slide missing at location where badly requires. During 2014, road blocked for 3 to 4 days due to land sliding and villages were disconnected from Jammu & district town. Movement of people was ensured only after removal of land slide debris without vehicle movement. Without the proposed project, People will have to face the problem of movement throughout year like accessing schools, health centres, district headquarters, ferrying agricultural produce etc.

5.1.2 'With' Project Scenario

The objective of the sub-project is to restore and improve the connectivity disrupted due to the disaster through the reconstruction of damaged roads and bridges. Restoration of roads will also serve as supply/rescue lines in the event of a disaster. Since the existing road is not a fair-weather road, therefore fair-weather road will provide people throughout year access to avail basic services such as schools, hospitals, district headquarters and safety also. The sub-project will not require any private land acquisition and is not impacting any other private asset. This has been confirmed through discussion with engineers from PIU and PMU, JTFRP (Jammu division). Later on Social Safeguard expert from PMU, JTFRP visited the site and has confirmed the same. PWD, Bhaderwah division owns the land.

Anji-Panasa sub-project road will be improved and upgraded in government land (Annexure 3). Project Manager (Transport, Jammu division) of PIU vide letter no PIU/T/ERA/2021/865 dated 16.03.2021 issued a non-encumbrance certificate which confirms that the sub-project upgradation RoW of 6.00 meters is available and no land acquisition is required. (annexure 4).

6. Stakeholder's Consultation

Stakeholder's Consultation is basically concerned with involving, informing and consulting the public in planning, implementation and other decision-making activities. It tries to ensure that due consideration is given to public values, concerns, and preferences when decisions were made.

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 efforts to minimize the potential unexpected opposition of the proposed project and potential adverse effects to the environment and society at large.

6.1 Identification of Stakeholder

Stakeholder's 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. Project related information has been shared with all the concerned stakeholders on 20.6.2019 and 23..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 and identified as major stakeholders besides PIU/PMU and line departments.

6.2 Objective of Stakeholder's Consultation

The main objective of this exercise is to inform stakeholders about the project and its likely impacts, 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 available RoW details along with other project related information were shared with them in order to instil faith and confidence among them about the proposed sub-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 Gram Panchayat 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

The public consultation was conducted on 20.07.2019 and thereafter, follows up meeting on 23.12.2020. Local people, People from PIU/PMU and Gram Panchayat were present in the meeting. Detail discussions were held over JTFRP and its funding and other requirements (annexure 7). Major outcome during consultation was that people are aware that no private land or structure is being acquired for the sub-project. Gram Sabha head and others requested to construct protection wall wherever EA does land cutting since the road is passing through hilly terrain and land cutting without giving protection walls can lead to soil erosion and put buildings on the risk.

6.5 Issues Discussed

The following issues were discussed:

- Design of the sub-project, Land Requirement and available revenue record.
- Issues surfaced during raining season in the absence of bitumen road.
- Impact on education of girls and boys dilapidated road
- Problems of transportation.
- Proposed Grievance Redressal Mechanism.
- Proposed investment on road sub-project and its funding from World Bank.

- Requirement of Environmental & Social screening.
- Adverse direct or indirect impacts caused due to construction activities and mitigation measures through ESMP.

6.6 Feedback Received

- They are aware that no private land acquisition is involved in the sub-project, a transect walk was conducted to assure same along with Sarpanchs, members of Gram Sabha and local people.
- People requested to provide protection walls wherever, EA does land cutting or excavation towards hill side.
- Proper Drainage along road needs to be constructed as it will increase the life of road.
- Proper Implementation of ESMP.

7. Analysis of Social Impacts

7.1 Impact on Land

The proposed sub-project does not involve any land acquisition, demolition and removal of structures. As per DPR the existing formation width is 6.0 meters and available RoW is also 6.0m. Project Manager (Transport) vide letter no PIU/T/ERA/2021/865 dated 16.03.3021 issued a non-encumbrance certificate which confirms that the available existing RoW is 6.00 meters and sub-project does not require land for the proposed sub-project (annexure 4).

Revenue record revealed that the road proposed for up gradation fall under 03 khasra numbers viz., 96, 297 and 298. All the three khasra numbers are under government ownership (annexure 3). Evaluation of available revenue record, DPR and the site visits envisaged that the sub-project does not require land either private or government for proposed sub-project. The existing road was constructed some 03 decades back (as told by people during public consultation). Strip plan of the road annexed as annexure 5 also confirm that there is no structure inside the alignment of the proposed road.

However, if during execution, there is any unanticipated impact in terms of land requirement or acquisition of any asset. Same shall be brought into the notice of the World Bank and addressed as per ESMF of the project, the applicable World Bank guidelines and and that of the Union Territory of the J&K.

7.2 Impacts on Structures

As per the design of the sub-project no structure Residential, Commercial or Religious is falling in the alignment of the road. Further no Community Property Resource is falling in the alignment. Project Manager (Transport) vide letter no PIU/T/ERA/2021/865 dated 16.03.3021 issued non-encumbrance certificate which confirms that the available existing RoW is 6.00 meters (annexure 4).

7.3 Impact on Livelihood

The social impact assessment study does not envisage any impact on the commercial permanent or temporary structures such as Kiosks etc. due to sub-project execution.

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 the envisaged and 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:

Preconstruction Stage

To discuss the design and technical proposal with the stakeholders in order to know their suggestions and inputs. To inform them about the project, it's funding, land requirements and policies and guidelines of funding agencies and applicable to the project.

Construction Stage

To ensure that the provision of the SMP (Social Management Plan) are strictly followed and implemented by strengthening implementation arrangement.

To address the construction stage social impacts arising due to various project activities enroute the corridor and particularly at habitations through specific measures 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 rose during 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 minimize adverse social impacts, to offset them, or to reduce them to acceptable levels in accordance with 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 Anji Panasa Road is based on the Social Impact Assessment study during which site visits carried out in the project corridor, meeting were done with people and project design was discussed and evaluated on the ground. The sub-project does not have any impact on the 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 project activities. The same has been confirmed by the project Manager vide letter no. PIU/T/ERA/2021/865 dated 16.03.2021 which confirms that 6.00 meters of RoW is available for construction and no private land is required for the proposal (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, JTFRP.

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 Key social issues and impacts that may arise during 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
- Drying up of seasons springs or streams due to construction works.
- Temporary – short duration or prolonged disruption to services such as water supply, power supply.
- Temporary Disruption to traffic movement leading to time delays.
- Dust emissions during construction leading to impacts on crops and trees resulting in lower yield or growth.
- Possibility of gender-based violence arising from influx of migrant labour for construction works.
- Likelihood of spread of HIV/AIDS among construction workers and road side communities.

8.7 Social Management Plan

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 13: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**	• Sharing of design with the community. • Avoid & minimize land	• Consultation with local community and stakeholder's engagement.	Contractor	PIU

S.No.	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
		acquisition to the extent possible. • Utilization of private temporarily. • 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, if any.	• Written consent from community or owner of the land required for stocking construction material temporarily. • Involving locals (Gram Sabha) wherever any issues arises.		
Construction Phase					
2	**Influx of labour**	• 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	• Minimize labour influx as much as possible by engaging local population. • Ensure separate labour 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 labour. • Awareness on sexual assault & drug abuse.	Contractor	PIU/ PMU Monthly Monitoring

S.No.	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
		versa. • Possibility of Sexual abuse and assault in the labor camps or otherwise. • Drug abuse, gambling etc.			
		• Facilities for the Labour in camp and on worksite	• Providing accommodation facilities to the migrant labours with proper ventilations. • Provision for safe drinking water and appropriate cooking arrangement at labour camps; • Provision of Separate toilet and bathing facilities for men and women • 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.	Contractor	PIU/ PMU Monthly Monitoring

S.No.	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
			• Safe storage facilities for the gas cylinder, petroleum and other chemicals, used by labourers. • 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, labourers 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 labours 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		

S.No.	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
			transmission of sexually transmitted infections (STI) HIV/AIDS. • Labour Registration. • Awareness program for labour rights • No employment of child labour.		
		• Registration of Complaints received from labour.	• 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
		• Equality of opportunity to work. • Equal Pay for equal work • Preference to the Women Laborers	• To be ensured throughout project cycle. • Maintenance of payment registers by the contractor.	Contractor,	PIU/ PMU Monthly Monitoring
3	**Community Health and Safety**	• Injury & sickness due to construction work and movement of heavy vehicles, contamination or other natural or human-made hazards.	• 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	Contractor	PIU/ PMU Monthly Monitoring

