

Passage Plan for Forest Effectuated Road

Under Kanha Pench Corridor Area



Pradhan Mantri
Gram Sadak Yojna

District :- Balaghat

Block :- Lanji

State :- Madhya Pradesh

MPRRDA Bhopal (M.P.)

MADHYA PRADESH RURAL ROAD DEVELOPMENT AUTHORITY (MPRRDA)**DETAIL PROJECT REPORT**

FOR PMGSY-RCPLWE ROADS

UNDER


PRADHAN MANTRI GRAM SADAK YOJNA (RCPLWE)

2020-21

**VOLUME - I**

DISTRICT :	BALAGHAT	BLOCK :	LANJI
NAME OF ROAD :	BODALKHA TO DHIRI MURUM		
PACKAGE NO. :	MP01-810	ROUTE No. :	VR024

			Cost Without GST	Cost Incl. GST @ 12%		Avg.Cost/ KM Without GST (Lakh)	Avg.Cost / KM i/c GST (Rs.Lacs)
TOTAL ROAD LENGTH	:	18.500		-	KM		
LENGTH OF RIGID PAVEMENT	:	2.200		-	KM		
LENGTH OF FLIXIBLE PAVEMENT	:	16.300		-	KM		
COST OF RIGID PAVEMENT	:	:	115.83	129.73	LAKH	52.65	205.92
COST OF FLIXIBLE PAVEMENT	:	:	691.05	773.98	LAKH	42.40	47.48
TOTAL COST OF PAVEMENT	:	:	806.88	903.70	LAKH	43.62	48.85
COST OF C.D. WORKS	:	34 Nos	206.30	231.05	LAKH	12.66	14.18
PROTECTION WORKS	:	0.480 Km	68.20	76.38	LAKH		
CC DRAIN	:	0.780 Km	25.45	28.51	LAKH	32.63	36.55
ROAD FURNITURE ITEMS	:	:	5.19	5.81	LAKH	0.32	0.36
DPR PREPARATION COST	:	:	2.31	2.59	LAKH	0.14	0.16
COST OF STATE ITEMS (UTILITY SHIFTING)	:	:	2.70	3.02	LAKH	0.17	0.19
Total Construction Cost	:	:	1117.03	1251.08	LAKH	60.38	67.63
MAINTENANCE COST	:	:	53.90	60.36	LAKH	3.31	3.70
TOTAL COST i/c MAINTENANCE	:	:	1170.93	1311.44	LAKH	63.29	70.89


 Assistant Manager
 M.P.R.R.D.A.
 P.I.U.-1, Balaghat


 General Manager
 M. P. R. R. D. A.
 P. I. U. -1, Balaghat

Introduction

Pradhan Mantri Gram Sadak Yojana (PMGSY)

• Pradhan Mantri Gram Sadak Yojana (PMGSY) was launched on 25th December, 2000 as a 100% Centrally Sponsored Scheme with the objective to provide All-Weather road connectivity to the eligible unconnected habitations as per Core-Network with a population of 500 persons (as per 2001 Census) and above in plain areas. In respect of 'Special Category States' (North-East, Sikkim, Himachal Pradesh, Jammu & Kashmir and Uttarakhand), the Desert areas, the Tribal (Schedule V) areas and 88 Selected Tribal and Backward districts as identified by the Ministry of Home Affairs/Planning Commission, the population criteria to connect eligible unconnected habitations as per Core-Network was of 250 persons and above (Census 2001). In critical Left Wing Extremism affected blocks (as identified by MHA), additional relaxation has been given to connect habitations with population 100+. The Scheme has also an element of upgradation (to prescribed standards) of existing rural roads in districts where all the eligible habitations of the designated population size have been provided all weather road connectivity, though it is not central to the Programme.

RCPLWEA PROGRAMME OBJECTIVES:- The provisions of the existing PMGSY Programme Guidelines mentioned in paras 2.1 to 2.2 of the "PMGSY Programme Guidelines, January 2015" will apply. 2.3 Road Connectivity Project for Left Wing Extremism (LWE) Affected Areas (RCPLWEA) as a vertical under the PMGSY will provide an all-weather road connectivity with necessary culverts and cross-drainage structures in 44 districts (35 are worst LWE affected districts and 09 are adjoining districts), which are critical from security and communication point of view. The primary focus in improving the road connectivity under this project is to bring people out of physical and functional isolation. Suitable road connectivity will create confidence in the governance structures, create job opportunity, uplift living standard and thus help to keep the local populace away from the LWE activities. 2.4 Presently under PMGSY Guidelines, for most intensive 267 LWE blocks, as identified by Ministry of Home Affairs, unconnected habitations with a population of 100 and above (as per 2001 Census), are eligible to be connected under PMGSY. Under Road Connectivity Project for LWE Affected Areas, the population of the habitations has not been taken as a consideration as the primary objective is providing seamless connectivity, for population of the area, various arms of the government and the security forces in the LWE affected and adjoining areas. The project will cover the Rural Roads (RR), Village Roads (VR), Other District Roads (ODR) and Major District Roads (MDR) which are critical from the security point of view which have been identified by the Ministry of Home Affairs in consultation with the Home departments of the identified states and the Security Forces engaged in combating the LWE violence and rehabilitating the affected population. The list of roads and bridges is available at Annex-

