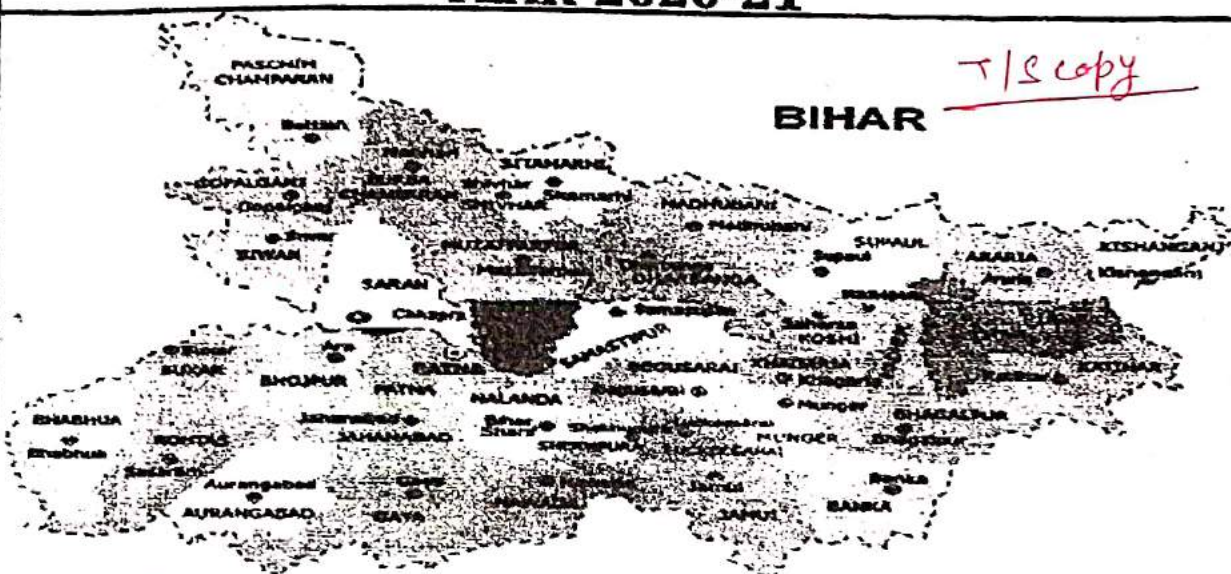




ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

DETAILED PROJECT REPORT UNDER FDR YEAR-2020-21



Name of the Road :-

**PERMANENT RESTORATION OF ROAD FROM Kumhrauli PWD Road REO
Road To Chanua Tol Tak**

DISTRICT	:	DARBHANGA	
DIVISION	:	DARBHANGA-2	
BLOCK	:	Jale	
ACTUAL LENGTH OF ROAD	:	1.130	KM
FLOOD AFFECTED LENGTH OF ROAD	:	0.450	KM
TOTAL COST OF PROJECT	:	38.040	Lac

SUBMITTED BY:-

EXECUTIVE ENGINEER
RWD (W) DIVISION DARBHANGA-2
DARBHANGA-2

UNDER EDR

(Year-2020-21)

GENERAL ABSTRACT OF COST

Block:-

Tale

District:- DARBHANGA

Actual Length of Road:- 1.130 KM

Name of Road:- PERMANENT RESTORATION OF ROAD FROM Kumbhaurli PWD Road REO Road To Chanua Tol Tak

L. No.	Item of Work	Amount
A	TOTAL COST OF CONSTRUCTION	: 32.95377 Lacs
	Add GST @ 12%	: 3.9545 Lacs
	Add Labour Cess @ 1%	: 0.3295 Lacs
	Add Seigniorage Fee @ 10% on Material Cost only	: 0.42594 Lacs
	TOTAL CONSTRUCTION COST INCLUDING GST, L.C & S.F.	: 37.6637 Lacs
B	CONTINGENCY @ 1% FOR CONSTRUCTION COST ONLY	: 0.37664 Lacs
	TOTAL	: 38.040 Lacs

Pran
20.5.2021
Senior Engineer
WD(W) Div. Darbhanga-2

Pran
20.5.2021
Asstt Engineer
RWD(W) Div. Darbhanga-2

Pran
20.5.2021
Executive Engineer
RWD(W) Div. Darbhanga-2

Technically sanctioned for Rs 37,66,370.00 (Rupees Thirty seven
lacs sixty six thousand three hundred and seventy only.)
SE *Pran*
RWD(W) Circle Darbhanga

