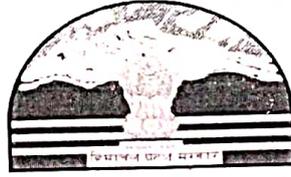


3213



Office of the District Magistrate, Shimla, District Shimla, H.P.

No.SML-Reader/ADM(L&O)/Dumping-2024- 5487

Dated : 23rd July, 2024.

To

✓
The Registrar,
Hon'ble National Green Tribunal,
New Delhi

Subject: -

Compliance of order dated 15-04-2024 passed by the Hon'ble NGT in OA No. 127/2024 titled Naathu Ram V/s Ministry of Road Transport and Highways & Ors. pending before the Hon'ble NGT, New Delhi- regarding.

Sir,

This is in reference to the orders passed by Hon'ble NGT on the matter cited above. In this context, spot inspection of NH 707 falling in district Shimla from Fediz to Minus (Km 103.550 to Km 86.800) was carried out by the Joint Committee on 22.03.2024. Interim report of the Joint Committee already stands filed.

The Joint Committee has examined the documents submitted by MoRTH and other stakeholder departments and prepared the factual report after verifying the truthfulness of all the allegations made in the Original Application

Therefore, it is requested that above Report of the Joint Committee may kindly be taken on the record by Hon'ble National Green Tribunal. The Joint Committee shall abide by the further orders of Hon'ble National Green Tribunal in this matter.

Yours faithfully,

Enclosed:-Report of the Joint Committee


Anupam Kashyap, IAS,

Deputy Commissioner, Shimla,
Himachal Pradesh.

Endst. No. As above

Dated: As above.

Copy forwarded to:

1. The Additional Secretary (Env. Sc. Technology & CC) to the Govt. of H.P. w.r.t. your office letter No. STE-E(3)-5/2022, dated-04.03.2024 for information, please.
2. The Member Secretary, HPSPCB, Shimla w.r.t. HPSPCB letter No. 15849-54, dated-22.02.2024 for information, please.

- SD
Deputy Commissioner,
Shimla, Himachal Pradesh

FINAL REPORT OF THE JOINT COMMITTEE CONSTITUTED FOR DISTRICT SHIMLA BY HON'BLE NGT IN O.A. NO. 127/2024 TITLED AS NAATHU RAM V/S MINISTRY OF ROAD, TRANSPORTATION AND HIGHWAYS & ORS.

1. Background and the Orders of Hon'ble National Green Tribunal:

The matter is related to an Original Application filed before the Hon'ble National Green Tribunal, wherein a grievance has been raised against construction of road in the Shivalik range of Himalayas ending up to a length of 97/103.55 Kms in the State of Himachal Pradesh undertaken by the Ministry of Road Transport and Highways in the process of two-lane upgradation with the paved shoulders of the existing single lane Paonta Sahib-Gumma Section at National Highway No. 707. The allegation of the Applicant is that during road widening and upgradation process, contractors are destroying the Himalayan ecology and natural vegetation and that they are breaking and cutting the hills on one side of the road and throwing the debris (including boulders, stones, dust, etc.) on the steep hill on the other side of the road in the valley. As per the allegations levelled, the entire hilly area on the length of 97 km on the downside slope is getting destroyed, which includes natural vegetation, river streams, habitations, wildlife, etc. It is also alleged that crores of trees including Pine and Deodhar have been destroyed and thousands of minor and 1 major river streams have either been covered up with debris or have changed their course.

It was observed and directed by Hon'ble National Green Tribunal vide Order dated 06/02/2024 (**Annexure-1**), as follows:

- "...3. The OA raises substantial issue related to compliance of the provisions of the scheduled enactments,*
- 5. Considering the grievance raised in the OA, we also deem it proper to form a Joint Committee comprising of the representative of the Member Secretary, Central Pollution Control Board (CPCB), Regional Officer, Ministry of Environment, Forests and Climate Change (MoEF&CC), Chandigarh, Member Secretary, Himachal Pradesh State Pollution Control Board (HSPCB), Deputy Commissioner Sirmour and deputy Commissioner, Shimla. The Deputy Commissioners will act as nodal agency for co-ordination and compliance in the Committee.*
 - 6. The Joint Committee will carry out the spot inspection, ascertain the truthfulness of the allegations made in the OA and submit the factual and action taken report at least one week before the next date of hearing...."*

2. Compliance of the orders of Hon'ble National Green Tribunal:

2.1. Constitution of the Joint Committee:

In compliance to the orders of Hon'ble National Green Tribunal, a Joint Committee comprising of the following members was constituted for district Shimla:

- i) Shri Ajit Bhardwaj, HAS, ADM, Shimla (Member nominated by DC, Shimla)
- ii) Dr. Narender Sharma, Scientist 'F', CPCB, RD, Chandigarh (Member nominated by Member Secretary, Central Pollution Control Board, Delhi)
- iii) Dr. Anup Das, Scientist 'B', MoEF&CC (Member nominated by MoEF&CC, Sub Office, Shimla (IRO, Chandigarh)
- iv) Er. Lalit Thakur, Regional Officer, HPPCB, Shimla (Member nominated by Member Secretary, HPPCB, Shimla.

Further, Deputy Commissioner, Sirmour has desired to file a separate report for part of NH 707 falling in district Sirmour. Hence, a separate report is being filed for part of NH 707 falling in district Shimla i.e. from Minus to Fediz (87.00 Km to 103.55 Km).

2.2. Spot Inspection:

The Joint Committee conducted spot inspection of 16.750 Km length of the NH 707 falling in district Shimla from Fediz to Minus (Km 103.550 to Km 86.800) on **22.03.2024**. Although Gumma to Fediz Section of NH 707, which has already been completed, does not pertain to Original Application No. 127 of 2024, however, it was also inspected by the Joint Committee on 22/03/2024 as directed by the hon'ble NGT.

Both the applicant and representatives of MoRTH and Forest Department were also present during spot inspections by the Joint Committee. The attendance sheets are attached as **Annexure-2**.

The construction of package 4 and package 5 have been **completed on 08.04.2022 and 23.10.2023** respectively. As per the documents provided by MoRTH, 8 dumping sites of package 4 with a dumping capacity of 11,04,552 cum has been completely utilized and in package 5, out of approved capacity of 3,50,865 cum of the two dumping sites, 2,80,000 cum has been utilized. It was further observed that protection measures and bio-

engineering methods have been implemented in the approved dumping sites of both package 4 and package 5. However, the dumping sites were not marked/tagged mentioning the details thereof in a display board. It was also submitted by the MoRTH and the contractors that during the flash flood of 2023 in Himachal Pradesh, landslides have occurred at multiple points in the entire stretch of road. ***Further, it was apprised that there was immense pressure from the State Authorities and public in general to open the road blockades. To open the road, the contractors have pushed the rolled down debris of landslides on the downward side of valleys at a few places instead of dumping the muck at designated dumping sites.***

2.3 Interim Report of the Joint Committee:

The Joint Committee was directed by Hon'ble National Green Tribunal to ascertain the truthfulness of the allegations made in the Original Application and submit the factual report.

Subsequent to the Spot Inspection, the interim report of Joint Committee was submitted before Hon'ble NGT and following directions were passed by Hon'ble NGT vide their order dated 15.04.2024 (Annexure-3):

"...3. Joint Committee has submitted the report in four volumes but to verify the truthfulness of the allegations made in the original application (sr. nos. 1 to 4 in the concerned paragraph) and in terms of paras 2.3.1.1 to 2.3.1.4 of the report, Joint Committee has sought further seven weeks' time for examination of documents, analysis of the data, preparation and filing of authentic factual action taken report. Prayer made by the Joint Committee for grant of further seven weeks' time is allowed.

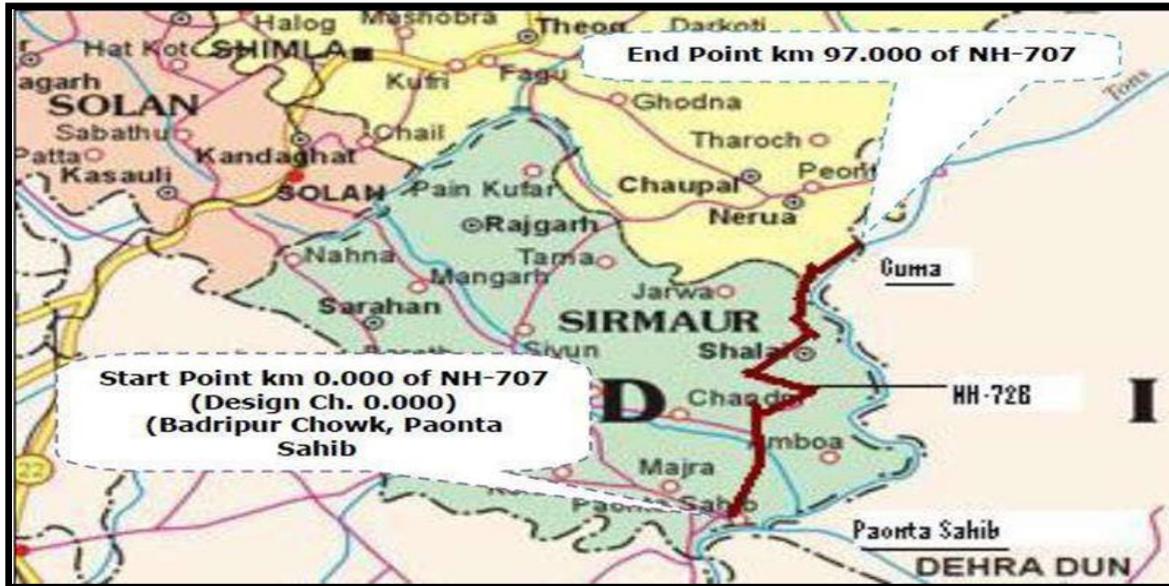
4. Meanwhile, it will be open to all the concerned parties to file objections to the report of the Joint Committee already filed.

5. Learned Counsel for respondent no.1 also submits that a reply on behalf of respondent no.1 has been filed but since it is bulky reply, therefore, it is lying in defect. He is permitted to cure the defect so that reply comes on record.

6. List on 24.07.2024."

3. Factual and Action Taken Report by Joint Committee:

The examination of Original Application filed before the Hon'ble National Green Tribunal indicated that the grievance of the applicant is with respect to Paonta Sahib- Gumma section at National Highway No. 707 in the State of Himachal Pradesh starting from Badripur Chowk (Start Point Km 0.000 NH 707) to Gumma (End Point Km 97.000 NH 707) as shown in the following Figure 1 attached in the Original Application.



The allegations levelled by the applicant can be categorized in the following categories:

1. Avoidance of requirement of Environmental Clearance by taking the advantage of Item 7(f) of the EIA Notification 2006.
2. Illegal felling of trees across the hill slopes.
3. Damage to natural sources of drinking water (rivulets) by filling with debris.
4. Illegal use of Gelatin in explosives, for road construction.
5. Muck dumping beyond the designated sites and the violation of Construction & Demolition Waste Management Rules 2016.

While the factual report and verification of the truthfulness of the allegations made in the Original Application (Sr. No. 1 in the above paragraph), has already been prepared and submitted in the interim report to the Joint Committee, the factual report and truthfulness of allegations mentioned in reference to Sr. No. 2-5 is being reported hereafter by the Joint Committee.

The point-wise report on the facts and truthfulness of the above allegations levelled in the Original Application, based on the spot Inspection, examinations and analysis of the documents made available to the Joint Committee is submitted as under:

3.1 Avoidance of Requirement of Environmental Clearance by taking the advantage of Item 7(f) of the EIA notification 2006:

The allegation made in the Original Application that MoRTH has taken advantage of Item 7(f) of the EIA notification 2006 by dividing the highway to reduce its length to less than 100 Km has already been addressed in the interim report.

According to current regulations, a prior Environmental Clearance (EC) is required if, the proposed expansion involves more than 100 km of length and additional right of way (RoW) or land acquisition greater than 40 m on existing alignments and 60m on re-alignments or by-passes. Further, as per EIA Notification, 2006 and subsequent amendment dated 22.08.2013 (**Annexure-4**), only such project which meets both the conditions, i.e., threshold length of the highway and envisaged expansion width (RoW or land acquisition) of the highway, would require a prior EC.

Now, as the necessary Right of Way (RoW) or land acquisition for all segments of NH 707 in question (0.00-97.00 Km and 97.00-103.00 Km) is below the 40 m threshold, the Ministry of Road Transport and Highways (MoRTH) isn't required to obtain Environmental Clearance. This holds true even if the total length of 103.55 Km isn't segmented as alleged, to reduce it to less than 100 Km. Consequently, there appears to be no requirement for MoRTH to segment the highway to circumvent the need for Environmental Clearance.

3.2 Illegal felling of trees across the hill slopes:

One forest division is involved in the NH 707, Minus-Fediz Section namely- **Chopal Forest Division**. Earlier, in the interim report, only three violations of illegal dumping were reported by Forest department.

Table 1: Violations reported by Forest Division regarding illegal felling of trees and others issues in interim report.

Forest Division	Nature of violation	Action taken by Forest Department
Chopal Forest Division	Illegal dumping at three sites have been reported	Damage report chalked against construction company of NH 707 amounting to Rs. 1,22,500/-.

Directions were issued by the Deputy Commissioner, Shimla to Forest department to re-assess the damage caused due to felling of trees & illegal muck duping across NH-707 from Minus-Fediz. The following violations have been reported by the Forest department after re-assessment. Report of the Forest department is attached as **Annexure-5**.

Table 2: Violations reported by Forest Division regarding illegal felling of trees and others issues after re-assessment.

Sr. No.	Department	Location/ RD	Damage Report
1	HP Forest Department	103/550	Illegal dumping of debris on Govt & private land without any protection measures. Damage report amounting to Rs. 11,200/- chalked & compounded.
2		102/720	Damage Report already chalked during the time of construction. Rs 1,22,500/- deposited in Govt treasury.
3		98/930	
4		95/180	
5		101/000	Illegal dumping and damage to shrubs. Damage report amounting to Rs. 19,600/- chalked & compounded.
6		99/150	Illegal dumping and damage to shrubs. Damage report amounting to Rs. 29,400/- chalked & compounded.

3220

7		98/540	Illegal dumping and damage of B/L IV class 2 no. trees; 6858+800 compensation & 22,400/- damage report chalked & compounded.
8		97/710	Illegal dumping and damage of B/L IV class 3 no. trees. Earlier it was stated as private land after during re-assessment with revenue staff it was found that it forest land 10,287+1200 compensation & 33,600/- damage report chalked & compounded.
9		97/610	Illegal dumping. Damage report amounting to Rs. 24,500/- chalked & compounded.

3.3 Damage to natural sources of drinking water (rivulets) by filling with debris:

It was observed during spot inspection that villagers use Kuhls to convey water from nearby streams for irrigation. These streams flow downstream the NH 707.

It is true that many of these streams were found to be obstructed with debris and sediments, leading to damage to the Kuhls and consequently disrupting water supply to the villages (Photographs attached as **Annexure-6**).

As per certificate issued by Executive Engineer, Jal Shakti Vibhag, Nerwa on **11.06.2024** (**Annexure-7**), M/s Shivalik Buildtech Pvt. Ltd. (contractor of MoRTH) has completed the work of providing and laying of GI pipe 20 mm dia, 800 mtr, 1 no. hand pump as per approved estimate submitted by the Jal Shakti Vibhag Nerwa. Further, a report has been received from Executive Engineer, Jal Shakti Vibhag, Nerwa (**Annexure-8**) that no damage was caused to natural sources of water (rivulets) or any other water supply scheme due to debris generated during construction activity carried out by MoRTH through its contractor on NH-707. ***However, the approach path to JE's office cum residence was damaged during widening of this road. Therefore, it shall be repaired by way of construction of retaining wall or pucca path. An amount of Rs. 15 lakhs will be involved in it.***

It is pertinent to mention here that, impact of highway construction on natural water sources should have been addressed in the Social Impact Assessment conducted by MoRTH prior to commencing highway construction. However, it appears that the same was not anticipated during the social impact study.

3.4 Illegal use of Gelatin in explosives, for road construction:

The documents provided by the MoRTH on this issue were revisited by the Joint Committee after filing the interim report before the Hon'ble National Green Tribunal.

According to the details provided by MoRTH, permission for controlled blasting was sought by the contractors from SDM Chaupal for Sri Kiari-Gumma section (Package-4) vide letter dated 11.11.2021 and for Gumma-Fediz section (Package-5) vide letter dated 13.06.2022 (Annexure-9).

In response to the above letter dated 13/06/2022, a letter dated 12/08/2022 on the ***"Subject: Permission regarding taking up controlled blasting" (Annexure-10)*** was issued by SDM Chaupal to the Sub Divisional Police Officer, Chaupal with Copy to Deputy Commissioner, Shimla, Project Proponent and Executive Magistrate, mentioning that Shivalik Buildtech Pvt. Ltd shall carry out controlled blasting during night hours or when there will be no movement of traffic and also requesting to depute adequate police personnel for managing both vehicular and pedestrian traffic during blasting operations. ***This letter from the SDM appears to have been used by the Project Proponent as permission for controlled blasting.***

It is important to note that the SDM is not authorized to grant permission for blasting operations. The authority to permit controlled blasting operations lies with the Deputy Commissioner. Based on the Deputy Commissioner's permission, subsequent approvals are granted by the concerned SDMs according to the blasting schedules submitted by MoRTH. However, for the NH 707 packages in the Shimla Region, neither the Deputy Commissioner's blasting permission nor the blasting schedules submitted to the concerned SDMs were made available to the Joint Committee.

The report in this regard was sought from SDM Chaupal and as per report received from SDM Chaupal, in reference to above mentioned letters of Contractors, Sub Divisional Police Officer, Chaupal (copy to the Deputy Commissioner, Shimla) was requested to depute

adequate police personnel for managing both vehicular and pedestrian traffic during blasting operations. However, the required documents for grant of permission i.e. Area map, NOC, Location plan of area, Work order, Short fire license copy, Explosive license copy and Explosive transport license copy etc. were not provided by MoRTH which indicates that blasting operations may have been carried out by MoRTH without proper permission (**Annexure-11**).

In view of the fact that the Joint Committee has observed significant impacts from blasting operations, including the dumping of large boulders on valley-side land, this issue needs review by a team constituted by the Deputy Commissioner of Shimla, to determine its legality and also whether the responsibility for bearing the loss and cost of remediation lies with the State or MoRTH.

3.5 Muck dumping beyond the designated sites and the violation of Construction & Demolition Waste Management Rules 2016:

During spot inspection on 22.03.2024, the joint Committee inspected total 27 spots in District Shimla on the NH 707 from Fediz to Minus. The issues raised by the applicant and the villagers associated with him were noted and geo-tagged photographs were taken by the Joint Committee.

Subsequently, the Nodal Agencies issued letters to MoRTH seeking feedback on the issues raised on all 27 spots along with relevant documents (**Annexure-12**). Various documents were also requested by the members of the Joint Committee.

Accordingly, MoRTH provided feedback on the issues raised/observed on all 27 spots along with photographs and relevant documents/record (**Annexure-13**). Additionally, the following documents/data requested by the members of the Joint Committee was also provided by MoRTH:

- i. Muck Management Plans for all the Packages of the Highway.
- ii. Details of the Dumping Sites alongwith capacity and utilization.

3223

- iii. Total quantity of muck estimated in DPR and the actual muck generated and its disposal.
- iv. Day-wise details of Landslides reported to District Administration.
- v. Permissions for blasting issued by concerned SDMs.
- vi. Rainfall data of the period under reference.
- vii. Inspection/Supervision Notes with regard to supervision made by MoRTH during Highway construction.
- viii. Details of RoW for all the Packages of the Highway.
- ix. Before and after geo-tagged photographs of the spots, where muck observed by the Joint Committee was attributed to Landslides by the MoRTH.
- x. Copy of the forest Clearances obtained.
- xi. Forest and Non-Forest Tree cutting permissions.
- xii. Permissions obtained from SPCBs.
- xiii. Report on Slope Stability issues along NH707 in the State of Himachal Pradesh by JICA Experts for Project for Capacity Development for Maintenance of Resilient Mountainous Highway
- xiv. EIA Reports prepared for World Bank.

To verify the truthfulness of the allegations made in the Original Application regarding unauthorized muck dumping beyond designated sites, the Joint Committee examined these documents with regard to the compliance of various conditions & guidelines made by MoRTH and its Contractors during highway construction.

A meeting of joint committee was held on 12.06.2024 under the Chairmanship of Deputy Commissioner, Shimla wherein report was sought from Forest department regarding illegal felling of trees & muck dumping, Jal Shakti Vibhag regarding damage caused to natural sources of water/rivulets or to any water supply schemes, District Disaster Management Authority, Shimla regarding reporting of landslides by MoRTH and SDM Chaupal regarding authenticity of blasting permissions and verified incidences of landslide occurrences before and during construction of NH 707. The minutes of meeting along with letters issued to all the stakeholders are attached as **Annexure-14**. Another meeting was held on 28.06.2024 under the Chairmanship of Deputy Commissioner, Shimla wherein Forest department was

asked to re-assess the damage caused to Forest and chalk out damage reports accordingly. SDM Chaupal was also asked to submit his clear-cut comments on blasting permissions issued to the contractors of MoRTH. The minutes of meeting are attached as **Annexure-15**. Accordingly, the reports were provided to the Joint Committee by respective departments which are enclosed as **Annexure-5 & 11**.

A meeting of Joint Committee was held on 08.07.2024 under the Chairmanship of Deputy Commissioner, Shimla and a comprehensive analysis of reports received from Forest department, SDM Chaupal and MoRTH was done to distinguish between dumping caused by natural landslides and that resulting from negligence of MoRTH's Contractors during highway construction.

As per report received from MoRTH (**Annexure-16**), *there are 17 major locations on NH 707 where roads were blocked due to heavy rainfall and landslides; sometimes on multiple occasions*. The location and date wise details are as under.

Table:- 3: Incidences of Landslides Due to Heavy Rainfall in Shimla With Respect To NH-707 (Minus to Fediz)

Sr. No.	Department	Location/RD	Date on which landslide took place
1	MoRTH	103/000	09.07.2023
2		102/500 to 102/890	12.07.2023
3		101/600 to 102/100	09.10.2022, 17.01.2023, 12.07.2023, 23.07.2023
4		101/160 to 101/450	12.07.2023, 05.09.2023, 12.07.2023
5		100/700	09.07.2023
6		100/380 to 100/600	12.07.2023
7		100/010 to 100/150	12.07.2023
8		99/800 to 99/860	12.07.2023
9		99/430	04.08.2023
10		99/400	09.07.2023
11		99/200 to 99/300	12.07.2023
12		94/900 to 95/100	09.07.2023, 12.07.2023

3225

13		92/580	11.08.2022
14		89/580	27.09.2022
15		88/200	06.02.2023
16		84/700	16.07.2023
17		83/000	26.09.2022

Further, District Disaster Management Authority Shimla doesn't have any record regarding verified incidences of landslide occurrences before and during the construction of NH 707.