EMPOWERED COMMITTEE:-

National Rural Road Development Agency (NRRDA) will provide Operational and Management Support to the "Road Connectivity Project for LWE Affected Areas" project. The Ministry of Rural Development will finalize the selection of the roads in consultation with the Ministry of Home Affairs which in turn will receive inputs from the State Governments and from intelligence agencies, CRPF etc. MoRD will be the nodal implementing Ministry. Various activities under the project include approval of the district Panchayats, vetting of the proposals by States Rural Roads Development Agencies (SRRDA), scrutiny/ approval by State level Standing Committee chaired by the Chief Secretary of the State, preparation of the Detailed Project Reports (DPRs) of the selected projects by Project Implementation Units (PIUs), scrutiny of the DPRs by the State Technical Agencies (STA) designated by National Rural Roads Development Agency (NRRDA) and sample scrutiny of the proposals by NRRDA after receiving the same from the SRRDA and placing them before the Inter-Ministerial Empowered Committee (IMEC). 10.2 The Inter Ministerial Empowered Committee (IMEC) would be Co-Chaired by Secretary (Home Affairs) and Secretary (Rural Development), Government of India. The Committee will have the power to change/ amend the physical/ financial scope of project proposal like number of roads etc. to be covered under the scheme in LWE Districts. The recommendations of the Empowered Committee would be submitted to the Hon'ble Minister of Rural Development for final approval/ clearance. 10.3 The Ministry will communicate the clearance / sanction of the Proposals to the State Government. The clearance / sanction by the Ministry does not imply Administrative or Technical sanction of the proposals. The procedures of the State Government / SRRDA in this regard would be followed. The authorised officer of the Executing Agency / department (to be decided by the State Government), would have to record the Technical Sanction on each DPR before action is taken to tender the works.

GUIDING PRINCIPLES OF PMGSY AND DEFINITIONS 3.1 The provisions of the existing PMGSY Programme Guidelines, January 2015 mentioned in paras 3.1 to 3.16 will apply except for the fact that under the existing PMGSY Guidelines, for most intensive LWE blocks, as identified by Ministry of Home Affairs, unconnected habitations with a population of 100 and above (as per 2001 Census), are eligible to be covered under PMGSY. In "Road Connectivity Project for LWE Affected Areas" population of the habitation is not a consideration at all as the primary objective is providing seamless connectivity, area security and area domination along with smooth movement of security forces in the LWE affected areas, by construction / upgradation of specifically identified roads.

Name of Work Construction of road from Bodalkha to Dhiri murum Under RCPLWEA Scheme

BLOCK	LANJI	DISTRICT	BALAGHAT	STATE	MADHYAPRADESH
-------	-------	----------	----------	-------	---------------

Table 1.2 forest information of Project Under FCA

Sr. No.	Name of Road	Chainage (in Km)		Desing Length (in Km)	Forest Length (in Km)	Area In Hact.
		From	to			
1	Bodalkha to Dhiri murum	0 + 00	18 + 500	18.500	18.50	16.65

