

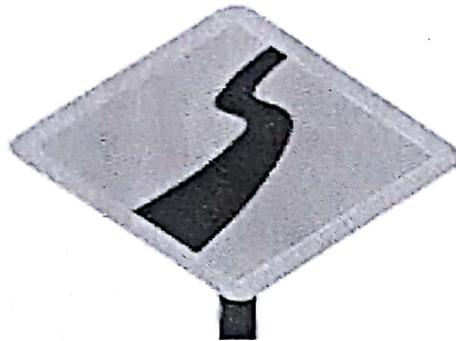
GOVERNMENT OF JAMMU AND KASHMIR



Government of Jammu & Kashmir

PRADHAN MANTRI GRAM SADAK YOJANA PMGSY DIVISION DODA

Package No:- JK-04- 524.52



PRADHAN MANTRI GRAM SADAK YOJANA

NAME OF THE ROAD:- BHARA TO MANDIR MOHALLA
(GODHA) STAGE 1st AND 2nd. (Combine)

ESTIMATED COST :- ~~524.41~~ ^{471.71} LACS

MAINTENANCE COST:-

~~41.95~~
^{37.73}

ROAD CONNECTIVITY:-

509.44 LACS

ROAD LENGTH :-

4.00 K.M.

BLOCK :-

BHADERWAH

DIST.

DODA

CHIEF ENGINEER

PMGSY JKRRDA

JAMMU

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1. Introduction

1.1 Objectives of Pradhan Mantri Gram Sadak Yojna (PMGSY)

Rural Road connectivity is a key component of rural development by promoting access to economic and social services and thereby generating increased agricultural incomes and productive employment opportunities. It is also a key ingredient in ensuring poverty reduction.

It was against this background of poor connectivity that the Prime Minister announced in 2000, a massive rural roads program. The Prime Minister's Rural Road Program (Pradhan Mantri Gram Sadak Yojana, PMGSY) set a target of:

- Achieving all-weather road access to every village/habitation with a population greater than 1000 by 2003
- Providing all-weather road access to all villages/habitations of population greater than 500 people [250 in case of hill States (North-Eastern states, Sikkim, Himachal Pradesh, Jammu & Kashmir and Uttaranchal), the desert areas and tribal areas] by the end of the Tenth Five Year Plan, i.e., 2007

1.2 All Weather Road

The all weather road is one which negotiable during all weather with some interruptions, this means that at cross drainage structures the duration of overflow or interruptions at one stretch shall not exceed 12 hours for ODR & 24 hours for VR in hilly terrain. The total period in interruption during the year should not exceed 10 days for ODR & 15 days for VR.

1.3 Core Network

The rural road network required for providing the 'basic access' to all villages/ habitations is termed as the Core Network. Basic access is defined as one all-weather road access from each village/ habitation to the nearby Market Centre or Rural Business Hub (RBH) and essential social and economic services.

A Core Network comprises of Through Routes and Link Routes. Through routes are the ones which collect traffic from several link roads or a long chain of habitations and lead it to a market centre or a higher category road, i.e. the District Roads or the State or National Highways. Link Routes are the roads connecting a single habitation or a group of habitations to Through Roads or District Roads leading to Market Centers. Link Routes generally have dead ends terminating on habitations, while Through Routes arise from the confluence of two or more Link Routes and emerge on to a major road or to a Market Centre.

The Core Network may not represent the most convenient or economic route for all purposes. However, since studies show 85-90% of rural trips are to market centres, the Core Network is likely to be a cost-effective conceptual frame work for investment and management purposes, particularly in the context of scarce resources.

This road directly connects the habitation of Bharaand Mandir Mohalla (Godda) with population _____ respectively. Thus this link road serves the total population of _____.

2.4

Road Design Brief

{Insert a tabular format (sample attached) giving the design issues and solutions to be used by the Consultants in finalizing the drawings, provision of c/d structures, land acquisition issues, drainage issues, etc., approx. distance from existing centre line will be of use and have to be clearly spelt out in this table.}

Table 2.1 Road Design Brief (example attached)

Sl.	Location	Issue	Design Solutions
1	Ch. 0.00km	The proposed road is connecting Bhara to Mandir Mohalla (Godda).	All the hindrances are being cleared.
2	Ch.0.000 to 4.00km	side slopes are not adequate and gets eroded with rain and endanger the traffic movement and blocks the traffic.	Proper protection works like, 6mtr, 4mtr, 3 mtr, & 1 mtr height retaining wall/ Edge wall to be provided.
3	Ch.0.000 to 4.00km	water collects on upside of road which damages the road by crossing over road formation resulting in halting of traffic till stoppage of rains	Breast wall to be provided for safety of road.
4	Ch.0.000 to 4.00km	water collects on road which damages the road by crossing over road formation resulting in halting of traffic till stoppage of rains	14No. Hume Pipe Culverts of 1.00 mtr Dia 2no. 2mtr span RCC Culverts.