However, as per report received from SDM Chaupal and Forest Department (**Annexure-11 & 5 respectively**), ***debris has been illegally dumped at 9 spots out of total 27 spots. No loss has been reported at 6 spots and natural landslides have been reported at rest of the spots.***

Forest department has ***chalked out damage reports amounting to Rs. 2,82,345/- against contractors of MoRTH for illegal dumping of muck on Forest land (Annexure-5).***

HPSPCB has also issued directions to the contractors of MoRTH from time to time to take appropriate measures to contain the muck generated from widening and landslides. Also, ***Environmental Compensation amounting to Rs. 7,00,000/- (Rs. Seven Lacs) has been imposed upon the contractors of MoRTH for unscientific management of C&D waste during construction (Annexure-17).*** The compensation has been deposited by both the contractors.

Additionally, a report was received from SDM Chaupal regarding damage caused to the private land owners due to construction of NH-707. As per report, Kh. No. 62 & 63 of Sh. Rajender Singh, S/o Sh. Roop Singh, R/o Village Kyarla, PO Pabahan, Tehsil Nerwa, District Shimla was damaged due to dumping of debris by contractor of MoRTH. ***Also, both the parties have mutually settled the dispute and an amount of Rs. 3 Lacs was paid by the contractor to land owners.*** The copy of SDM's report alongwith relevant documents is attached as **Annexure-18.**

Joint committee was informed that hill stabilization/strengthening measures were not incorporated in the scope of the work awarded by MoRTH to M/s Shivalik Buildtech Pvt. Ltd. (Package-5). ***However, the examination of the documents provided by MoRTH clearly indicated that protection against hill failures on both the hillside and valley side was very much there in the scope of Contractor in Package 5.***

Furthermore, besides the factual report on truthfulness of allegations made in the Original Application, the Joint Committee has also been directed by the Hon'ble National Green Tribunal to file an Action Taken Report.

4. Conclusion, Action Taken and Recommendations:

- i. The necessary Right of Way (RoW) or land acquisition for all segments of NH 707 in question (0.00-97.00 Km and 97.00-103.00 Km) is below the 40 m threshold, the Ministry of Road Transport and Highways (MoRTH) isn't required to obtain Environmental Clearance. This holds true even if the total length of 103.55 Km isn't segmented as alleged, to reduce it to less than 100 Km in the light of provisions of EIA Notification, 2006 and subsequent amendment dated 22.08.2013. Consequently, there appears to be no requirement for MoRTH to segment the highway to circumvent the need for Environmental Clearance. Therefore, the allegation in the Original Application that MoRTH exploited Item 7(f) of the EIA Notification 2006 by dividing the highway to reduce its length to under 100 km appears to be incorrect.
- ii. The Forest Department has reported violations concerning illegal tree felling and a compensation & damage report amounting to Rs. 2,82,345/- has been issued against the construction company for NH 707 in Shimla Region. However, the Forest Department's report does not mention the status of recovering this amount.
- iii. According to the report from SDM Chaupal, debris has been illegally dumped at 9 out of 27 spots visited by the Joint Committee. ***No loss has been reported at 6 of these spots, while natural landslides have been observed as the cause of these***

incidents, at the remaining sites. It is recommended that a team of revenue officials, appointed by the Deputy Commissioner of Shimla, assess the cost of repair or remediation. Damages caused by natural disasters or landslides may be covered by the State of Himachal Pradesh. However, damages resulting from the negligence of MoRTH's contractors or from road construction will be the responsibility of MoRTH.

- iv. Environmental Compensation amounting to Rs. 7,00,000/- (Rs. Seven Lacs) has been imposed upon the contractors of MoRTH for unscientific management of C&D waste during construction. The compensation has been deposited by both the contractors.
- v. Many natural streams were obstructed by debris and sediment, damaging flexible pipes and disrupting the water supply to villages as observed by the Joint Committee during site visit on 22/03/2024. As per update provided to the members of the Joint Committee by HPSPCB on 19/07/2024 that contractor of MoRTH (M/s Shivalik Buidtech Pvt. Ltd) has repaired the water rivulets/Kuhls damaged during construction (Ref: Certificate issued by Executive Engineer, Jal Shakti Vibhag, Nerwa on **11/06/2024; Annexure-7**). Further, and as per report received from Jal Shakti Vibhag, Nerwa, no damage has been caused to natural sources of water (rivulets) or to any other water supply schemes during construction carried out by MoRTH through its contractors. *However, the said report does not mention anything about the observation made by the Joint Committee regarding **obstruction and damage to the Kuhls with debris/ sediments, and consequently disrupting water supply along with Geo-tagged Photographs in the interim report.***
- vi. The letter issued by the SDM on the **Subject: "Permission regarding taking up controlled blasting"** appears to have been used by the Project Proponent as Permission for controlled blasting. However, the SDM is not authorized to grant such permissions; this authority lies with the Deputy Commissioner. Subsequent approvals are granted by the concerned SDMs based on the blasting schedules submitted by MoRTH. *Given that the Joint Committee has observed significant impacts from blasting operations, including the dumping of large boulders on*

valley-side land, it is recommended that this issue be revisited by a team constituted by the Deputy Commissioner of Shimla. This will help determine legality of blasting operations carried out by the contractor in the Shimla region and also whether the responsibility for bearing the loss and cost of remediation lies with the State or MoRTH.

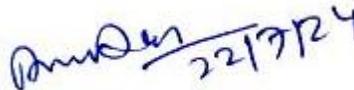
- vii. According to the documents provided by MoRTH, ***a total of 17 landslides*** occurred along the entire stretch of NH 707 in District Shimla between 12/07/2021 and 18/03/2024. ***The possibility of similar incidents recurring during the current rainy season and in the future cannot be ruled out.*** The contract documents suggest that ***protection against hill failures on both the hillside and valley side*** was part of construction work. ***However, given the heavy rains and landslides experienced in previous seasons, it is strongly recommended that MoRTH plan and implement additional protection measures.***
- viii. The Joint Committee noted that, under the contract terms between MoRTH and the contractors, ***it is the contractors' responsibility to arrange muck dumping sites on private lands.*** Contractors negotiate with private landowners near the project sites and finalize agreements with them, after which MoRTH approves the chosen muck dumping sites. ***It is recommended that the local administration and the State Pollution Control Board (SPCB) also participate in the selection and approval process for such muck dumping sites.***
- ix. The Completion Certificates for two packages of NH-707 in Shimla District were ***issued by the Authority's Engineer on 27/06/2023 and 23/10/2023 (Annexure-19 and Annexure-20),*** while various observations were made by the Joint Committee during a site visit on 22/03/2023, in the present NGT Matter. ***Therefore, it is recommended that a copy of the Report, once accepted by the Hon'ble National Green Tribunal, be provided to the Authority's Engineer. The Engineer should then review the Joint Committee's observations through physical inspection and suggest remedial and protection measures for implementation by MoRTH to reduce the frequency of such incidents.***

It is humbly prayed that above Report of the Joint Committee may kindly be taken on the record by Hon'ble National Green Tribunal.

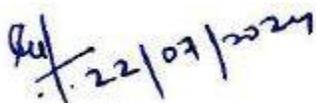
The Joint Committee shall abide by the further orders of Hon'ble National Green Tribunal in this matter.



Regional Officer
HPPCB Regional Office Shimla,
Distt Shimla (HP)



Assistant Director / Scientist 'B'
MoEF&CC, Sub Office, CGO Complex.
Shivalik Khand, Longwood, Shimla (HP)



Scientist 'F'
Central Pollution Control Board
Regional Directorate Chandigarh



Addl. District Magistrate (L&O), Shimla
Distt: Shimla, (HP)

Item No. 05

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 127/2024

Naathu Ram

Applicant

Versus

Ministry of Road Transport and
Highways & Ors.

Respondent(s)

Date of hearing: 06.02.2024

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

Applicant: Mr. Rahul Khurana & Mr. Hasil Jain, Advs.

ORDER

1. In this original application, Applicant has raised a grievance against construction in the Shivalik range of Himalayas extending up to a length of 97/103.55 kms in the State of Himachal Pradesh undertaken by the Ministry of Road Transport and Highways in the process of two lane upgradation with paved shoulders of existing single lane Paonta Sahib – Guma section at National Highway No. 707. The allegation of the Applicant is that during road widening and upgradation process, contractors are destroying the Himalayan ecology and natural vegetation and that they are breaking and cutting the hills on one side of the road and throwing the debris (including boulders, stones, dust, etc.) on the steep hill on the other side of the road in the valley. As per the allegation, the entire hilly area on the length of 97 km on the downside slope is getting destroyed, which includes natural vegetation, river streams, habitations, wildlife, etc. It is also alleged that crores of trees including Pine and Deodhar have been destroyed and thousands of minor and

major river streams have either been covered up with debris or have changed their course.

2. During the course of hearing, learned Counsel appearing for the Applicant has also referred to para 7 of the OA wherein it is stated that the project has taken the advantage of Item 7(f) of the EIA Notification 2006, by segmenting NH 707 into smaller segments and bring it to less than 100 km whereas the project is actually of the length of 103.55 kms. In support of the submission, learned Counsel for Applicant has referred to Annexure-A/2, a communication dated 18.07.2022 issued by Government of India, Ministry of Road Transport and Highways.

3. The OA raises substantial issue relating to compliance of the provisions of the Scheduled enactments.

4. Issue notice to the respondents. Learned Counsel for Applicant is directed to serve the respondents and file affidavit of service at least one week before the next date of hearing.

5. Considering the grievance raised in the OA, we also deem it proper to form a Joint Committee comprising of the representative of Member Secretary, Central Pollution Control Board (CPCB), Regional Officer, Ministry of Environment, Forests and Climate Change (MoEF&CC), Chandigarh, Member Secretary, Himachal Pradesh State Pollution Control Board (HPSPCB), Deputy Commissioner, Sirmaur and Deputy Commissioner, Shimla. The Deputy Commissioners will act as nodal agency for coordination and compliance in the Committee.

6. The Joint Committee will carry out the spot inspection, ascertain the truthfulness of the allegations made in the OA and submit factual and action taken report at least one week before the next date of hearing

by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.

7. List on 15.04.2024.

8. A copy of this order be forwarded to CPCB, MoEF&CC, HPSPCB and Deputy Commissioners, Sirmaur and Shimla by e-mail for compliance.

Prakash Shrivastava, CP

Dr. A. Senthil Vel, EM

February 06, 2024
Original Application No. 127/2024
DV.

In reference to Hon'ble NGT order dated 6/02/2024 in OA No. 127/2024 filed Nathu Ram v/s MORTH & Ors. a joint inspection^{was} conducted on 22/03/2024 under the Chairmanship of ADM, Shimla.

Following were present during inspection:-

Sr. No	Name	Designation	Signature
1.	Dr. Narendra Sharma	Director, CECOS	
2.	Dr. Anup Kr. Das.	Assistant Director / Scientist B MoEFCC, Govt	
3.	Hein Chand Viree	SDM Chopal	
4.	Vinod Kumar	Tehsildar Nerwa	
5.	VIJAY KUMAR	Range Forest officer Nerwa.	
6.	Nathu Ram Chauhan	OA	
7.	ANUS JAIN	Asst. Executive Engineer, MORTH PSU Parvati Sahib	
8.	ARJUN BHATIA	SHIVALIK	
9.			
10.			
11.			
12.			
13.			

Item No.13

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 127/2024
Naathu Ram Applicant

Versus

Ministry of Road Transport and Highways & Ors. Respondent(s)

Date of hearing: 15.04.2024

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER**

Applicant: Mr. Rahul Khurana, Mr. Hasil Jain & Mr. Satish Kumar, Advs. for Applicant

Respondent: Mr. Sumit Khimta, DC, Sirmaur (Through VC)
Mr. Gigi. C. George, Adv. for R - 1
Ms. Charu Singhal, Adv. for R - 2
Mr. Vaibhav Srivastava, Adv. for R - 5
Mr. Gaurav Khanna, Mr. Gautam Barnwal, Mr. Rudraksh Pandey & Ms. Deepali Bhanot, Advs. for R - 9
Mr. Ruchir Mishra & Ms. Reba Jena Mishra, Advs. for R - 10
Ms. Sakshi Panwar, Adv. for R - 14

ORDER

1. In this Original Application, grievance of the applicant is in respect of violations during construction in Shivalik range of Himalayas extending up to a length of 97/103.55 kms in the State of Himachal Pradesh undertaken by Ministry of Road Transport and Highways in the process of two lane upgradation.

2. Tribunal by order dated 06.02.2024 had constituted a Joint Committee and had called for the report.

3. Joint Committee has submitted the report in four volumes but to verify the truthfulness of the allegations made in the original application (sr. nos. 1 to 4 in the concerned paragraph) and in terms of paras 2.3.1.1

to 2.3.1.4 of the report, Joint Committee has sought further seven weeks time for examination of documents, analysis of the data, preparation and filing of authentic factual action taken report. Prayer made by the Joint Committee for grant of further seven weeks time is allowed.

4. Meanwhile, it will be open to all the concerned parties to file objections to the report of the Joint Committee already filed.

5. Learned Counsel for respondent no.1 also submits that a reply on behalf of respondent no.1 has been filed but since it is bulky reply, therefore, it is lying in defect. He is permitted to cure the defect so that reply comes on record.

6. List on 24.07.2024.

Prakash Shrivastava, CP

Sudhir Agarwal, JM

Arun Kumar Tyagi, JM

Dr. Afroz Ahmad, EM

April 15, 2024
Original Application No. 127/2024
JG.

रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D. L.-33004/99



भारत का राजपत्र

The Gazette of India

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 1960]

नई दिल्ली, बृहस्पतिवार, अगस्त 22, 2013/श्रावण 31, 1935

No. 1960]

NEW DELHI, THURSDAY, AUGUST 22, 2013/SHRAVANA 31, 1935

पर्यावरण और वन मंत्रालय

अधिसूचना

नई दिल्ली, 22 अगस्त 2013

का.आ.2559(अ).-केन्द्रीय सरकार ने, भारत सरकार की पर्यावरण और वन मंत्रालय में पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उप-नियम (3) के खंड (घ) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उपधारा (2) के खंड (5) और उप-धारा (1) के अधीन जारी अधिसूचना संख्या का.आ. 1533 (अ) तारीख 14 सितंबर, 2006 द्वारा निदेश दिया है कि इस अधिसूचना के प्रकाशन की तारीख से ही नई परियोजनाओं या उक्त अधिसूचना की अनुसूची में सूचीबद्ध विद्यमान परियोजनाओं या कार्यकलापों के विस्तार या आधुनिकीकरण के लिए अपरिहार्य क्षमतावर्धन के लिए प्रक्रिया या प्रौद्योगिकी में परिवर्तन और या उत्पाद मिश्रण, भारत के किसी भी भाग में यथास्थिति केन्द्रीय सरकार या उक्त अधिनियम की धारा 3 की उप-धारा (3) के अधीन केन्द्रीय सरकार द्वारा सम्यक् रूप से गठित राज्य स्तरीय पर्यावरण संघात निर्धारण प्राधिकरण की उसमें विनिर्दिष्ट प्रक्रिया के अनुसरण में पूर्व पर्यावरण निकासी के पश्चात् ही हाथ में लिया जाएगा;

और भारत सरकार ने पर्यावरण और वन मंत्रालय में राजमार्गों, भवनों और विशेष आर्थिक क्षेत्र परियोजनाओं के लिए पर्यावरणीय निकासी प्रदान करने से संबंधित पर्यावरण संघात निर्धारण अधिसूचना, 2006 के उपबंधों का पुनर्विलोकन करने के लिए कार्यालय जापन सं. 21-270/2008-आईए.III, तारीख 11 दिसंबर, 2012 और पर्यावरण और वन मंत्रालय के गगनचुंबी भवनों के संबंध में कार्यालय जापन तारीख 7 फरवरी, 2011 द्वारा सदस्य, (पर्यावरण और वन तथा विज्ञान और प्रौद्योगिकी), योजना आयोग की अध्यक्षता में एक उच्च स्तरीय समिति का गठन किया था ;

और समिति के संदर्भ के निबंधनों (टीओआर) में एक निबंधन पर्यावरण संघात निर्धारण अधिसूचना के अधीन 60 मीटर के मार्गाधिकार और 200 किलोमीटर लंबी राजमार्ग विस्तार परियोजनाओं के लिए पर्यावरण निकासी की अपेक्षाओं का पुनर्विलोकन करना था ;

और समिति ने मंत्रालय को अपनी रिपोर्ट प्रस्तुत कर दी है और इस टीओआर पर समिति ने राजमार्ग विस्तार परियोजनाओं को विस्तारण की अपेक्षा और पर्यावरण संघात निर्धारण से छूट देने की सिफारिश की है या राजमार्ग विस्तार परियोजनाओं के लिए पर्यावरण प्रबंधन परियोजना माडल टीओआर, जिसे मंत्रालय की वेबसाइट पर पोस्ट किया जाएगा के अनुसार तैयार किया जा सकता है और पर्यावरण निकासी की अपेक्षा के संबंध में समिति ने सिफारिश की है कि 100 किलोमीटर तक राष्ट्रीय राजमार्ग परियोजनाओं का विस्तार जिसमें अतिरिक्त मार्गाधिकार या विद्यमान संरेखणों पर 40 मीटर तक अर्जन और पुनःसंरेखण पर 60 मीटर या उप-मार्गों को अधिसूचना की परिधि से बाहर रखने की सिफारिश की है ;

और समिति की रिपोर्ट की पर्यावरण और वन मंत्रालय में जांच की गई है । पहले ही अधिसूचना सं. का. आ. 3067(अ) तारीख 1 दिसंबर, 2009 द्वारा सभी राज्य राजमार्ग विस्तार परियोजनाओं को सिवाय उन परियोजनाओं के जो पहाड़ी क्षेत्रों (1000 मीटर एएमएसएल) और पारिस्थितिकीय रूप से संवेदनशील क्षेत्रों में है, को पर्यावरण संघात निर्धारण अधिसूचना 2006 से छूट प्रदान कर दी गई है ।

और अन्य बातों के साथ पूर्वोक्त को ध्यान में रखते हुए पर्यावरण और वन मंत्रालय ने कार्यालय जापन सं. 21-270/2008-आईए. III, तारीख 11 दिसंबर, 2012 द्वारा गठित उच्च स्तरीय समिति की पूर्वोक्त सिफारिशों को स्वीकार करने का विनिश्चय किया है ;

अतः, अब, केन्द्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (4) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उपधारा (2) के खंड (5) और उपधारा (1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, भारत सरकार के पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 1533(अ) तारीख 14 सितंबर, 2006 में उक्त नियम 5 के उपनियम (3) के खंड (क) के अधीन सूचना की अपेक्षा से अभिमुक्ति देने के लिए निम्नलिखित और संशोधन करती है, अर्थात् :-

2. उक्त अधिसूचना में,-

(क) पैरा 7 के उपपैरा II के मद (i) के स्थान पर निम्नलिखित मद रखी जाएगी, अर्थात्:-

'(i) "विस्तारण" उस प्रक्रिया को निर्दिष्ट करता है, जिसके द्वारा प्रवर्ग 'क' परियोजना क्रियाकलापों के मामले में विशेषज्ञ आंकलन समिति और प्रवर्ग 'ख 1' परियोजनाओं या क्रियाकलापों के मामले में, राज्य स्तर विशेषज्ञ आंकलन समिति, जिसके अंतर्गत विद्यमान परियोजनाओं या क्रियाकलापों के विस्तार या आधुनिकीकरण या उत्पाद मिश्रण में परिवर्तन उस परियोजना या क्रियाकलाप, जिसके लिए पूर्व पर्यावरणीय अनापत्ति ईप्सित की गई है, के संबंध में पर्यावरण समाधात निर्धारण रिपोर्ट (ईआईए) तैयार करने के लिए सभी सुसंगत पर्यावरणीय चिंताओं को संबोधित करते हुए विस्तृत और समय निर्देश के निबंधनों का अवधारण और विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर आंकलन समिति विहित आवेदन प्ररूप 1/प्ररूप1क में दी गई जानकारी के आधार पर जिसके अंतर्गत आवेदक द्वारा प्रस्तावित निर्देश के निबंधन हैं, किसी विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर आंकलन समिति के किसी उप समूह द्वारा स्थल भ्रमण यदि संबंधित विशेषज्ञ आंकलन समिति या संबंधित राज्य स्तर विशेषज्ञ आंकलन समिति द्वारा आवश्यक समझा जाए, आवेदक द्वारा सुझाए गए निर्देश के निबंधन, यदि प्रस्तुत किए जाएं और अन्य सूचना जो विशेषज्ञ आंकलन समिति या राज्य स्तर विशेषज्ञ आंकलन समिति के पास उपलब्ध हों, सम्मिलित है:

परंतु निम्नलिखित को विस्तारण की आवश्यकता नहीं होगी-

(i) अनुसूची के मद 8 में प्रवर्ग ख के रूप में सूचीबद्ध सही परियोजनाएं और कार्यकलाप (नगरों या वाणिज्यिक परिसरों या आवासन का संनिर्माण) ;

(ii) अनुसूची के मद 7 की उपमद (च) के अधीन स्तंभ (3) और स्तंभ (4) की प्रविष्टि (ii) के अधीन आने वाली राजमार्ग विस्तार परियोजनाएं ;

परंतु यह और कि -

अ. खंड (i) में निर्दिष्ट परियोजनाएं और कार्यकलापों का अंकन प्ररूप 1 या प्ररूप 1क और अवधारणा योजना के आधार पर किया जाएगा ;

आ. खंड (ii) में निर्दिष्ट परियोजनाएं पर्यावरण और वन मंत्रालय द्वारा विनिर्दिष्ट माडल टीओआर के आधार पर ईआईए और ईएमपी रिपोर्ट तैयार करेंगी ;

(ख) अनुसूची में मद 7 की उप मद (च) के सामने स्तंभ (3) में प्रविष्टि (ii) के स्थान पर निम्नलिखित प्रविष्टि रखी जाएगी, अर्थात्:-

"(ii) राष्ट्रीय राजमार्गों का 100 किलोमीटर से अधिक विस्तार जिनमें अतिरिक्त 40 मीटर से अधिक विद्यमान संरेखणों पर और पुनः संरेखणों या उपमार्गों पर 60 मीटर क्षेत्राधिकार या भूमि अर्जन अंतर्बलित है ।"

[फा.सं.21-270/2008-आईए.।।।]

अजय त्यागी, संयुक्त सचिव

टिप्पण : मूल नियम भारत के राजपत्र असाधारण, भाग II, खंड 3, उपखंड (ii) में अधिसूचना सं. का.आ. 1533(अ), तारीख 14 सितंबर, 2006 द्वारा प्रकाशित किए गए थे और तत्पश्चात् निम्नानुसार संशोधित किए गए :

1. का.आ. 1733(अ), तारीख 11 अक्तुबर, 2007;
2. का.आ. 3067(अ), तारीख 1 दिसंबर, 2009;
3. का.आ. 695(अ), तारीख 4 अप्रैल, 2011;
4. का.आ. 2896 (अ), तारीख 13 दिसंबर, 2012; और
5. का.आ. 674(अ), तारीख 13 मार्च, 2013

MINISTRY OF ENVIRONMENT AND FORESTS
NOTIFICATION

New Delhi, the 22nd August, 2013

S.O. 2559(E).- Whereas by notification of the Government of India in the Ministry of Environment and Forests vide number S.O.1533(E), dated the 14th September, 2006 issued under sub-section (1) and clause (v) of sub-section (2) of section (3) of the Environment (Protection) Act, 1986 read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government directed that on and from the date of its publication, the required construction of new projects or activities or the expansion or modernization of existing projects or activities listed in the Schedule to the said notification entailing the capacity addition with change in process or technology and or product mix shall be undertaken in any part of India only after prior environmental clearance from the Central Government or as the case may be, by the State level Environment Impact Assessment Authority, duly constituted by the Central Government under sub-section (3) of section 3 of the said Act, in accordance with the procedure specified therein;

And whereas the Government of India in the Ministry of Environment and Forests had constituted a High Level Committee under the Chairmanship of Member (Environment and Forests and Science and Technology), Planning Commission, vide OM No.21-270/2008-IA.III dated the 11th December, 2012 to review the provisions of Environmental Impact Assessment Notification, 2006 relating to granting Environmental Clearances for Roads, Buildings and Special Economic Zone projects and provisions under the OM dated the 7th February, 2012 issued by the Ministry of Environment and Forests regarding guidelines for High Rise Buildings;

And whereas one of the terms of reference (ToR) of the Committee was to review the requirement of Environmental Clearance for highway expansion projects up to the right of way of 60 meters and length of 200 kms under Environmental Impact Assessment notification;

And whereas the Committee has submitted its report to the Ministry and on this ToR, the Committee has recommended exempting highway expansion projects from the requirement of scoping and that Environmental Impact Assessment or Environment Management Plan for highway expansion projects may be prepared on the basis of model ToRs to be posted on Ministry's website and in respect of requirement of environmental clearance, the Committee has recommended that expansion of National Highway projects up to 100 kms involving additional right of way or land acquisition up to 40 mts on existing alignments and 60 mts on re-alignments or by-passes may be exempted from the preview of the notification;

And whereas the report of the Committee has been examined in the Ministry of Environment and Forests. Earlier, vide notification S.O. 3067(E), dated the 1st December 2009 all State Highway expansion projects, except those in hilly terrain (above 1000 m AMSL) and ecologically sensitive areas, have already been exempted from the purview of the Environmental Impact Assessment notification, 2006.