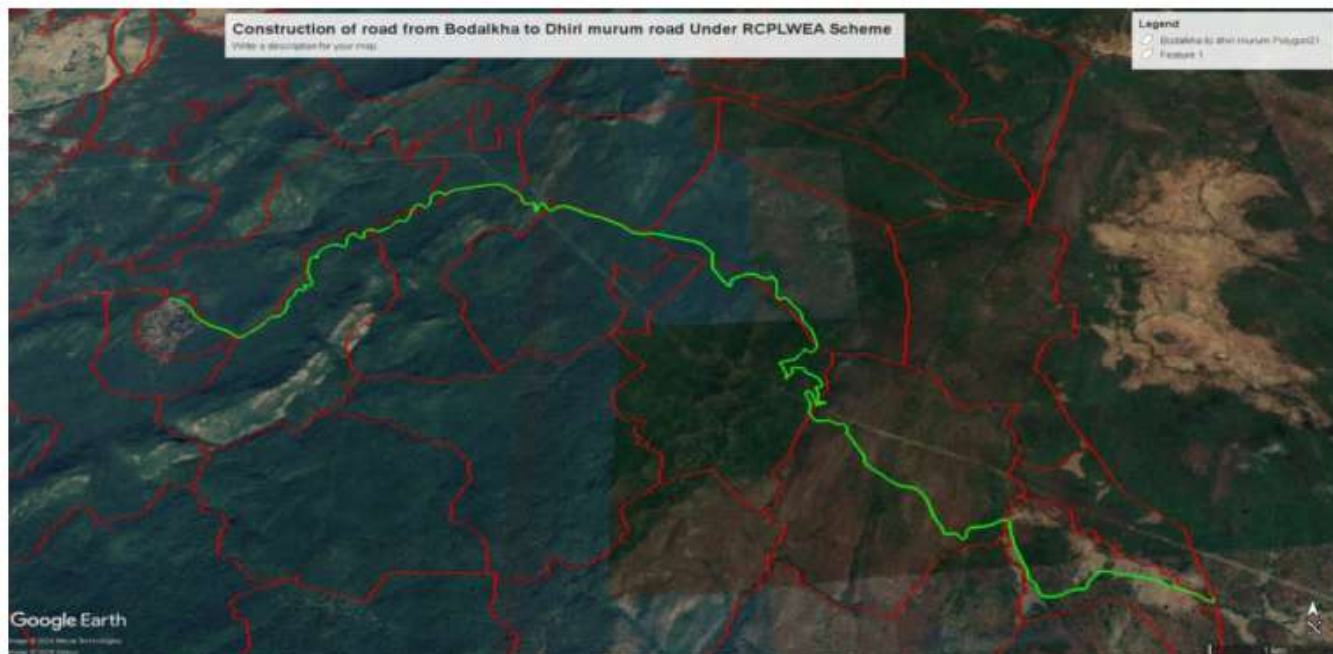
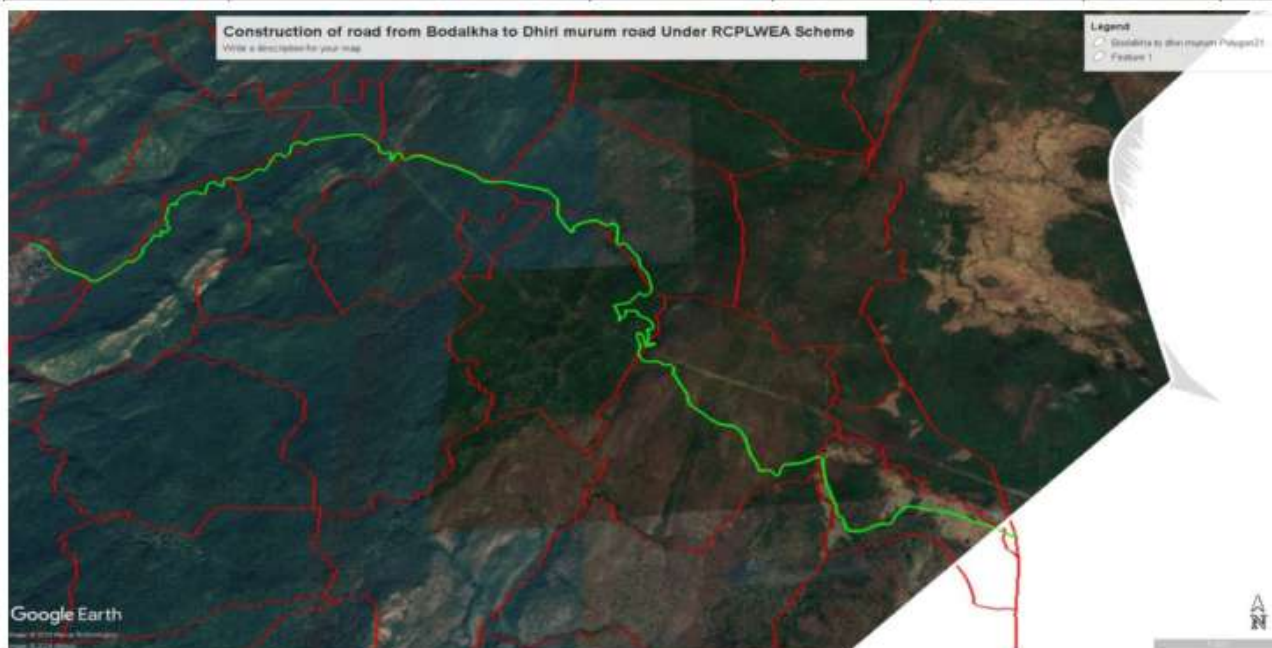