Design of Cross Drainage Works

General

On the basis of hydrological survey, ¹⁴~~(80)~~ new cross drainage structures are recommended for the project road as listed below. {Consultants shall review these guidelines with respect to the Expenditure Committee guidelines "Review of Geometric Design Standards for Rural Roads in Hill Areas (meeting at Mussorie – 29-30 November 2007) and Review of Geometric Design Standards for Rural Roads in Plains}

The existing structures in poor condition that are proposed for replacement as listed below. Agricultural conduits, which basically act as balancers, have also been provided as listed below.

Design Feature

Design Standards for culverts has been prepared based on standard codes and guidelines of IRC: SP: 20: 2002 and similar type of ongoing projects. General features of the designed cross drainage structures are given below:

For hume pipe culvert, minimum road width has been taken as ^{6.0}~~{7.5}~~ m,

Width of culvert : ^{6.0}~~{7.5}~~ m with parapet.

Width of Bridge: {-} m with parapet.

Justification for retaining/widening and replacement of culverts

{Insert the design considerations developed after the transect walk}

Hydraulic calculation for Culvert

The design discharge was calculated by the rational method considering peak runoff from catchment using the formula,

$$Q = 0.028 \times P \times A \times I_c$$

Where P = Coefficient of Run Off for the catchments characteristics, A = Catchments Area in Hectares & I_c = Rainfall Intensity

Small bridge-site length of which exceeds 15 m to be jointly visited by STA and S.E. Design – as per SP-20 & SP-13 and relevant IRC Codes for Bridges.

Causeways and submersible bridges – Design to be done as per SP-20 and SP-82:2005.

{Insert detailed hydraulic calculation of all replaced and proposed new culverts and attached as Annexure-2 of this report}.

{Insert list of c/d works proposed/upgraded, type, location, span/dia in a tabular form. This should connect to the decisions taken during transect walk}

11. Protective Works & Drainage

11.1 General

{Insert necessary description of the terrain and drainage condition along the road under study}