S.No.	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
			and STDs and COVID-19. • Ensure least contact between the labour 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 access to shops, kids, hospital/clinic, religious places etc. • Community Consultation		
4	**Occupational health and safety**	• Injury and sickness of labour	• 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 labourers for COVID-19 and maintaining a register. • Awareness program on COVID-19. • Provision of hand	Contractor	PIU/ PMU Monthly Monitoring

S.No.	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
			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 labur 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 labourers 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		

S.No.	Project Phase/Activity	Issues/ Potential impacts	Proposed Mitigation Measures	Responsibility	Monitoring Agency/ Frequency
5	**Gender Based Violence**	• Sexual Exploitation and Abuse (SEA) • Workplace Sexual Harassment • Human Trafficking • Non-SEA	• Awareness program for the Contractors, Local Communities and labourers on national laws. • Introducing a workers code of conduct. • Displaying of various legal provisions on site, in labour camps and at prominent locations in the project area. • Ensure that complaints of GBV registered and maintain a register. • Strict code of conduct for workers with no tolerance for physical or verbal abuse of women or children. • Community Consultation.	Contractor	PIU/ PMU Monthly Monitoring
Post Construction Phase					
6		• 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.	• Consultation with the private party or Community and restoration of their land. • Removing 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 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 separate Women Component Plan (WCP) by identifying specific Schemes/Projects having direct bearing on welfare and development of Women. The 10th Five Year Plan further strengthened the implementation of 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. 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 has population of 1.25 Crore souls over the figure of 1.01 Crore in 2001 census. Total population of Jammu and Kashmir as per 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 sex ratio of 892. Sex ratio (females per thousand of males) is an important indicator of the social conditions particularly with respect to women's status in any society.

Low sex ratio shows indulgence of artificial interventions, distorting the biological trend and natural balance in terms of number of females per thousand males. An important concern in the present status of Jammu and Kashmir's demographic transition relates to 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 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 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 2001 Census to 68% in the 2011 Census. While female literacy has increased from 42.22% in 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 a number of 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 equal share in the basic human rights. With 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

- 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.

- 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 better and congenial situation for increasing participation from women.

- Devise ways to make other vulnerable to participate in the project activities.

Involvement during Construction

Wherever possible, women's involvement in construction activities should be encouraged in order to help them have access to benefits of 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 labourers/workers should be provided with residential accommodation suitable to nuclear families.
- **Health Centre:** Health problems of the workers should be taken care of by providing basic health care facilities as and when required by labour.
- **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 Labour:** Minors, i.e. persons below the age of 14 years, should be restricted from getting involved in the constructional activities. It will be the responsibility of Social and Environmental experts of PMU, JTFRP to ensure that no child labourer is engaged in the activities. PMU& PIU shall keep strong vigilance to ensure 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 Labour Management

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

Objectives

The influx of migrant labour will have both negative and positive impacts on the nearby community and local environment. The labour 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 in the immediate vicinity of 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 influx on the host population and receiving environment are minimized;
- Provision of safe and healthy working conditions, and a comfortable environment for migrant labour; and
- To ensure compliance with the national labour laws, including guidance provided on latest COVID 19 epidemic in the country.

8.9.1 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 labour camp to be established by contractors during 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 mitigation measures as per the guidelines and advisory issued by the government time to time.

- **Complaints and incident reporting:** A formal Complaints Procedure will be implemented to ensure timely and transparent response to complaints as received from labour.

- **Labour 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;

- **Labour 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 labourers living in campsite and community and shall be implemented by construction contractors for all engaged labourers.

- **Labour Compensation and Accommodation:** JTFRP shall ensure that labourers are provided with benefits such as leave, weekly rest day, etc. Accommodation to be provided for the construction labour which covers facilities (including catering facilities, dining areas, washing and laundry facilities, etc.) and supporting utilities.

8.9.2 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 labour; The construction labourers will be provided with documented information regarding their rights under national labour and employment law such as but not limited to Factories Act, Minimum Wages Act, 1948 Trade Unions Act, and Workmen's Compensation Act; 1923
- First priority for employment of labour 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 with respect to 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 labour;
- Every labour 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 pertaining to labour sourced by sub-contractors;

8.9.3 Worker's Accommodation

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

- The labourers 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 units to be supported by common latrines and bathing facilities duly segregated for male and female labour; A minimum of 1 unit to 15 males and 1 unit for 10 females shall be provided;
- 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 on a daily basis;

- 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.

8.9.4 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.

8.9.5 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.

8.9.6 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 labourers in the project area does not interfere with the local requirements, necessary arrangements for supply of fuel to the labourers shall be done by the contractor.

8.9.7 Waste Water Generation

- There will of generation of wastewater from the campsite. About 80% of water used shall be generated as sewage/wastewater.
- Contractors to ensure that the campsite is equipped with the 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 materials that are easily cleanable. Sanitary and toilet facilities are required to be cleaned frequently and kept in working condition.

8.9.8 Medical facilities

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

- A first aid centre shall be provided for the labour 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;
- 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 labourers every six month and health records shall be maintained;

- Labours 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 environment and social 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 the course of project implementation. Evaluation on the other hand assesses whether the activities have actually achieved intended goal and objectives. Thus, monitoring and evaluation are critical in order to measure the project performance and fulfilment of project objectives.

In order to carry out this, PMU has made specific arrangements. 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 issues Director Safeguards 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 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 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

In order to address peoples 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 it will be forwarded to R&R Committee at Divisional level for this project which will be established under the Divisional Commissioner, Jammu/Srinagar. The grievances will be registered at Project site. The local level grievance committee will try to resolve the case in maximum 14 days. In case the aggrieved person is not satisfied with the decision delivered at local level or the grievance/s are 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 aggrieved party is not satisfied with the decision delivered or committee is not successful in resolving the grievance/s, they can approach the court of law on their own expenses. 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 local level i.e. site level. This will be comprises 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 grievance/s are not addressed at 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 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 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 with respect to 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 take decision 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 with regard to 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 women representative (Retired/ Development Professional/Academician)
j. A PRI representative
k. A representative of PAPs who can articulate well.

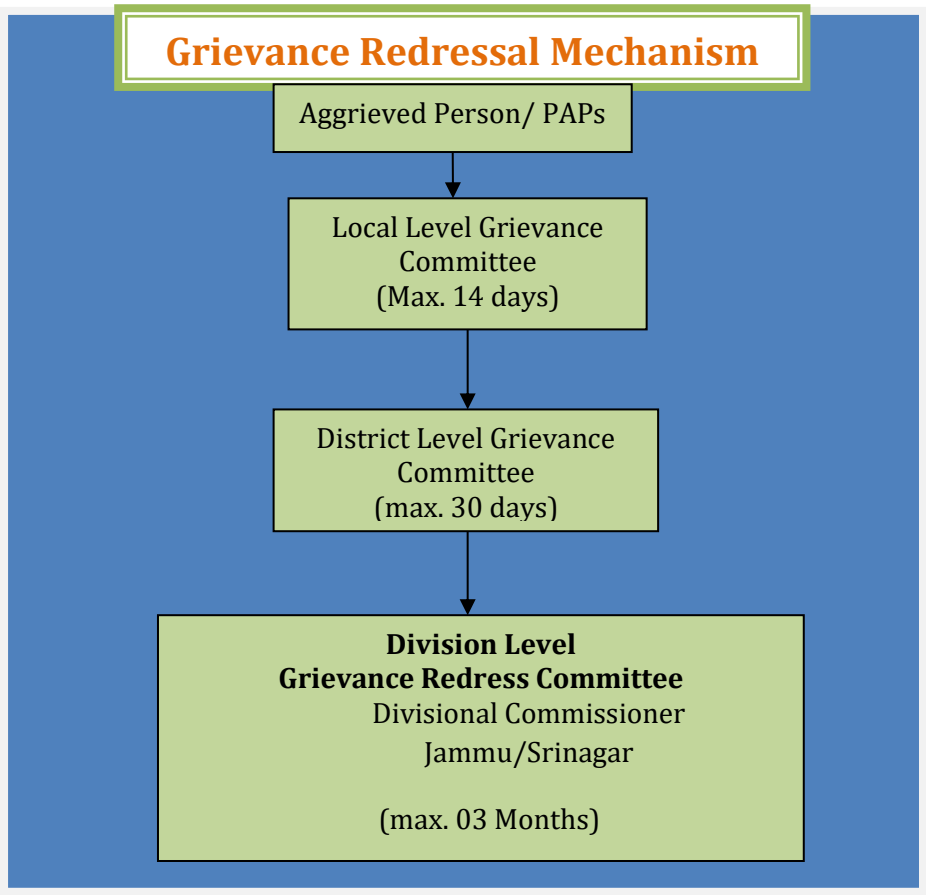


Figure 3: Structure of GRM

10.2 Approach to GRC

Project Affected Person/aggrieved party can approach to GRC for 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 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. A grievance register will be maintained by the contractor/PIU at each site office. Phone number of concerned engineer shall be displayed at the site so that 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 enroute the same through PIU to the site engineer who will try to resolve it within the stipulated time and rest process will follow.

