GOVERNMENT OF JAMMU AND KASHMI R

PMGSY DEPARTMENT (J&K)

JAMMU

DETAILED PROJECT FOR CONSTRUCTION OF

ROAD PROPOSED UNDER

BHARAT NIRMAN

IN BLOCK MAHORE

DISTRICT REASI

Name of the scheme

MARI TO DHAKIKOT (PART-II)

LENGTH = 32.20 KMS

PKG:- JK14- 56o

COST = Rs 2378.58LACS

Chief Engineer

PMGSY (JKRRDA)

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 road which serves the targetted habitation under all weather conditions.

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.

The Sub-project road Mari To Dhakikot (Part-II) is a link road with Code LO33 in Arnas block of Reasi District (Erstwhile Udhampur District). This road directly connects the habitations of Mari to Berigalan,Chalwalkot,Girikot,Gotni,Ghoorah,Chandi,Phagala,Plapri and Dhakikot with populations of 177,115240,238,179,405,111,100 &520 respectively. Thus this link road serves the total population of 2085.

2.4 Road Design Brief

Table 2.1 Road Design Brief

Sl.	Location	Issue	Design Solutions
1	*Ch. 000*	*The proposed road is connecting Mataa to Dhakikot. The road is extension of Mari to Dhakikot (Part-I)*	
2	*Ch.17335*	*Local nallah*	*6 mtr span culvert proposed*
3	*Ch.19705*	*Local nallah*	*6mtr span CULVERT proposed*
4	*Ch. 20195*	*Local nallah*	*3mtr span culvert proposed*
5	*Ch. 22645*	*Local nallah*	*3mtr span culvert proposed*
6	*Ch. 24295*	*Local nallah*	*2mtr span culvert proposed*
7	*Ch. 24620*	*Local nallah*	*2mtr span culvert proposed*
8	*Ch. 27420*	*Local nallah*	*2mtr span culvert proposed*
9	*Ch. 28150*	*Local nallah*	*3mtr span culvert proposed*
10	*Ch. 30170*	*Local nallah*	*35mtr span Bridge proposed*
11	*Ch. 30350*	*Local nallah*	*6 mtr span culvert proposed*
12	*Ch. 32400*	*Local nallah*	*3mtr span culvert proposed*
13	*Ch. 32650*	*Local nallah*	*2mtr span culvert proposed*
14	*Ch.33750*	*Local nallah*	*2mtr span culvert proposed*
15	*Ch. 34310*	*Local nallah*	*6mtr span culvert proposed*
16	*Ch. 34750*	*Local nallah*	*3mtr span culvert proposed*
17	*Ch. 34880*	*Local nallah*	*2mtr span culvert proposed*
18	*Ch. 35230*	*Local nallah*	*2mtr span culvert proposed*
19	*Ch. 35900*	*Local nallah*	*2mtr span culvert proposed*
20	*Ch. 36910*	*Local nallah*	*3mtr span culvert proposed*
21	*Ch. 37250*	*Local nallah*	*2mtr span culvert proposed*
22	*Ch. 40160*	*Local nallah*	*2mtr span culvert proposed*
23	*Ch. 40340*	*Local nallah*	*3mtr span culvert proposed*
24	*Ch. 41260*	*Local nallah*	*6mtr span culvert proposed*
25	*Ch. 41530*	*Local nallah*	*3mtr span culvert proposed*
26	*Ch. 44510*	*Local nallah*	*2mtr span culvert proposed*
27	*Ch. 46000*	*Local nallah*	*2mtr span culvert proposed*
28	*Ch. 46330*	*Local nallah*	*2mtr span culvert proposed*
29	*Ch. 46540*	*Local nallah*	*6mtr span culvert proposed*
30	*Ch. 47050*	*Local nallah*	*2mtr span culvert proposed*
31	*Ch. 48610*	*Local nallah*	*2mtr span culvert proposed*
32	*Ch.48830-48885*	*Bus stop*	*Extra width of road proposed.*

