



कार्यपालक अभियंता का कार्यालय
पथ निर्माण विभाग, पथ प्रमण्डल, मनोहरपुर।

ercdmanohar-jhr@nic.in

पत्रांक :- 390 (अनु०)

मनोहरपुर/दिनांक :- 21-06-2021

सेवा में,

वन प्रमण्डल पदाधिकारी,
पोड़ाहाट वन प्रमण्डल, चाईबासा।

विषय :- सोनुवा-पनसुवा-लोढ़ाई-गुदड़ी पथ के कि०मी० 0.00 से कि०मी० 41.56 तक चौड़ीकरण एवं मजबूतीकरण कार्य हेतु 18.28 हे० वन भूमि अपयोजन प्रस्ताव के संबंध में।

संदर्भ :- पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार, क्षेत्रीय कार्यालय, राँची का पत्रांक-FP/JH/ROAD/26179/2017/6463 दिनांक 03.06.2021.

महाशय,

उपयुक्त विषयक प्रासंगिक पत्र के द्वारा पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार के क्षेत्रीय कार्यालय द्वारा 5 (पाँच) बिन्दुओं पर Query किया गया है। बिन्दु संख्या 2 से 5 अधोहस्ताक्षरी के कार्यालय से संबंधित है। उनका बिन्दुवार व्याख्या निम्न है, जो पत्र के साथ अलग-अलग पेज पर अंकित कर दिया गया है।

सभी वर्णित जानकारियाँ तथा Referecned किया गया Enclosure सहित सभी दस्तावेज/जानकारी को Parivesh Web Portal पर Upload कर दिया जायेगा।

अनु०:- यथोक्त।

विश्वासभाजन,

Chandray

कार्यपालक अभियंता,
प०नि०वि०, पथ प्रमण्डल,
मनोहरपुर। 21/6/21

Query No. 2 – Details of the other two alternative explored with the reasons of their rejected

Explanation :- विषय योजना में सोनुवा-पनसुवा-लोढ़ाई-गुदड़ी पथ की कुल लम्बाई 41.56 कि०मी० है। गुदड़ी प्रखण्ड की निकटतम प्रमुख रेल हेड एवं अनुमण्डल मुख्यालय चक्रधरपुर से दूरी 41.5+28 कि०मी० = 63.5 कि०मी० होती है। यह पथ जिला मुख्यालय चाईबासा से 61.5 कि०मी० + 30 कि०मी० = 91.5 कि०मी० है। यह पथ जिला मुख्यालय चाईबासा से गुदड़ी पहुँचने वाला न्यूनतम दूरी वाला मार्ग है।

अन्य वैकल्पिक निम्नवत हैं :-

1. चक्रधरपुर-सोनुवा-गोइलकेरा-बड़डीहा-गुदड़ी पथ है, जिसकी लम्बाई-63 कि०मी० तथा जिला मुख्यालय से 63 कि०मी० + 61.00 कि०मी० = 124 कि०मी० एवं चक्रधरपुर रेल हेड एवं अनुमण्डल मुख्यालय से 63 कि०मी० + 37 कि०मी० = 100 कि०मी० है। यह पथ वर्तमान में 3.05 मीटर चौड़ी है तथा 39 कि०मी० लम्बाई सघन वन क्षेत्र से गुजरती है। इस पथ के उन्नयन (Improvement/ चौड़ीकरण एवं सुदृढीकरण) कार्य में ज्यादा वन भूमि अपयोजन की आवश्यकता होगी। पथ जीर्ण-शीर्ण अवस्था में है। पथ के वर्तमान चौड़ाई में Traffic के Through Movement संभव नहीं है। जिला मुख्यालय, अनुमण्डल मुख्यालय एवं निकटतम रेल हेड से अधिक दूरी होने के साथ अधिक वन भूमि अपयोजन की आवश्यकता होगी। इसलिए इस प्रस्ताव को वैकल्पिक मार्ग के रूप में उन्नयन (Improvement) कार्य के लिए उपयुक्त नहीं समझा गया।

(ii) जिला मुख्यालय, अनुमण्डल मुख्यालय एवं प्रमुख रेल हेड से गुदड़ी पहुँचने का दूसरा वैकल्पिक मार्ग बन्दगाँव-बड़केल-गिरू-गुदड़ी पथ हो सकता है, जो N.H. 75E पर स्थित बन्दगाँव से निकलती है। इस पथ की बन्दगाँव से गुदड़ी तक की लम्बाई 57 कि०मी० है। जिसका 21.00 कि०मी० अंश सघन वन क्षेत्र से गुजरता है, अधिकांश अंश में पगडंडी मात्र की तरह है इस मार्ग द्वारा चक्रधरपुर अनुमण्डल से 57 कि०मी० + 51 कि०मी० = 108 कि०मी० एवं जिला मुख्यालय-चाईबासा 138 कि०मी० होगी। इसके अतिरिक्त इस पथ के उन्नयन कार्य के लिए सोनुवा-गुदड़ी की तुलना में अधिक वन भूमि अपयोजन की आवश्यकता होगी तथा तुलनात्मक रूप से कम जनसंख्या यातायात सुगमता प्रदान करेगा। इसलिए प्रस्ताव को अनुपयुक्त पाया गया। दोनों वैकल्पिक मार्गों की दूरी को चार्ट के द्वारा Elaborate किया जा रहा है :-