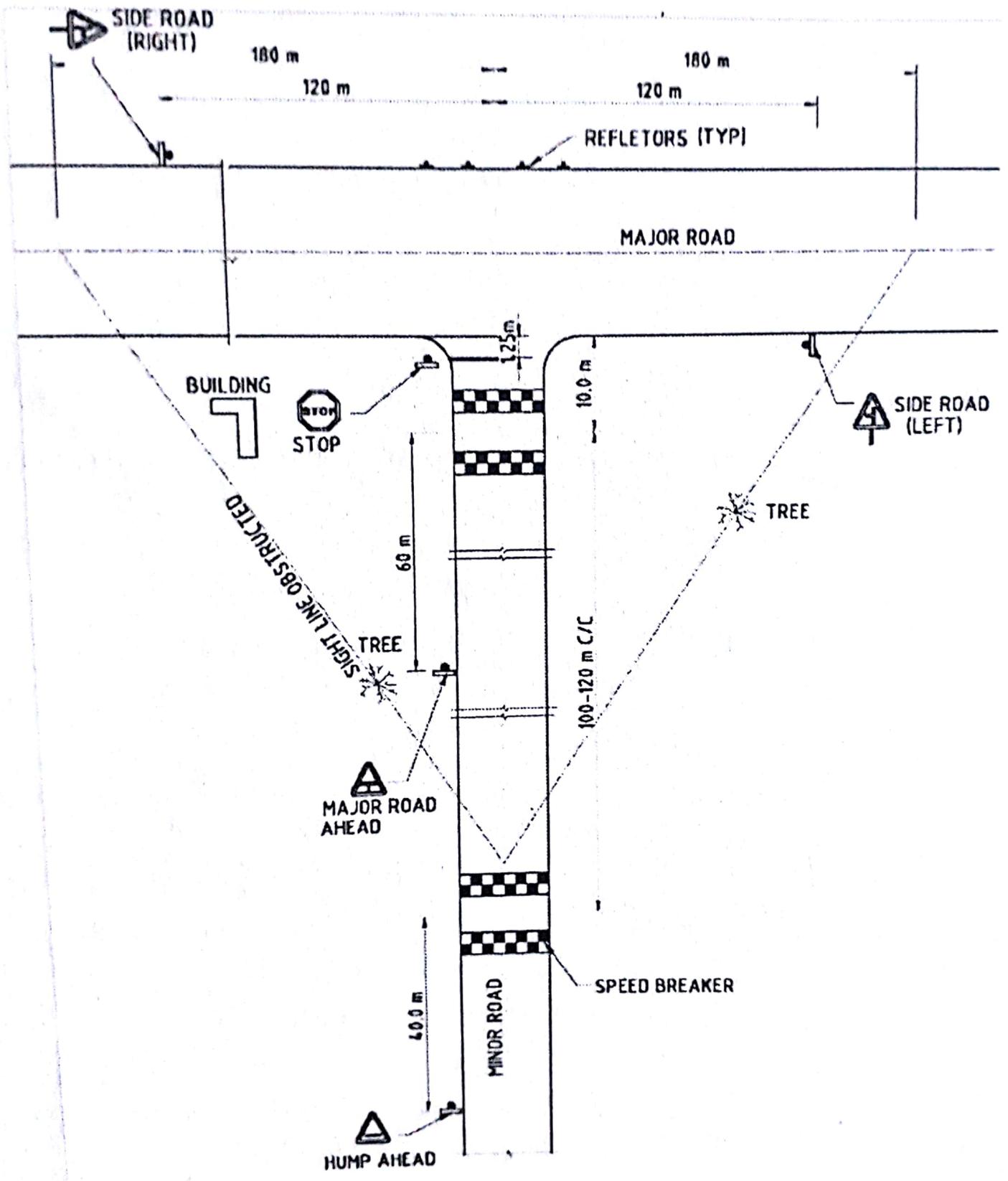
11.2 Road side drain

As the insufficient drainage of surface water leads to rapid damage of road, road side drain as shown in drawing volume has been provided particularly on the location of habitation areas. Sketch for a standard roadside drain should be made available.

11.3 Protective Works

Necessary protection works consisting of closed {Insert type of piling} piling and {Insert ballah suggested} ballah piling have been provided near pond and water bodies falling within the proposed alignment. Table 11.1 gives the chainage-wise protection works adopted.

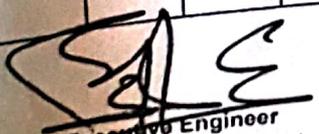
{Insert list of protection works proposed/upgraded, type, location in a tabular form. This should connect to the decisions taken during transect walk}

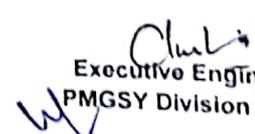


CARRIAGE OF MATERIALS

Name of Work:- Bhara to Mandir Mohalla (Godda)

Item	Distance			Loading & Unloading			Density	Haulage @ of Rs.4.49/Mt for BT @Rs.10.86/Mt for Kacha @Rs.5.40/MT for Gravel	Total Haulage (B)	G. Total including Loading & unloading carriage (A+B)
	BT	Gravel	Kacha	Loadin g	Unloadi ng	Total				
	(A)									
1 Sand	32	2	3	25	11	36	1.7	1.70 X (32x4.49 + 2 x 5.40+3x10.86)	318.00	354.00
2 Stone Aggregate (40-63MM)	57	2	3	48	11	59	2	2.00 x (57x 4.49 + 2x5.40+3x10.86)	508.83	567.827
3 Stones	24	2	3	48	11	59	1.8	1.80x(24X4.49 + 2 x5.40+3x10.86)	256.94	315.938
4 Stone aggregate (20mm & down)	57	2	3	48	11	59	1.8	1.8 x (57x 4.49 + 2x5.40+3x10.86)	508.83	567.827
5 Cement	187	2	3	127	127	254	1	1.00 x (187 x 4.49 + 2x5.40+3x10.86)	1501.12	1755.117
6 Hume Pipe	212	2	3	84/2.50	379/2.50	185.2	0.996	0.996 x (212 x 4.49 + 2x5.40+3x10.86)	1691.94	1877.142
7 Bitumen	187	2	3	149	135	284	1	1.00 x (187 x 4.49 + 2x5.40+3x10.86)	1501.12	1785.117
8 Granular Sub Base (GSB)	57	2	3	48	11	59	2	2.00 x (57 x 4.49 + 2x5.40+3x10.86)	508.83	567.827
9 Steel	187	2	3	138	138	276	1	1.00x(187x4.49+2x4.5+3x10.86)	1501.12	1777.117


Assistant Executive Engineer
PMGSY Sub-Division Bhaderwah


Executive Engineer
PMGSY Division Doda

PRADHAN MANTRI GRAM SADAK YOJANA (P.M.G.S.Y.)