And whereas, keeping inter-alia in view the foregoing, the Ministry of Environment and Forests has decided to accept the aforesaid recommendations of the High Level Committee constituted vide OM No.21-270/2008-IA.III, dated the 11th December 2012;

Now, therefore in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with sub-rule (4) of rule (5) of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following further amendment to the notification of the Government of India, in the Ministry of Environment and Forests number S.O. 1533(E), dated the 14th September, 2006 after having dispensed with the requirement of notice under clause (a) of sub-rule (3) of the said rule 5 in public interest, namely:—

2. In the said notification, —

(a) in paragraph 7, in sub-paragraph II, for item (i), the following item shall be substituted, namely:—

(i) "Scoping" refers to the process by which the Expert Appraisal Committee in the case of Category A projects activities, and State level Expert Appraisal Committee in the case of Category 'B1' projects or activities, including applications for expansion or modernization or change in product mix of existing projects or activities, determine detailed and comprehensive Terms of Reference (TOR) addressing all relevant environmental concerns for the preparation of an Environment Impact Assessment (EIA) Report in respect of the project or activity for which prior environmental clearance is sought and the Expert Appraisal Committee or State level Expert Appraisal Committee concerned shall determine the terms of reference on the basis of the information furnished in the prescribed application Form I or Form 1A including terms of reference proposed by the applicant, a site visit by a sub-group of Expert Appraisal Committee or State level Expert Appraisal Committee concerned only if considered necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, terms of Reference suggested by the applicant if furnished and other information that may be available with the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned:

Provided that the following shall not require Scoping:—

- (i) all projects and activities listed as Category 'B' in item 8 of the Schedule (Construction or Township or Commercial Complexes or Housing);
- (ii) all Highway expansion projects covered under entry (ii) of column (3) and column (4) under sub-item (f) of item 7 of the Schedule:

Provided further that—

- A. the projects and activities referred to in clause (i) shall be apprised on the basis of Form I or Form 1A and the conceptual plan;
- B. The projects referred to in clause (ii) shall prepare EIA and EMP report on the basis of model TOR specified by Ministry of Environment and Forests;

(b) in the Schedule, against sub-item (f) of item 7, in column (3), for the entry (ii), the following entry shall be substituted, namely:—

- "(ii) Expansion of National Highways greater than 100 km involving additional right of way or land acquisition greater than 40m on existing alignments and 60m on re-alignments or by-passes."

[F. No. 21-270/2008-IA.III]

AJAY TYAGI, Jt. Secy.

Note: The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide notification number S.O. 1533(E), dated the 14th September, 2006 and subsequently amended as follows:—

1. S.O. 1737 (E), dated the 11th October, 2007;
2. S.O. 3067 (E), dated the 1st December, 2009;
3. S.O. 695 (E), dated the 4th April, 2011;
4. S.O. 2896 (E), dated the 13th December, 2012; and
5. S.O.674(E), dated the 13th March, 2013

No. 744/16
H.P. Forest Department.

Dated Chopal, the 05/08/2024

To,

The Deputy Commissioner,
Distt. Shimla HP.

Subject: -

Proceeding of the meeting of Joint Committee to finalize the Factual and Action Taken Report in compliance to orders dated 15.04.2024 passed by Hon'ble NGT in O.A No. 127/2024 titled Naathu Ram V/s Ministry of Road Transport and Highway & Ors. held under the Chairmanship of Sh. Anupam Kashyap, IAS, Deputy Commissioner, Shimla on dated 12-06-2024 at 11:30 AM..

Sir,

Kindly refer to your office endst No. SML-Reader/ADM (L&O) /Dumping-2024-5352 dated 13.06.2024 on the subject cited above.

It is submitted that regarding re-access the illegal felling of trees /damage to the trees across the hill slopes on the forest/private land including 27 spots were jointly inspected along with revenue department for construction/widening activity of NH-707 and it was found that no illegal felling of trees in forest land at package 5 Gumma to Fediz was found however due to muck some shrubs were found damage whose assessment along with RD detail is as under:-

Sr No	Location No.	Issues
1	RD 103/550	Illegal dumping of debris on Govt & private land without any protection measures $16m^3 \times 700 = 11,200$ / damage report chalked & compounded
2	RD 101/000 near fadiz bridge.	Illegal dumping to damage shrubs (assessment) $28m^3 \times 700RS/m = 19600$ / damage report chalked & compounded
3	RD 99/150	Illegal dumping to damage shrubs (assessment) $42m^3 \times 700RS/m = 29400$ / damage report chalked & compounded
4	RD 98/540	Illegal dumping damage of B/L IV class 2 No trees $0.28 \times 2 \text{ nos} \times 12,246/cube = 6858$ / + 800 compensation & $32m^3 \times 700 = 22400$ damage report chalked & compounded
5	RD 97/710	Illegal dumping damage of B/L IV class 3 No trees Earlier it was stated as private land after during re-assessment with revenue staff it was found that it forest land $0.28 \times 3 \text{ nos} \times 12,246/p/m^3 = 10287$ /+ 1200/ compensation & $48m^3 \times 700 = 33600$ / damage report chalked & compounded
6	RD 97/610	Illegal dumping $35m^3 \times 700 = 24,500$ / damage report

3241

		chalked & compounded.
Total	Re-access of damage caused =	1,59,845/ Revenue deposit in Govt treasury.
1	RD 95/180, 98/930 & 102/720	Damage report already chalked during the time of construction Rs 1,22,500 deposit in Govt treasury.
2	RD 96/980, 97/800, 94/480, 93/960, & Minas(3 sites)	No damage was/were found in these RD(s)
3	RD 101/160, 99/890	The road was broken & heavy landslides due to heavy rainfall july 2023.
4	RD 100/170,94/100, 94/050, 102/200 & 101/700	Muck fall in the forest due to landslides.
5	RD 96/350-96/250 ,99/050-99/25, 90/800	Dumping zone(s) have been made on the spot and filled with muck debris.
6	RD 88/600, 100/610	Debris fall in tons river.

This is for favour of kind information and taking further necessary action

at your end please.


Deputy Conservator of Forests,
Chopal Forest Division Chopal



GOVERNMENT OF HIMACHAL PRADESH
JAL SHAKTI VIBHAG

TO WHOM IT MAY CONCERN

This is to certify that M/S Shivalik Buildtech Pvt. Ltd. Have completed the work of P/L of GI Pipe 20 mm dia 800 Rmt, 1No hand pump installed as per the approved estimate submitted by this office anexuture attached. This no objection certificate is being issued to M/S Shivalik Buildtech Pvt. Ltd. for onward submission to concerned officials involved in rehabilitation/upgradation of Gumma-Fediz section of NH-707.

Dated: - 11-06-2024


Junior Engineer
JSV Section Gumma


Assistant Engineer
JSV Sub Division Nerwa


Executive Engineer
JSV Division Nerwa

Himachal Pradesh
Jal Shakti Department

No. JSV-ND-CB-WA/2023-24

To,

1384-86 Dated: 25-6-2024

✓ The Deputy Commissioner,
Shimla.

Subject:-

Information required in compliance of order passed by the Ho'ble NGT in OA No. 127/2024 titled as Nathu Ram V/s Ministers of Road Transport and Highways & Ors. Pending before the Hon'ble NGT, New Delhi- Regarding.

In This connection it is intimated that no damages caused to natural sources of water (rivulets) or to any other water supply scheme due to debris generated during construction activity carried out by MoRTH through its contractor on NH 707.

However, the approach path to JE's office cum residence is damaged during widening of this road. Therefore, it shall be repaired by way of construction of R/wall or pucca path. Therefore, the amount of Rupees 15 lakh only shall be involved in it.

This is for your kind information & necessary action at your end please.


**Executive Engineer,
JSV Division Nerwa.**

Copy to the Superintending Engineer, Jal Shakti Circle Shimla-09 Sub- for information please

Copy to the Assistant Engineer, I&PH Sub-Division Nerwa for information & necessary action please.


**Executive Engineer,
JSV Division Nerwa.**

**SHIVALIK BUILDTECH PVT. LTD.**

A-1/A, 2nd Floor, Sector-16, Noida (U.P.)-201301

Tel. : 0120-4575106, 107, 108

E-mail : info@shivalikbuildtech.comWebsite : www.shivalikbuildtech.com

Ref No.: SBPL/Gumma/HO-108

Dated: 13.06.2022

SDM,
Chaupal,
Distt: Shimla
HP

Dear Sir,

Re: Rehabilitation & Up-gradation to Intermediate Lane Configuration of Gumma - Fediz Section (Km 94.900 to Km 103.550) of NH-707 in the state of Himachal Pradesh under Green National Highways Corridor Project (GNHCP) with the Loan Assistance of World Bank on EPC Mode - **Request For Controlled Blasting**

: LOA no. RW/NH-12014/05/2020/HP/PKG-V/EAP dt 22.02.2022:
Contract signed on 25.03.2022

We were awarded above mentioned job in Gumma Fediz section from Km 94.900 to Km 103.550. During execution of the job, we have found hard rocks in around 3 (three) kilometres of area as per detail given below: -

Hard rock chainage 94+900 to 95+100 & 95+580 to 96+300 & 96+640 to 97+000 & 97+500 to 97+700 & 98+760 to 99+020 & 99+700 to 100+560 & 103+300 to 103+530

Due to hard rock, it is difficult to carry out construction of road without blasting work.

We therefore request you to kindly arrange permission of controlled blasting. We will carry out blasting work as per rule.

Thanking you & assuring you of our best services always

Yours Sincerely,
For Shivalik Buildtech Private Limited


Adesh Kumar Jain
(Authorized Signatory)

Copy to,

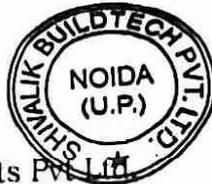
Team Leader,

M/s L. N. Malviya Infra Projects Pvt. Ltd.

H.No. 122/2, B Block, Adarsh Colony, Ward No. 3

Badripur

Paonta Sahib (H.P.)



No CPL- Reader (L&O)-(8) /2019-6317-20
Office of the Sub-Divisional Magistrate,
Chopal District Shimla HP

Dated Chopal the 12-11-2021.

To,

✓ The Sub-Divisional Police Officer,
Chopal, District Shimla HP.

Sub:- Permission regarding taking up controlled blasting..

Sir,

Kindly refer to the Please refer to the Assistant Executive Engineer for Project Director, M/o RT&H, Project implementation Unit, Paonta Sahib office letter No. MoRTH.PIU-P.S./ Civil Workis/Pkg.iv/2020-21/732 dated 11.11.2011 on the subject cited above. The Assistant Executive Engineer for Project Director, M/o RT&H, Project implementation Unit, Paonta Sahib has mentioned that M/s PRL Projects & Infrastructures Ltd. Dhatarwal Construction Company Pvt. Ltd. (JV), Puja House 34/1, Vikas Apartment, East Punjabi Bagh, New Delhi-110026, have been awarded the work of Rehabilitation/Up-gradation to 2-lane configuration of Sri Kyari-Gumma Section (Km75+000 to 94+900) of NH-707 in the State of Himachal Pradesh on EPC mode. Due to the hard rock it is difficult to carry out the construction of road without blasting work. The contractor will arrange the blasting material at his own from the approved supplier and will store in the blasting magazine at site of work as per rule & Act. Further contractor will carry out the controlled blasting during the night hours or when there will be no movement of traffic.

In this context, you are requested to depute adequate police personals to regulate traffic during the construction.


Sub-Divisional Magistrate,
Chopal, Distt. Shimla HP.

Endest. No. As above/2019- 6317-20

Dated 12-11-2021.

Copy forwarded to:-

1. The Deputy Commissioner Shimla for information please.
2. The Assistant Executive Engineer, Project Director, M/o RT&H, Project implementation Unit, Paonta Sahib for information please.
3. The Executive Magistrate Nerwa for information and n/a pl.


Sub -Divisional Magistrate,
Chopal, District. Shimla HP.

3247

No CPL- Reader (L&O)-(8)/2019- 3002-05
Office of the Sub-Divisional Magistrate,
Chopal District Shimla HP

Dated Chopal the 12.08-2022.

To

The Sub-Divisional Police Officer,

Chopal, District Shimla HP.

Sub:-

Permission regarding taking up controlled blasting..

Sir,

Please refer to the Team Leader, M/s I.N.Malviya Infra Projects Pvt. Ltd. H.No. 112/2, B Block, Adarsh Colony, Ward No, 3 Badripur Paonta, Sahib(H.P.) letter No. SBPL/ Gumma/HO-108 dated 13.06.2022 on the subject cited above. M/s L.N.Malviya Infra Projects Pvt. Ltd. H.No. 112/2, B Block, Adarsh Colony, Ward No, 3 Badripur Paonta, Sahib(H.P.) has been awarded the work of Gumma Fediz section from Km. 94.900 to Km.103.550. During the execution of the job, hard rocks in around three kilometers of area as per the detail given in the application are there, which is enclosed herewith. Due to the hard rock it is difficult to carry out the construction of road without blasting. The M/s Shivalik Buildtech Pvt. Ltd C/o I.N.Malviya Infra Projects Pvt. Ltd. H.No. 112/2, B Block, Adarsh Colony, Ward No, 3 Badripur Paonta, Sahib(H.P.) will arrange the blasting material at his own from the approved supplier and will store in the blasting magazine at site of work as per rule & Act. Further the M/s Shivalik Buildtech Pvt. Ltd C/o M/s I.N.Malviya Infra Projects Pvt. Ltd. H.No. 112/2, B Block, Adarsh Colony, Ward No, 3 Badripur Paonta, Sahib (H.P.) shall carry out the controlled blasting during the night hours or when there will be no movement of traffic.

In this context, you are requested to depute adequate police personals to regulate traffic during the construction.

Sub-Divisional Magistrate,
Chopal, Distt. Shimla HP.

Endest. No. As above/2019- 3002-05

Dated 12.08.2022.

Copy forwarded to:- 3002-05

1. The Deputy Commissioner Shimla for information please.
2. The Assistant Executive Engineer for Project Director, M/o RT&H, Project implementation Unit, Paonta Sahib for information please.
3. The Executive Magistrate Nerwa for information and n/a please.

Sub -Divisional Magistrate,
Chopal, District. Shimla HP.

No.CPL-Reader-(NGT) 12/2024/2019. 2446-47
Office of the Sub-Divisional Officer (C),
Chopal, District Shimla H.P.

To Dated the Chopal 06.07.2024

The Deputy Commissioner,
Shimla, District Shimla H.P.

Subject: - Compliance of order passed dated 06-02-2024 passed by the Hon'ble NGT in OA
No. 127/2024 titled Nanthu Ram V/s Ministry of Road Transport and Highways &
Ors. Pending before the Hon'ble NGT, New Delhi-regarding .

Sir,

Kindly refer to your office endst. No. SML- Reader /ADM (L&O) /

Dumping -2024- 5428 date 04.07.2024 on the subject cited above.

In this context, it is submitted that from the perusal of the relevant file/record it is found that on the request dated 11.11.2021 received from the Assistant Executive Engineer for Project Director, M/o RT & H Project Implementation Unit, Poanta Sahib had requested for seeking permission for blasting in Package -IV Sri Kiari-Gumma Section and application/request letter dated 13.06.2022 of Team Leader M/s L.N. Malviya Infra Projects Pvt. Ltd received in this office for permission regarding controlled blasting Gumma-Fediz Section (Km.900 to Km103.550 of NH-707. In this regard vide this office letter No. CPL-Reader- (L&O)-(8)/2019- 6317-20 dated 12.11.2021 & letter No.CPL-Reader-(L&O)-(8)/2019-3002-05 dated 12.08.2022 addressed to the Sub Divisional Police Officer Chopal was requested to depute adequate police personals to regulate traffic during the construction, and copies of same were sent to your good office (worthy Deputy Commissioner Shimla), the Assistant Executive Engineer for Project Director M/O RT&H Project implementation Unit, Ponta Sahib as well as the Executive Magistrate Nerwa for information (copies enclosed). The required documents for grant of permission i.e. Area map, NOC, Location plan of area, Work order, Short fire license copy, Explosive license copy, and Explosive transport license copy etc. is not available with the application/request letters dated 11.11.2021 & 13.06.2022 as per office record/file.

The requisite point wise report on occurrences of land slide incidences submitted by the Tehsildar Nerwa after spot verification/inspection is enclosed herewith for your kind perusal and information please.

With kind regards

Yours faithfully,

Encls. As above

[Signature]
Sub-Divisional Officer (C)
Chopal, District Shimla (H.P.)

Endst. No . CPL-Reader-(NGT) 12/2024/2019-

Dated : 06.07.2024

Copy submitted to the Regional Officer, HPSPCB, Shimla for information and further n/a please.

[Signature]
Sub-Divisional Officer (C), (C)
Chopal, District Shimla (H.P.)

3249

Sr. No.	Location No.	Khasra (NH) & Revenue Village	Adjoining Khasra No.	Issues:-Unauthorized and illegal dumping of debris on forest and private land without any protection measures.	Remarks
1.	RD103/550 Near Fediz bridge	Kandal	65-चरागाह	Loss of forest land due to illegal dumping	-
2.	RD102/720 Near Fediz bridge	48-Bandur	57-चरागाह 234-गै० मु० खड	Loss of forest land due to illegal dumping	-
3.	RD102/200	58-Bandur	57-चरागाह 234-गै० मु० खड	Debris fall due to land slide	Heavy Rain in the area as per Rapat Rojnamcha Rapat No. 345 Dated 09-07-2023 PC Antrawali
4.	RD101/700	242-Kyarla	171-चरागाह 2- चरागाह	Debris fall due to land slide	Heavy Rain in the area as per Rapat Rojnamcha Rapat No. 345 Dated 09-07-2023 PC Antrawali
5.	RD101/160	50-Kyarla	49. चरागाह 47-गै० मु० कुहल	Half Road damage due to land slide	Heavy Rain in the area as per Rapat Rojnamcha Rapat No. 345 Dated 09-07-2023 PC Antrawali
6.	RD101/000	50-Kyarla	49. चरागाह 47-गै० मु० कुहल	Loss of forest land River site due to illegal dumping	-
7.	RD100/610	107-Kyarla	106. चरागाह 104-कुहल	Loss of private land & loss of river site due to illegal dumping and land slide <i>Note: Private land effected due to illegal dumping Khasra No.62- चरार अब्बल & 63-चंजर कदीम, land owner name: Rajinder Singh S/o Sh. Roop Singh etc.</i>	Heavy Rain in the area as per Rapat Rojnamcha Rapat No. 345 Dated 09-07-2023 PC Antrawali

Sub-Divisional Officer (C)
Chopal, Dist. Shimla (H.P.)

5	RD 07/710	32m3x700 = 22400 damage report chalked & compounded
---	-----------	---

2024/7/22 1

8.	RD100/170	108-Kyarla	109. चरागाह	Loss of river site due to land slide and damage of canal (कुल)	Heavy Rain in the area as per Rapat Rojnamecha Rapat No. 345 Dated 09.07-2023 PC Antrawali
9.	RD 99/890	336-Kyarla	330. चरागाह	Road damage due to land slide	Heavy Rain in the area as per Rapat Rojnamecha Rapat No. 345 Dated 09.07-2023 PC Antrawali
10.	RD 99/050-99/25 Dumping Zone-II	332-Kyarla	334/3. भारत सरकार	Debris fall in Tons river site	-
11.	RD 99/150	549-Kyarla	548. चरागाह, 547-गैठ गुठ खड	Illegal dumping of forest land /Debris fall in Tons river site	-
12.	RD 98/930	549-Kyarla	548. चरागाह, 547-गैठ गुठ खड	Illegal dumping in Govt. land	-
13.	RD 98/540 Near village Antravali	160-Antravali	161. चरागाह	Loss of trees in govt. land due to illegal dumping	-
14.	RD 97/800	110-Bohi	111. चरागाह	No loss	-
15.	RD 97/710	110-Bohi	111. चरागाह	Loss of trees in Govt. land due to illegal dumping	-
16.	RD 97/610	110-Bohi	111. चरागाह	Illegal dumping in Govt. land	-
17.	RD 96/350-96/250 Dumping Zone-I, Boie	177-Bohi	171/1, 172. भारत सरकार	Debris thrown out from dumping point due insufficient capacity of dumping point.	Sub-Division Officer (C) Chopal, Jhansi (U.P.)

18.	RD 96/980 Near Village Gumma	166-Bohi	171. चरागाह	No loss	-
19.	RD 95/180	720-Shobal	मय चक गुग्गा	Illegal dumping in Govt. land.	-
20.	RD 94/100	499-Gumma	276-चरागाह	Loss of Govt. land due to land slide	Heavy Rain in the area as per Rapat Rojnamcha Rapat No. -309 Dated 09-07-2023 PC Gumma.
21.	RD 94/050	499-Gumma	276.चरागाह	Loss of Govt land due to land slide	Heavy Rain in the area as per Rapat Rojnamcha Rapat No. -309 Dated 09-07-2023 PC Gumma.
22.	RD 94/480	564-Gumma	555ध. वंजर कदीम (मनजीत पुत्र हरी सिंह आदि)	No loss	-
23.	RD 93/960	356-Gumma	357.कुलाउ अब्दल, (सुखराम आदि मज.) 354-कुलाउ अब्दल (सुखराम आदि मज.)	No loss	-
24.	RD 90/800	284-Rohana	36.वंजर कदीम, (मोप सिंह आदि) 285-गै०मु० नाला	Debris thrown out from dumping point due insufficient capacity of dumping point.	-
25	RD 88/600	384-Rohana	385.चरागाह	Debris was dropped near the Tons river site	-
26.	RD 86/800	District Sirmour	.	-	-
27.	Minus (3 sites)	District Sirmour	.	-	-

Sub-Divisional Engineer (C),
Chopal District Gumma I.P.P.