Besides the grievance redress mechanism of JTFRP, state has 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 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. General public and PAPs specifically will be informed about 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

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 ARAP 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 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. 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 Social Development Specialist in PMU, JK ERA will ensure compliance to the WB policies and other provisions applicable to the project. For this sub-project Only Social management Plan needs to be implemented during execution of the sub-project.

Annexures

Annexure1: Environment and Social Screening Data Sheets

Part A: General information

1. Name of the sub-project	**"Improvement and Upgradation of Anji-Panasa Road" (District Reasi)**
2. Type of proposed activity (tick the applicable option and provide details)	
• Road	Single Lane
• Bridge	
• Fire Station	
• Hospital/Health Facility	
• Educational Institute	
• Building for Livelihoods	
• Flood Infrastructure Related	√
• Other Public Building	
• Any Other (Please Specify)	
3. Location of the proposed sub-project	
• Name of the Region	Jammu (J&K)
• Name of the District	Reasi
• Name of the Settlements	Seela, Panasa, Dassanu, Pabbar
• Latitude	Start point 33° 4'11.22"N, End point 33° 3'46.07"N
• Longitudes	Start point 74°50'5.40"E, End point 74°48'8.07"E
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 mt/km, as relevant	4.265 Kms
5. Land Requirement (in hac./sq.mt.)	
• Total Requirement	The sub-project is strengthening the existing road. Hence, no land acquisition is envisaged
• Private Land	Nil
• Govt. Land	Nil
• Forest Land	Nil
6. Implementing Agency Details (sub-project level)	
• Name of the Department/Agency	PIU-Jammu, J&K ERA
• Name of the contact person	Mr. Nand Kishore Gupta

• Designation	S.E.
• Contact Number	9419193872
• E-mail Id	pmtransportera@gmail.com
7. Screening Exercise Details	
• Date on which it was carried out	Site visited on 20.06.2019/23.12.2020
• Name of the Person	Vikash Sharma/ Charanjeet Singh
• Contact Number	+919419125803, +91 9419893392
• E-mail Id	jkerasocial@gmail.com jcharan.sim@gmail.com

Part B (1): Environment Screening

Question	Yes	No	Detail
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		However, no impact on the forest is envisaged as sufficient ROW is available with R&B department. No tree cutting required.
l. Wetland		No	
m. Natural Lakes		No	
n. Rivers/Streams	Yes		Ikhar Nallah flows for some distance along the road ahead of the start point.
o. Swamps/Mudflats		No	
p. Zoological Park		No	

q. Botanical Garden		No	
2. Is the sub-project located in whole or part within 500m 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?		--	
4. Is any scheduled/protected tree like Chinar, Mulberry or Deodar likely to be affected/ cut due to the project?		No	
5. Is the sub-project located in a landslide/heavy erosion prone area or affected by such a problem?		No	
6. 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	Wildlife Clearance Required	No
5	Tree Cutting Permission Required	No
6	ASI (Centre/State) Permission Required	No
7	Permission from ULB/Local Body/Department Required	No
8	Any other clearance/permission required	Yes. Consent to Establish and Consent to Operate for the stone crusher plant, Hot mix plant, etc, if established by the contractor, may require to be obtained by the contractor prior to the start of the work.

Part C (1): Social Screening

1. Does the sub-project activity require acquisition of land?			
Yes		**No**	√
Give the following details	Private Land (sqmts/hac.)		
	Govt. Land (sqmts/hac.)		
	Forest Land (sqmts/hac.)		
2 . Does the proposed sub-project activity result in demolition/removal of existing structures?			
Yes		No	√
If yes give the details			
Number of public structures/buildings		No	
Number of common property resources (such as religious/cultural/drinking water/wells/etc.)		No	
Number of private structures (located on private or public land)		No	
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/hac).			
6.Does the proposed project activity affect scheduled tribe/caste communities?			
Yes		No	√

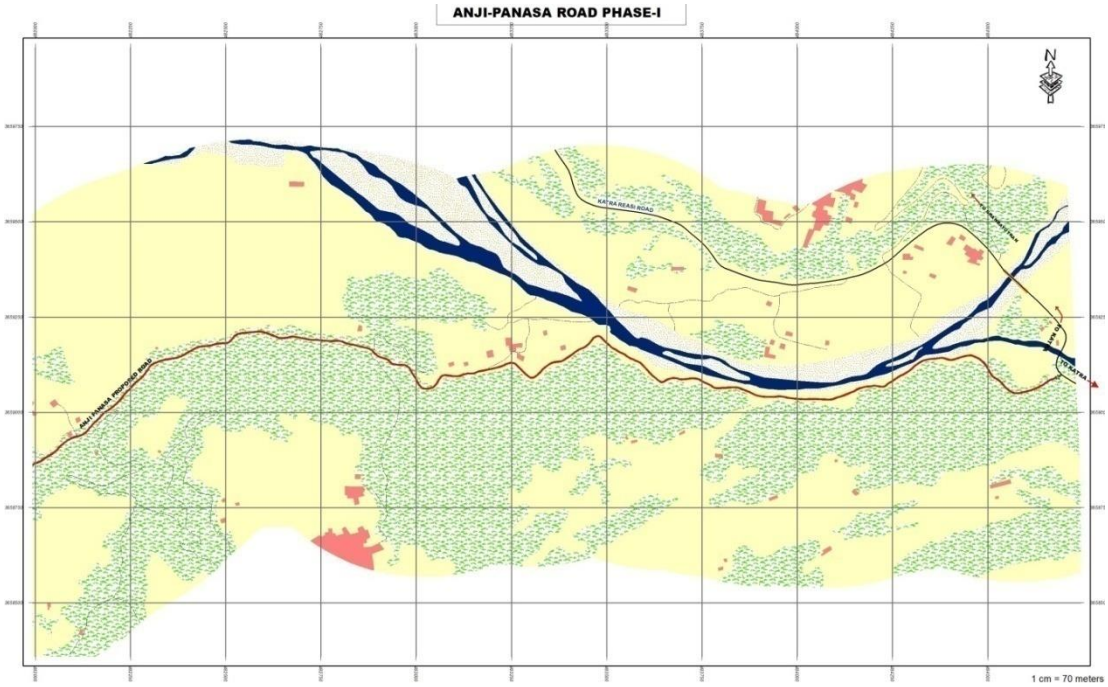
Part C (2): Result/Outcome of Social Screening Exercise