Table 10.2 Proposed Culverts

Sl. No.	Chainage	Type of Culvert	Span/dia
1	16695	SCUPPER	(1 x 6.0 M)
2	16895	BOX CULVERT	(1 .0 M x 1.5 M)
3	17335	SLAB	(1 x 6.0 M)
4	17445	SCUPPER	(1 x 6.0 M)
5	17745	BOX CULVERT	(1 .0 M x 1.5 M)
6	18095	BOX CULVERT	(1 .0 M x 1.5 M)
7	18395	BOX CULVERT	(1 .0 M x 1.5 M)
8	18540	BOX CULVERT	(1 .0 M x 1.5 M)
9	18825	BOX CULVERT	(1 .0 M x 1.5 M)
10	19070	BOX CULVERT	(1 .0 M x 1.5 M)
11	19325	SCUPPER	(1 x 6.0 M)
12	19505	SCUPPER	(1 x 6.0 M)
13	19705	SLAB	(1 x 6.0 M)
14	20195	SLAB	(1 x 3.0 M)
15	20445	BOX CULVERT	(1 .0 M x 1.5 M)
16	20575	SCUPPER	(1 x 6.0 M)
17	20795	BOX CULVERT	(1 .0 M x 1.5 M)
18	21045	BOX CULVERT	(1 .0 M x 1.5 M)
19	21435	BOX CULVERT	(1 .0 M x 1.5 M)
20	21735	BOX CULVERT	(1 .0 M x 1.5 M)
21	22105	BOX CULVERT	(1 .0 M x 1.5 M)
22	22245	BOX CULVERT	(1 .0 M x 1.5 M)
23	22345	BOX CULVERT	(1 .0 M x 1.5 M)
24	22645	SLAB	(1 x 3.0 M)
25	22945	BOX CULVERT	(1 .0 M x 1.5 M)
26	23195	BOX CULVERT	(1 .0 M x 1.5 M)
27	23545	SCUPPER	(1 x 6.0 M)
28	23745	BOX CULVERT	(1 .0 M x 1.5 M)
29	23895	SCUPPER	(1 x 6.0 M)
30	24145	BOX CULVERT	(1 .0 M x 1.5 M)
31	24295	SLAB	(1 x 2.0 M)
32	24620	SLAB	(1 x 2.0 M)
33	24895	BOX CULVERT	(1 .0 M x 1.5 M)
34	25295	BOX CULVERT	(1 .0 M x 1.5 M)
35	25645	SCUPPER	(1 x 6.0 M)
36	25950	BOX CULVERT	(1 .0 M x 1.5 M)
37	26300	BOX CULVERT	(1 .0 M x 1.5 M)
38	26570	SCUPPER	(1 x 6.0 M)
39	26800	BOX CULVERT	(1 .0 M x 1.5 M)
40	26950	BOX CULVERT	(1 .0 M x 1.5 M)
41	27110	BOX CULVERT	(1 .0 M x 1.5 M)
42	27420	SLAB	(1 x 2.0 M)
43	27750	SCUPPER	(1 x 6.0 M)
44	27950	BOX CULVERT	(1 .0 M x 1.5 M)
45	28150	SLAB	(1 x 3.0 M)
46	28200	BOX CULVERT	(1 .0 M x 1.5 M)
47	28550	BOX CULVERT	(1 .0 M x 1.5 M)
48	28950	BOX CULVERT	(1 .0 M x 1.5 M)
49	29250	BOX CULVERT	(1 .0 M x 1.5 M)
50	29600	BOX CULVERT	(1 .0 M x 1.5 M)
51	30170	BRIDGE	(1 x 35.0 M)
52	30350	SLAB	(1 x 6.0 M)
53	30560	BOX CULVERT	(1 .0 M x 1.5 M)
54	31020	SCUPPER	(1 x 6.0 M)
55	31490	BOX CULVERT	(1 .0 M x 1.5 M)
56	31740	BOX CULVERT	(1 .0 M x 1.5 M)
57	32000	BOX CULVERT	(1 .0 M x 1.5 M)