3252
H.P. STATE POLLUTION CONTROL BOARD
Regional Office at "HIM-PARIVESH", PHASE III, BCS
NEW SHIMLA-171009.

Annexure-12



www.hppcb.nic.in E-mail: pcbroshimla@gmail.com

No. PCB-RQS/OA.No.127/2024 2883

Dated - 27⁰³/
2024

To
✓ Project Director,
Morth, Paonta Sahib, District Sirmour, HP

Subject: - Compliance of order dated 06-02-2024 passed by the Hon'ble NGT in OA No. 127/2024 titled Nathu Ram v/s Ministry of Road Transport and Highways & Ors. Pending before the Hon'ble NGT, New Delhi.

Sir,

I would like to bring your kind attention towards the Joint Inspection conducted on dated 22-03-2024 for considering the grievance raised in OA No. 127/2024 by the applicant.

During the course of inspection, applicant raised issues of illegal muck dumping at various section along NH 707, details of which is enclosed herewith, therefore you are requested to send your detailed comments on the objections made by the applicant during the inspection to this office within 3 days, so that joint inspection report could be sent to the Hon'ble NGT within stipulated time.

Yours faithfully

Additional District Magistrate
District Shimla at Shimla.

Sr. o.	Location No.	Issues
1.	RD 103/550 near Fediz bridge.	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
2.	RD102/720 near Fediz bridge.	
3.	RD102/200	
4.	RD101/700	
5.	RD101/160	
6.	RD101/000	
7.	RD100/610	
8.	RD100/170	
9.	RD99/890	
10.	RD99/.050-99/25 dumping zone-II	
11.	RD99/150	
12.	RD98/930	
13.	RD98/540 near villate Antravali	
14.	RD97/800	
15.	RD97/710	
16.	RD97/610	
17.	RD 96/350-96/250 dumping Zone-I, Boie	
18.	RD 96/980 Near Village Gumma	
19.	RD95/180	
20.	RD94/100	
21.	RD94/050	
22.	RD94/480	
23.	RD93/960	
24.	RD90/800	
25.	RD88/600	
26.	RD86/800	
27.	Minus (3 sites)	

In addition to above, please provide following details.

- As per approved DPR, there were 8 no. of sliding zones in package-V (*Gumma-Fediz*) where protection measures were proposed. Please provide details of each sliding zone in section-V and current status of remedial measures/ protection measures taken and estimated funds allotted for this work?
- Details of dumping sites in package-V along with their capacity in terms of CuM (Private +Forest Land), total muck dumped so far and capacity left unutilized. As per approved DPR, there was provision of gabion wall of height 20 mtrs and length 85mtrs for two dumping sites as protection measures. Please, provide current status of retaining structures at these sites and funds allotted for this work? Also, provide the copy of agreement done with private land owners for using their land as dumping site (if available).
- Total hydroseeding and bamboo plantation (in terms of area) proposed and actually carried out along with its current status in package-v and funds allotted for this work?
- Number of Sliding zones in package-IV (*Minus-Gumma*) and what protection measures were proposed to provided. Please, give details of each sliding zone in section-IV and current status of remedial measures/ protection measures taken and estimated funds allotted for this work? Please provide copy of DPR and work award letter.
- Details of dumping sites in package-IV (*Minus-Gumma*) along with their capacity in terms of CuM Private +Forest Land), total muck dumped so far and capacity left unutilized. As per approved DPR what was the provision of gabion wall (in terms of height and length) for these dumping sites. Please, provide current status of retaining structures at these sites funds allotted for this work? Also, provide the copy of agreement done with private land owners for using their land as dumping site (if available).
- Total quantity of muck generated from landslides and rainfall. How muck of this muck was collected by MoRTH and disposed off at designated dumping sites.

**Comments on Objections made by Applicant during the inspection of Additional District
Magistrate, District Shimla dated 22.03.2024**

Sr. No.	1
Location No.	RD 103/550 near Fediz bridge.
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comments	This location is not a dumping zone and no dumping has been done by the Contractor at this location. The Valley Side slope was already stabilized using Geo-cell with hydroseeding and bamboo plantation. However, debris from catchment outside RoW crossed the highway during extreme rainfall of 2023 (Natural calamity order of State Govt. is attached). Detailed report (submitted to insurance company for claim) attached herewith may also be referred in this regard. Further, retaining structures and slope protection measures have been completed and are being maintained by the Contractor.

Before flash floods



After flash floods





**Government of Himachal Pradesh
Department of Revenue
(Disaster Management)**

No. REV (DMC) (F) 2-5/2023 Dated: the Shimla, 18th August 2023

NOTIFICATION

Whereas, the State of Himachal Pradesh has witnessed unprecedented loss of human lives and huge destruction, damage and loss to public and private property during the ongoing monsoon season. The entire State has been badly ravaged by incessant rains leading to floods, cloudbursts, landslides, and slope failure taking heavy toll of lives and property. Thousands of dwelling units have been damaged or destroyed. There has been unprecedented loss of crops and agricultural land. Thousands of tourists and local people who were stranded had to be evacuated with the help of Indian Air Force, Army, NDRF, SDRF, Police, Home Guards, Fire Services and local volunteers. The national highways, state, district and local road network has been severely damaged and destroyed. Dozens of bridges have been washed away or damaged severely hampering connectivity and rescue efforts. The unprecedented excessive precipitation has led to a series of challenges that impacted the daily life in the State;

And Whereas, the District Administration supported by the Govt. has been carrying out relief and rescue activities, ever since the onset of Monsoon, working day and night to save lives, provide relief to the affected persons, and restore essential services to minimize the impact the disaster;

And Whereas, the Government of Himachal Pradesh has been providing all the necessary assistance for relief, rescue and rehabilitation works throughout the State and to bring life of the people back to normalcy and mitigate the sufferings of the affected people;

Now Therefore, keeping in view the unprecedented grave situation leading loss of human life and damage, destruction and loss to public infrastructure and private property, the State Government has decided to declares the whole State of Himachal Pradesh as "Natural Calamity Affected Area". After the weather become normal and the accessibility is improved, complete assessments damage and loss

assessment of property, livestock, infrastructure and crops shall be carried out by the respective Districts and Departments which shall be submitted to the Government for recovery and reconstruction efforts.


(Onkar Chand Sharma)
Principal Secretary (Revenue) to the
Government of Himachal Pradesh

Endst No. As above Dated Shimla ^{18th} August, 2023
Copy forwarded to:

1. The Joint Secretary (DM-I), Govt. of India, Ministry of Home Affairs, (DM Division), "C" Wing, 3rd Floor, NDCC-II, Jai Singh Road, New Delhi-110001.
2. All Administrative Secretaries to the Government of Himachal Pradesh.
3. The Principal Secretary to Chief Minister Himachal Pradesh
4. The Secretary to Governor, Himachal Pradesh
5. The Joint Secretary (GAD) to the Government of Himachal Pradesh in compliance to CMM by circulation dated 18-8-2023
6. All HODs to the Government of Himachal Pradesh.
7. All DCs cum Chairman DDMA of Himachal Pradesh.
8. Pr.PS-cum-Spl. Secretary to Pr. PS to CM OSD to Hon'ble Chief Minister.
9. Senior Private Secretary to Revenue Minister Shimla-171002
10. Sr. Private Secretary to all the Ministers Himachal Pradesh
11. Senior PS to the Chief Secretary cum Chairman, State Executive Committee (SEC), HP Secretariat, Shimla-171002.
12. Guard File


(D.C. Rana) ^{18/8/23}
Director-cum- Ex Officio Spl. Secy. (Rev.-DM) to the
Government of Himachal Pradesh.

भारत सरकार
पृथ्वी विज्ञान मंत्रालय
मौसम केंद्र, शिमला



Government of India
Ministry of Earth Sciences,
Meteorological Centre, Shimla

Monthly Rainfall (मासिक वर्षा)

01 July - 18 July 2023

District (जिला)	Actual Rainfall (mm) (मासिक वर्षा)	Normal Rainfall(mm) (साधारण वर्षा)	Percentage (%) Departure from the normal
BILASPUR	402.3	149.4	169
CHAMBA	339.2	163	108
HAMIRPUR	366.5	170.7	115
KANGRA	442.1	309.7	43
KINNAUR	154	35.8	330
KULLU	351.9	98.4	258
LAHAUL & SPITI	148.4	70.1	112
MANDI	407.1	203.7	100
SHIMLA	388.8	114.3	240
SIRMAUR	836.3	245.5	241
SOLAN	563.1	173.1	225
UNA	360.3	179.3	101
SUBDIVISION RAINFALL	327.2	137.3	138



Sr. No.	2
Location No.	RD102/720 near Fediz bridge.
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. The Valley side slope was already stabilized with slope protection measures with geocell with hydroseeding, bamboo plantation and hydroseeding. However, due to unprecedented rainfall and landslide, the damage took place at this location. Detailed report (submitted to insurance company for claim) attached herewith may also be referred in this regard. Further, retaining structures and slope protection measures have been completed and are being maintained by the Contractor.
Before flash floods	



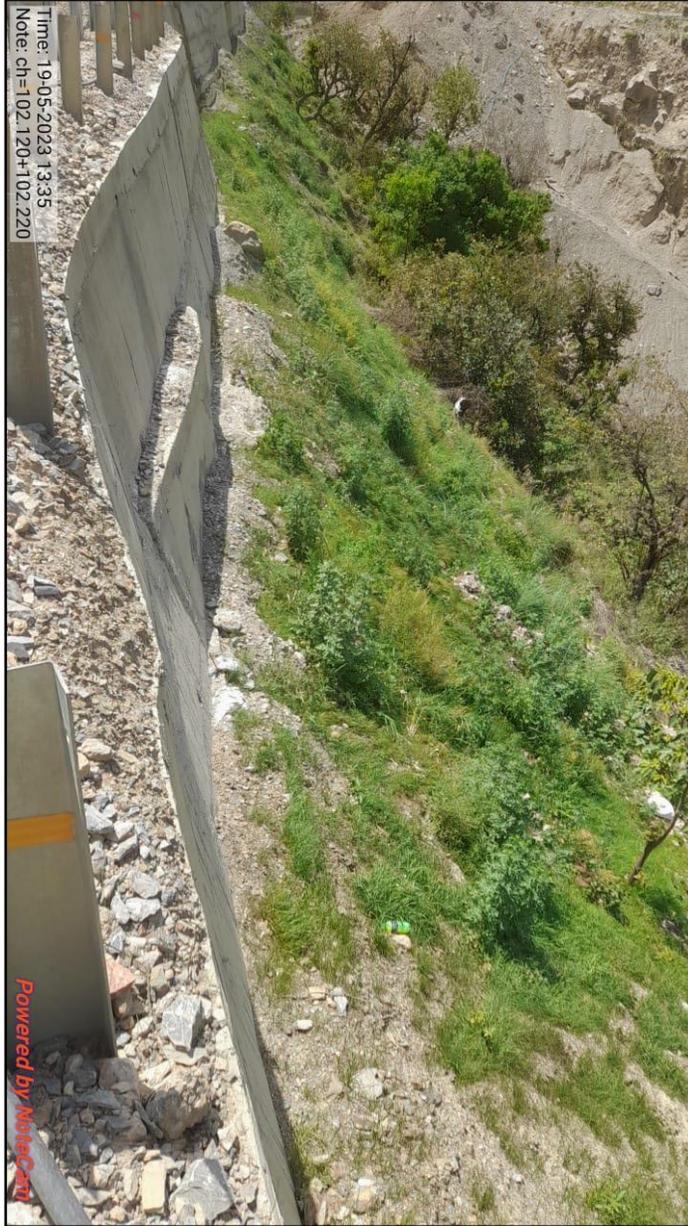


After flash flood

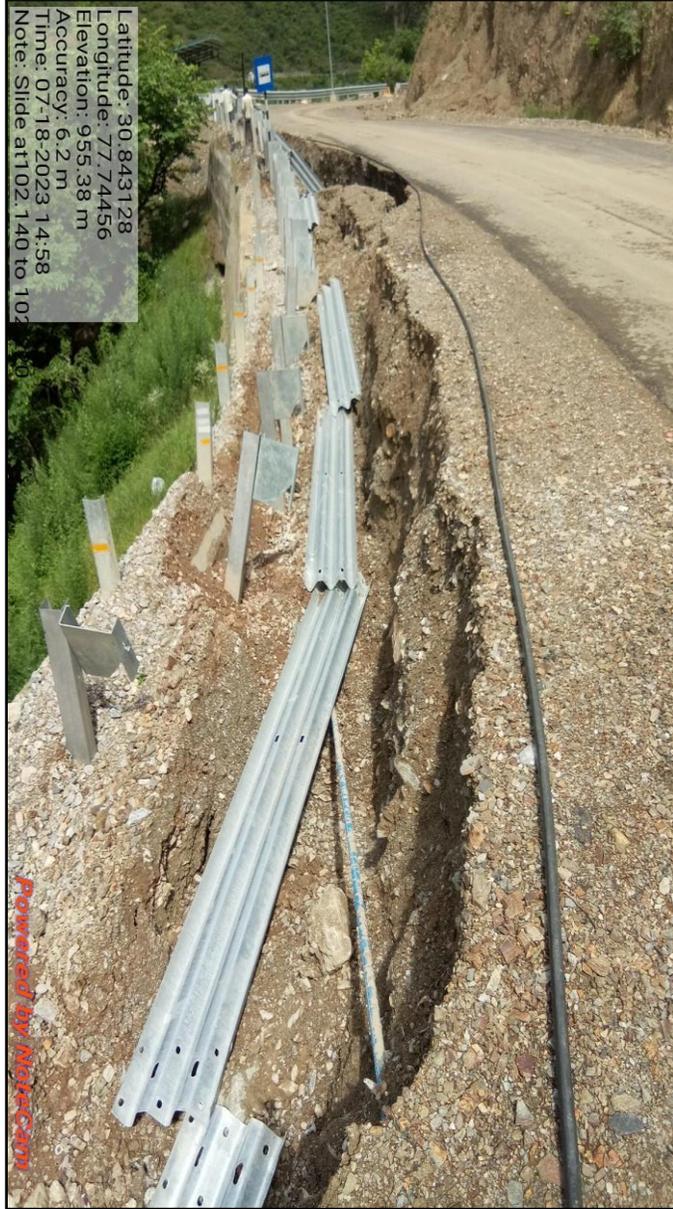


3262

Sr. No.	3
Location No.	RD102/200
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. Valley Side slope was already stabilized using Geo-cell with hydroseeding and bamboo plantation. However, debris crossed the highway during extreme adverse weather condition of rainfall in 2023. Detailed report (submitted to insurance company for claim) attached herewith may also be referred in this regard. Further, retaining structures and slope protection measures have been completed and are being maintained by the Contractor.
Before sliding	



After flash floods



3265



After Restoration



3266



Sr. No.	4
Location No.	RD101/700
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. Valley Side slope was stabilized using hydroseeding, breast wall and retaining wall. However, debris from catchment outside RoW crossed the highway during extreme rainfall of 2023. Detailed report (submitted to insurance company for claim) attached herewith may also be referred in this regard. Further, retaining structures and slope protection measures have been completed and are being maintained by the Contractor.
Before slide	





Sr. No.	5
Location No.	RD101/160
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. This area was severely affected by cloud bursts. The landslide occurred from beyond the ROW and the road was washed away to the valley. The hillside breast wall and culverts were also damaged. The road was closed for 15 days and the Same was intimated to the local police station and Sub-divisional Officers (SDO) of Chopal and Shillai. The gabion at the toe and hydroseeding on the valley slope were constructed to control erosion. The hillside breast wall was also reconstructed to control further landslides. The road was repaired/ rehabilitated for safe movement of passengers. Further, retaining structures and slope protection measures have been completed and are being maintained by the Contractor.

Before damage



Damage





3271

After restoration



Time: 19-01-2024 17:19
Note: 101.130 to 101.160

Powered by NoteCam

3272



WORK-wise detail of road damaged due to Rainfall/Snowfall															
Sr. No.	Name of Circle/Division	Name of Road	Blocked on	Opened on	Likely date of open	Type of damage	Machinery deployed						Amount required for restoration	Remarks	
							JCB	Grader	Loader	Excavator	Roller	Tipppers			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
M/o RT&H, PIU-Paonta Sahib															
1	M/o RT&H	Paonta Sahib-Hewna section (0.000 to 25.0000) of NH-707 (PKG-I)	09.07.2023 at 10:50 PM	closed	Nil	Road collapsed at Km 15+250 to 15+600	Nil	Nil	Nil	1	Nil	2	Nil	Road closed	
			14.07.2023 at 11:30 AM	closed	Nil	landslide at Km 20+100	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed
			26.09.2022 at 04:00 AM	01.10.2022 at 06:00 AM (Temporary Diversion)	Nil	Road collapsed due to sinking at km 15+300 to km 15+580	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2	M/o RT&H	Hewna-Ashyari section (25.000 to 50.000) of NH-707 (PKG-II)	09.07.2023 at 09:00 PM	closed	Nil	landslide at Km 26+200 to Km 26+800	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed	
			30.07.2021 at 08:00 AM	21.08.2021 at 03:00 AM (Temporary Diversion)	Nil	Road collapsed due to heavy landslide at km 27+300	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open for light vehicles and emergency services only
3	M/o RT&H	Ashyari-Shri Kyari section (50.000 to 75.000) of NH-707 (PKG-III)	15.07.2023 at 11:00 AM	closed	Nil	landslide at Km 69+100	Nil	Nil	Nil	1	Nil	2	Nil	Road closed	
			16.07.2023 at 03:00 AM	16.07.2023 at 11:15 AM	Nil	landslide at Km 51+000	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
			16.07.2023 at 09:00 AM	closed	Nil	landslide at Km 57+350	Nil	Nil	Nil	1	Nil	2	Nil	Nil	Road closed
			11.07.2023 at 04:00 PM	closed	Nil	Road collapsed at Km 74+700	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed
4	M/o RT&H	Shri Kyari-Gumma section (75.000 to 94.900) of NH-707 (PKG-IV)	16.07.2023 at 08:00 AM	16.07.2023 at 11:30 AM	Nil	landslide at Km 84+700	Nil	Nil	Nil	1	Nil	2	Nil	Road open	
5	M/o RT&H	Gumma-Fedidiz section (94.900 to 103.550) of NH-707 (PKG-V)	12.07.2023	closed	Nil	Road collapsed at Km 101+160 to 101+450	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed	
Dated: 16.07.2023															
Copy to the Deputy Commissioner District Sirmour at Nahar for information please.															

WORK-wise detail of road damaged due to Rainfall/Snowfall														
Sr. No.	Name of Circle/Division	Name of Road	Blocked on	Opened on	Likely date of open	Type of damage	Machinery deployed						Amount required for restoration	Remarks
							JCB	Grader	Loader	Excavator	Roller	Tipppers		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
M/o RT&H, PIU-Paonta Sahib														
1	M/o RT&H	Paonta Sahib-Hewna section (0.000 to 25.0000) of NH-707 (PKG-I)	29.07.2023 at 02:30 AM	29.07.2023 at 05:00 AM	Nil	Landslide at km 22+100	1	Nil	Nil	1	Nil	Nil	Nil	Road open
			26.09.2022 at 04:00 AM	01.10.2022 at 06:00 AM (Temporary Diversion)	Nil	Road collapsed due to sinking at km 15+300 to km 15+580	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2	M/o RT&H	Hewna-Ashyari section (25.000 to 50.000) of NH-707 (PKG-II)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
			30.07.2021 at 08:00 AM	21.08.2021 at 03:00 AM (Temporary Diversion)	Nil	Road collapsed due to heavy landslide at km 27+300	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3	M/o RT&H	Ashyari-Shri Kyari section (50.000 to 75.000) of NH-707 (PKG-III)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
4	M/o RT&H	Shri Kyari-Gumma section (75.000 to 94.900) of NH-707 (PKG-IV)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
5	M/o RT&H	Gumma-Fedidiz section (94.900 to 103.550) of NH-707 (PKG-V)	12.07.2023	24.07.2023 at 04:10 PM	Nil	Road collapsed at Km 101+160 to 101+450	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open for light vehicles Only
Dated: 29.07.2023														
Copy to the Deputy Commissioner District Sirmour at Nahar for information please.														

Sr. No.	6
Location No.	RD101/000
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. However, due to the landslides, the muck slipped into the valley. Detailed report (submitted to insurance company for claim) attached herewith may also be referred in this regard. Further, retaining structures and slope protection measures have been completed and are being maintained by the Contractor.

3275

Sr. No.	7
Location No.	RD100/610
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. However, due to unprecedented rainfall damages occurred. Requisite breast wall have been reconstructed to protect the hill. The road was closed on 09.07.2023 and 12.07.2023 due to a slide at this location. The same information was communicated to the District Disaster Management Authority (DDMA).

