

GOVT OF JAMMU & KASHMIR

Phase VII

(1544-15)

(J&K RURAL ROADS DEVELOPMNET AGENCY)

(BHARAT NIRMAN)

DISTRICT KISHITWAR  
J&K STATE

NAME OF THE ROAD	:	PATNAZI TO KITHER
BLOCK	:	THATHRI
LENGTH	:	15.500 KM
ESTIMATED COST	:	<del>1235.45</del> 1544.15 LACS (Including Bridges)
	:	<del>1095.45</del> Lacs (Excluding Bridges)
NO. OF VILLAGES	:	01 NO 1430-40
NAME OF THE VILLAGE	:	KITHER
POPULATION	:	645 SOULS

Executive Engineer  
PMGSY Division  
Kishtwar

1. Name of work
2. Project length
3. Formation width
4. History & Necessity

## TECHNICAL REPORT

: Construction of Link road from Patnazi to Kither.  
 : 15.500 Km  
 : 5.50 M.  
 :

Roads are considered to be the veins of an area as the development & prosperity travels along the road. Himalayas are, as we know, the highest and the youngest mountains of the world, the rainfall on the southern side i.e. Indian side is always heavy, and as such these hilly areas are very fragile and delicately balanced. The terrain is generally mountainous and steep. It is very rugged. There are deep valleys and high ridges. Due to these geographical conditions, the population is much scattered.

Geographically, the Himalayas are divided into three sub regions i.e.

1. Western Himalayas, consisting of states of J&K Himachal Pradesh.
2. Central Himalayas, consisting of Garhwal & Kumaon divisions of U.P. & Nepal.
3. North Eastern Himalayas comprising of Sikkim & North Eastern States.

Within the domain of PMGSY Division Kishtwar the climate is moderate to very cold in winter season but summer is dry and moderate to hot. Rainfall is moderate to heavy. The terrain is mostly rugged and steep. Unit cost of infrastructure development is much higher than that in plains & returns are relatively low. Means of transport are limited to roads only and that too is slower and costlier than in the plains. Climatic conditions are very harsh. Accessibility to modern scientific advances is very difficult and costly. This has resulted in much more backwardness of the area both socially as well as economically.

The Rural roads are the basic infrastructure required for the development of rural areas. Rural roads have been planned and constructed under various rural development programme of the Govt. of India. Serious efforts through these programme also could not make all weather connectivity to more than 50% of the 6 Lacs villages in India located in different terrain conditions i.e. plain, hilly and mountainous regions, Deserts, Swamps, Coastal regions, backward area, tribal pockets etc. The climatic conditions also vary from place to place to great extent.

Social economical and education development of these villages greatly depends on accessibility. A large number of villages in rural areas of PMGSY Division Kishtwar are still not connected with the all weather roads. The employment opportunities and basic necessities like health, education can not



reach rural masses without a system of good road network. It has been realized that for the development of rural area, development of proper road communications system must be a priority.

Continued emphasis was laid in all the nine five year plans on Village connectivity to all villages by the turn of the century. Over these plans, substantial development has taken place in expansion of rural road Network. However, there has been admittedly neglected on proper maintenance of rural roads after their construction in the absence of uniform guidelines. Therefore, IRC felt it necessary to have uniform guidelines on rural roads to achieve planned and effective development of rural roads.

The Govt. of India has launched a major rural roads programmed i.e. Bharat Nirman known as Pradhan Mantri Gram Sadak Yojna (PMGSY) for the first time focusing directly on rural connectivity keeping rural roads of uniform standard as the only deliverable. It aims to provide connectivity by good all weather roads to all habitations above 1000+ & 500+. The all weather roads above have been defined in IRC as a road, which is negotiable during all weathers, except major river crossings. This implies that the road bed is drained effectively by adequate cross drainage structures, such as, culverts, minor bridges, and cause ways. Interruptions to traffic as per permitted frequency and duration are, however, allowed. The pavement should be negotiable during all weathers, but this does not necessarily imply that it should be paved or surfaced or back topped.

The aforementioned link road has been proposed under the scheme.

5. Working condition

The terrain being rugged and population scattered, transportation to Village Kither is only on foot with very narrow bridal path off shooting from Dundi Bungard road. The climate is very harsh. Rainfall/Snowfall is generally heavy. There are occasional cloud burst also number of wet days are more during winter, a large part is snow covered. Transportation of men and material is much costlier and more time consuming. During rainy season the roads in hilly areas get frequently blocked. These are main reasons why hilly areas remained more backward both socially and economically.