SUMMARY OF COST ESTIMATE FOR THE PROJECT

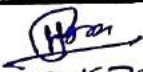
NAME OF ROAD : PERMANENT RESTORATION OF ROAD FROM Kumhrauli PWD
Road REO Road To Chanua Tol Tak

DISTRICT DARBHANGA
BLOCK Jale
DIVISION DARBHANGA-2
LENGTH OF ROAD 1.130 KM

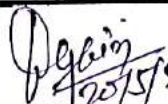
CD STRUCTURES

HUME PIPE 0
RCC CULVERT 1
BOX CELL CULVERT 0

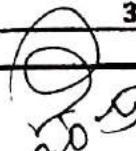
Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
1	PREPARATORY WORKS ,SITE CLEARANCE , DISMANTLING	0.000
2	EARTHWORK	0.735
3	GSB	5.410
4	WBM GRADE III	5.123
5	PRIME COAT	0.000
6	TACK COAT	0.000
7	MIX SEAL SURFACING	0.000
8	SEAL COAT	0.000
9	CC PAVEMENT	20.614
10	HARD SHOULDER	1.073
	SUB TOTAL OF PAVEMENT COST IN LACS =	32.9538
11	CROSS DRAINAGE STRUCTURES	
I	HUME PIPE	0.000
II	RCC Culvert (1 x5 x2.5M)	0.000
III	BOX	0.000
IV	CAUSEWAY	0.000
V	PROTECTION WORK	0.000
	SUB TOTAL OF CD STRUCTURES COST IN LACS =	0.000
	SUB TOTAL COST OF PROJECT IN LACS =	32.954
	ADD GST @ 12 % =	3.954
	ADD LABOUR CESS @ 1 % =	0.330
	Add Selniorage Fee @ 10% =	0.426
	TOTAL COST OF PROJECT INCLUDING GST, LC & S.F. IN LACS =	37.664
	CONTINGENCY @ 1% FOR CONSTRUCTION COST ONLY =	0.377
	TOTAL =	38.040


 20.5.2021
 JE

RWD(W) Div. Darbhanga-2


 20/5/2021
 AE

RWD(W) Div. Darbhanga-2


 20-5-21
 EE
 RWD(W) Div.
 Darbhanga-2

Sl. No.	SDB	MOBD	Name of Road :
			PERMANENT RESTORATION OF ROAD FROM Kumbhauri PWD Road Proj. Road No. 10

Sl.No	RefNo	Description	Unit	NOS	LENGTH(m)	WIDTH(m)	HEIGHT(m)	QUANTITY(m³)	RATE(In ₹)	AMOUNT (In ₹)
1	3.14	303.1 Construction of Subgrade and Earthen Shoulders								
		Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300.2 with lead upto 1000 m as per Technical Specification Clause 303.1.								
		Beside Flank (On Flood affected Portion) For 1000 m lead @ 100 %	Cum	2	450.00	1.375 Avg	0.250 Avg	309.38	237.43	73,456.00
2	4.1	401 Granular Sub-base with Well Graded Material (Table 400.1) (By mix in place method) For Grading I Material						309.38		73,456.00
		Sub Head : PAVEMENT LAYERS - GSB & WBM ITEMS							A) SUB TOTAL OF CRUST =	73,456.00
		Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.								
			Cum	1.00	450.00	3.750	0.100	168.75		
		Net GSB Qty						168.750	3,205.82	5,40,982.00
2	4.7	405 WBM Grading 3 with screening Material (By Mechanical Means)								
		Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheel roller 80-100 kN in stages to proper grade and camber, applying and brooming, stone screening to fill-up the interstices of coarse aggregate, watering and compacting to the required density Grading 3 as per Technical Specification Clause 405.								
		Chainage In M. From To								
		150 600			450					
		Total Length=			450.00					
			Cum	1	450.00	3.750	0.075	126.56		
								126.560	4,048.01	5,12,316.00
									B) SUB TOTAL OF CRUST =	10,53,298.00