Table 1.3 forest information of Project Under wildlife (Tiger corridor Area)

Sr. No.	Name of Road	Chainage (in Km)		Desing Length (in Km)	Corridor Length (in Km)	Area In Hact.
		From	to			
1	Bodalkha to Dhiri murum	0 + 000	14 + 100	14.10	0.13	0.117



#Geography

Balaghat District is located in the southern part of Jabalpur Division. It occupies the south eastern portion of the Satpura Range and the upper valley of the Wainganga River. The district extends from 21°19' to 22°24' north latitude and 79°31' to 81°3' east longitude. The total area of the district is 9,245 km². Balaghat District is bounded by Mandla District of Madhya Pradesh to the north, Dindori District to the northwest, Rajnandgaon District of Chhattisgarh state to the east, Gondia and Bhandara districts of Maharashtra state to the south, and Seoni District of Madhya Pradesh to the west. The Main language spoken in district is Hindi, Gondi, Chattishgarhi and Powari in Baihar & Ukwa, Powari in Paraswada, Northern parts of Balaghat Tehsil and Bharveli, Kalari in Lanji & kirnapur, Powari in western parts i.e. Waraseoni, Katangi & Lalbarra and Marathi in the southern part of district.

Forests in Balaghat

The highland forests are tropical moist, dry deciduous type and of a completely different nature from bamboo on slopes. A notable Indian ghost tree can also be seen in the dense forest.

Kanha Tiger Reserve has species of tigers, leopards, wild dogs, wild cats, foxes and jackals. Among the deer species, swamp deer or hard-ground barasingha is the pride of the place, as it is the only subspecies of swamp deer in India, except the great swamp deer of Sundarbans. The animal is adapted to hard ground unlike swamp deer of the north, which live in marshy swamps.

#Importance

Habitation served, population of the habitations connected and population served.

The Sub-project road, **Bodalkha to Dhiri murum** is a Link road with code **RR(VR)** in Block **Lanji** of District **Balaghat**. This Road directly connects the habitations of

Basic Feature of the Sub-Project road :-

District = Balaghat
 Block = Lanji
 Road Name = Bodalkha to Dhiri murum
 Road Code = RR(VR)
 CNCPL/CUPL No. =
 Package No = MP 01-810
 Road Length = 18.50 Km km
 Start Point = Bodalkha
 End Point = Dhiri

Start Point

Latitude :- 21°30'15.58"N
 Longitude :- 80°39'0.36"E

End Point

Latitude :- 21°28'28.40"N
 Longitude :- 80°44'15.01"E

Sl.No.	Habitation benefited	Population Benefited		Chainage	
		Direct	Indirect	From	To
1	Bodalkha	365		0	0
2	Mataghat	13		0	0
3	Dhiri	115		0	0

#Climatic Condition :-

The Climate of Balaghat District is sub- tropical characterized by a hot summer and general dryness except during the southwest monsoon season. The year may be divided into four seasons. The cold season, December to February is followed by the hot season from March to about the middle of June. The period from the middle of June to September is the southwest monsoon. October and November form the post monsoon or transition period. The normal annual rainfall of Balaghat district is 1168.12 mm (Table-1.3). Balaghat District received maximum rainfall during southwest monsoon period i.e. June to September. Thus, surplus water for ground water recharge is available only during the southwest monsoon period. The normal maximum temperature recorded during the month of May is 43°C and minimum during the month of December is 8°C. The normal annual means maximum and minimum temperatures of Balaghat district are 32°C & 8°C respectively. The rainfall comparison of the district is shown in the figure-1.4. During the southwest monsoon season the relative humidity ranges between 70-75%. In the rest of the year it is drier. The driest part of the year is the summer season, when relative humidity is less 34%. May is the driest month of the year.

Rainfall.

The wind velocity is higher during the pre-monsoon period as compared to post monsoon period. The maximum wind velocity 7.7 km/hr observed during the month of June and minimum 3.9 km/hr during the month of December.