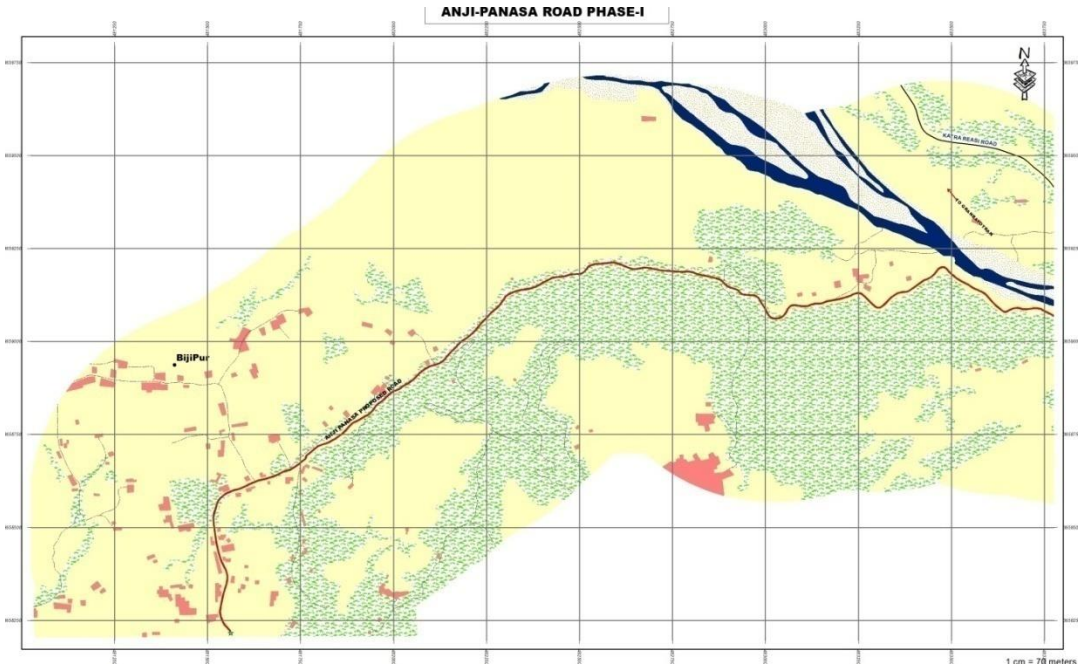
S.No.	Result/Outcome	Outcome
1.	Answer to all the questions is 'No' and only forest land is being acquired	No SIA/RAP required
2.	Answer to any question is 'Yes' and the sub-project does not affect more than 200 people (i.e. either complete or partial loss of assets and/or livelihood)	No Abbreviated 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 adverse social and environmental impacts. The proposed sub-project is only the strengthening of the existing road and does not involve acquisition of private land. Therefore, no issue of involuntary resettlement, displacement and livelihood loss (temporary or permanent) will be triggered by the proposed sub project. The sub-project also does not involve diversion of forest land, destruction of ecological resources and does not have major Environmental threat/risks. However, in order to assess the temporary impacts and impact on non-title holders SIA needs to be conducted.

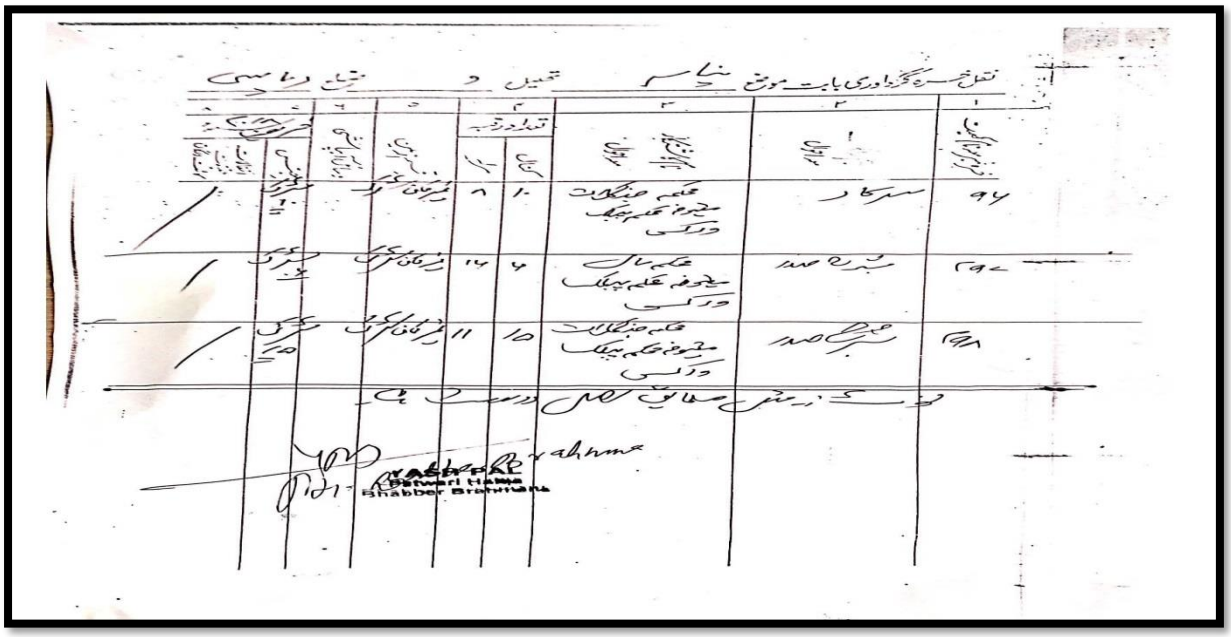
Annexure 2:GIS MAPs of the Sub-Project Road





Annexure 3: Revenue Record

Revenue record in Urdu



Translated Revenue Records in Urdu

Nakal khasra girdwari at village Panasa – Teshil & District- Reasi.

1	2	3	4		5	6	7	8	9	10
Number Khasra	Name of Owner	Name of Tenant	Area		Type of Land	Kharif 2018				
			K	M		Harvest	Intkal Haqit kast & lagan	Harvest	Intkal Haqit kast & lagan	
96	State	Forest In possession of PWD	10	08	Road	10 kanal 08 marla Road				
297	State	In possession of PWD	06	16	Road	06 kanal 16 marla Road				
298	State	Forest In possession of PWD	15	11	Road	15 kanal 11 marla Road				

Copy is true

Sd
Patwari

Collector
Economic Reconstruction Agency
J&K, Jammu

Annexure 4: RoW Status of Road

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

ERA

JEHLUM & TAWI FLOOD RECOVERY PROJECT

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 Bhaderwah (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 depptt. 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

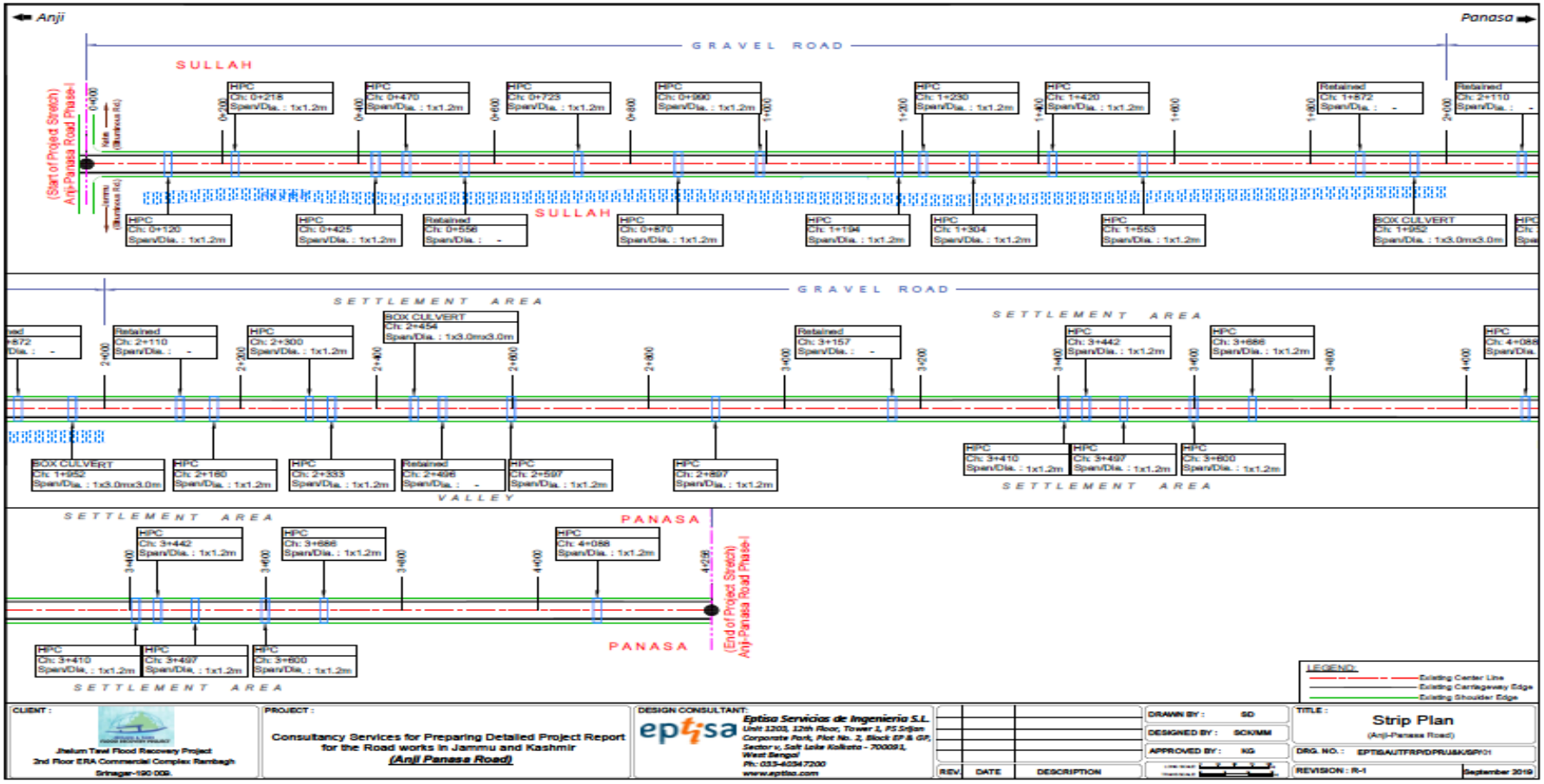
Hence the RoW is encumbrance free.