Cost-Estimate for Permanent Restoration of Road

Name of Road : PERMANENT RESTORATION OF ROAD FROM KUMHRAULI PWD ROAD REO ROAD TO CHANNA TOL										
SL No.	SDB SL NO	MORD Ref.No	Description	Unit	NOS	LENGTH(m)	WIDTH(m)	HEIGHT(m)	QUANTITY(m ³)	LENGTH: 1.130 KM
3	6.4	1500	SUB HEAD : CC PAVEMENT Cement Concrete Pavement							
			Construction of un-reinforced plain cement thickness as per design, over a prepared sub base with 43 grade cement or any other type as per clause 1501.2.2 M 30 grade coarse and fine aggregate maximum size of aggregate not exceeding 25mm, mixed in a concrete of not less than 0.2cum capacity and appropriate weigh batcher using approved mix design laid in approved fixed side formwork (steel channel laying and fixing of 125 micron thick plythene film ,wedges ,steel plates including levelling the formwork as per drawing) spreading the concrete with shovels , rakes , compacted using needle, screed and plate vibrators and finished in continuous operation including provision of contraction and expansion , construction joints applying debonding strips , primer , sealant , dowel bars , near approaches to bridge/ culvert and construction joints, admixtures as approved , curing of concrete slab for 14 days curing compound (where specified) and water finishing to lines and grade as per drawing and Technical specification clause 1501.							
			On Flood affected portion (Details are as above mentioned)	cum	1	450.00	3.750	0.160	270.00	
			Net Qty						270.000	7,63,467
4	4.18	412	Hard Shouldering							20,61,361.00
			Laying brick soling layer on prepared sub-grade with brick on end edging according to lines, graded and cross-section shown on the drawing filling joints with sand and earth, spreading 25 mm thick layer of earth over brick soling, watering and rolling the same with three wheel road roller 80-100 kN as per Technical Specification Clause 412							
			Hard Shouldering besides CC Portion	sqm	2.00	450.00	0.250		225.00	
			New Brick Area						225.00	
									476.72	1,07,262.00
									225.00	
									C) SUB TOTAL OF CC PAVEMENT =	21,68,623.00
									TOTAL COST OF PAVEMENT IN RS. (A+B+C) =	32,95,377.00

RWD(W) Div. Darbhanga-2

RWD(W) Div. Darbhanga-2

RWD(W) Div. Darbhanga-2

JE

AE

EE

20.5.2021

20.5.2021

20.5.2021

Self-storage Fee

SL	SDB SL	MORD	No.	No.	Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount In Rs	Total material Qty. required	Total material Amount	Self-storage Fee Add 10 %
1	3.14	303.1				CONSTRUCTION OF SUBGRADE AND EARTHEN SHOULDERS TO REQUIRED SLOPE AND COMPACTED TO MEET REQUIREMENT OF TABLE 300.2 WITH LEAD UP TO 1000 M AS PER TECHNICAL SPECIFICATION CLAUSE 303.1.							
						UNIT = CUM							
						TAKING OUTPUT = 100 CUM							
						MATERIAL							
						COMPENSATION FOR EARTH TAKEN FROM PRIVATE LAND							
						COST FOR 100 CUM = A							
						RATE PER CUM = (A)/100							
						TOTAL COST CUM							
						34.82							
						3482.00							
						3482.00							
						100.00							
						34.82							
						TOTAL COST CUM							
						34.82							
						309.38							
						10772.61							
						1077.00							
						(BY MIX IN PLACE METHOD) FOR GRADING I MATERIAL							
						CONSTRUCTION OF GRANULAR SUB-BASE BY PROVIDING WELL GRADED MATERIAL, SPREADING IN UNIFORM LAYERS WITH TRACTOR MOUNTED GRADER ARRANGEMENT ON PREPARED SURFACE, MAKING BY MIX IN PLACE METHOD WITH ROTAVATOR AT OMC, AND COMPACTING WITH SMOOTH WHEEL ROLLER TO ACHIEVE THE DESIRED DENSITY, COMPLETE AS PER TECHNICAL SPECIFICATION CLAUSE 401.							
						UNIT = CUM							
						TAKING OUTPUT = 300 CUM							
						MATERIAL							
						FOR WELL GRADED GRANULAR SUB-BASE MATERIAL AS PER TABLE							
						53 MM TO 9.5 MM @ 50 PER CENT							
						9.5 MM TO 2.36 MM @ 20 PER CENT							
						2.36 MM BELOW @ 30 PER CENT - COURSE SAND							
						COST FOR 300 CUM = A							
						RATE PER CUM = (A)/300							
						TOTAL COST CUM							
						551.39							
						165417.84							
						18986.40							
						175.80							
						506.92							
						36498.24							
						109933.20							
						610.74							
						180.00							
						72.00							
						108.00							
						551.39							
						551.39							
						TOTAL COST CUM							
						551.39							
						168.75							
						93047.06							
						9305.00							
						WBM GRADING 3							
						PROVIDING, LAYING, SPREADING AND COMPACTING STONE AGGREGATES OF SPECIFIC SIZES TO WATER BOUND MACADAM SPECIFICATION INCLUDING SPREADING IN UNIFORM THICKNESS, HAND PACKING, ROLLING WITH SMOOTH WHEEL ROLLER 80-100 KN IN STAGES TO PROPER GRADE AND CAMBER, APPLYING AND BROOMING, STONE SCREENING TO FILL-UP THE INTERSTICES OF COARSE AGGREGATE, WATERING AND COMPACTING TO THE REQUIRED DENSITY GRADING 3 AS PER TECHNICAL SPECIFICATION CLAUSE 405.							
						UNIT = CUM							
						TAKING OUTPUT = 360 CUM							
						BY MECHANICAL MEANS							
						(A)							
						405							
						4.7							
						2							