Table-1.3: Annual Rainfall Data - 2016-2020(mm)

Year	Jan Rainfall (mm)	Feb Rainfall (mm)	Mar Rainfall (mm)	Apr Rainfall (mm)	May Rainfall (mm)	Jun Rainfall (mm)	Jul Rainfall (mm)	Aug Rainfall (mm)	Sept Rainfall (mm)	Oct Rainfall (mm)	Nov Rainfall (mm)	Dec Rainfall (mm)
2016	3.7	3.8	12.3	0.2	3.4	74.1	380.7	347	170.3	15.8	0	0
2017	7.7	2.8	0.9	0	7.3	105.8	290.4	263.6	187.5	49.4	0	0
2018	0	23.3	0.1	9.6	2	142.8	407.9	330.7	101.4	5.2	0	16.3
2019	28.6	18	17.9	0.4	0	35.1	353.6	447.1	448.4	20.4	1.5	7.3
2020	102.7	27.2	60.1	7.1	11.4	168	238.2	661.2	130.1	77.1	12.2	1

(Source: Indian Meteorological Department)

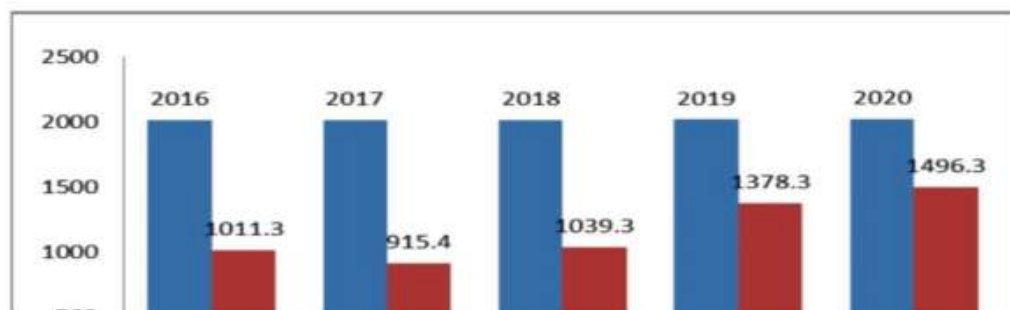


Table-1.3: Annual Rainfall Data - 2016-2020(mm)

Year	Jan Rainfall (mm)	Feb Rainfall (mm)	Mar Rainfall (mm)	Apr Rainfall (mm)	May Rainfall (mm)	Jun Rainfall (mm)	Jul Rainfall (mm)	Aug Rainfall (mm)	Sept Rainfall (mm)	Oct Rainfall (mm)	Nov Rainfall (mm)	Dec Rainfall (mm)
2016	3.7	3.8	12.3	0.2	3.4	74.1	380.7	347	170.3	15.8	0	0
2017	7.7	2.8	0.9	0	7.3	105.8	290.4	263.6	187.5	49.4	0	0
2018	0	23.3	0.1	9.6	2	142.8	407.9	330.7	101.4	5.2	0	16.3
2019	28.6	18	17.9	0.4	0	35.1	353.6	447.1	448.4	20.4	1.5	7.3
2020	102.7	27.2	60.1	7.1	11.4	168	238.2	661.2	130.1	77.1	12.2	1

(Source: Indian Meteorological Department)

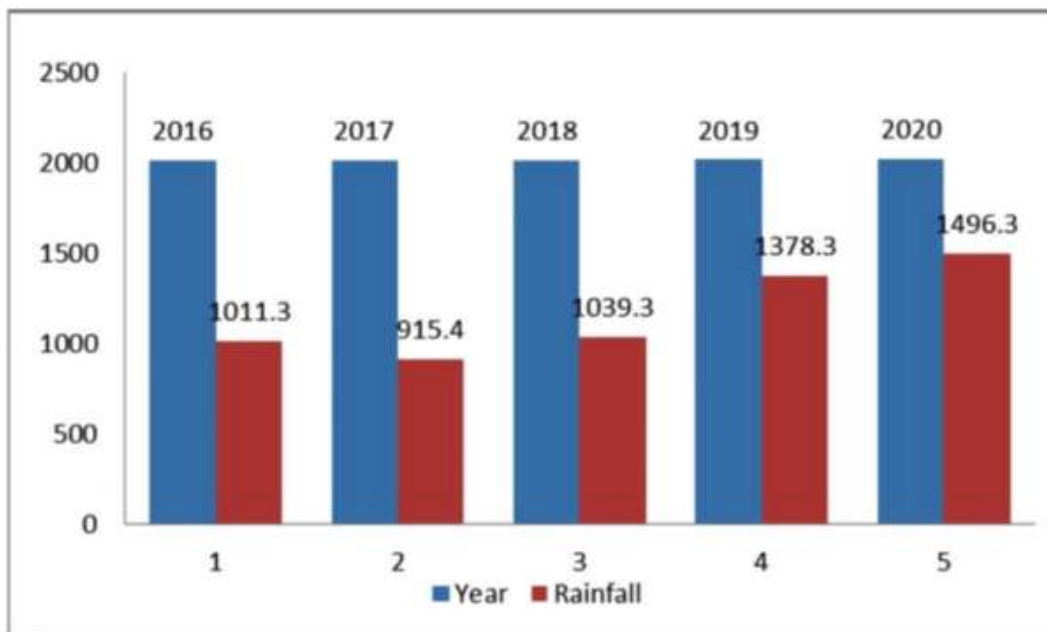


Fig-1.4: Rainfall comparison (2016-2020)