Sliding



3	Ashyari-Shri Kyari section (50.000 to 75.000) of NH-707 (PKG-III)	09.07.2023 at 08:30 PM	10.07.2023 at 08:00 AM	NIL	landslide at Km 57+000	1	NIL	NIL	2	NIL	4	NIL	Road open
		09.07.2023 at 08:30 PM	10.07.2023 at 08:00 AM	NIL	landslide at Km 59+000	NIL	NIL	NIL	2	NIL	4	NIL	Road open
		10.07.2023 at 05:00 AM	10.07.2023 at 08:00 AM	NIL	landslide at Km 60+000	1	NIL	NIL	2		3	NIL	Road open
		09.07.2023 at 08:30 PM	10.07.2023 at 09:00 AM	NIL	landslide at Km 73+700	2	NIL	NIL	3	NIL	5	NIL	Road open
4	Shri Kyari-Gumma section (75.000 to 94.900) of NH-707 (PKG-IV)	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	Road open
5	Gumma-Feddiz section (94.900 to 103.550) of NH-707 (PKG-V)	09.07.2023 at 08:30 PM	10.07.2023 at 04:00 AM	NIL	landslide at Km 95+000	1	NIL	NIL	1	NIL	3	NIL	Road open
		09.07.2023 at 08:30 PM	10.07.2023 at 04:00 AM	NIL	landslide at Km 99+400	NIL	NIL	NIL	1	NIL	2	NIL	Road open
		09.07.2023 at 08:30 PM	10.07.2023 at 04:00 AM	NIL	landslide at Km 100+700	1	NIL	NIL	1	NIL	3	NIL	Road open
		09.07.2023 at 08:30 PM	10.07.2023 at 04:00 AM	NIL	landslide at Km 103+000	1	NIL	NIL	2	NIL	2	NIL	Road open
Dated: 10.07.2023													
Copy to the Deputy Commissioner District Sirmour at Nahan for information please													

WORK-wise detail of road damaged due to Rainfall/Snowfall

Sr. No.	Name of Circle/Division	Name of Road	Blocked on	Opened on	Likely date of open	Type of damage	Machinery deployed						Amount required for restoration	Remarks	
							JCB	Grader	Loader	Excavator	Roller	Tipppers			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
M/o RT&H, PIU-Paonta Sahib															
1		Paonta Sahib-Hewna section (0.000 to 25.000) of NH-707 (PKG-I)	09.07.2023 at 10:50 PM	closed	Nil	Road collapsed at Km 15+250 to 15+600	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed	
			26.09.2022 at 04:00 AM	01.10.2022 at 06:00 AM (Temporary Diversion)	Nil	Road collapsed due to sinking at km 15+300 to km 15+580	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open for light vehicles and emergency services only
2		Hewna-Ashyari section (25.000 to 50.000) of NH-707 (PKG-II)	09.07.2023 at 09:00 PM	closed	Nil	landslide at Km 26+200 to Km 26+800	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed	
			30.07.2021 at 08:00 AM	21.08.2021 at 03:00 AM (Temporary Diversion)	Nil	Road collapsed due to heavy landslide at km 27+300	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open for light vehicles and emergency services only
3		Ashyari-Shri Kyari section (50.000 to 75.000) of NH-707 (PKG-III)	11.07.2023 at 04:00 PM	closed	Nil	Road collapsed at Km 74+700	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed	
4		Shri Kyari-Gumma section (75.000 to 94.900) of NH-707 (PKG-IV)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open	
5	M/o RT&H	Gumma-Feddiz section (94.900 to 103.550) of NH-707 (PKG-V)	12.07.2023	closed	Nil	Road collapsed at Km 101+160 to 101+450	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed	
			12.07.2023		Nil	landslide at Km 99+800 to 99+860	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open only for light vehicles
			12.07.2023	closed	Nil	landslide at Km 94+900 to 95+100	Nil	Nil	Nil	1	Nil	1	Nil	Nil	Road closed
			12.07.2023	closed	Nil	landslide at Km 99+200 to 99+300	Nil	Nil	Nil	1	Nil	1	Nil	Nil	Road closed
			12.07.2023	closed	Nil	landslide at Km 100+010 to 100+150	Nil	Nil	Nil	1	Nil	1	Nil	Nil	Road closed
			12.07.2023	closed	Nil	landslide at Km 100+380 to 100+600	Nil	Nil	Nil	1	Nil	1	Nil	Nil	Road closed
			12.07.2024	closed	Nil	landslide at Km 101+600 to 102+100	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Completed section at Km 100+610



Sr. No.	8
Location No.	RD100/170
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. However, due to unprecedented rainfall and flash floods, rock fall occurred and debris slid into the valley. A retaining wall has been provided to prevent further erosion. The road was closed and many vehicles were stuck for nearly 24 hours. The same information was communicated to the District Disaster Management Authority (DDMA).

After restoration



Sr. No.	9
Location No.	RD99/390
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. However, due to unprecedented rainfall and flash floods debris went sliding into the valley. The retaining wall has been reconstructed to prevent further erosion on the valley side and Breast wall on hill side has also been restored. The road was closed on 09.07.2023 due to a slide at this location. The same information was communicated to the District Disaster Management Authority (DDMA).
Before sliding	



After Sliding



After rectification



3	Ashyari-Shri Kyari section (50.000 to 75.000) of NH-707 (PKG-II)	09.07.2023 at 08:30 PM	10.07.2023 at 08:00 AM	Nil	landslide at Km 57+000	1	Nil	Nil	2	Nil	4	Nil	Road open
		09.07.2023 at 08:30 PM	10.07.2023 at 08:00 AM	Nil	landslide at Km 59+000	Nil	Nil	Nil	2	Nil	4	Nil	Road open
		10.07.2023 at 05:00 AM	10.07.2023 at 08:00 AM	Nil	landslide at Km 60+000	1	Nil	Nil	2		3	Nil	Road open
		09.07.2023 at 08:30 PM	10.07.2023 at 09:00 AM	Nil	landslide at Km 73+700	2	Nil	Nil	3	Nil	5	Nil	Road open
4	Shri Kyari-Gumma section (75.000 to 94.900) of NH-707 (PKG-IV)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
5	Gumma-Fedditz section (94.900 to 103.550) of NH-707 (PKG-V)	09.07.2023 at 08:30 PM	10.07.2023 at 04:00 AM	Nil	landslide at Km 95+000	1	Nil	Nil	1	Nil	3	Nil	Road open
		09.07.2023 at 08:30 PM	10.07.2023 at 04:00 AM	Nil	landslide at Km 99+400	Nil	Nil	Nil	1	Nil	2	Nil	Road open
		09.07.2023 at 08:30 PM	10.07.2023 at 04:00 AM	Nil	landslide at Km 100+700	1	Nil	Nil	1	Nil	3	Nil	Road open
		09.07.2023 at 08:30 PM	10.07.2023 at 04:00 AM	Nil	landslide at Km 103+000	1	Nil	Nil	2	Nil	2	Nil	Road open
Dated: 10.07.2023													
Copy to the Deputy Commissioner District Sirmour at Nahar for information please													

Sr. No.	10
Location No.	RD99/050-99/25 dumping zone-II
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This is a designated dumping zone. The dumping zone has been protected with gabion wall at the toe. Soil compaction benching, geocell with hydroseeding and bamboo plantation have been provided to control the erosion. A breast wall has also been constructed to support the hillside.





Sr. No.	11
Location No.	RD99/150
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	(Location is already included in Sr. No. 10) This is a designated dumping zone. The dumping zone has been protected with gabion wall at the toe. Soil compaction benching, geocell with hydroseeding and bamboo plantation have been provided to control the erosion. A breast wall has also been constructed to support the hillside.



Sr. No.	12
Location No.	RD98/930
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. Hillside slide and valley-side soil erosion have happened during extreme adverse weather condition of

rainfall in 2023. Bamboo plantation has been done to control the erosion. Detailed report (submitted to insurance company for claim) attached herewith may also be referred in this regard. Further, retaining structures and slope protection measures have been completed and are being maintained by the Contractor.



भारत सरकार
पृथ्वी विज्ञान मंत्रालय
मौसम केंद्र, शिमला



Government of India
Ministry of Earth Sciences,
Meteorological Centre, Shimla

Monthly Rainfall (मासिक वर्षा)

01 July - 18 July 2023

District (जिला)	Actual Rainfall (mm) (मासिक वर्षा)	Normal Rainfall(mm) (साधारण वर्षा)	Percentage (%) Departure from the normal
BILASPUR	402.3	149.4	169
CHAMBA	339.2	163	108
HAMIRPUR	366.5	170.7	115
KANGRA	442.1	309.7	43
KINNAUR	154	35.8	330
KULLU	351.9	98.4	258
LAHAUL & SPITI	148.4	70.1	112
MANDI	407.1	203.7	100
SHIMLA	388.8	114.3	240
SIRMAUR	836.3	245.5	241
SOLAN	563.1	173.1	225
UNA	360.3	179.3	101
SUBDIVISION RAINFALL	327.2	137.3	138

Sr. No.	13
Location No.	RD98/540 near village Antravali
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. During heavy rainfall debris from catchment beyond RoW was transported and accumulated in the valley. The retaining wall of the state highway towards Paban village was damaged and debris flowed with water to the valley. Detailed report (submitted to the insurance company for claim) attached herewith may also be referred in this regard.

भारत सरकार
पृथ्वी विज्ञान मंत्रालय
मौसम केंद्र, शिमला



Government of India
Ministry of Earth Sciences,
Meteorological Centre, Shimla

Monthly Rainfall (मासिक वर्षा)

01 July - 18 July 2023

District (जिला)	Actual Rainfall (mm) (मासिक वर्षा)	Normal Rainfall(mm) (साधारण वर्षा)	Percentage (%) Departure from the normal
BILASPUR	402.3	149.4	169
CHAMBA	339.2	163	108
HAMIRPUR	366.5	170.7	115
KANGRA	442.1	309.7	43
KINNAUR	154	35.8	330
KULLU	351.9	98.4	258
LAHAUL & SPITI	148.4	70.1	112
MANDI	407.1	203.7	100
SHIMLA	388.8	114.3	240
SIRMAUR	836.3	245.5	241
SOLAN	563.1	173.1	225
UNA	360.3	179.3	101
SUBDIVISION RAINFALL	327.2	137.3	138

Sr. No.	14
Location No.	RD97/800
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. The material lying near the carriageway belongs to local people who have dumped the excavation material from construction of the access road. The same was clarified during the visit.



Sr. No.	15
Location No.	RD97/710
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. The damage is due to extremely adverse weather conditions of rainfall. Detailed report (submitted to the insurance company for claim) attached herewith may also be referred in this regard. Further, retaining structures and slope protection measures have been completed and are being maintained by the Contractor.

भारत सरकार
पृथ्वी विज्ञान मंत्रालय
मौसम केंद्र, शिमला



Government of India
Ministry of Earth Sciences,
Meteorological Centre, Shimla

Monthly Rainfall (मासिक वर्षा)

01 July - 18 July 2023

District (जिला)	Actual Rainfall (mm) (वास्तविक वर्षा)	Normal Rainfall(mm) (साधारण वर्षा)	Percentage (%) Departure from the normal
BILASPUR	402.3	149.4	169
CHAMBA	339.2	163	108
HAMIRPUR	366.5	170.7	115
KANGRA	442.1	309.7	43
KINNAUR	154	35.8	330
KULLU	351.9	98.4	258
LAHAUL & SPITI	148.4	70.1	112
MANDI	407.1	203.7	100
SHIMLA	388.8	114.3	240
SIRMAUR	836.3	245.5	241
SOLAN	563.1	173.1	225
UNA	360.3	179.3	101
SUBDIVISION RAINFALL	327.2	137.3	138

Sr. No.	16
Location No.	RD97/610
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. The damage is due to extremely adverse weather condition of rainfall. Detailed report (submitted to insurance company for claim) attached herewith may also be referred in this regard. Further, retaining structures on valley side and slope protection measures have been completed and are being maintained by the Contractor.
After restoration	



Sr.no.	17
Location No.	RD 96/350-96/250 dumping Zone-I, Boie
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	It is a designated dumping zone. Gabion wall has been constructed to support the dumping zone at toe of the valley. The site has been further stabilized by benching/ compacting and subsequent stabilization by slope protection measures of hydroseeding, Geocell with hydroseeding and bamboo plantation to

prevent the soil erosion from the dumping site.







Time: 19-01-2024 13:23
Note: 96.427 to 96.461

Powered by NoteCam



Time: 19-01-2024 13:25
Note: 96.310 to 96.372

Powered by NoteCam



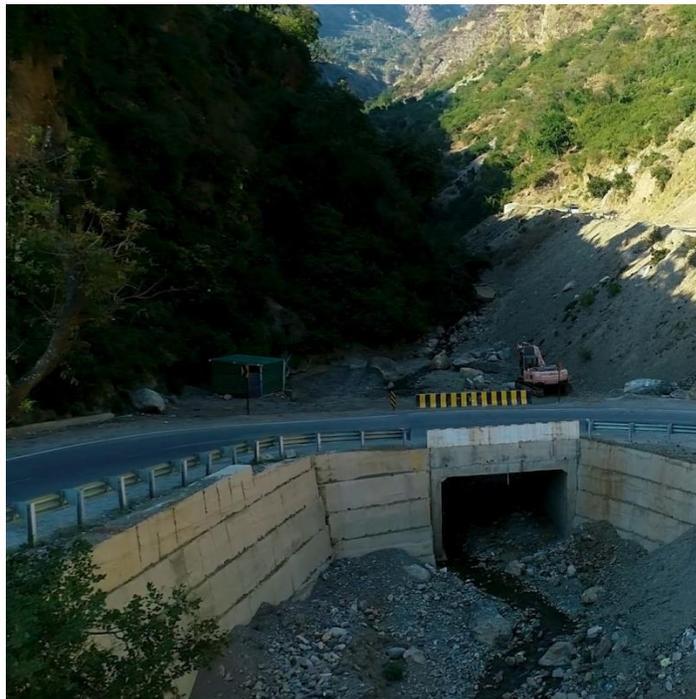
Sr. No.	18
Location No.	RD 96/980 Near Village Gumma
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. The damage is due to extremely adverse weather conditions of rainfall. Detailed report (submitted to the insurance company for claim) attached herewith may also be referred in this regard.

District (जिला)	Actual Rainfall (mm) (मासिक वर्षा)	Normal Rainfall(mm) (साधारण वर्षा)	Percentage (%) Departure from the normal
BILASPUR	402.3	149.4	169
CHAMBA	339.2	163	108
HAMIRPUR	366.5	170.7	115
KANGRA	442.1	309.7	43
KINNAUR	154	35.8	330
KULLU	351.9	98.4	258
LAHAUL & SPITI	148.4	70.1	112
MANDI	407.1	203.7	100
SHIMLA	388.8	114.3	240
SIRMAUR	836.3	245.5	241
SOLAN	563.1	173.1	225
UNA	360.3	179.3	101
SUBDIVISION RAINFALL	327.2	137.3	138

Sr. No.	19
Location No.	RD95/180
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. The rock fall happened during the rainy season from beyond ROW. The rock debris hit the crash barrier and debris fell in the valley side. Further, geocell with hydroseeding was done in this location to prevent erosion. During the subsequent rainfall, the slope protection measures were also damaged. The stream banks have been cleared for the free flow of water and necessary repair/ restoration works are being ensured by the Contractor.



After rectification





Sr. No.	20
Location No.	RD94/100
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. The debris from catchment beyond RoW has flown on valley side during rainfall of 2023 and is being cleared by the Contractor. Further, retaining structures and slope protection measures have been completed and are being maintained by the Contractor.



भारत सरकार
पृथ्वी विज्ञान मंत्रालय
मौसम केंद्र, शिमला



Government of India
Ministry of Earth Sciences,
Meteorological Centre, Shimla

Monthly Rainfall (मासिक वर्षा)

01 July - 18 July 2023

District (जिला)	Actual Rainfall (mm) (वास्तविक वर्षा)	Normal Rainfall(mm) (साधारण वर्षा)	Percentage (%) Departure from the normal
BILASPUR	402.3	149.4	169
CHAMBA	339.2	163	108
HAMIRPUR	366.5	170.7	115
KANGRA	442.1	309.7	43
KINNAUR	154	35.8	330
KULLU	351.9	98.4	258
LAHAUL & SPITI	148.4	70.1	112
MANDI	407.1	203.7	100
SHIMLA	388.8	114.3	240
SIRMAUR	836.3	245.5	241
SOLAN	563.1	173.1	225
UNA	360.3	179.3	101
SUBDIVISION RAINFALL	327.2	137.3	138

Sr. No.	21
Location No.	RD94/050
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. The debris from catchment beyond RoW has flown on valley side during rainfall of 2023 and is being cleared by the Contractor. Further, retaining structures and slope protection measures have been completed and are being maintained by the Contractor.



भारत सरकार
पृथ्वी विज्ञान मंत्रालय
मौसम केंद्र, शिमला



Government of India
Ministry of Earth Sciences,
Meteorological Centre, Shimla

Monthly Rainfall (मासिक वर्षा)

01 July - 18 July 2023

District (जिला)	Actual Rainfall (mm) (मासिक वर्षा)	Normal Rainfall(mm) (सामान्य वर्षा)	Percentage (%) Departure from the normal
BILASPUR	402.3	149.4	169
CHAMBA	339.2	163	108
HAMIRPUR	366.5	170.7	115
KANGRA	442.1	309.7	43
KINNAUR	154	35.8	330
KULLU	351.9	98.4	258
LAHAUL & SPITI	148.4	70.1	112
MANDI	407.1	203.7	100
SHIMLA	388.8	114.3	240
SIRMAUR	836.3	245.5	241
SOLAN	563.1	173.1	225
UNA	360.3	179.3	101
SUBDIVISION RAINFALL	327.2	137.3	138

Sr. No.	22
Location No.	RD94/480
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.

3301

Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. The location pertains to built up area with structures on both side of the carriageway.
---------	--



Sr.No.	23
Location No.	RD93/960
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. Further, retaining structures and slope protection measures have been completed and are being maintained by the Contractor. The debris is pertaining to the access road that has been excavated by local people at this location.



Sr. No.	24
---------	----

3302

Location No.	RD90/800
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	The dumping is being done with the consent/permission/agreement of the concerned Department. The site has been stabilized by benching/ compacting and subsequent stabilization by slope protection measures of hydroseeding, grass strip and plantation to prevent the soil erosion from the dumping site.





Sr. No.	25
Location No.	RD88/600
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. The road was closed on 06.02.2023 due to a slide at this location. The same information was communicated to the District Disaster Management Authority (DDMA).

WORK--Wise detail of road damaged due to Rain fall/ Snowfall														
Sr.No.	Name of Circle / Division	Name of Road	Blocked on	Opened on	Likely date of opens	Type of damage	Machinery deployed						Amount required for restoration in lacs	Remarks
							JCB	Grader	Loader	Excavator	Roller	Tipper		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MoRTH PIU Office, Paonta Sahib														
1		Paonta Sahib-Hewna Section (Km 0.000 to km.25.000) of NH- 707 pkg-I	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
			26.09.2022 at 4:00 AM	01.10.2022 at 6:00 AM (Temporary Diversion)	Nil	Road collapsed due to sinking at Km 15+300 to15+580	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open for Light vehicles and Emergency Services only
2		Hewna - Ashiyari section (Km.25.000 to km.50.000) of NH- 707 PKG-II	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
			30.07.2021 at 8.00 am	21.08.2021 at 3:00 (Temporary Diversion)	Nil	Road collapsed due to heavy Landslide at Km.27+300	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open for Light vehicles and Emergency Services only
3		Ashiyari - Shri Kyari section (Km.50.000 to km.75.000) of NH- 707 KG-III	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
4		Shri Kyari - Gumma section (Km 75.000 to Km 94.900) of NH- 707 PKG-IV	06.02.2023 at 02:00 PM	Road closed	Nil	landslide at km 88+200	Nil	Nil	Nil	2	Nil	2	Nil	Road closed
5		Gumma - Fediz section (Km.94.900 to Km 103.550) of NH- 707 PKG-V	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
Dated: 07.02.2023														
Copy to the Deputy Commissioner District Sirmour at Nahar for information please.														

Sr. No.	26
Location No.	RD86/800
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. Continuous slide resulting in subsequent road closure, the debris from the hillside slid down the slope on the valley side.

District (जिला)	Actual Rainfall (mm) (मासिक वर्षा)	Normal Rainfall(mm) (साधारण वर्षा)	Percentage (%) Departure from the normal
BILASPUR	402.3	149.4	169
CHAMBA	339.2	163	108
HAMIRPUR	366.5	170.7	115
KANGRA	442.1	309.7	43
KINNAUR	154	35.8	330
KULLU	351.9	98.4	258
LAHAUL & SPITI	148.4	70.1	112
MANDI	407.1	203.7	100
SHIMLA	388.8	114.3	240
SIRMAUR	836.3	245.5	241
SOLAN	563.1	173.1	225
UNA	360.3	179.3	101
SUBDIVISION RAINFALL	327.2	137.3	138

Sr. No.	27
Location No.	Minus (3 sites)
Issues	Unauthorized and illegal dumping of debris on forest and private land without any protection measures.
Comment	This location is not a dumping zone and no dumping has been done by the Contractor at this location. Continuous slide resulting in subsequent road closure, the debris from the hillside slide down the slope on the valley side. However, no dumping on the valley side has been done by the Contractor. The road was closed on 24.08.2022, 03.10.2022, 29.01.2023 and 12.07.2023 due to a slide at this location. The same information was communicated to the District Disaster Management Authority (DDMA).

WORK-wise detail of road damaged due to Rainfall/Snowfall															
Sr. No.	Name of Circle/Division	Name of Road	Blocked on	Opened on	Likely date of open	Type of damage	Machinery deployed						Amount required for restoration	Remarks	
							JCB	Grader	Loader	Excavator	Roller	Tipper			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
M/o RT&H, PIU-Paonta Sahib															
1		Paonta Sahib-Hewna section (0.000 to 25.0000) of NH-707 (PKG-I)	09.07.2023 at 10:50 PM	closed	Nil	Road collapsed at Km 15+250 o 15+600	Nil	Nil	Nil	1	Nil	2	Nil	Road closed	
			14.07.2023 at 11:30 AM	closed	Nil	landslide at Km 20+100	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed
			26.09.2022 at 04:00 AM	01.10.2022 at 06:00 AM (Temporary Diversion)	Nil	Road collapsed due to sinking at km 15+300 to km 15+580	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2		Hewna-Ashyari section (25.000 to 50.000) of NH-707 (PKG-II)	09.07.2023 at 09:00 PM	closed	Nil	landslide at Km 26+200 to Km 26+800	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed	
			30.07.2021 at 08:00 AM	21.08.2021 at 03:00 AM (Temporary Diversion)	Nil	Road collapsed due to heavy landslide at km 27+300	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open for light vehicles and emergency services only
3	M/o RT&H	Ashyari-Shri Kyari section (50.000 to 75.000) of NH-707 (PKG-III)	15.07.2023 at 11:00 AM	closed	Nil	landslide at Km 69+100	Nil	Nil	Nil	1	Nil	2	Nil	Road closed	
			16.07.2023 at 03:00 AM	16.07.2023 at 11:15 AM	Nil	landslide at Km 51+000	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
			16.07.2023 at 09:00 AM	closed	Nil	landslide at Km 57+350	Nil	Nil	Nil	1	Nil	2	Nil	Nil	Road closed
4		Shri Kyari-Gumma section (75.000 to 94.900) of NH-707 (PKG-IV)	11.07.2023 at 04:00 PM	closed	Nil	Road collapsed at Km 74+700	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed	
			16.07.2023 at 08:00 AM	16.07.2023 at 11:30 AM	Nil	landslide at Km 84+700	Nil	Nil	Nil	1	Nil	2	Nil	Nil	Road open
5		Gumma-Feddiz section (94.900 to 103.550) of NH-707 (PKG-V)	12.07.2023	closed	Nil	Road collapsed at Km 101+160 to 101+450	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road closed	

Dated: 16.07.2023
Copy to the Deputy Commissioner District Sirmour at Nahan for information please.

WORK -Wise detail of road damaged due to Rain fall/ Snowfall														
Sr.No.	Name of Circle / Division	Name of Road	Blocked on	Opened on	Likely date of open	Type of damage	Machinery deployed						Amount required for restoration in lacs	Remarks
							JCB	Grader	Loader	Excavator	Roller	Tipper		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MoRTH PIU Office, Paonta Sahib														
1		Paonta Sahib-Hewna Section (km 0.000 to km 25.000) of NH-707 pkg-I	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
			26.09.2022 at 4:00 am	01.10.2022 at 6:00AM (Temporary Diversion)	Nil	Road collapsed due to sinking at Km 15+300 to 15+580	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2		Hewna - Ashyari section (km 25.000 to km 50.000) of NH- 707 PKG-II	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
			30.07.2021 at 8.00 am	21.08.2021 at 3:00 (Temporary Diversion)	Nil	Road collapsed due to heavy Landslide at Km 27+300	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3		Ashyari - Shri Kyari section (km 50.000 to km 75.000) of NH- 707 KG-III	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
4		Shri Kyari - Gumma section (Km 75.000 to Km 94.900) of NH- 707 PKG-IV	03.10.2022 at 04.00 am	03.10.2022 at 08.00 am	Nil	Landslide at km 85+480	Nil	Nil	Nil	2	Nil	Nil	Nil	Road open
5		Gumma - Fedz section (Km 94.900 to Km 103.550) of NH- 707 PKG-V	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Dated: 03.10.2022
Copy to the Deputy Commissioner District Sirmour at Nahan for information please.