No: PM/T/ERA/2021/865
Date: 16.03.2021

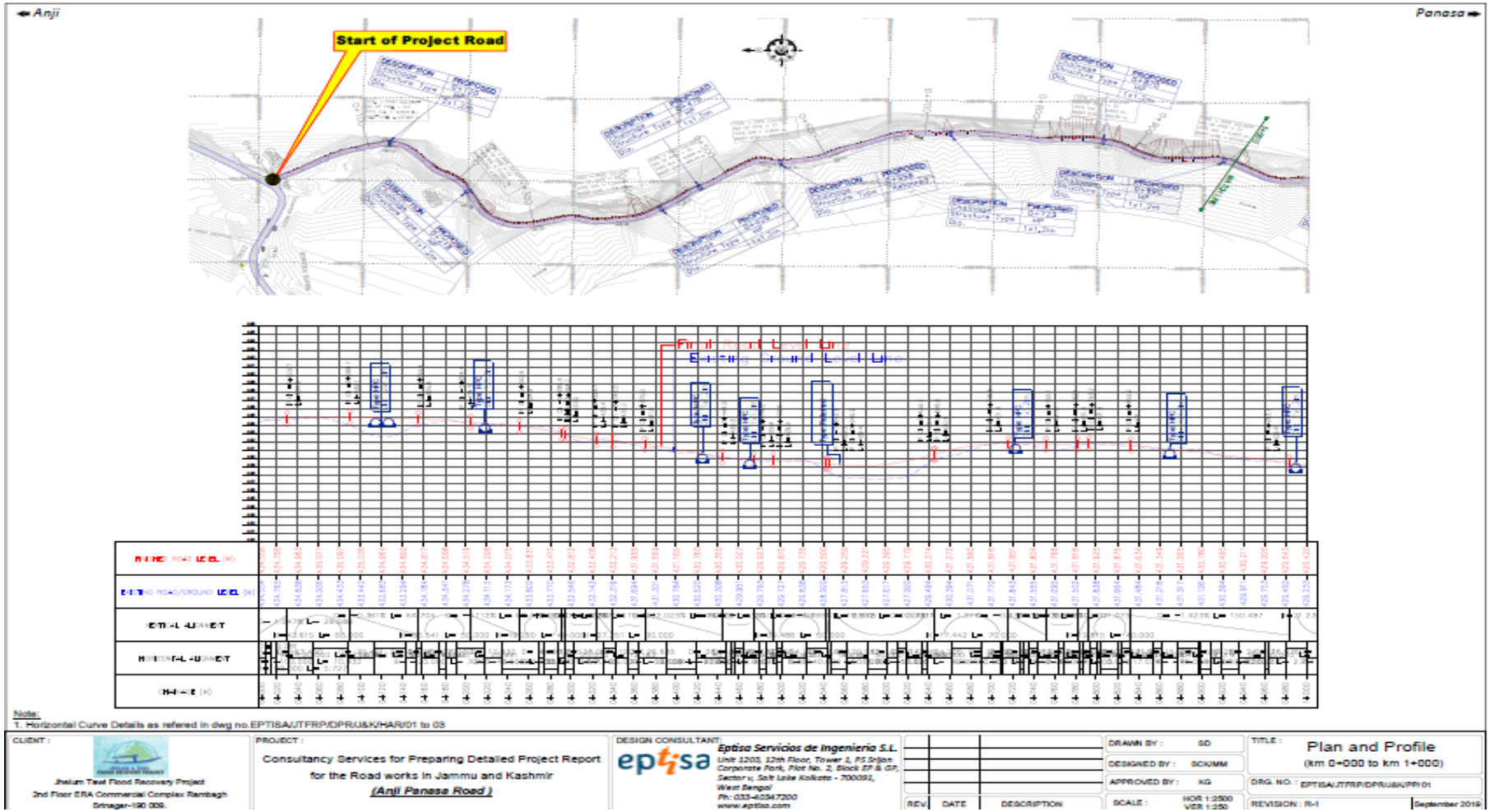
Project Manager (Transport)
J&K ERA, Jammu