ANIMAL PASSAGE PLAN IN CORRIDOR AREA

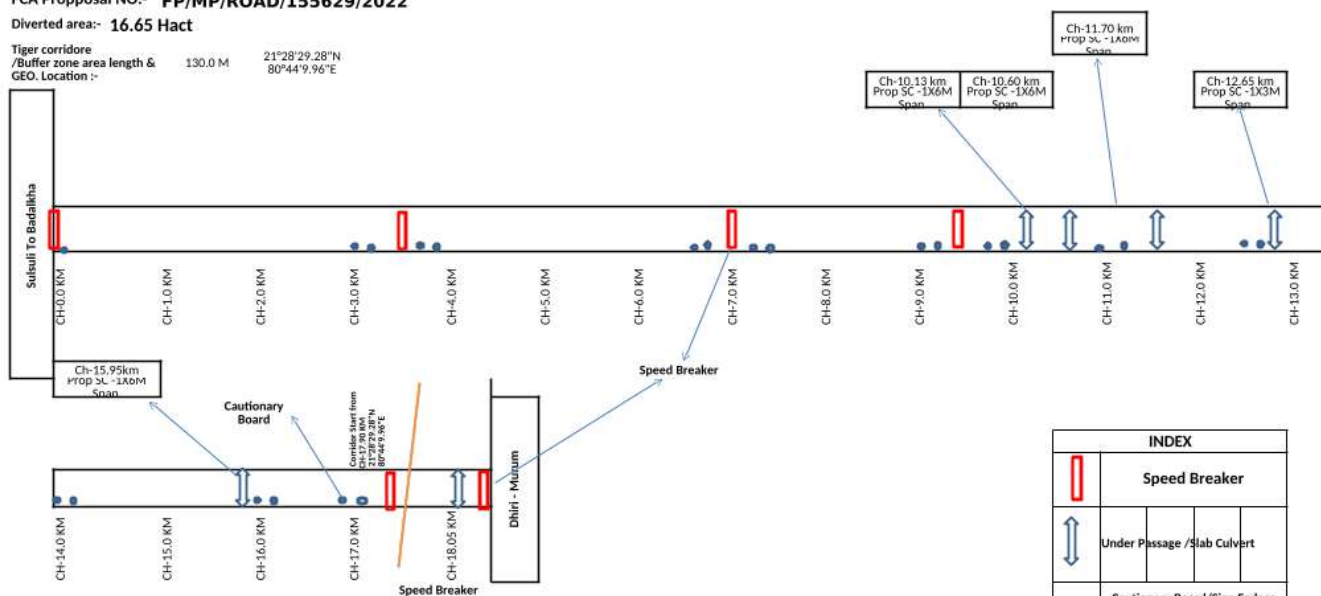
Project Name :- **Construction of road from Bodalkha to Dhiri murum Under RCPLWEA Scheme**

Proposal No. **WL/MP/ROAD/468651/2024**

FCA Proposal NO:- **FP/MP/ROAD/155629/2022**

Diverted area:- **16.65 Hact**

Tiger corridor
/Buffer zone area length &
GEO. Location :- 130.0 M 21°28'29.28"N
80°44'9.96"E



S No.	CH	Type of Sttructures	L (M)	B (M)	H (M)	Geotach Location	Cost (In Lacs)
1	17.8 Km	Under Passage /SC 6.0M 1-SPAN	6	7.5	4	21°28'27.97"N 80°44'12.47"E	26.62
2	15.95 Km	Under Passage /SC 6.0M 1-SPAN	6	7.5	4	21°28'51.16"N 80°43'17.47"E	26.62
3	12.65 Km	Under Passage /SC 3.0M 1-SPAN	3	7.5	4	21°29'33.91"N 80°42'31.14"E	7.45
4	11.7 Km	Under Passage /SC 6.0M 1-SPAN	6	7.5	4	21°29'46.69"N 80°42'20.97"E	26.62
5	10.60 km	Under Passage /SC 6.0M 1-SPAN	6	7.5	4	21°30'8.67"N 80°42'28.05"E	26.62
6	10.13 Km	Under Passage /SC 6.0M 1-SPAN	6	7.5	4	21°30'24.18"N 80°42'20.01"E	26.62