58	32400	SLAB	(1 x 3.0 M)
59	32650	SLAB	(1 x 2.0 M)
60	33000	BOX CULVERT	(1 .0 M x 1.5 M)
61	33400	BOX CULVERT	(1 .0 M x 1.5 M)
62	33750	SLAB	(1 x 2.0 M)
63	34150	BOX CULVERT	(1 .0 M x 1.5 M)
64	34310	SLAB	(1 x 6.0 M)
65	34550	BOX CULVERT	(1 .0 M x 1.5 M)
66	34750	SLAB	(1 x 3.0 M)
67	34880	SLAB	(1 x 2.0 M)
68	35090	BOX CULVERT	(1 .0 M x 1.5 M)
69	35230	SLAB	(1 x 2.0 M)
70	34605	BOX CULVERT	(1 .0 M x 1.5 M)
71	35900	SLAB	(1 x 2.0 M)
72	36200	BOX CULVERT	(1 .0 M x 1.5 M)
73	36650	SCUPPER	(1 x 6.0 M)
74	36910	SLAB	(1 x 3.0 M)
75	37250	SLAB	(1 x 2.0 M)
76	37550	BOX CULVERT	(1 .0 M x 1.5 M)
77	37910	BOX CULVERT	(1 .0 M x 1.5 M)
78	38070	BOX CULVERT	(1 .0 M x 1.5 M)
79	38300	BOX CULVERT	(1 .0 M x 1.5 M)
80	38800	BOX CULVERT	(1 .0 M x 1.5 M)
81	39100	BOX CULVERT	(1 .0 M x 1.5 M)
82	39400	BOX CULVERT	(1 .0 M x 1.5 M)
83	39710	SCUPPER	(1 x 6.0 M)
84	40160	SLAB	(1 x 2.0 M)
85	40340	SLAB	(1 x 3.0 M)
86	40700	BOX CULVERT	(1 .0 M x 1.5 M)
87	40960	BOX CULVERT	(1 .0 M x 1.5 M)
88	41260	SLAB	(1 x 6.0 M)
89	41530	SLAB	(1 x 3.0 M)
90	42190	SCUPPER	(1 x 6.0 M)
91	42530	BOX CULVERT	(1 .0 M x 1.5 M)
92	42605	SCUPPER	(1 x 6.0 M)
93	43000	BOX CULVERT	(1 .0 M x 1.5 M)
94	43580	BOX CULVERT	(1 .0 M x 1.5 M)
95	43950	SCUPPER	(1 x 6.0 M)
96	44330	BOX CULVERT	(1 .0 M x 1.5 M)
97	44510	SLAB	(1 x 2.0 M)
98	45150	BOX CULVERT	(1 .0 M x 1.5 M)
99	45550	SCUPPER	(1 x 6.0 M)
100	45800	BOX CULVERT	(1 .0 M x 1.5 M)
101	46000	SLAB	(1 x 2.0 M)
102	46330	SLAB	(1 x 2.0 M)
103	46540	SLAB	(1 x 6.0 M)
104	46850	BOX CULVERT	(1 .0 M x 1.5 M)
105	47050	SLAB	(1 x 2.0 M)
106	47500	BOX CULVERT	(1 .0 M x 1.5 M)
107	47890	BOX CULVERT	(1 .0 M x 1.5 M)
108	48030	BOX CULVERT	(1 .0 M x 1.5 M)
109	48230	SCUPPER	(1 x 6.0 M)
110	48450	BOX CULVERT	(1 .0 M x 1.5 M)
111	48610	SLAB	(1 x 2.0 M)
112	48810	BOX CULVERT	(1 .0 M x 1.5 M)

11. Protective Works & Drainage

11.1 General

Mountaneous terrain and drainage condition along the road is under study as the road is new connectivity

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 R/walls&B/walls have been provided near to protect earthfilling ,road edge& cut slopes and water bodies falling within the proposed alignment. Table 11.1 gives the chainage-wise protection works adopted.

Table 11.1 List of protective works

Sl. No.	Chainage		Type of protective works		Comments
	From	To	LHS	RHS	
1	16695	16770	-	75	3 mtr R/Wall
2	17445	17495	-	50	3 mtr R/Wall
3	18445	18545	-	100	3 mtr R/Wall
4	19025	19145	-	100	3 mtr R/Wall
5	21195	21295	-	100	3 mtr R/Wall
6	21595	21695	-	100	3 mtr R/Wall
7	21745	21845	-	100	3 mtr R/Wall
8	22195	22295	-	100	3 mtr R/Wall
9	24420	24495	-	75	3 mtr R/Wall
10	24895	24995	-	100	3 mtr R/Wall
11	25095	25195	-	100	3 mtr R/Wall
12	25295	25345	-	50	3 mtr R/Wall
13	28150	28250	-	100	3 mtr R/Wall
14	30150	30200	-	50	3 mtr R/Wall
15	31700	31750	-	50	3 mtr R/Wall
16	32350	32400	-	50	3 mtr R/Wall
17	34200	34250	50	-	3 mtr R/Wall
18	34750	34780	30	-	3 mtr R/Wall
19	36160	36220	60	-	3 mtr R/Wall
20	40150	40300	-	150	3 mtr R/Wall
21	44300	44350	-	50	3 mtr R/Wall
22	45500	45560	-	60	3 mtr R/Wall
23	18645	18720	75	-	2 mtr B/Wall
24	18870	18970	100	-	2 mtr B/Wall
25	22395	22645	250	-	2 mtr B/Wall
26	22795	22895	100	-	2 mtr B/Wall
27	26600	26950	350	-	2 mtr B/Wall
28	27700	27750	50	-	2 mtr B/Wall
29	32400	32750	100	350	2 mtr B/Wall
30	36600	36700	-	300	2 mtr B/Wall
31	48500	48800	-		2 mtr B/Wall