WORK - Wise detail of road damaged due to Rain fall/ Snowfall														
Sr No.	Name of Circle / Division	Name of Road	Blocked on	Opened on	Likely date of open	Type of damage	Machinery deployed						Amount required for restoration in laes	Remarks
							JCB	Grader	Loader	Excavator	Roller	Tipppers		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MoRTH PIU Office, Paonta Sahib														
1	MoRTH	Paonta Sahib-Hewna section (km 0.000 to km 25.000) of NH- 707 pkg-I	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
			26.09.2022 at 4:00 AM	01.10.2022 at 6:00 AM (Temporary Diversion)	Nil	Road collapsed due to sinking at Km 15+300 to 15+580	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2		Hewna - Ashyari section (km 25.000 to km 50.000) of NH- 707 PKG-II	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open
			30.07.2021 at 8:00 am	21.08.2021 at 3:00 (Temporary Diversion)	Nil	Road collapsed due to heavy Landslide at Km 27+300	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3		Ashyari - Shri Kyari section (km 75.000) of NH- 707 KG-III	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
4	Shri Kyari - Gumma section (Km 75.000 to Km 94.900) of NH- 707 PKG-IV	27.01.2023 at 01:30 PM	27.01.2023 at 06:45 PM	Nil	landslide at 85+500 km	1	Nil	Nil	2	Nil	2	Nil	Nil	Road open
		27.01.2023 at 08:00 PM	28.01.2023 at 12:30 PM	Nil	landslide at 85+500 km	1	Nil	Nil	2	Nil	2	Nil	Nil	Road open
5	Gumma - Fediz section (Km 94.900 to Km 103.550) of NH- 707 PKG-V	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open

Dated: 28.01.2023
Copy to the Deputy Commissioner District Sirmour at Nahar for information please.

WORK - Wise detail of road damaged due to Rain fall/ Snowfall															
Sr No.	Name of Circle / Division	Name of Road	Blocked on	Opened on	Likely date of open	Type of damage	Machinery deployed						Amount required for restoration in laes	Remarks	
							JCB	Grader	Loader	Excavator	Roller	Tipppers			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
MoRTH PIU Office, Paonta Sahib															
1	MoRTH	Paonta Sahib-Hewna Section (km.0.000 to km.25.000) of NH- 707 pkg-I	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	
2		Hewna - Ashyari section (km.25.000 to km.50.000) of NH- 707 PKG-II	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	
			30.07.2021 at 8:00 am	21.08.2021 at 3:00 (Temporary Diversion)	Nil	Road collapsed due to heavy Landslide at Km 27+300	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Road open for Light vehicles and Emergency Services only
3		Ashyari - Shri Kyari section (km.50.000 to km.75.000) of NH- 707 KG-III	24.08.2022 at 07:00 pm	24.08.2022 at 07:45pm	Nil	landslide at 56+100 km	1	Nil	Nil	1	Nil	1	Nil	Nil	Road open
4		Shri Kyari - Gumma section (Km 75.000 to Km 94.900) of NH- 707 PKG-IV	24.08.2022 at 07:00 pm	24.08.2022 at 07:00 pm	Nil	landslide at 85+680 km	1	Nil	Nil	1	Nil	Nil	Nil	Nil	Road open
	25.08.2022 at 02:00 am		25.08.2022 at 02:30 am	Nil	Nil	1	Nil	Nil	1	Nil	Nil	Nil	Nil	Road open	
5	Gumma - Fediz section (Km 94.900 to Km 103.550) of NH- 707 PKG-V	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	

Dated: 25.08.2022
Copy to the Deputy Commissioner District Sirmour at Nahar for information please.

Additional details

- As per the approved DPR, there were 8 no. of sliding zones in package-V (Gumma-Fediz) where protection measures were proposed. Please provide details of each sliding zone in section V and the current status of remedial measures/protection measures taken and estimated funds allocated for this work?

The project has been executed under EPC mode wherein it is the responsibility of the Contractor to conduct a detailed Geological/ Geotechnical investigation and accordingly, suggest measures for stabilization. The payment is on lump-sum basis for the provisions specified in the signed EPC Contract Agreement. Further, provisions such as Gabion wall, retaining wall, breast wall, hydroseeding, geocell with hydroseeding, hedge brush layer, bamboo plantation etc. have already been envisaged in the scope.

Chainage-wise details of retaining structures and slope protection works executed at the site are as follows:

S.N.	TYPE OF MEASURE	DESIGN CH. AS PER CA				VARIATION IN LOCATION OF BIO ENGINEERING WORKS										REMARKS			
		FROM	TO	LENGTH	AREA	SIDE	FROM	TO	LENGTH	HEIGHT	AREA	SIDE	FROM	TO	LENGTH		HEIGHT	AREA	SIDE
1	Hedge Brush Layer	97+750	97+950	200		HILL	95520	95550	30			HILL SIDE	95735	95765	30			HILL SIDE	
2	Hedge Brush Layer	98+160	98+350	190		HILL	96480	96510	30			HILL SIDE	96688	96718	30			HILL SIDE	
3	Hedge Brush Layer	98+450	98+500	50		HILL	100035	100075	40			HILL SIDE	100227	100267	40			HILL SIDE	
4	Hedge Brush Layer	99+200	99+400	200		HILL	100110	100310	200			HILL SIDE	100302	100502	200			HILL SIDE	
5	Hedge Brush Layer					HILL	102270	102335	65			HILL SIDE	102467	102532	65			HILL SIDE	
6	Hedge Brush Layer					HILL	98780	98820	40			VALLEY SIDE	98975	99015	40			HILL SIDE	
7	Hedge Brush Layer					HILL	100075	100090	15			VALLEY SIDE	100267	100282	15			VALLEY SIDE	
8	Hedge Brush Layer					HILL	102610	102690	80			VALLEY SIDE	102807	102857	50			VALLEY SIDE	
						HILL	99220	99390	170			HILL SIDE	99500	99670	170			HILL SIDE	
	TOTAL LENGTH (HILL SIDE)																		
	TOTAL LENGTH (VALLEY SIDE)																		
	TOTAL LENGTH																		
1	Bamboo plantation	96+960	97+750	790	7900	HILL	96+110	96+372	262	28	7228	VALLEY	96+318	96+580	262	28	7228	VALLEY	
2	Bamboo plantation	97+550	98+050	100	1500	HILL	96+950	96+975	25	25	625	VALLEY	97+158	97+183	25	25	625	VALLEY	
3	Bamboo plantation	99+400	99+500	100	1500	HILL	98+430	98+460	30	18	530	VALLEY	98+625	98+656	30	18	530	VALLEY	
4	Bamboo plantation	99+700	99+950	250	3750	HILL	98+570	98+600	30	12	360	VALLEY	98+756	98+786	30	12	360	VALLEY	
5	Bamboo plantation	101+740	102+190	450	4500	HILL	98+510	98+700	190	23	2049	VALLEY	98+806	98+896	90	23	2049	VALLEY	
6	Bamboo plantation	102+850	103+050	200	7900	HILL	98+710	98+740	30	20	800	VALLEY	98+906	98+936	30	20	800	VALLEY	
7	Bamboo plantation	DUMPING - 1			7145	VALLEY	98+790	98+830	40	20	800	VALLEY	99+152	99+360	208	20	800	VALLEY	
8	Bamboo plantation	DUMPING - 2			3833	VALLEY	99+006	99+182	176	33	5861	VALLEY	99+396	99+426	30	20	800	VALLEY	
9	Bamboo plantation						99+315	99+385	70	9	637	VALLEY	99+501	99+571	70	9	637	VALLEY	
10	Bamboo plantation						99+995	100+010	15	15	225	VALLEY	100+181	100+196	15	15	225	VALLEY	
11	Bamboo plantation						100+421	100+460	39	20	780	VALLEY	100+613	100+652	39	20	780	VALLEY	
12	Bamboo plantation						100+795	100+820	25	25	625	VALLEY	100+967	101+012	45	25	625	VALLEY	
13	Bamboo plantation						101+250	101+299	49	23	1135	VALLEY	101+435	101+484	49	23	1135	VALLEY	
14	Bamboo plantation						101+680	101+685	5	15	225	VALLEY	101+865	101+890	25	15	225	VALLEY	
15	Bamboo plantation						102+740	103+000	260	31	8034	VALLEY	102+937	103+197	260	31	8034	VALLEY	
16	Bamboo plantation						103+350	103+500	150	10	1500	VALLEY	103+549	103+699	150	10	1500	VALLEY	
17	Bamboo plantation						99+365	99+432	67	20	800	VALLEY	103+700	103+730	30	20	800	VALLEY	
18	Bamboo plantation						98+550	99+570	20	30	590	HILL	99+551	99+618	67	20	800	VALLEY	
19	Bamboo plantation						101+063	101+107	44	4	174	HILL	101+248	101+292	44	4	174	HILL	
20	Bamboo plantation						101+140	101+210	70	5	350	HILL	101+325	101+395	70	5	350	HILL	
21	Bamboo plantation						101+305	101+414	109	12	1357	HILL	101+490	101+599	109	12	1357	HILL	
22	Bamboo plantation						101+480	101+634	154	4	189	HILL	101+665	101+719	54	4	189	HILL	
23	Bamboo plantation						101+633	101+687	54	22	1170	HILL	101+818	101+872	54	22	1170	HILL	
24	Bamboo plantation						101+750	101+895	145	6	911	HILL	101+935	102+080	145	6	911	HILL	
25	Bamboo plantation						101+957	101+975	18	5	90	HILL	102+142	102+180	38	5	90	HILL	
26	Bamboo plantation						102+005	102+032	27	10	820	HILL	102+202	102+229	27	10	820	HILL	
27	Bamboo plantation						102+118	102+200	82	10	820	HILL	102+315	102+397	82	10	820	HILL	
28	Bamboo plantation						102+260	102+270	10	5	50	HILL	102+487	102+487	10	5	50	HILL	
29	Bamboo plantation						102+450	102+480	30	4	120	HILL	102+647	102+677	30	4	120	HILL	
30	Bamboo plantation						102+580	102+740	160	5	800	HILL	102+777	102+937	160	5	800	HILL	
31	Bamboo plantation																		
	TOTAL AREA (VALLEY SIDE)				SQM	27050					SQM	32114						SQM	32114
	TOTAL AREA (HILL SIDE)				SQM	10978					SQM	7042						SQM	7042
	TOTAL AREA				SQM	38028					SQM	39156						SQM	39156
1	Hydro seeding	95+570	95+720	150		HILL	99+115	99+117	2	15	92	HILL	99+301	99+303	2	15	92	HILL	
2	Hydro seeding	96+050	96+100	50		HILL	99+137	99+146	9	3	25	HILL	99+323	99+332	9	3	25	HILL	
3	Hydro seeding	96+600	96+700	100		HILL	100+140	100+280	140	3	420	HILL	100+332	100+472	140	3	420	HILL	
4	Hydro seeding	98+500	98+650	150		HILL	100+280	100+380	100	2	200	HILL	100+472	100+572	100	2	200	HILL	
5	Hydro seeding	99+200	99+400	200		HILL	101+123	101+149	26	4	100	HILL	101+308	101+334	26	4	100	HILL	
6	Hydro seeding	99+500	99+700	200		HILL	101+173	101+217	44	10	461	HILL	101+358	101+402	44	10	461	HILL	
7	Hydro seeding	100+970	101+170	200		HILL	101+413	101+469	56	8	861	HILL	101+598	101+654	56	8	861	HILL	
8	Hydro seeding	101+470	101+670	200		HILL	101+479	101+592	113	8	861	HILL	101+664	101+777	113	8	861	HILL	
9	Hydro seeding					VALLEY	101+636	101+690	54	22	1170	HILL	101+821	101+875	54	22	1170	HILL	
10	Hydro seeding					VALLEY	101+955	102+215	260	15	3900	HILL	102+140	102+480	340	15	3900	HILL	
11	Hydro seeding						100+421	100+460	39	20	780	VALLEY	100+613	100+652	39	20	780	VALLEY	
							101+070	101+120	50	3	150	HILL	101+070	101+120	50	3	150	HILL	
							101+130	101+173	43	14	589	VALLEY	101+130	101+173	43	14	589	VALLEY	
							101+217	101+240	23	10	237	HILL	101+217	101+240	23	10	237	HILL	
							95+580	95+600	20	4	80	HILL	95+580	95+600	20	4	80	HILL	
							96+580	96+640	60	2	90	HILL	96+580	96+640	60	2	90	HILL	

For Shifting of Evt. L.L.
 Authorised Signatory



VARIATION IN LOCATION OF RETAINING WALLS

S.N.	TYPE OF STRUCTURE	DESIGN CH. AS PER CA			DESIGN CH. AS PER CA - REVISED			CHAINAGE BEFORE RECONCILIATION			FINAL CHAINAGE AFTER RECONCILIATION			SIDE	REMARKS
		FROM	TO	LENGTH	FROM	TO	LENGTH	FROM	TO	LENGTH	FROM	TO	LENGTH		
1	PCC Retaining Wall	95+260	95+275	15	94+900	94+915	15	00+047	00+094	47	94+935	94+945	10	VALLEY SIDE	
2	PCC Retaining Wall	94+900	94+930	30	94+925	95+207	282	00+109	00+119	9	94+945	94+967	22	VALLEY SIDE	
3	PCC Retaining Wall	95+020	95+085	65	95+217	95+308	91	00+121	00+145	24	94+967	94+975	8	VALLEY SIDE	
4	PCC Retaining Wall	95+100	95+140	40	95+318	95+405	87	95+070	95+078	8	94+975	94+985	10	VALLEY SIDE	
5	PCC Retaining Wall	95+205	95+255	50	95+415	95+697	282	95+078	95+081	3	94+985	94+995	10	VALLEY SIDE	
6	PCC Retaining Wall	95+300	95+340	40	95+715	95+725	10	95+195	95+206	11	95+002	95+025	23	VALLEY SIDE	
7	PCC Retaining Wall	95+400	95+430	30	95+830	95+865	35	95+218	95+243	25	95+025	95+036	11	VALLEY SIDE	
8	PCC Retaining Wall	95+500	95+620	120	95+170	96+180	10	95+292	95+307	15	95+045	95+060	15	VALLEY SIDE	
9	PCC Retaining Wall	95+805	95+835	30	96+170	96+180	10	95+319	95+354	35	95+096	95+100	4	VALLEY SIDE	
10	PCC Retaining Wall	95+930	95+950	20	96+370	96+380	10	95+388	95+400	12	95+102	95+106	4	VALLEY SIDE	
11	PCC Retaining Wall	96+000	96+020	20	96+190	96+195	5	95+400	95+404	4	95+288	95+296	8	VALLEY SIDE	
12	PCC Retaining Wall	96+130	96+170	40	96+450	96+460	10	95+416	95+460	44	95+420	95+427	7	VALLEY SIDE	
13	PCC Retaining Wall	96+290	96+310	20	96+460	96+470	10	95+460	95+462	2	95+432	95+462	30	VALLEY SIDE	
14	PCC Retaining Wall	96+370	96+400	30	96+520	96+530	10	95+535	95+556	20	95+508	95+528	20	VALLEY SIDE	
15	PCC Retaining Wall	96+510	96+530	20	96+530	96+540	10	95+556	95+589	33	95+530	95+548	18	VALLEY SIDE	
16	PCC Retaining Wall	96+610	96+630	20	96+540	96+550	10	95+589	95+596	7	95+605	95+622	17	VALLEY SIDE	
17	PCC Retaining Wall	96+710	96+740	30	96+710	96+735	25	95+775	95+802	27	95+628	95+680	52	VALLEY SIDE	
18	PCC Retaining Wall	96+770	96+795	25	96+860	96+870	10	96+105	96+138	33	95+747	95+811	64	VALLEY SIDE	
19	PCC Retaining Wall	96+820	96+960	140	96+915	96+925	10	96+151	96+157	4	95+933	95+941	8	VALLEY SIDE	
20	PCC Retaining Wall	96+980	97+005	25	96+925	96+933	8	96+580	96+614	34	95+985	96+019	34	VALLEY SIDE	
21	PCC Retaining Wall	97+040	97+060	20	96+980	96+995	15	96+626	96+640	14	96+022	96+030	8	VALLEY SIDE	
22	PCC Retaining Wall	97+180	97+200	20	96+943	96+995	52	96+400	96+660	20	96+034	96+040	6	VALLEY SIDE	
23	PCC Retaining Wall	97+470	97+500	30	97+410	97+420	10	96+765	96+789	24	96+059	96+071	12	VALLEY SIDE	
24	PCC Retaining Wall	97+690	97+710	20	97+703	97+710	7	96+896	96+910	14	96+084	96+129	46	VALLEY SIDE	
25	PCC Retaining Wall	97+830	97+850	20	97+840	97+850	10	96+911	96+932	21	96+130	96+149	19	VALLEY SIDE	
26	PCC Retaining Wall	97+930	97+980	50	98+050	98+120	60	96+944	96+952	8	96+315	96+343	28	VALLEY SIDE	
27	PCC Retaining Wall	98+130	98+150	20	98+120	98+130	10	97+030	97+070	40	96+345	96+355	10	VALLEY SIDE	
28	PCC Retaining Wall	98+315	98+335	20	98+130	98+138	8	97+191	97+194	3	96+487	96+494	7	VALLEY SIDE	
29	PCC Retaining Wall	98+460	98+480	20	98+320	98+380	60	97+194	97+224	30	96+496	96+501	5	VALLEY SIDE	
30	PCC Retaining Wall	98+630	98+650	20	98+390	98+421	31	97+224	97+251	27	96+769	96+816	47	VALLEY SIDE	
31	PCC Retaining Wall	98+700	98+730	30	98+490	98+495	5	97+251	97+278	28	96+818	96+878	36	VALLEY SIDE	
32	PCC Retaining Wall	98+860	98+900	40	98+495	98+510	15	97+278	97+284	6	96+954	96+978	24	VALLEY SIDE	
33	PCC Retaining Wall	98+945	99+000	55	98+510	98+527	17	97+284	97+306	21	97+218	97+263	45	VALLEY SIDE	
34	PCC Retaining Wall	99+080	99+100	20	98+616	98+655	39	97+456	97+484	28	97+364	97+370	6	VALLEY SIDE	
35	PCC Retaining Wall	99+210	99+230	20	98+700	98+720	20	97+496	97+501	5	97+372	97+492	120	VALLEY SIDE	
36	PCC Retaining Wall	99+360	99+400	40	98+720	98+740	20	97+501	97+523	22	97+642	97+677	35	VALLEY SIDE	
37	PCC Retaining Wall	99+420	99+450	30	98+954	98+980	26	97+523	97+543	20	97+679	97+735	56	VALLEY SIDE	
38	PCC Retaining Wall	99+470	99+500	30	98+980	98+990	10	97+566	97+612	46	97+756	97+802	46	VALLEY SIDE	
39	PCC Retaining Wall	99+530	99+550	20	99+035	99+050	15	97+625	97+658	33	97+814	97+846	32	VALLEY SIDE	
40	PCC Retaining Wall	99+590	99+630	40	99+070	99+070	20	97+706	97+729	23	97+880	97+884	4	VALLEY SIDE	
41	PCC Retaining Wall	99+800	99+820	20	99+050	99+090	20	97+815	97+855	40	97+889	97+904	15	VALLEY SIDE	
42	PCC Retaining Wall	100+100	100+150	50	99+350	99+570	220	97+938	97+943	6	98+013	98+054	41	VALLEY SIDE	
43	PCC Retaining Wall	100+235	100+255	20	99+570	99+580	10	97+957	97+967	10	98+118	98+131	13	VALLEY SIDE	
44	PCC Retaining Wall	100+300	100+340	40	99+580	99+585	5	98+013	98+046	33	98+138	98+154	16	VALLEY SIDE	
45	PCC Retaining Wall	100+370	100+390	20	99+600	99+620	20	98+046	98+076	30	98+202	98+263	61	VALLEY SIDE	
46	PCC Retaining Wall	100+605	100+625	20	99+620	99+630	10	98+118	98+126	8	98+297	98+320	23	VALLEY SIDE	
47	PCC Retaining Wall	100+800	100+820	20	99+630	99+640	10	98+126	98+136	10	98+324	98+334	10	VALLEY SIDE	
48	PCC Retaining Wall	100+960	100+980	20	99+665	99+800	135	98+150	98+154	4	98+428	98+435	7	VALLEY SIDE	
49	PCC Retaining Wall	101+170	101+200	30	100+080	100+092	12	98+245	98+253	8	98+490	98+501	11	VALLEY SIDE	
50	PCC Retaining Wall	101+485	101+510	25	100+120	100+130	10	98+348	98+360	12	98+517	98+522	5	VALLEY SIDE	
51	PCC Retaining Wall	101+550	101+580	30	100+130	100+170	40	98+361	98+390	29	98+526	98+601	75	VALLEY SIDE	
52	PCC Retaining Wall	101+735	101+750	15	100+170	100+190	20	98+390	98+421	31	98+664	98+671	7	VALLEY SIDE	
53	PCC Retaining Wall	101+720	101+770	50	100+288	100+304	16	98+495	98+510	15	98+673	98+750	77	VALLEY SIDE	
54	PCC Retaining Wall	102+000	102+020	20	100+305	100+315	10	98+510	98+527	17	98+797	98+863	66	VALLEY SIDE	
55	PCC Retaining Wall	102+080	102+100	20	100+315	100+330	16	98+527	98+555	28	98+885	98+911	26	VALLEY SIDE	
56	PCC Retaining Wall	102+280	102+295	15	100+330	100+343	13	98+616	98+655	39	98+940	98+962	22	VALLEY SIDE	
57	PCC Retaining Wall	102+250	102+310	60	100+343	100+352	9	98+655	98+685	30	99+110	99+126	16	VALLEY SIDE	
58	PCC Retaining Wall	102+470	102+490	20	100+352	100+358	6	98+708	98+734	26	99+128	99+170	42	VALLEY SIDE	
59	PCC Retaining Wall	102+760	102+790	30	100+460	100+460	92	98+769	98+788	19	99+170	99+176	6	VALLEY SIDE	
60	PCC Retaining Wall	103+005	103+025	20	100+780	100+815	35	98+819	98+839	21	99+589	99+663	74	VALLEY SIDE	
61	PCC Retaining Wall	103+050	103+100	50	101+245	101+270	25	98+932	98+943	11	99+707	99+717	10	VALLEY SIDE	
62	PCC Retaining Wall	103+350	103+400	50	101+283	101+298	15	98+955	98+995	39	99+742	99+766	24	VALLEY SIDE	
63	PCC Retaining Wall	103+430	103+530	100	101+298	101+309	11	99+315	99+391	76	99+770	99+774	4	VALLEY SIDE	
64	PCC Retaining Wall				101+309	101+320	11	99+418	99+453	35	99+777	99+813	36	VALLEY SIDE	
65	PCC Retaining Wall				101+320	101+348	28	99+453	99+482	29	99+967	100+064	97	VALLEY SIDE	
66	PCC Retaining Wall				101+348	101+356	8	99+482	99+493	10	100+067	100+099	32	VALLEY SIDE	
67	PCC Retaining Wall				101+356	101+360	4	99+530	99+540	10	100+222	100+230	8	VALLEY SIDE	
68	PCC Retaining Wall				101+410	101+412	2	99+560	99+584	24	100+232	100+396	164	VALLEY SIDE	
69	PCC Retaining Wall				101+412	101+437	25	99+596	99+625	29	100+398	100+530	132	VALLEY SIDE	
70	PCC Retaining Wall				101+437	101+522	85	99+799	99+839	41	100+647	100+662	15	VALLEY SIDE	
71	PCC Retaining Wall				101+522	101+552	30	99+839	99+860	21	100+754	100+760	6	VALLEY SIDE	
72	PCC Retaining Wall				101+552	101+570	18	99+861	99+887	26	100+762	100+767	5	VALLEY SIDE	
73	PCC Retaining Wall				101+570	101+600	30	99+899	99+904	5	100+923	100+955	32	VALLEY SIDE	
74	PCC Retaining Wall				101+600	101+616	16	99+906	99+923	18	100+958	100+994	36	VALLEY SIDE	
75	PCC Retaining Wall				101+616	101+626	10	100+052	100+054	2	101+104	101+108	4	VALLEY SIDE	
76	PCC Retaining Wall				101+626	101+637	11	100+066	100+115	49	101+144	101+154	10	VALLEY SIDE	
77	PCC Retaining Wall				101+637	101+638	1	100+115	100+132	17	101+165	101+191	26	VALLEY SIDE	
78	PCC Retaining Wall				101+725	101+730	5	100+132	100+177	45	101+202	101+210	8	VALLEY SIDE	
79	PCC Retaining Wall				101+730	101+740	10	100+177	100+187	10	101+228	101+277	49	VALLEY SIDE	
80	PCC Retaining Wall				101+740	101+745	5	100+187	100+221	34	101+395	101+447	52	VALLEY SIDE	

For Shivalik Buildtech Pvt. Ltd.