Note :- Corridor start from road CH 17.90 km (GEO. Location 21°28'29.28"N , 80°44'9.96"E) and Passes through length of 0.130 Km along the Road

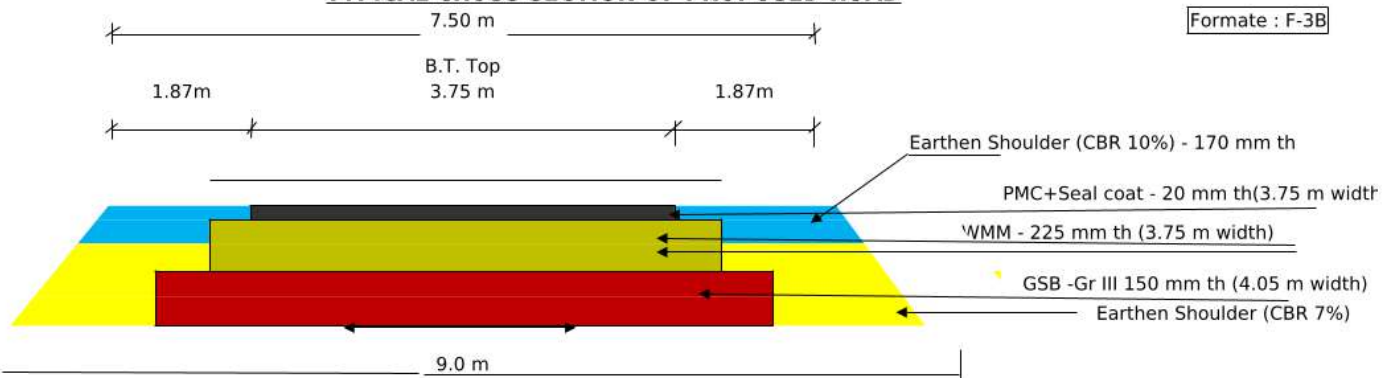
Assistant Manager
M.P.R.R.D.A.
P.I.U.-1, Balaghat

Assistant Manager
M.P.R.R.D.A.
P.I.U.-1, Balaghat

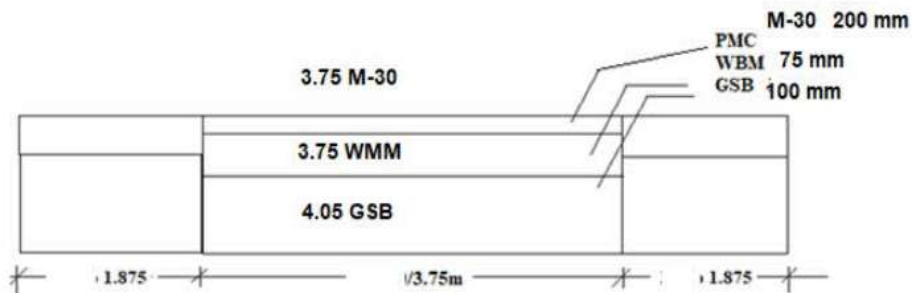
INDEX				
	Speed Breaker			
	Under Passage / Slab Culvert			
Cautionary Board/Sign Eadges				
1. Speed Limit Board				
2. Speed Breacker Board				
3. Turning board (Left/Right)				
4. Chetawani board				