Format F-6

Cost Estimates for Roads Construction.

CONSTRUCTION OF ROAD FROM BHARA TO MANDIR MOHALLA (GODDA)

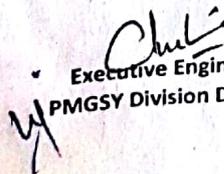
Block:- Bhaderwah.

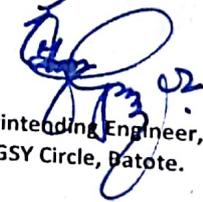
Package No:- JK04- 521

Doda

Description of Item	No.	L (M)	B (M)	D(M)	Quantity	Unit	Rate (Rs)	Amount (Rs.) Lacs	
Retaining Wall 6mtr Height	-	20 35	-	-	-	-	35438.69	7.27 12.40	7.87
Retaining Wall 4 Mtr Height	-	150 175	-	-	-	M	17481.66	30.59	26.22
Retaining Wall 3 Mtr Height	-	350 425	-	-	-	M	12188.75	51.80	42.66
Breast Wall	-	800	-	-	-	M	6991.28	55.93	✓
Edge Wall	-	450	-	-	-	M	2075.94	9.34	✓
Crated wall	-	250 450	-	-	-	-	6412.99	28.86	16.32
PCC Drain	-	350 700	-	-	-	M	1364.74	9.55	4.78
HP Culvert	-	-	-	-	10 14	No	205363.59	28.75	20.54
RCC Culvert 2 Mtr	-	-	-	-	2	-	732901.44	14.66	✓
RCC Culvert 3mtr	-	-	-	-	-	-	-	0	
RCC Culvert 6mtr	-	-	-	-	-	-	-	-	
Box type Culvert 1m x2m	-	-	-	-	-	-	-	0.00	
Box type Culvert 2m x2m	-	-	-	-	-	-	-	0.00	
SCUPPER 6.0 MT LONG	-	-	-	-	200	-	1283.03	2.57	✓
Parapets	-	-	-	-	-	-	-	-	
Extension of 1000mm Dia HPC	-	-	-	-	-	-	-	-	
Total=								244.46	200.89


Assistant Executive Engineer
PMGSY Sub-Division Bhaderwah


Executive Engineer
PMGSY Division Doda


Superintending Engineer,
PMGSY Circle, Patote.

PRADHAN MANTRI GRAM SADAK YOJANA (PMGSY)
CERTIFICATE OF GROUND VERIFICATION FROM EXECUTIVE ENGINEER, HEAD PIU

Name of the Road :- Bhara to Mandir Mohalla (Godda)

Package no:- JK-04- 521

District:- Doda

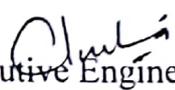
Block:- Bhaderwah

- i). Certified that the Land Width for the Road is available and that no additional land is required; or
 ii). Certified that land width for the Road is likely to be available as certified by the Panchayats.
 iii). Certified that no forest land is involved along the entire road way; or
 iv). Certified that the case for permission under Forest conservation Act has been moved to the Forest Department on Dated and File or Case no.

Certified that the DPR has been checked at site by


 Executive Engineer
 Head of PIU.


 Assistant Executive Engineer
 PMGSY Sub-Division Bhaderwah


 Executive Engineer
 PMGSY Division Doda


 Superintending Engineer
 PMGSY Circle, Batote.

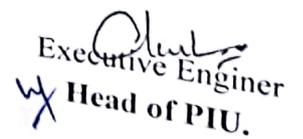
PRADHAN MANTRI GRAM SADAK YOJANA (PMGSY)
LIST OF DPRS VERIFIED ON GROUND.

of the Road :- Bhara to Mandir Mohalla (Godda)

District:- Doda

Block:- Bhaderwah

DPRs Seen on Ground by	DPR Nos.	% of total Number
A.E	<u>21</u>	100 %
E.E	one check	—
S.E	Am.	


 Executive Engineer
 Head of PIU.