Authorised Signatory



S.N.	TYPE OF STRUCTURE	DESIGN CH. AS PER CA			DESIGN CH. AS PER CA - REVISED			CHAINAGE BEFORE RECONCILIATION			FINAL CHAINAGE AFTER RECONCILIATION			SIDE	REMARKS
		FROM	TO	LENGTH	FROM	TO	LENGTH	FROM	TO	LENGTH	FROM	TO	LENGTH		
					101+840	101+845	5	100+238	100+241	3	101+449	101+457	8	VALLEY SIDE	
81	PCC Retaining Wall				101+845	101+857	12	100+241	100+248	7	101+581	101+606	25	VALLEY SIDE	
82	PCC Retaining Wall				101+967	101+977	10	100+248	100+259	11	101+631	101+636	5	VALLEY SIDE	
83	PCC Retaining Wall				101+977	101+989	12	100+260	100+279	19	101+636	101+737	101	VALLEY SIDE	
84	PCC Retaining Wall				102+050	102+059	9	100+279	100+288	9	101+738	101+752	14	VALLEY SIDE	
85	PCC Retaining Wall				102+065	102+067	2	100+288	100+304	16	101+778	101+819	41	VALLEY SIDE	
86	PCC Retaining Wall				102+077	102+085	8	100+305	100+315	10	101+840	101+846	6	VALLEY SIDE	
87	PCC Retaining Wall				102+126	102+137	11	100+315	100+330	16	101+875	101+885	10	VALLEY SIDE	
88	PCC Retaining Wall				102+137	102+147	10	100+330	100+343	13	101+922	101+988	66	VALLEY SIDE	
89	PCC Retaining Wall				102+147	102+173	26	100+343	100+352	9	101+983	101+988	5	VALLEY SIDE	
90	PCC Retaining Wall				102+174	102+174	1	100+750	100+780	30	102+001	102+025	24	VALLEY SIDE	
91	PCC Retaining Wall				102+173	102+211	38	100+794	100+817	23	102+139	102+162	23	VALLEY SIDE	
92	PCC Retaining Wall				102+211	102+230	19	100+977	100+987	10	102+207	102+235	29	VALLEY SIDE	
93	PCC Retaining Wall				102+250	102+265	15	101+000	101+013	13	102+236	102+253	17	VALLEY SIDE	
94	PCC Retaining Wall				102+335	102+400	65	101+013	101+027	14	102+288	102+430	142	VALLEY SIDE	
95	PCC Retaining Wall				102+427	102+438	11	101+039	101+047	8	102+439	102+445	6	VALLEY SIDE	
96	PCC Retaining Wall				102+438	102+454	16	101+068	101+116	48	102+525	102+542	17	VALLEY SIDE	
97	PCC Retaining Wall				102+470	102+484	14	101+211	101+216	5	102+543	102+616	73	VALLEY SIDE	
98	PCC Retaining Wall				102+484	102+498	14	101+216	101+236	21	102+618	102+650	32	VALLEY SIDE	
99	PCC Retaining Wall				102+616	102+660	44	101+236	101+251	15	102+767	102+827	60	VALLEY SIDE	
100	PCC Retaining Wall				102+745	102+754	9	101+251	101+266	15	102+855	102+866	11	VALLEY SIDE	
101	PCC Retaining Wall				102+800	102+900	100	101+285	101+298	13	102+896	102+914	18	VALLEY SIDE	
102	PCC Retaining Wall				102+990	103+045	55	101+298	101+309	11	102+918	102+932	14	VALLEY SIDE	
103	PCC Retaining Wall				103+045	103+120	75	101+309	101+320	11	103+037	103+066	29	VALLEY SIDE	
104	PCC Retaining Wall				103+340	103+362	22	101+320	101+348	28	103+082	103+198	116	VALLEY SIDE	
105	PCC Retaining Wall				103+415	103+440	25	101+348	101+356	8	103+201	103+227	26	VALLEY SIDE	
106	PCC Retaining Wall				103+505	103+520	15	101+412	101+437	25	103+495	103+510	15	VALLEY SIDE	
107	PCC Retaining Wall				103+520	103+530	10	101+479	101+502	23	103+517	103+523	6	VALLEY SIDE	
108	PCC Retaining Wall							101+502	101+522	20	103+528	103+533	5	VALLEY SIDE	
109	PCC Retaining Wall							101+522	101+552	30	103+615	103+621	6	VALLEY SIDE	
110	PCC Retaining Wall							101+552	101+570	18	103+638	103+647	9	VALLEY SIDE	
111	PCC Retaining Wall							101+570	101+599	29	103+264	103+279	15	VALLEY SIDE	
112	PCC Retaining Wall							101+616	101+626	10	97+904	97+912	8	VALLEY SIDE	
113	PCC Retaining Wall							101+626	101+637	11	101+895	101+922	27	VALLEY SIDE	
114	PCC Retaining Wall							101+637	101+653	16	101+865	101+875	10	VALLEY SIDE	
115	PCC Retaining Wall							101+701	101+716	15	103+621	103+629	8	VALLEY SIDE	
116	PCC Retaining Wall							101+730	101+740	10	95+465		23	VALLEY SIDE	
117	PCC Retaining Wall							101+740	101+755	16	101+380	101+395	15	VALLEY SIDE	
118	PCC Retaining Wall							101+755	101+767	12	101316	101322	6	VALLEY SIDE	
119	PCC Retaining Wall							101+770	101+790	20					
120	PCC Retaining Wall							101+832	101+845	13					
121	PCC Retaining Wall							101+845	101+857	12					
122	PCC Retaining Wall							101+967	101+977	10					
123	PCC Retaining Wall							101+977	101+989	12					
124	PCC Retaining Wall							102+038	102+050	12					
125	PCC Retaining Wall							102+050	102+059	9					
126	PCC Retaining Wall							102+075	102+085	10					
127	PCC Retaining Wall							102+126	102+137	11					
128	PCC Retaining Wall							102+137	102+147	10					
129	PCC Retaining Wall							102+147	102+173	26					
130	PCC Retaining Wall							102+174	102+211	38					
131	PCC Retaining Wall							102+211	102+230	19					
132	PCC Retaining Wall							102+230	102+251	21					
133	PCC Retaining Wall							102+251	102+261	10					
134	PCC Retaining Wall							102+368	102+388	20					
135	PCC Retaining Wall							102+390	102+408	18					
136	PCC Retaining Wall							102+408	102+427	19					
137	PCC Retaining Wall							102+427	102+438	11					
138	PCC Retaining Wall							102+438	102+454	16					
139	PCC Retaining Wall							102+470	102+484	14					
140	PCC Retaining Wall							102+484	102+498	14					
141	PCC Retaining Wall							102+602	102+613	11					
142	PCC Retaining Wall							102+613	102+616	3					
143	PCC Retaining Wall							102+616	102+660	44					
144	PCC Retaining Wall							102+691	102+709	18					
145	PCC Retaining Wall							102+738	102+753	15					
146	PCC Retaining Wall							102+765	102+774	9					
147	PCC Retaining Wall							102+887	102+916	29					
148	PCC Retaining Wall							102+936	102+969	33					
149	PCC Retaining Wall							102+969	102+984	15					
150	PCC Retaining Wall							102+984	103+007	23					
151	PCC Retaining Wall							103+007	103+027	20					
152	PCC Retaining Wall							103+027	103+041	14					
153	PCC Retaining Wall							103+048	103+074	26					
154	PCC Retaining Wall							103+120	103+135	15					
155	PCC Retaining Wall							103+339	103+354	15					
156	PCC Retaining Wall														
	TOTAL LENGTH	MTR	1930.00		MTR	3023.80		MTR	3023.80		3399				

NOTE:

1 Approval Vide Lr. No.LNM/MORTH-PIU/PKG-V/2022-23/1493 DT. 22.06.2022

For Shivalik Buildtech Pvt. Ltd.

 Authorised Signatory



VARIATION IN LOCATION OF BREAST WALLS

S.N.	TYPE OF STRUCTURE	DESIGN CH. AS PER CA			CHAINAGE BEFORE RECONCILIATION			FINAL CHAINAGE AFTER RECONCILIATION			SIDE	REMARKS
		FROM	TO	LENGTH	FROM	TO	LENGTH	FROM	TO	LENGTH		
1	PCC Breast Wall	94+840	94+890	50	00+205	00+250	45.00	95+050	95+100	50	HILL SIDE	
2	PCC Breast Wall	95+100	95+215	115	95+212	95+229	17.10	95+432	95+449	17	HILL SIDE	
3	PCC Breast Wall	95+400	95+430	30	95+394	95+472	78.00	95+605	95+624	19	HILL SIDE	
4	PCC Breast Wall	95+520	95+570	50	95+505	95+520	14.80	95+627	95+680	53	HILL SIDE	
5	PCC Breast Wall	96+250	96+280	30	95+520	95+564	44.00	95+711	95+716	5	HILL SIDE	
6	PCC Breast Wall	96+630	96+660	30	95+580	95+603	22.65	95+892	95+937	45	HILL SIDE	
7	PCC Breast Wall	98+090	98+140	50	95+605	95+630	24.40	96+320	96+369	49	HILL SIDE	
8	PCC Breast Wall	98+800	98+850	50	96+118	96+170	51.60	96+687	96+710	23	HILL SIDE	
9	PCC Breast Wall	100+000	100+230	230	96+492	96+514	22.20	96+776	96+836	60	HILL SIDE	
10	PCC Breast Wall	100+230	100+500	270	96+579	96+618	39.35	97+122	97+149	27	HILL SIDE	
11	PCC Breast Wall	100+800	101+000	200	96+618	96+622	4.00	97+181	97+202	21	HILL SIDE	
12	PCC Breast Wall	101+840	102+270	430	96+622	96+639	17.00	97+244	97+285	41	HILL SIDE	
13	PCC Breast Wall	102+600	102+760	160	96+931	96+940	9.40	97+285	97+377	92	HILL SIDE	
14	PCC Breast Wall	102+785	102+850	65	96+940	96+958	18.20	97+380	97+592	212	HILL SIDE	
15	PCC Breast Wall	95+000	95+050	50	96+996	97+017	21.10	97+904	98+121	217	HILL SIDE	
16	PCC Breast Wall	95+720	95+750	30	97+053	97+064	11.00	98+156	98+236	80	HILL SIDE	
17	PCC Breast Wall	95+900	95+930	30	97+064	97+092	28.10	98+339	98+414	75	HILL SIDE	
18	PCC Breast Wall	96+050	96+100	50	97+092	97+122	30.20	98+530	98+611	81	HILL SIDE	
19	PCC Breast Wall	96+450	96+570	120	97+122	97+140	18.00	98+657	98+688	31	HILL SIDE	
20	PCC Breast Wall	97+750	97+800	50	97+140	97+159	18.50	98+721	98+762	41	HILL SIDE	
21	PCC Breast Wall	97+850	97+950	100	97+159	97+174	15.00	99+182	99+314	132	HILL SIDE	
22	PCC Breast Wall	98+160	98+230	70	97+174	97+187	13.30	99+380	99+411	31	HILL SIDE	
23	PCC Breast Wall	98+350	98+450	100	97+187	97+196	8.40	99+454	99+468	14	HILL SIDE	
24	PCC Breast Wall	98+520	98+550	30	97+196	97+214	18.10	99+482	99+578	96	HILL SIDE	
25	PCC Breast Wall	98+850	98+990	140	97+214	97+230	16.30	99+605	99+641	36	HILL SIDE	
26	PCC Breast Wall	99+550	99+680	130	97+230	97+260	30.00	99+652	99+748	96	HILL SIDE	
27	PCC Breast Wall	99+920	100+000	80	97+266	97+290	23.75	99+752	99+774	22	HILL SIDE	
28	PCC Breast Wall	100+500	100+800	300	97+290	97+320	30.00	99+778	99+795	17	HILL SIDE	
29	PCC Breast Wall	101+000	101+270	270	97+320	97+327	7.00	99+938	99+980	42	HILL SIDE	
30	PCC Breast Wall	101+370	101+470	100	97+327	97+342	14.50	100+036	100+064	28	HILL SIDE	
31	PCC Breast Wall	101+690	101+735	45	97+342	97+376	34.50	100+064	100+097	33	HILL SIDE	
32	PCC Breast Wall	102+490	102+600	110	97+376	97+404	28.00	100+097	100+116	19	HILL SIDE	
33	PCC Breast Wall	103+050	103+100	50	97+712	97+720	8.40	100+116	100+625	509	HILL SIDE	
34	PCC Breast Wall				97+720	97+744	23.65	100+650	100+684	34	HILL SIDE	
35	PCC Breast Wall				97+744	97+771	27.20	100+994	101+070	76	HILL SIDE	
36	PCC Breast Wall				97+771	97+795	23.80	101+236	101+286	50	HILL SIDE	
37	PCC Breast Wall				97+795	97+835	40.00	101+295	101+449	155	HILL SIDE	
38	PCC Breast Wall				97+835	97+859	24.00	101+449	101+558	109	HILL SIDE	
39	PCC Breast Wall				97+859	97+861	2.10	101+558	101+623	65	HILL SIDE	
40	PCC Breast Wall				97+861	97+888	27.15	101+623	101+689	66	HILL SIDE	
41	PCC Breast Wall				97+888	97+909	21.00	101+719	101+730	11	HILL SIDE	
42	PCC Breast Wall				97+909	97+921	12.30	101+730	101+765	35	HILL SIDE	
43	PCC Breast Wall				97+921	97+931	9.38	101+765	101+789	24	HILL SIDE	
44	PCC Breast Wall				97+941	97+961	20.50	101+797	101+880	83	HILL SIDE	
45	PCC Breast Wall				97+971	97+983	12.23	101+890	101+936	46	HILL SIDE	
46	PCC Breast Wall				97+983	97+993	9.60	101+982	102+010	28	HILL SIDE	
47	PCC Breast Wall				97+993	98+010	17.46	102+065	102+085	20	HILL SIDE	
48	PCC Breast Wall				98+011	98+030	19.35	102+085	102+174	89	HILL SIDE	
49	PCC Breast Wall				98+031	98+051	20.10	102+311	102+408	97	HILL SIDE	
50	PCC Breast Wall				98+154	98+179	25.10	102+600	102+630	30	HILL SIDE	
51	PCC Breast Wall				98+180	98+198	18.50	102+732	102+883	151	HILL SIDE	
52	PCC Breast Wall				98+198	98+210	12.00	102+887	102+918	31	HILL SIDE	
53	PCC Breast Wall				98+210	98+230	20.20	101+689	101+719	30		
54	PCC Breast Wall				98+346	98+385	39.30	AT LOADING/		11		
55	PCC Breast Wall				98+385	98+430	45.00	AT LOADING/		65		
56	PCC Breast Wall				98+477	98+489	12.30					
57	PCC Breast Wall				98+489	98+497	8.00					
58	PCC Breast Wall				98+497	98+512	15.40					

For Shivalik Buildtech Pvt. Ltd.
 Authorised Signatory



S.N.	TYPE OF STRUCTURE	DESIGN CH. AS PER CA			CHAINAGE BEFORE RECONCILIATION			FINAL CHAINAGE AFTER RECONCILIATION			SIDE	REMARKS
		FROM	TO	LENGTH	FROM	TO	LENGTH	FROM	TO	LENGTH		
59	PCC Breast Wall				98+536	98+543	7.30					
60	PCC Breast Wall				98+543	98+580	37.00					
61	PCC Breast Wall				99+013	99+038	25.20					
62	PCC Breast Wall				99+038	99+043	4.90					
63	PCC Breast Wall				99+043	99+070	26.50					
64	PCC Breast Wall				99+070	99+090	20.40					
65	PCC Breast Wall				99+090	99+120	30.00					
66	PCC Breast Wall				99+120	99+124	4.40					
67	PCC Breast Wall				99+125	99+146	21.40					
68	PCC Breast Wall				99+200	99+228	28.30					
69	PCC Breast Wall				99+308	99+315	7.40					
70	PCC Breast Wall				99+315	99+335	20.00					
71	PCC Breast Wall				99+335	99+351	15.60					
72	PCC Breast Wall				99+351	99+373	22.60					
73	PCC Breast Wall				99+373	99+388	14.60					
74	PCC Breast Wall				99+388	99+403	14.70					
75	PCC Breast Wall				99+430	99+435	4.60					
76	PCC Breast Wall				99+468	99+489	20.90					
77	PCC Breast Wall				99+489	99+559	70.00					
78	PCC Breast Wall				99+564	99+587	22.75					
79	PCC Breast Wall				99+594	99+611	17.80					
80	PCC Breast Wall				99+768	99+791	23.10					
81	PCC Breast Wall				99+791	99+806	15.20					
82	PCC Breast Wall				99+806	99+817	11.00					
83	PCC Breast Wall				99+863	99+873	10.10					
84	PCC Breast Wall				99+873	99+891	18.30					
85	PCC Breast Wall				99+891	99+892	1.00					
86	PCC Breast Wall				99+892	99+903	11.25					
87	PCC Breast Wall				99+903	99+918	15.10					
88	PCC Breast Wall				99+918	100+029	110.75					
89	PCC Breast Wall				100+029	100+079	50.00					
90	PCC Breast Wall				100+049	100+131	81.50					
91	PCC Breast Wall				100+131	100+143	12.30					
92	PCC Breast Wall				100+143	100+156	12.80					
93	PCC Breast Wall				100+156	100+178	22.00					
94	PCC Breast Wall				100+178	100+197	19.60					
95	PCC Breast Wall				100+197	100+220	22.70					
96	PCC Breast Wall				100+220	100+235	15.30					
97	PCC Breast Wall				100+235	100+245	10.05					
98	PCC Breast Wall				100+245	100+259	13.50					
99	PCC Breast Wall				100+259	100+286	27.15					
100	PCC Breast Wall				100+286	100+310	24.00					
101	PCC Breast Wall				100+310	100+328	17.70					
102	PCC Breast Wall				100+328	100+354	26.00					
103	PCC Breast Wall				100+354	100+371	17.60					
104	PCC Breast Wall				100+371	100+406	34.50					
105	PCC Breast Wall				100+406	100+423	17.30					
106	PCC Breast Wall				100+423	100+436	12.70					
107	PCC Breast Wall				100+436	100+459	23.15					
108	PCC Breast Wall				100+512	100+528	15.62					
109	PCC Breast Wall				100+831	100+856	25.50					
110	PCC Breast Wall				100+856	100+871	14.90					
111	PCC Breast Wall				100+871	100+887	15.70					
112	PCC Breast Wall				100+887	100+902	15.30					
113	PCC Breast Wall				101+063	101+089	25.20					
114	PCC Breast Wall				101+089	101+108	19.00					
115	PCC Breast Wall				101+108	101+121	12.95					
116	PCC Breast Wall				101+121	101+137	16.55					
117	PCC Breast Wall				101+137	101+154	16.60					
118	PCC Breast Wall				101+154	101+167	13.70					
119	PCC Breast Wall				101+171	101+180	9.50					
120	PCC Breast Wall				101+180	101+190	10.00					
121	PCC Breast Wall				101+190	101+204	14.00					
122	PCC Breast Wall				101+204	101+216	12.00					
123	PCC Breast Wall				101+232	101+253	21.10					

For Shivalik Buildtech Pvt. Ltd.