TYPICAL CROSS SECTION OF PROPOSED ROAD

Formate : F-3B



TYPICAL CROSS SECTION OF PROPOSED CC ROAD



Assistant Manager
M.P.R.R.D.A.
P.I.U.-1, Balaghat

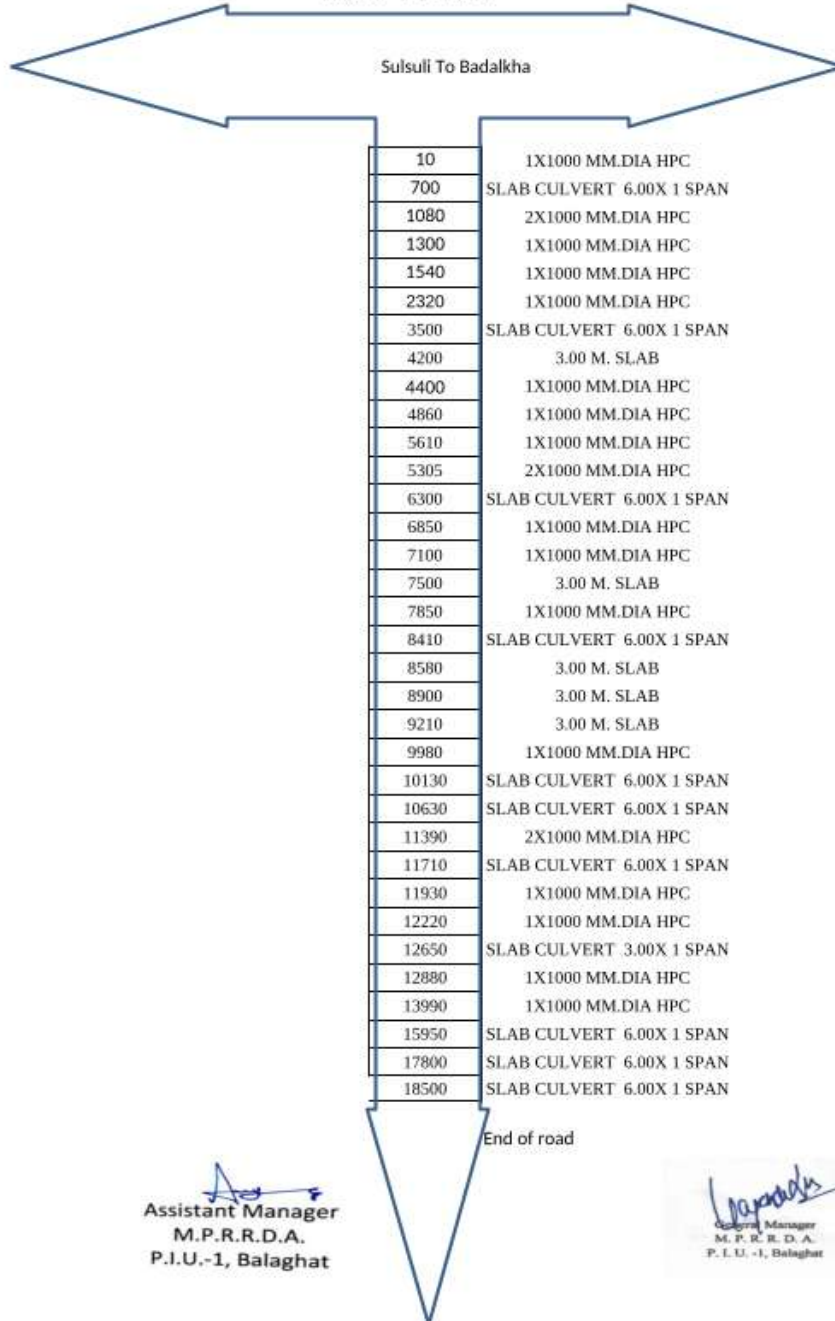
General Manager
M. P. R. R. D. A.
P. I. U. -1, Balaghat

District :- Balaghat

Name of the Road :- Construction of road from Bodalkha to Dhiri murum Under RCPLWEA Scheme

Length of the Road :- 18.50 Km.

KEY PLAN



Cautionary Board

सवधान वन्यप्राणियो
को मार्ग से गुजरने
को प्रथम अधिकारी

गतिसीमा 20
किमी

गति अवरोधक

कंन्हा पेंच
कॉरिडोर क्षेत्र

वन है तो कल है

वन ही जीवन है
जल ही जीवन है

पेड़ लगाये
पर्यावरण बचाये

वनों की आग से
रक्षा करें

वन्यप्राणी
विचरण क्षेत्र

सावधान
वन्यप्राणी क्षेत्र

PLAN-SPEED BREAKER

0.15m WIDE BLACK & WHITE STRIP WITH SYNTHETIC ENAMELED PAINT

600mm Equilateral semi reflective sign board

3.75/3.00

45.00

5.00

0.15

0.50

0.15

A

3.70

0.10

CRUST COMPOSITION AS SANCTIONED

LONGITUDINAL SECTION A-A'

0.30m WIDE BLACK & WHITE STRIP WITH SYNTHETIC ENAMELED PAINT

B

7.50/6.00

5.00

0.15

0.50

0.15

A'

45.00

600mm Equilateral semi reflective sign board

7.50/6.00

3.75/3.00

ADDITIONAL WORK INCLUDED IN SPEED BREAKER ITEM

HOT MIXED HOT LAYED BITUMINOUS MIX

G-III (75MM THICK)

G-II (75MM THICK)

GSB 125MM WITH RIVER BORN MATERIAL

3.75M CARRIAGEWAY WIDTH CRUST COMPOSITION AS SANCTIONED

G-III (75MM THICK)

G-II (75MM THICK)

GSB 125MM WITH RIVER BORN MATERIAL

ADDITIONAL WORK INCLUDED IN SPEED BREAKER ITEM

TRANSVERSE SECTION BB'

0.10