Name of Road : PERMANENT RESTORATION OF ROAD FROM KUMHRAHILL PWD ROAD REO ROAD TO CIBLOCK : Jale

LENGTH : 1.130 KM

Name of Road : PERMANENT RESTORATION OF ROAD FROM Kumhrauli PWD Road REO Road To CIBLOCK : Jale												LENGTH: 1.130 KM	
Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION		Unit	Quantity	Rate	Amount In Rs	Total material Qty. required	Total Material Amount	Add 10 % Selfgnorage Fee		
		a)	Material (Refer Tables 400.7, 8, 9 and 10)										
			Aggregate										
			Grading 3 53 mm to 22.4 mm @ 0.91 cum per 10 sqm for compacted thickness of 75 mm		cum	435.60	503.85	219477.06					
			Stone Screening										
			Type B 11.2 mm for Grading 3 @ 0.18 cum per 10 sqm		cum	86.40	392.53	33914.59					
			Cost for 360 cum = a					253391.65					
			Rate per cum = (a)/360					703.87					
Total Cost					cum			703.87	126.56	89081.79	8908.00		
3	6.4	1500	Cement Concrete Pavement										
			Construction of un-reinforced, plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including provision of contraction and expansion, construction joints, applying debonding strips, primer, sealant, dowel bars, near approaches to bridge/culvert and construction joints, admixtures as approved, curing of concrete slabs for 14-days, using curing compound (where specified) and water finishing to lines and grade as per drawing and Technical Specification Clause 1501.										
			Unit = cum										
			Taking output = 75 cum (172.50 t)										
			(100 x 3.75 x 0.200)										
		a)	Material										
		(i)	Crushed stone coarse aggregates, grading will be as per Clause 1501.2.4.1 (Table 1500.1) of specifications @ 0.90 cum/cum of concrete										
			67.50									38672.10	
		(ii)	Sand as per IS:383 and conforming to Clause 1500.2.4.2 @ 0.45 cum/cum of concrete										
			33.75									5933.25	
			Rate per cum = (a)/75										
			594.74										
Total Cost					cum			594.74	270	160579.8	16058.00		
4	4.18	412	Brick Soling (With New Brick)										
			Laying brick soling layer on prepared sub-grade with brick on end edging according to lines, graded and cross-section shown on the drawing filling joints with sand and earth, spreading 25 mm thick layer of earth over brick soling, watering and rolling the same with three wheel road roller 80-100 kN as per Technical Specification Clause 412.										
			Unit = sqm										
			Taking output = 150 sqm										
		(a)	Material										
			Brick 1st Class										
			No. 8160.00									41860.80	
			Brick 1st Class on edging										
			No. 1100.00									5643.00	