Annexure 5: Strip Plan & Plan & Profile

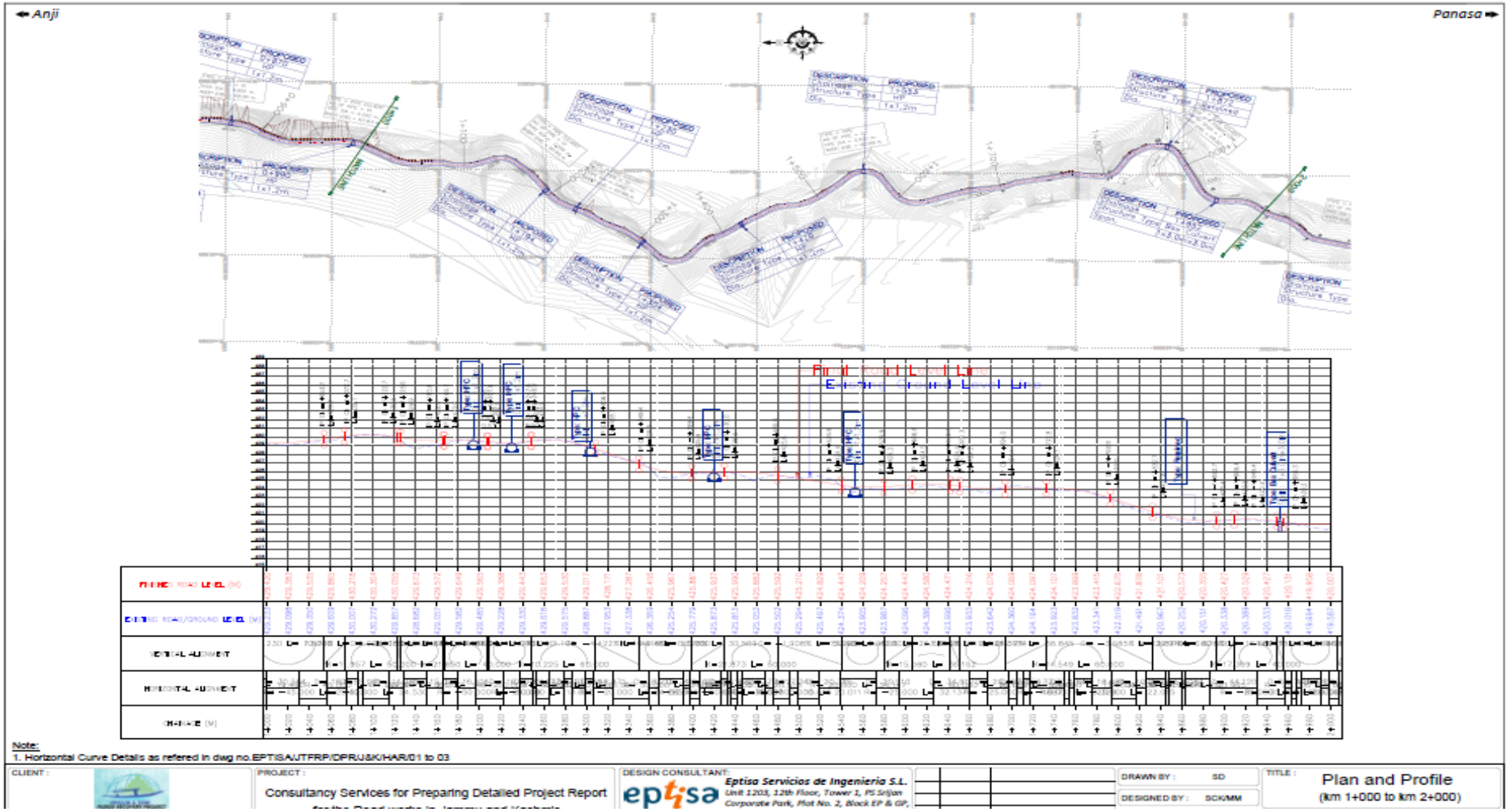
Strip Plan



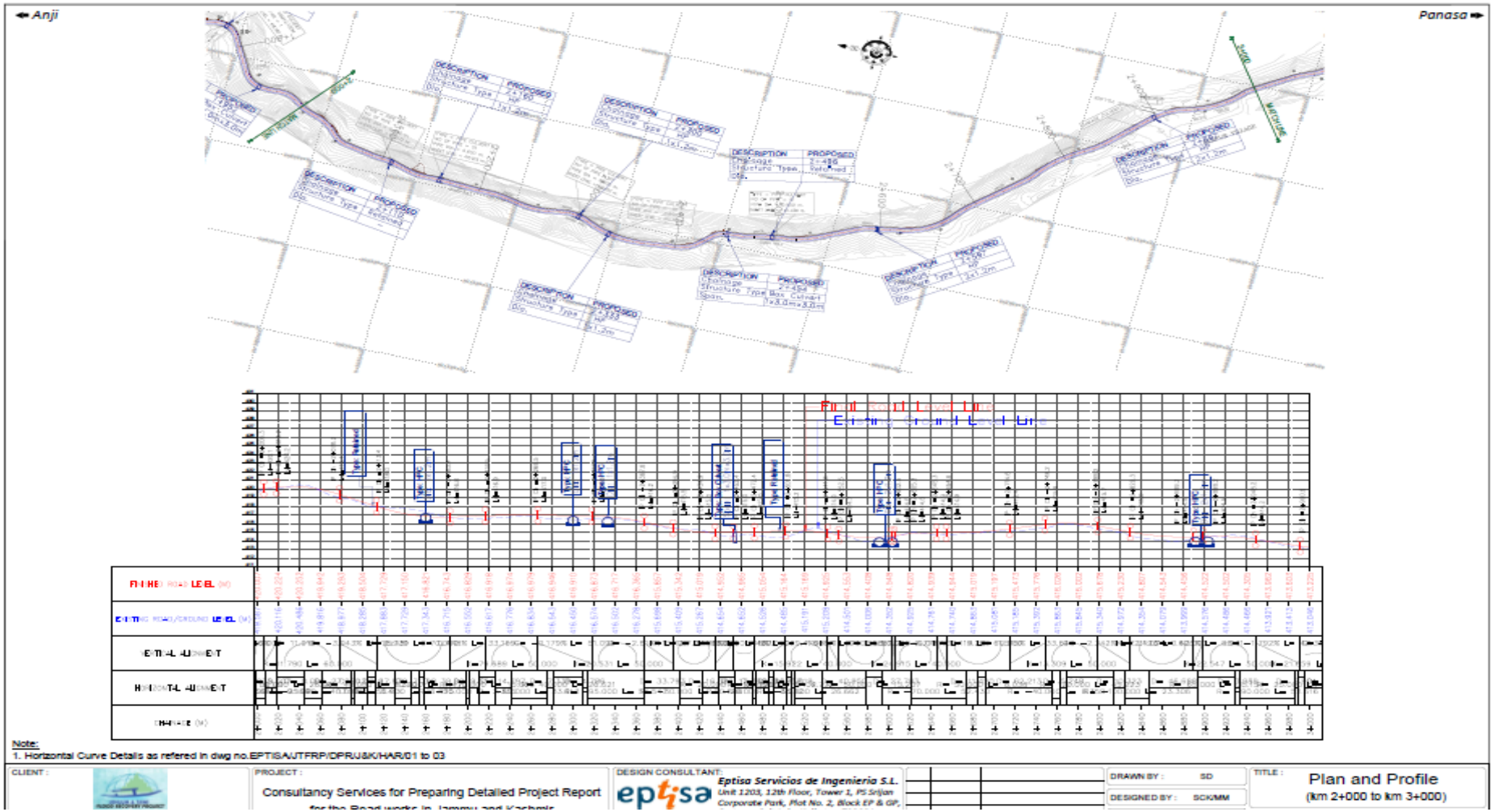
Plan & Profile



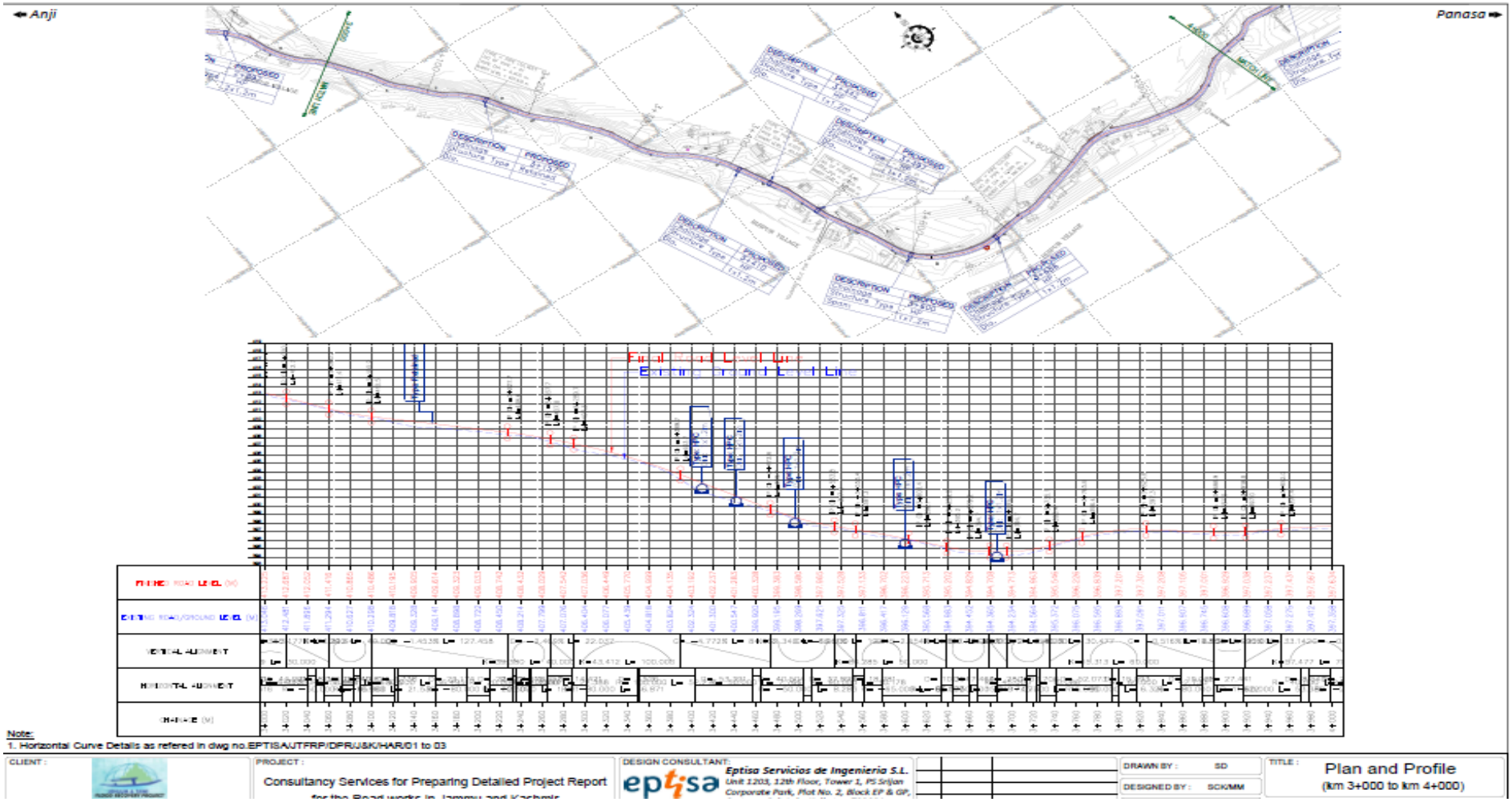
Plan & Profile Contd.