**PRADHAN MANTRI GRAM SADAK YOJANA (PMGSY)
COMMUNITY CONSULTATION CHECK LIST - ENGINEERING**

Road :- Bhara to Mandir Mohalla (Godda)

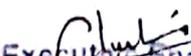
Package no :- JK-04-521

District:- Doda

Block:- Bhaderwah

No.	Question	Yes	No	N/a
	Are there any flood prone areas on the road?		✓	
	If Yes:			
	1.1 Are locations specified and inspected?			
	1.2. Is high flood level specified for each stretch?			
	1.3 Are locations specified and inspected?			
	Are there any locations on the road where irrigations ducts need to be provided?		✓	
	If Yes:			
	2.1 Are locations specified and inspected?			
	Can the road be used as a shortcut by through traffic?	-	-	-
	Does the road lead to any quarries, mining areas, brick kilns, logging areas, tourist attractions etc.?	Yes		
	Are there plans to build new schools, hospitals, temples etc	Yes		
	Is there potential for double connectivity?	-	No	-
	If yes on any of 3-6:			
	6.1 Is information on location, size and nature of additional traffic generators and specific routes obtained?			
	7. Is there a need for deviations from existing track?			
	If yes:			
	7.1 Were the proposals for deviation shown on site and explained to the community?	Yes		
	7.2 Is the land availability checked?	Yes		
	7.3 If there is a need for donation, were the owners consulted regarding their agreement to donate the land?	Yes		
	8. Is there a need for speed breakers?	-	-	-
	If yes:			
	8.1 Is location and rational for speed breakers identified?			
	8.2 Is rationale verified and checked on site?			
	8.3 Are alternative or additional locations discussed?			
	9. Are all existing intersections checked with the community on site?	-	-	-
	9.1 Is the use of intersecting roads identified (e.g. school children, farm machinery, etc)?			
	10. Are proposed culvert locations verified with the community?	-	-	-
	10.1 Is there a need for additional culverts?			
	10.2 If yes, are locations identified?			
	m			
	11.1 If yes, are locations identified?			


Assistant Executive Engineer
to Division
Bhaderwah


Executive Engineer
PMGSY Division
DODA


Superintending Engineer
PMGSY Batote

To be filled by S.T.A.

Name of the STA:

Name of Road :

NIT Srinagar (J&K)

Is the Proposed Road entered on the OMMS : *Bhara to Mjandir Mohalla Gowds* Yes / No

Are entries to be verified by STA before clicking the proposal) Yes / No

Is the proposal is for new connectivity *'N'* Yes / No

Have you satisfied yourself that the proposed Road is a part of the Core Network Yes / No

Is the unconnected habitation(s) part of list of unconnected Habitation as per CN – 6 Yes / No

Does the Proposal ensure full connectivity of the Target Habitation Yes / No

If No, the name of Unconnected Habitation up to which it is connected.

Is such Unconnected Habitation eligible Under PMGSY Yes / No

Are you satisfied with the following

Engineering Surveys (L section, X section must be verified) Yes / No

Soil / Material Investigation (CBR, Density, LL,PI, Gradation to be verified) Yes / No

Traffic Surveys / Estimation Yes / No

Hydraulic Studies Yes / No

Statement for structures with more than 2 vents to be verified from topo sheet. Location and requirement of all CD structures to be verified from L section.)

In case, Traffic is projected beyond T 4 category are you satisfied with the reason given by the PIU Yes / No

In case, sub grade CBR is less than 3; has soil stabilisation etc. been proposed Yes / No

If not, specific reason given by PIU)

Is the design of the following elements as per Rural Roads Manual / Circulars of NRRDA:

Alignment & Geometric Yes / No

Location and type of CD works and side drains Yes / No

Side drains Yes / No

Integration for Cross and Longitudinal Drainage Yes / No

Protection works Yes / No

Is the design of flexible pavement as per SP:72-2007 and design of Rigid pavement as per IRC SP:62-2004 Yes / No

Does the Estimate conform to Standard rate analysis and SSR generated for the current Phase Yes / No

Does the proposal have provision for

PMGSY Logo, Sign Boards & Information Boards Yes / No

Km / Hm Stones Yes / No

Guard Stones (where necessary) Yes / No

Traffic Sign Boards (as necessary) Yes / No

Specific remarks, if any, by STA (Specific remarks of STA about the overall project are necessary on each DPR)

DPR is for H-connectivity (Stage I & II) and includes all the required elements as per guidelines. The terrain is snow bound & mountainous.

It is confirmed that the Design and Estimation for the Proposed Road work are based on the data and SSR provided by PIU Engineers. The proposal after Correction is entered on the OMMS. The Proposal may be considered for clearance.

Technical Scrutiny at STA
Done By

Prof MS Khan & Prof JAT Khan

Signature
Name
Date

Coordinator :
S.T.A.

FAYAZ AHMAD MIR
Associate Professor NIT Srinagar
Coordinator State Technical Agency
Date