12. Land Requirement

12.1 General

There is no existing track . Thus the project road is a new connectivity road with no existing track.

12.2 Proposed ROW

The width of carriageway has been considered as 3.75 m in accordance with the IRC-SP 20: 2002. The total roadway width is limited to 6.00 m with 1.875 m earthen shoulder on either side of carriage way. The proposed ROW generally varies from 12 m – 15 m depending upon the road cut formation and the proposed ROW is even less than 10 m in some stretches of habitation area and in areas having tree plantation.

12.3 Additional Land

Local administration and local panchayat need to apprise the villagers about requirement of minor areas in places for development of the road. Villagers are generally highly enthusiastic during site visits for selection of the road. Table 12.1 provides the chainage-wise additional land required.

{Insert a table showing the additional land required for developing the PMGSY road}

GENERAL ABSTRACT OF COST

Name of Road: Construction of Road from "Mari to Dhakikot (Part-II)" JK14-560
Length 32.20 km
(Stage-I)

S.No	Description of Item	Unit	Quantity	Rate (Rs)	Amount (In Lacs)
1	2	3	4	5	6
1	**Earthwork in excavation in hilly terrain**				
a.	All kinds of soil	Cum	~~276507~~ 414761	115	~~317.98~~ 476.98
b.	Ordinary rock not requiring blasting	Cum	~~172817~~ ~~241944~~	201	~~486.31~~ 347.36
c.	Hard Rock	Cum	~~103690~~ ~~172817~~	343	~~592.76~~ 355.69
d.	Earth filling in embankment	Cum	9962.35	58	5.78
e.	Disposal of excavated mulba including Loading, unloading av. Lead 1km	Cum	69126	50	34.56
				T=	~~1437.39~~ 1220.54
2	**C.D Works**				
a.	Const. of 1.0 Mtr x 1.5 Mtr RCC Box Culvert	No	64	291515	186.57
b.	Const. of 2m span RCC Culvert	No	15	737314	110.60
c.	Const. of 3m span RCC Culvert	No	8	1041379	83.31
d.	Const. of 6m span RCC Culvert	No.	6	~~2233281~~ 2233281	~~134.00~~ 134.00
e.	Const. of 6.00 Mtr Long Scupper	No	18	510199	91.84
f.	Const. of 45.0 Mtr Span Bridge	No	1		
				T=	~~606.31~~ 600.10
3	**Const. of Semi Pucca Walling:-**				
a.	Semi Pucca R/Wall Av. Height 3.0 m	Rmt	2075	11872	246.34
b.	Semi Pucca R/Wall Av. Height 4.0 m	Rmt	0	18098	0.00
c.	Semi Pucca B/Wall Av. Height 2.0 m	Rmt	1775	5691	101.02
d.	Const. of Mulba Dumping Yards @ 1 no./800m	No.	40 25	807480 732080	~~322.99~~ 201.87
				T=	670.35
4	**Providing & Fixing of PMGSY Boards:-**				549.23
a	P/F of Citizen Informatory Board	Each	6	14494	0.87
b	P/F of PMGSY Logo after every 2Km	No.	16	10000	1.60
c.	Provision for tracer path cutting including survey and setting out etc.	Km	32.2	~~27000~~ 20000	~~8.69~~ 6.44

d.	Provision for Preparation of DPR & Painting of Boards ,Lines, Dashes, Arrows etc. as per Technical Specification Clause 1702.	LS	-	-	0.10 ~~0.30~~
				T=	~~11.46~~ 9.01
				G.TOTAL=	~~2725.52~~ Lacs

2378.58

i/c 73.87 lac/km

Asstt. Executive Engineer

Executive Engineer
PMGSY Division
Mahore

Stage-I DPR checked & scrutinized for Rs. 2378.58 lacs.

09/3/17