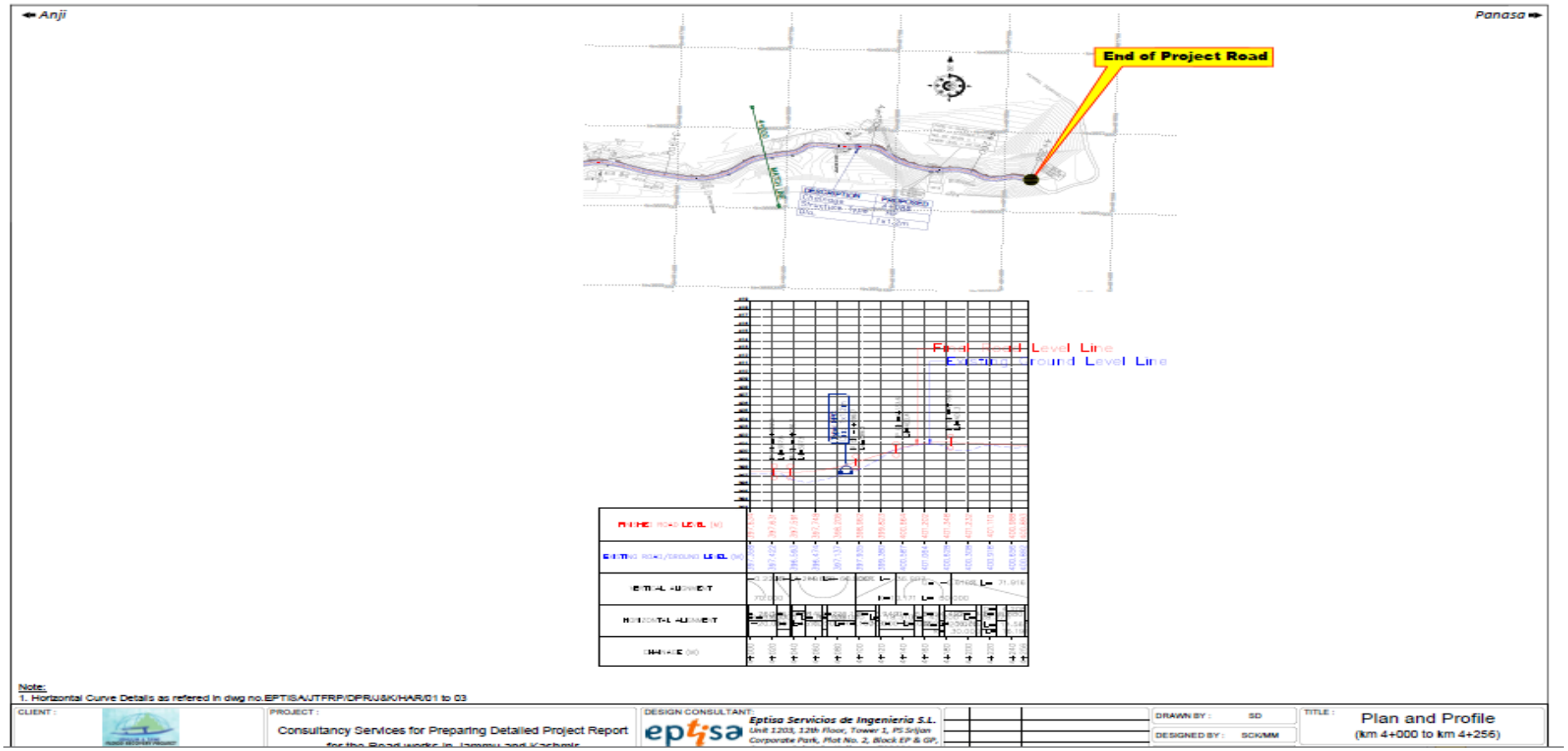
Plan & Profile Contd.



Plan & Profile Contd.



Plan & Profile Contd.



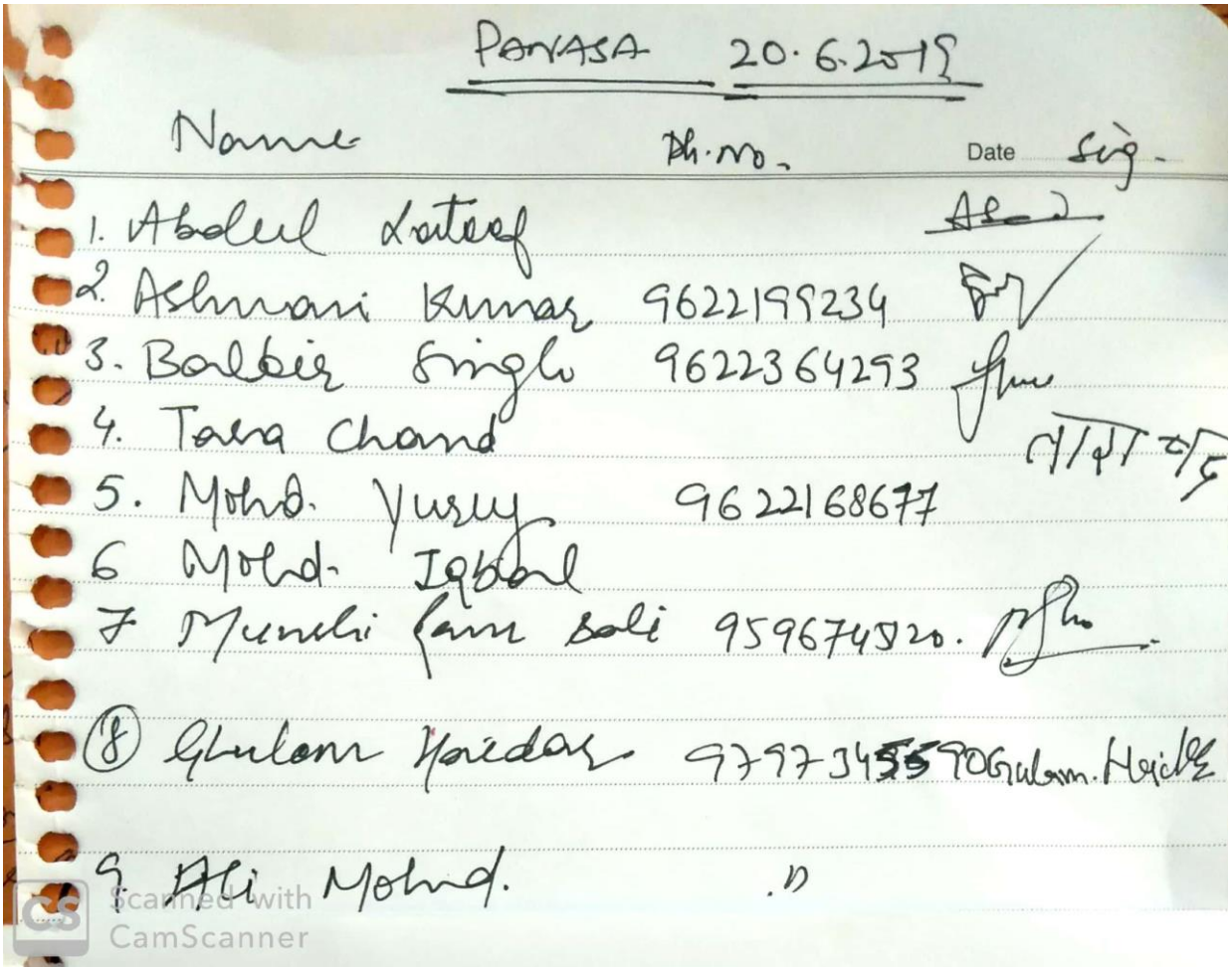
Annexure 6: Photograph of the Road

Site Photographs

<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>Photo-1 Road Condition</td><td>Photo-2 Road Condition</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Photo-3 Causeway on road</td><td>Photo-4 Settlement along the road</td></tr>
</table>