6. Present Status

The population of the area is facing lots of hardship for day to day transportation of men and material. A link road from Patnazi to Kither with its take off point from Tipri Patnazi road has been proposed under PMGSY which will mitigate the sufferings of the public surviving in such hard and inaccessible hilly terrain.

7. Proposal & Specification :

The road construction has been proposed mostly in the cutting width formation of 5.50 mtrs except at valley points where construction of R/walls are unavoidable from geometric considerations. The ruling gradient of 5% & limiting gradient of 6% has been proposed where at some obligatory points exceptional gradient of 7% has been proposed. At horizontal curves extra widening ranging from 0-60 M to 0-90 Mts has been proposed depending upon the radius of the curve. Two number passing zones per Kilometer with carriage way of 5.50 mts have been proposed. Ruling minimum radius of 23 mts. & absolute minimum radius of 15 mts. has been proposed for horizontal curves ruling design speed of 25 Km/Hr minimum speed of 20 Kms/Hr. have been taken.

At hair pin bends maximum gradient of 2.50% have been proposed while minimum roadway width at apex 7.5 M has been proposed. Minimum design speed at hair pin bend has proposed 20 Km/Hr. At horizontal curves the minimum radius of the inner curves shall be as large as practicable at site so that excessive earth cutting may not give rise to slips and slides large experiences of road construction in Doda District depicts that inner radius of 14 Mtrs as per IRC recommendations is rarely practicable in this hilly & snow bound area barring apart a few exceptions where cross country slope is not so large since the hilly slopes in this Distt. are very delicately balanced excessive earth cutting have created various slips and slides. However the efforts are being made to make inner radius of the curve as near to the IRC recommendations as possible so that the road is functional under normal conditions.

8. Drainage & Crossings :

For proper drainage of surface water 1000 MM dia Hume pipe have been proposed and at intercepting pipes have been proposed and intercepting Nallah points 6 M long cause way or RCC culvert or Bridges have been proposed depending upon span and site condition.

9. Walling :

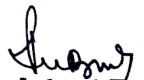
Semi pucca R/walls have been proposed in critical sections to ensure road geometric with height of R/walls more than 3 Mtrs. & Semi pucca B/walls have been proposed at required locations to prevent soil erosion. The top band, bottom band and vertical pillars of R/walls & B/walls have been proposed in stone masonry 1: 5 mix & bonds of RS dry masonry. The R/walls with less than 3 m height have been proposed in dry stone masonry.

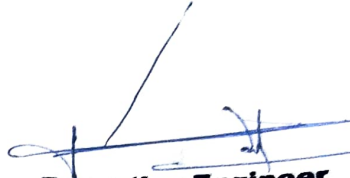
10. Population to be benefited :

On completion of scheme village Kither with other Mohras enroutes comprising of a population about 645 souls shall be benefited.

11. Time and cost :

The scheme shall cost Rs. <sup>1194.33 Lacs</sup> ~~1235.45~~ Lacs (Including bridges) Rs. <sup>1072.15 Lacs</sup> ~~1095.45~~ Lacs (Excluding Bridges) as per the enclosed abstract of cost & shall be completed with in 18 Months subject to availability of funds & material in time.


  
Assistant Executive Engineer  
PMGSY Sub Division,  
Kishtwar.


  
Executive Engineer  
PMGSY Division  
Kishtwar.



**Certified that:-**

1. The proposed link road from Patnazi to Kither (Km 25/800 to Km 41/300) is a part of core network.
2. The alignment along the road is safe, passes through the slide free zone and involves minimum CD works and thereby provides full connectivity to the intending Village / population.
3. The land is available for construction of this road. Private land owners are willing to provide land for the construction of road free of compensation.
4. R.O.W. for construction of road is sufficient as per rural road provisions of IRC.
5. The survey has been conducted by the concerned Sh. Rajesh Kumar (J.E), Sh . Mushtaq Ahmed Shahrmi (J.E.) and Sh. Irshad Ahmed Bhat (J.E) and it is certified that the field data in respect of L-section, X- sections, Site plan, classification of earth work, cutting hydraulic data for design of CD work and protection works are correct to the best of our knowledge.
6. The material and labour for road construction are available.
7. The condition of road from which takes off point is proposed is good and trafficable.
8. The location of CD and protection works has been proposed at requisite places as per the site conditions.
9. The CD works have been designed on realistic hydrological data.
10. The earth work quantities in cutting and filling have been balance.
11. The quantities provided in the DPR can be put to tenders and the analysis of rates and carriages are actual as per the local conditions.

  
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**PMGSY Sub Division,**  
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