Name of Road : PERMANENT RESTORATION OF ROAD FROM Kumhrauli PWD Road REO Road To CIBLOCK : Jale										LENGTH: 1.130 KM	
Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount In Rs	Total material Qty. required	Total Material Amount	Add 10 % Seigniorage Fee	
			Fine Sand	cum	5.66	141.85	802.87				
			Cost for 150 sqm = a				48306.67				
			Rate per sqm = (a)/150				322.04				
Total Cost				cum			322.04	225	72459	7246.00	
Total Construction cost of Seigniorage Fee @ 10%										42594.00	

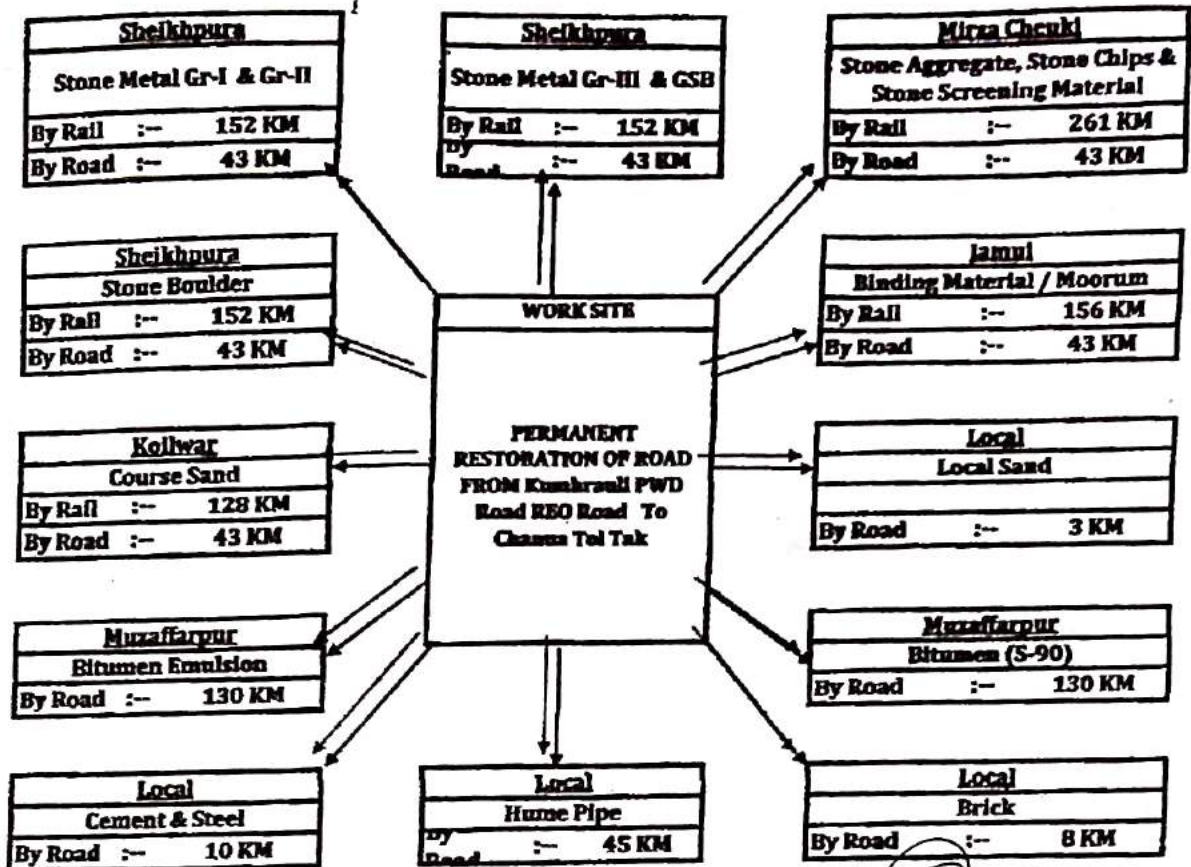
Quarry Map

Name of Road :- **PERMANENT RESTORATION OF ROAD FROM Kumbhauri PWD Road REQ Road To Charua Tol Tak**

Block :- **Jale**

District :- **DARBHANGA-2**

Length of the Road:- **1.130 KM**



* Subjected to Verification of Lead

(Signature)
20.5.2021
J.E

(Signature)
20.5.2021
A.E

(Signature)
20-5-21
E.E
(Signature)
20-5-21
S.E