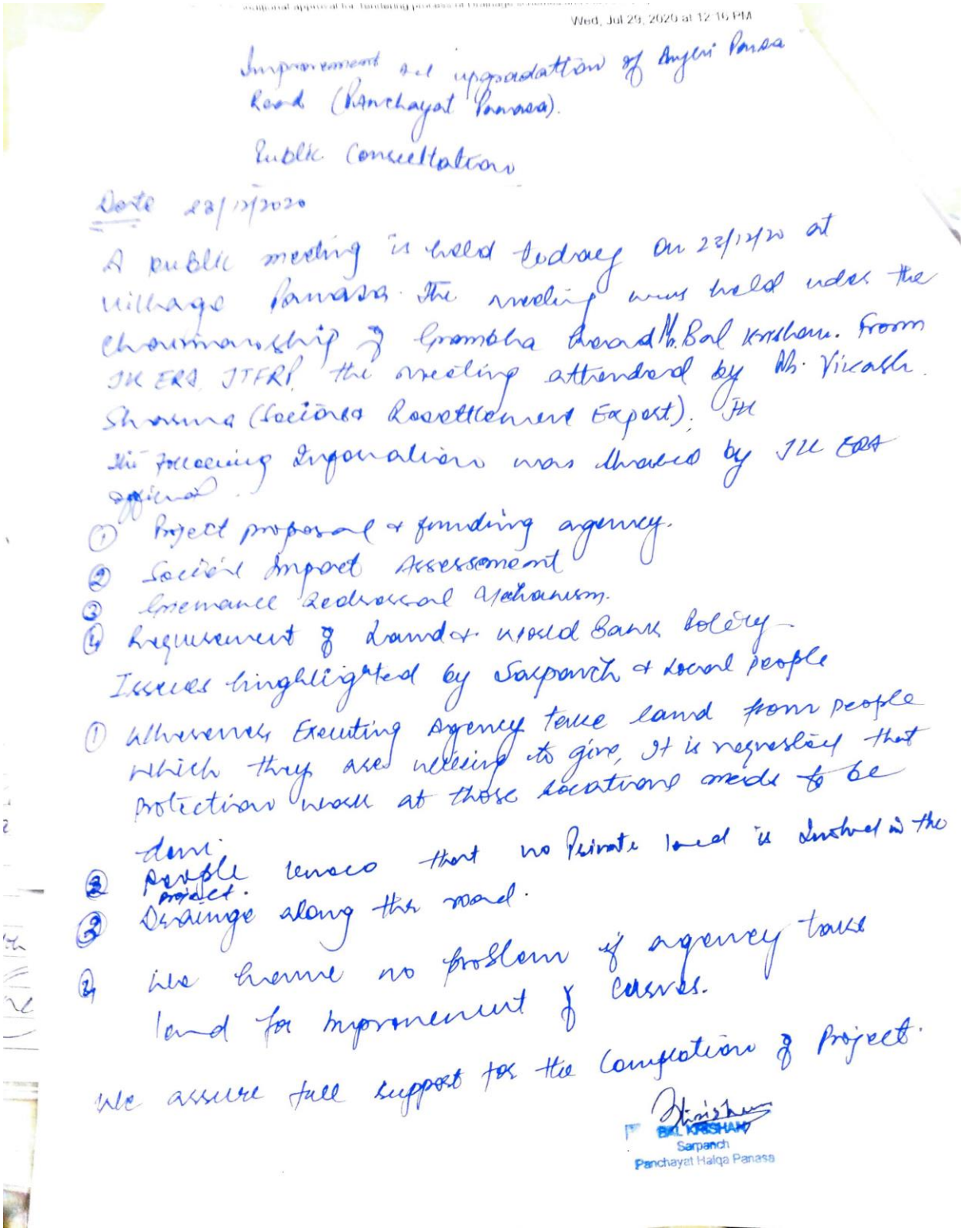
	
Photo-5 Settlement along the road	Photo-6 Settlement along the road

Annexure 7: Public Consultation (20.6.2019 & 23.12.2020)



PANASA 20.6.2019

Name	Ph. No.	Date	Sig.
1. Abdul Latef			
2. Ashwani Kumar	9622199234		
3. Balbir Singh	9622364293		
4. Tara Chand			
5. Mohd. Yusuf	9622168677		
6 Mohd. Iqbal			
7 Munshi Ram Sahi	9596745820.		
(8) Ghulam Haidar	9797345590	Ghulam Haidar	
9. Ali Mohd.			



Wed, Jul 29, 2020 at 12:16 PM

Improvement and upgradation of Anjni Panasa Road (Panchayat Panasa).

Public Consultations

Date 23/12/2020

A public meeting is held today on 23/12/20 at village Panasa. The meeting was held under the chairmanship of Gramsha Sarpanch Sh. Bal Krishan. From IIT ERS JTFRI the meeting attended by Ms. Vivekh Sharma (Socioeco Resettlement Expert). The following Explanation was shared by IIT ERS official.

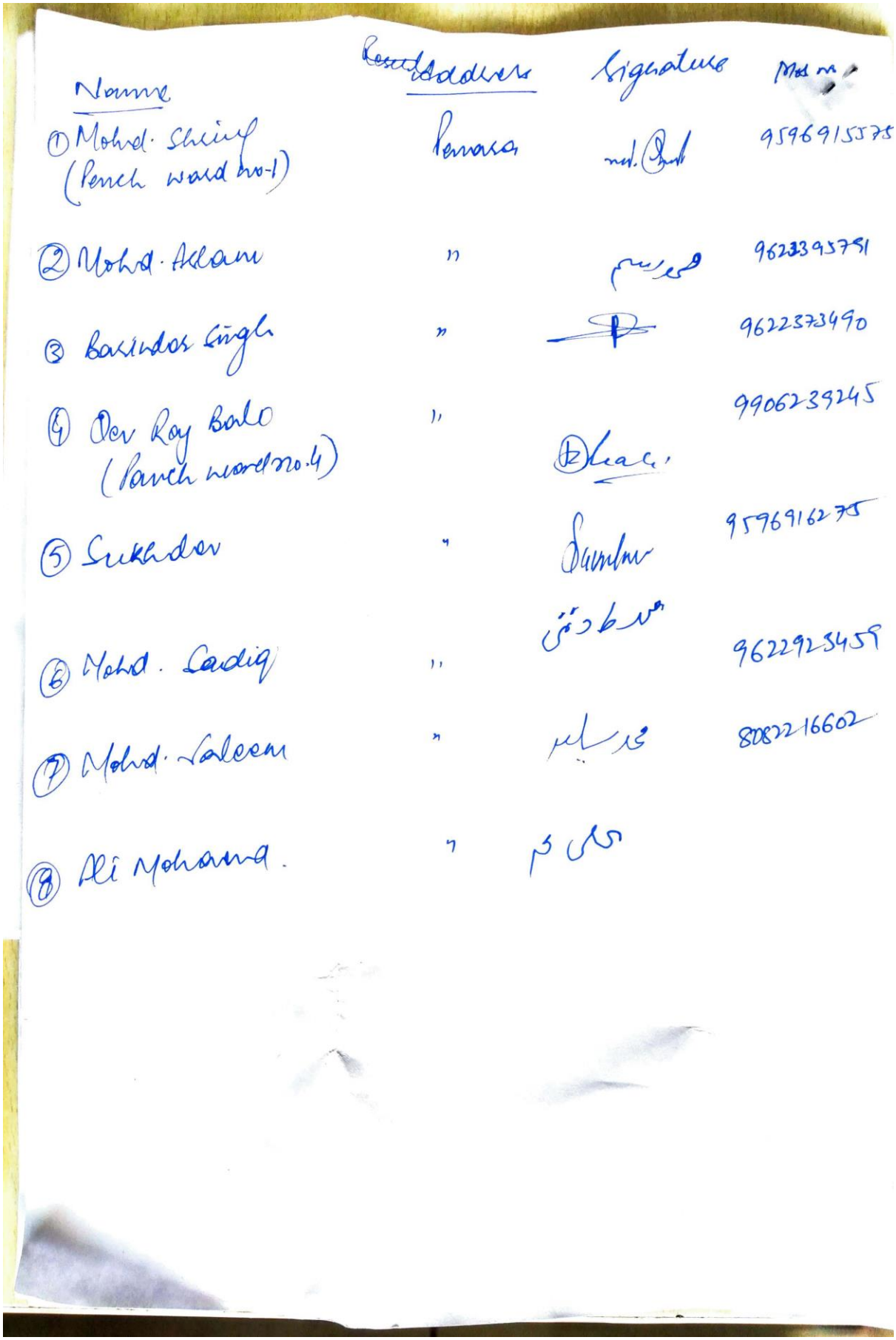
1. Project proposal & funding agency.
2. Social Impact Assessment
3. Grievance Redressal Mechanism.
4. Requirement of Land & World Bank Policy.

Issues highlighted by Sarpanch & Local people

1. Whenever Executing Agency take land from people which they are willing to give, It is requested that protection work at those locations needs to be done.
2. People request. Panch to that no Private land is involved in the project.
3. Drainage along the road.
4. We have no problem if agency take land for improvement of curves.

We assure full support for the completion of Project.

BAL KRISHAN
Sarpanch
Panchayat Halqa Panasa



Name	Residential address	Signature	Mobile no.
① Mohd. Shariff (Panch ward no-1)	Panasa		9596915575
② Mohd. Aslam	"		9623395791
③ Basudeo Singh	"		9622373490
④ Dev Raj Bado (Panch ward no.4)	"		9906239245
⑤ Sukhdev	"		9596916275
⑥ Mohd. Sadiq	"		9622923459
⑦ Mohd. Saleem	"		8082216602
⑧ Ali Mohamad.	"		

Photographs of Public Meeting