 Authorized Signatory



S.N.	TYPE OF STRUCTURE	DESIGN CH. AS PER CA			CHAINAGE BEFORE RECONCILIATION			FINAL CHAINAGE AFTER RECONCILIATION			SIDE	REMARKS
		FROM	TO	LENGTH	FROM	TO	LENGTH	FROM	TO	LENGTH		
59	PCC Breast Wall				98+536	98+543	7.30					
60	PCC Breast Wall				98+543	98+580	37.00					
61	PCC Breast Wall				99+013	99+038	25.20					
62	PCC Breast Wall				99+038	99+043	4.90					
63	PCC Breast Wall				99+043	99+070	26.50					
64	PCC Breast Wall				99+070	99+090	20.40					
65	PCC Breast Wall				99+090	99+120	30.00					
66	PCC Breast Wall				99+120	99+124	4.40					
67	PCC Breast Wall				99+125	99+146	21.40					
68	PCC Breast Wall				99+200	99+228	28.30					
69	PCC Breast Wall				99+308	99+315	7.40					
70	PCC Breast Wall				99+315	99+335	20.00					
71	PCC Breast Wall				99+335	99+351	15.60					
72	PCC Breast Wall				99+351	99+373	22.60					
73	PCC Breast Wall				99+373	99+388	14.60					
74	PCC Breast Wall				99+388	99+403	14.70					
75	PCC Breast Wall				99+430	99+435	4.60					
76	PCC Breast Wall				99+468	99+489	20.90					
77	PCC Breast Wall				99+489	99+559	70.00					
78	PCC Breast Wall				99+564	99+587	22.75					
79	PCC Breast Wall				99+594	99+611	17.80					
80	PCC Breast Wall				99+768	99+791	23.10					
81	PCC Breast Wall				99+791	99+806	15.20					
82	PCC Breast Wall				99+806	99+817	11.00					
83	PCC Breast Wall				99+863	99+873	10.10					
84	PCC Breast Wall				99+873	99+891	18.30					
85	PCC Breast Wall				99+891	99+892	1.00					
86	PCC Breast Wall				99+892	99+903	11.25					
87	PCC Breast Wall				99+903	99+918	15.10					
88	PCC Breast Wall				99+918	100+029	110.75					
89	PCC Breast Wall				100+029	100+079	50.00					
90	PCC Breast Wall				100+049	100+131	81.50					
91	PCC Breast Wall				100+131	100+143	12.30					
92	PCC Breast Wall				100+143	100+156	12.80					
93	PCC Breast Wall				100+156	100+178	22.00					
94	PCC Breast Wall				100+178	100+197	19.60					
95	PCC Breast Wall				100+197	100+220	22.70					
96	PCC Breast Wall				100+220	100+235	15.30					
97	PCC Breast Wall				100+235	100+245	10.05					
98	PCC Breast Wall				100+245	100+259	13.50					
99	PCC Breast Wall				100+259	100+286	27.15					
100	PCC Breast Wall				100+286	100+310	24.00					
101	PCC Breast Wall				100+310	100+328	17.70					
102	PCC Breast Wall				100+328	100+354	26.00					
103	PCC Breast Wall				100+354	100+371	17.60					
104	PCC Breast Wall				100+371	100+406	34.50					
105	PCC Breast Wall				100+406	100+423	17.30					
106	PCC Breast Wall				100+423	100+436	12.70					
107	PCC Breast Wall				100+436	100+459	23.15					
108	PCC Breast Wall				100+512	100+528	15.62					
109	PCC Breast Wall				100+831	100+856	25.50					
110	PCC Breast Wall				100+856	100+871	14.90					
111	PCC Breast Wall				100+871	100+887	15.70					
112	PCC Breast Wall				100+887	100+902	15.30					
113	PCC Breast Wall				101+063	101+089	25.20					
114	PCC Breast Wall				101+089	101+108	19.00					
115	PCC Breast Wall				101+108	101+121	12.95					
116	PCC Breast Wall				101+121	101+137	16.55					
117	PCC Breast Wall				101+137	101+154	16.60					
118	PCC Breast Wall				101+154	101+167	13.70					
119	PCC Breast Wall				101+171	101+180	9.50					
120	PCC Breast Wall				101+180	101+190	10.00					
121	PCC Breast Wall				101+190	101+204	14.00					
122	PCC Breast Wall				101+204	101+216	12.00					
123	PCC Breast Wall				101+232	101+253	21.10					

For Shivalik Buildtech Pvt. Ltd.

 Authorized Signatory



S.N.	TYPE OF STRUCTURE	DESIGN CH. AS PER CA			CHAINAGE BEFORE RECONCILIATION			FINAL CHAINAGE AFTER RECONCILIATION			SIDE	REMARKS
		FROM	TO	LENGTH	FROM	TO	LENGTH	FROM	TO	LENGTH		
124	PCC Breast Wall				101+253	101+267	14.80					
125	PCC Breast Wall				101+267	101+279	12.05					
126	PCC Breast Wall				101+279	101+285	5.55					
127	PCC Breast Wall				101+285	101+305	20.00					
128	PCC Breast Wall				101+305	101+330	25.00					
129	PCC Breast Wall				101+330	101+336	6.00					
130	PCC Breast Wall				101+336	101+351	14.50					
131	PCC Breast Wall				101+351	101+365	13.70					
132	PCC Breast Wall				101+365	101+377	12.00					
133	PCC Breast Wall				101+377	101+402	25.00					
134	PCC Breast Wall				101+402	101+412	10.40					
135	PCC Breast Wall				101+412	101+442	30.00					
136	PCC Breast Wall				101+442	101+454	11.64					
137	PCC Breast Wall				101+454	101+469	15.20					
138	PCC Breast Wall				101+469	101+477	8.15					
139	PCC Breast Wall				101+479	101+577	98.00					
140	PCC Breast Wall				101+577	101+590	13.00					
141	PCC Breast Wall				101+590	101+608	18.00					
142	PCC Breast Wall				101+608	101+616	8.00					
143	PCC Breast Wall				101+616	101+623	6.70					
144	PCC Breast Wall				101+628	101+634	5.55					
145	PCC Breast Wall				101+634	101+657	23.50					
146	PCC Breast Wall				101+657	101+677	20.00					
147	PCC Breast Wall				101+678	101+690	12.30					
148	PCC Breast Wall				101+690	101+700	10.00					
149	PCC Breast Wall				101+700	101+705	5.40					
150	PCC Breast Wall				101+706	101+721	15.00					
151	PCC Breast Wall				101+723	101+753	30.00					
152	PCC Breast Wall				101+754	101+770	16.40					
153	PCC Breast Wall				101+810	101+828	17.50					
154	PCC Breast Wall				101+828	101+834	5.94					
155	PCC Breast Wall				101+899	101+920	20.40					
156	PCC Breast Wall				101+920	101+935	15.25					
157	PCC Breast Wall				101+935	101+955	20.00					
158	PCC Breast Wall				101+955	101+975	20.00					
159	PCC Breast Wall				101+975	101+995	20.00					
160	PCC Breast Wall				101+995	102+008	12.95					
161	PCC Breast Wall				102+149	102+172	23.10					
162	PCC Breast Wall				102+172	102+181	9.10					
163	PCC Breast Wall				102+181	102+190	8.80					
164	PCC Breast Wall				102+190	102+200	10.10					
165	PCC Breast Wall				102+200	102+217	17.00					
166	PCC Breast Wall				102+217	102+227	10.10					
167	PCC Breast Wall				102+227	102+248	21.00					
168	PCC Breast Wall				102+449	102+464	15.10					
169	PCC Breast Wall				102+464	102+482	17.90					
170	PCC Breast Wall				102+564	102+603	39.20					
171	PCC Breast Wall				102+605	102+620	15.08					
172	PCC Breast Wall				102+620	102+630	9.80					
173	PCC Breast Wall				102+630	102+651	20.90					
174	PCC Breast Wall				102+651	102+675	24.60					
175	PCC Breast Wall				102+675	102+690	14.20					
176	PCC Breast Wall				102+690	102+705	15.90					
177	PCC Breast Wall				102+705	102+721	15.35					
178	PCC Breast Wall				102+721	102+750	29.00					
179	PCC Breast Wall				102+750	102+753	3.60					
	TOTAL LENGTH		MTR	3615		MTR	3615		MTR	3618		

NOTE :

1 Approval Vide Lr. No.LNM/MORTH-PIU/PKG-V/2022-23/1493 DT. 22.06.2022

For Shivalik Buildtech Pvt. Ltd.

Authorized Signatory



VARIATION IN LOCATION OF SPECIAL MEASURE TO AVOID SATURATION OF HILL SLOPE

S.N.	TYPE OF MEASURE	DESIGN CH. AS PER CA			CHAINAGE BEFORE RECONCILIATION			FINAL CHAINAGE AFTER RECONCILIATION			SIDE	REMARKS
		FROM	TO	LENGTH	FROM	TO	LENGTH	FROM	TO	LENGTH		
1	Seepage Control	99+920	101+170	1250	99+920	101+170	1250.00	100+050	101+300	1250.00	HILL SIDE	
	TOTAL LENGTH		MTR	1250		MTR	1250		MTR	1250		

For Shivalik Buildtech Pvt. Ltd.

Authorized Signatory

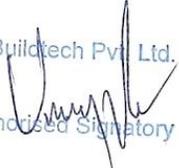


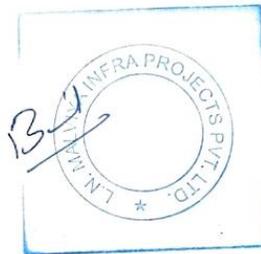
VARIATION IN LOCATION OF GABION WALLS

S.N.	TYPE OF STRUCTURE	DESIGN CH. AS PER CA		CHAINAGE BEFORE RECONCILIATION		FINAL CHAINAGE AFTER RECONCILIATION			SIDE	REMARKS	
		FROM	TO	FROM	TO	FROM	TO	LENGTH			
1	GABION WALLS	96+220	96+350	96+220	96+350	96+360	96+680	320	VALLEY SIDE		
2	GABION WALLS	99+050	99+250	99+050	99+250	99+190	99+390	200	VALLEY SIDE		
								TOTAL LENGTH (VALLEY SIDE)	520.00		

NOTE :

- 1 Dumping Zones approved in contract agreement, Schedule B - Cl. 12.3
- 2 Gabion Walls approve Vide Lr. No. LNM/MoRTH/PIU/Pkg-V/2022-23/1492 DT. 22.06.2022

For Shivalik Buildtech Pvt. Ltd.

 Authorised Signatory



- Details of dumping sites in package-V along with their capacity in terms of CuM (Private +Forest Land), total muck dumped so far and capacity left unutilized. As per the approved DPR, there was the provision of gabion wall of height 20 mtrs and length 85mtrs for two dumping sites as protection measures. Please, provide the current status of retaining structures at these sites and the funds allotted for this work? Also, provide the copy of the agreement done with private landowners for using their land as dumping site (If available).

Reply: As per dumping site details, muck management plan, and finalized utilization details of muck for Package-5 enclosed herewith.

- Total hydroseeding and bamboo plantation (in terms of area) proposed and actually carried out along with its current status in package-v and funds allotted for this work?

Sr. No.	Component in Package-V	Minimum Scope (in Sqm)	Total executed (in Sqm)
1	Slope protection in Sliding Zones with Geocell & Hydroseeding	12900	15968
2	Hydroseeding	23477	23787
3	Bamboo plantation	32128	32129

- Number of Sliding zones in package-IV (Minus-Gumma) and what protection measures were proposed to be provided. Please, give details of each sliding zone in section IV and current status of remedial measures/protection measures taken and estimated funds allotted for this work?

There is no identified/ designated sliding zone in Package IV. Further, the project has been executed under EPC mode wherein it is the responsibility of the Contractor to conduct a detailed Geological/ Geotechnical investigation and accordingly, suggest measures for stabilization. The payment is on lump-sum basis for the provisions specified in the signed EPC Contract Agreement. Further, provisions such as Gabion wall, toe wall, breast wall, hydroseeding, interlink chain mesh with grass strips, etc. have already been envisaged in the scope.

Chainage-wise details of the Gabion wall, toe wall, breast wall and slope protection work executed at site are as follows:

Variation in Location of Breast Wall (Annexure-II)										
S. No.	Structure Description	Design Ch As Per CA		Chainage Before Reconciliation		Final Chainage after reconciliation			Side	Remarks
		From	To	From	To	From	To	Length (m)		
1	Breast Wall	75.000	75.008	75.273	75.294	75.256	75.277	21	Hill Side	Approved vide letter No
2	Breast Wall	75.008	75.124	75.935	75.948	75.935	75.948	13	Hill Side	
3	Breast Wall	75.154	75.156	76.037	76.068	76.037	76.068	31	Hill Side	
4	Breast Wall	75.178	75.190	76.275	76.290	76.275	76.290	15	Hill Side	
5	Breast Wall	75.218	75.222	76.336	76.366	76.336	76.366	30	Hill Side	
6	Breast Wall	75.258	75.312	76.460	76.477	76.460	76.477	17	Hill Side	
7	Breast Wall	75.348	75.500	76.484	76.491	76.484	76.491	7	Hill Side	
8	Breast Wall	75.508	75.520	76.572	76.629	76.572	76.629	57	Hill Side	
9	Breast Wall	75.550	75.610	76.652	76.706	76.652	76.706	54	Hill Side	
10	Breast Wall	75.624	75.642	76.853	76.875	76.853	76.875	22	Hill Side	
11	Breast Wall	75.656	75.658	77.171	77.230	77.171	77.230	59	Hill Side	
12	Breast Wall	75.698	75.774	77.282	77.341	77.282	77.341	59	Hill Side	
13	Breast Wall	76.002	76.036	77.658	77.695	77.658	77.695	37	Hill Side	
14	Breast Wall	76.096	76.130	77.712	77.770	77.712	77.770	58	Hill Side	
15	Breast Wall	76.148	76.166	77.813	77.861	77.813	77.861	48	Hill Side	
16	Breast Wall	76.192	76.198	77.892	77.982	77.892	77.982	90	Hill Side	
17	Breast Wall	76.220	76.260	78.017	78.049	78.017	78.049	32	Hill Side	
18	Breast Wall	76.270	76.298	78.141	78.186	78.141	78.186	45	Hill Side	
19	Breast Wall	76.322	76.324	78.186	78.229	78.186	78.229	43	Hill Side	
20	Breast Wall	76.332	76.382	78.277	78.341	78.277	78.341	64	Hill Side	
21	Breast Wall	76.420	76.460	78.396	78.411	78.396	78.411	15	Hill Side	
22	Breast Wall	76.468	76.498	78.519	78.532	78.519	78.532	13	Hill Side	
23	Breast Wall	76.570	76.574	78.555	78.569	78.555	78.569	14	Hill Side	
24	Breast Wall	76.598	76.628	78.592	78.640	78.592	78.640	48	Hill Side	
25	Breast Wall	76.682	76.688	78.691	78.709	78.691	78.709	18	Hill Side	
26	Breast Wall	76.704	76.706	78.714	78.730	78.714	78.730	16	Hill Side	
27	Breast Wall	76.738	76.752	78.918	78.951	78.918	78.951	33	Hill Side	
28	Breast Wall	76.770	76.784	78.973	79.029	78.973	79.029	56	Hill Side	
29	Breast Wall	76.790	76.794	79.153	79.161	79.153	79.161	8	Hill Side	
30	Breast Wall	76.816	76.836	79.219	79.324	79.219	79.324	105	Hill Side	
31	Breast Wall	76.882	76.904	79.330	79.399	79.330	79.399	69	Hill Side	
32	Breast Wall	76.932	77.012	79.693	79.719	79.693	79.719	26	Hill Side	
33	Breast Wall	77.122	77.134	79.743	79.761	79.743	79.761	18	Hill Side	
34	Breast Wall	77.148	77.154	79.785	79.802	79.785	79.802	17	Hill Side	
35	Breast Wall	77.278	77.312	80.145	80.159	80.145	80.159	14	Hill Side	
36	Breast Wall	77.362	77.366	80.204	80.395	80.204	80.395	191	Hill Side	
37	Breast Wall	78.052	78.060	80.604	80.619	80.604	80.619	15	Hill Side	
38	Breast Wall	78.102	78.150	80.624	80.637	80.624	80.637	13	Hill Side	
39	Breast Wall	78.196	78.202	80.764	80.792	80.764	80.792	28	Hill Side	
40	Breast Wall	78.210	78.228	80.865	80.920	80.865	80.920	55	Hill Side	
41	Breast Wall	78.240	78.252	80.980	81.170	80.980	81.170	190	Hill Side	
42	Breast Wall	78.370	78.400	81.531	81.772	81.531	81.772	241	Hill Side	
43	Breast Wall	78.442	78.464	81.811	81.827	81.811	81.827	16	Hill Side	
44	Breast Wall	78.486	78.568	81.849	81.889	81.849	81.889	40	Hill Side	
45	Breast Wall	78.634	78.640	81.900	81.913	81.900	81.913	13	Hill Side	
46	Breast Wall	78.662	78.678	82.014	82.120	82.014	82.120	106	Hill Side	
47	Breast Wall	78.694	78.696	82.130	82.165	82.130	82.165	35	Hill Side	
48	Breast Wall	78.710	78.730	82.192	82.213	82.192	82.213	21	Hill Side	
49	Breast Wall	78.740	78.760	82.218	82.218	82.218	82.218	300	Hill Side	
50	Breast Wall	78.822	78.828	83.206	83.233	83.206	83.233	27	Hill Side	
51	Breast Wall	78.870	78.872	83.457	83.478	83.457	83.478	21	Hill Side	

As per site requirement location was approved via letter no. LNM/MORTH-PIU/PKG-IV/2023-24/2215 dated 04.05.2023



RESIDENT ENGINEER
L.N.M. Infra Projects Pvt. Ltd.
(NH-707), Shillai

Variation in Location of Toe Wall (Annexure-III)										Remarks
S. No.	Structure Description	Design Ch As Per CA		Chainage Before Reconciliation		Final Chainage after reconciliation			Side	
		From	To	From	To	From	To	Length (m)		
1	Toe Wall	75.149	75.455	75.003	75.020	75.020	75.037	17	Valley Side	Approved vide letter No
2	Toe Wall	75.497	75.514	75.054	75.067	75.037	75.050	13	Valley Side	
3	Toe Wall	76.009	76.019	75.063	75.074	75.050	75.061	11	Valley Side	
4	Toe Wall	76.084	76.106	75.072	75.089	75.061	75.078	17	Valley Side	
5	Toe Wall	77.523	77.527	75.095	75.107	75.078	75.090	12	Valley Side	
6	Toe Wall	77.573	77.589	75.458	75.466	75.268	75.276	8	Valley Side	
7	Toe Wall	78.714	78.724	75.772	75.783	75.520	75.531	11	Valley Side	
8	Toe Wall	78.731	78.747	75.556	75.639	75.538	75.621	83	Valley Side	
9	Toe Wall	78.761	78.764	76.324	76.375	75.931	75.982	51	Valley Side	
10	Toe Wall	80.313	80.406	77.047	77.053	76.489	76.495	6	Valley Side	
11	Toe Wall	80.419	80.496	76.591	76.606	76.540	76.555	15	Valley Side	
12	Toe Wall	80.547	80.558	77.264	77.280	76.902	76.918	16	Valley Side	
13	Toe Wall	80.592	80.600	76.944	76.953	76.923	76.942	19	Valley Side	
14	Toe Wall	80.623	80.625	77.027	77.035	76.975	76.983	8	Valley Side	
15	Toe Wall	80.654	80.661	77.025	77.040	77.000	77.015	15	Valley Side	
16	Toe Wall	80.696	80.699	77.080	77.090	77.040	77.050	10	Valley Side	
17	Toe Wall	80.769	80.831	77.085	77.110	77.060	77.085	25	Valley Side	
18	Toe Wall	80.898	80.977	77.124	77.162	77.092	77.130	38	Valley Side	
19	Toe Wall	80.987	81.074	77.230	77.275	77.161	77.210	49	Valley Side	
20	Toe Wall	81.084	81.106	77.379	77.383	77.270	77.274	4	Valley Side	
21	Toe Wall	81.125	81.147	77.290	77.303	77.280	77.293	13	Valley Side	
22	Toe Wall	81.163	81.214	77.350	77.390	77.315	77.355	40	Valley Side	
23	Toe Wall	81.230	81.241	77.425	77.467	77.370	77.412	42	Valley Side	
24	Toe Wall	81.254	81.263	77.454	77.463	77.412	77.421	9	Valley Side	
25	Toe Wall	81.286	81.310	77.558	77.588	77.485	77.515	30	Valley Side	
26	Toe Wall	81.317	81.342	77.571	77.584	77.528	77.541	13	Valley Side	
27	Toe Wall	81.366	81.373	77.712	77.717	77.620	77.625	5	Valley Side	
28	Toe Wall	81.399	81.410	77.630	77.640	77.625	77.635	10	Valley Side	
29	Toe Wall	81.420	81.452	77.705	77.720	77.665	77.680	15	Valley Side	
30	Toe Wall	81.467	81.477	77.725	77.742	77.695	77.712	17	Valley Side	
31	Toe Wall	81.504	81.553	77.731	77.746	77.713	77.728	15	Valley Side	
32	Toe Wall	81.568	81.583	78.071	78.132	77.892	77.953	61	Valley Side	
33	Toe Wall	81.616	81.627	78.158	78.196	78.025	78.063	38	Valley Side	
34	Toe Wall	81.645	81.720	78.315	78.325	78.170	78.180	10	Valley Side	
35	Toe Wall	81.748	81.778	78.190	78.210	78.180	78.200	20	Valley Side	
36	Toe Wall	81.801	81.833	78.870	78.888	78.525	78.543	18	Valley Side	
37	Toe Wall	81.868	81.872	78.561	78.584	78.543	78.566	23	Valley Side	
38	Toe Wall	81.896	81.925	78.589	78.625	78.566	78.602	36	Valley Side	
39	Toe Wall	81.966	82.049	78.748	78.786	78.657	78.695	38	Valley Side	
40	Toe Wall	82.144	82.158	78.733	78.743	78.695	78.705	10	Valley Side	
41	Toe Wall	82.177	82.197	78.739	78.768	78.717	78.746	29	Valley Side	
42	Toe Wall	82.226	82.234	78.803	78.878	78.760	78.835	75	Valley Side	
43	Toe Wall	82.323	82.338	79.522	79.544	79.141	79.163	22	Valley Side	
44	Toe Wall	82.365	82.381	79.255	79.266	79.198	79.209	11	Valley Side	
45	Toe Wall	82.542	82.544	79.232	79.302	79.215	79.285	70	Valley Side	
46	Toe Wall	82.549	82.575	79.369	79.395	79.292	79.318	26	Valley Side	
47	Toe Wall	82.596	82.610	79.382	79.395	79.337	79.350	13	Valley Side	
48	Toe Wall	82.621	82.623	79.647	79.653	79.492	79.498	6	Valley Side	
49	Toe Wall	82.708	82.714	79.812	79.853	79.652	79.693	41	Valley Side	
50	Toe Wall	82.726	82.737	80.122	80.153	79.887	79.918	31	Valley Side	
51	Toe Wall	82.742	82.780	80.313	80.364	80.100	80.151	51	Valley Side	
52	Toe Wall	82.819	82.824	80.424	80.477	80.262	80.315	53	Valley Side	
53	Toe Wall	82.862	82.875	80.512	80.656	80.387	80.531	144	Valley Side	
54	Toe Wall	82.893	82.953	81.139	81.161	80.763	80.785	22	Valley Side	
55	Toe Wall	82.968	82.975	80.933	80.951	80.848	80.866	18	Valley Side	
56	Toe Wall	82.980	82.984	81.412	81.457	81.130	81.175	45	Valley Side	
57	Toe Wall	82.994	83.012	81.932	81.980	81.531	81.579	48	Valley Side	
58	Toe Wall	83.022	83.051	81.733	81.758	81.632	81.657	25	Valley Side	
59	Toe Wall	83.093	83.107	81.788	81.840	81.710	81.762	52	Valley Side	
60	Toe Wall	83.233	83.247	81.850	81.879	81.780	81.809	29	Valley Side	
61	Toe Wall	83.256	83.260	81.940	81.954	81.860	81.874	14	Valley Side	
62	Toe Wall	83.386	83.468	81.888	81.916	81.874	81.902	28	Valley Side	
63	Toe Wall	83.489	83.538	82.160	82.258	82.017	82.115	98	Valley Side	
64	Toe Wall	83.583	83.586	82.243	82.276	82.130	82.163	33	Valley Side	
65	Toe Wall	83.925	83.978	82.196	82.222	82.163	82.189	26	Valley Side	
66	Toe Wall	84.022	84.045	82.233	82.265	82.198	82.230	32	Valley Side	
67	Toe Wall	84.236	84.269	82.284	82.289	82.241	82.246	5	Valley Side	
68	Toe Wall	84.543	84.556	82.751	82.775	82.496	82.520	24	Valley Side	

As per site requirement location was approved via letter no. LNM/MoRTH-III/PKG-IV/2023-24/2216 dated 05.05.2023



RESIDENT ENGINEER
L.N. Malviya Projects Pvt. Ltd.
(NH-707) Shillai