क्रमांक	पथ का नाम	चक्रधरपुर से दूरी	जिला मुख्यालय से दूरी	वन पथ की लम्बाई
1.	सोनुवा-पनसुवा-गुदड़ी पथ, 41.56 कि०मी०	63.5 कि०मी०	91.5 कि०मी०	17.56 कि०मी०
2.	चक्रधरपुर-सोनुवा-गोइकेरा-बड़डीहा-गुदड़ी पथ, 63 कि०मी०	100.00 कि०मी०	124.00 कि०मी०	39.00 कि०मी०
3.	बन्दगाँव-बड़केल-गिरू-गुदड़ी पथ, 57 कि०मी०	108 कि०मी०	138 कि०मी०	21 कि०मी०

उपर्युक्त तथ्यों के अवलोकन से स्पष्ट होगा कि सोनुवा-पनसुवा-लोढ़ाई-गुदड़ी पथ न्यूनतम दूरी वाला पथ के सबसे कम वन भूमि अपयोजन वाला पथ है। गुदड़ी क्षेत्र काफी अविकसित क्षेत्र है। यहाँ के लोगों को आकस्मिक स्वास्थ्य सेवाओं के लिए नजदीक के किसी बड़े स्वास्थ्य केन्द्र/हास्पिटल जाने का कोई मार्ग उपलब्ध नहीं है। अन्य आकस्मिकता की स्थिति में भी जिला मुख्यालय; अनुमण्डल मुख्यालय से गुदड़ी पहुँचने को All Weather मार्ग

Executive Engineer,
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उपलब्ध नहीं है। सोनुवा-पनसुवा-लोढ़ाई-गुदड़ी पथ के Near Vicinity में सोनुवा से गुदड़ी को जोड़नेवाली कोई और वैकल्पिक मार्ग उपलब्ध नहीं है। इसलिए सोनुवा-पनसुवा-लोढ़ाई-गुदड़ी पथ का चौड़ीकरण एवं मजबूतीकरण कार्य को सरकार द्वारा कराने का निर्णय लिया गया है।


Er. Raghubansh Chaudhary
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Manoharpur 21/6/21

COST BENEFIT ANALYSIS – PORAHAT FOREST DIVISION

Table-B Estimation of Costs for Cost Benefit Analysis

Sl. No.	Parameters	NPV Factor as per guidelines	Remarks
1	Ecosystem services losses due to proposed forest diversion	1	The total area considered for diversion is 18.28 ha. The economic value of loss of eco-system services due to diversion of forests is taken as the NPV of the forest land being diverted as per MoEFCC, forest type and forest class is considered as per FSI report 2015, and NPV value as per MoEFCC guidelines dated 05.02.2009 at Rs.803000/- for Dense forest class-III, density >0.4. The value is calculated at Rs.146.78 lakhs for the forest area diverted.
2	Loss of animal husbandry productivity, including loss of fodder	0.1	The economic value of loss due to diversion of forests is taken as the NPV of the forest land being diverted as per MoEFCC, forest type and forest class is considered as per FSI report 2015, and NPV value as per MoEFCC guidelines dated 05.02.2009 at Rs.803000/- for Dense forest class-III, the value is calculated at Rs.14.67lakhs for the forest area diverted.
3	Cost of human settlement		Nil, as No human settlement is displaced in forest area.
4	Loss of public facilities and administrative infrastructure (Roads, buildings, schools, dispensaries, electric lines, railways, etc.) on forest land, which would require forest land if these facilities were diverted due to the project		Diversion is made only for widening and upgradation to intermediate lane of existing alignment.
5	Possession value of forest land diverted	0.3	The loss is calculated as per the NPV value and factor as per guidelines. This value is calculated at Rs.44.03 lakhs for the forest area diverted.
6	Cost of suffering of oustees		Nil, no displacement of people is anticipated.
7	Habitat fragmentation cost	0.5	The loss is calculated as per the NPV value and factor as per guidelines. This value is calculated at Rs.73.39 lakhs for the forest area diverted.
8	Compensatory afforestation and soil and moisture conservation cost		This is calculated as per the CA costs as per Jharkhand Government Forest guidelines The total value of CA scheme is calculated at Rs.72 lakhs.
		Total	The total cost in terms of NPV for the forest land diversion is calculated at Rs.350.87 lakhs.

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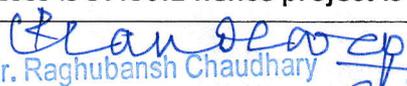
Table-C – Existing guidelines for estimating benefits of forest diversion in CBA

Sl. No.	Parameters	Descriptions
1	Increase in productivity attributable to the specific project	The Overall output of the industries established in the vicinity of the area will be increased as the Project road will provide them fast and safe transportation system which will decrease their transportation charge in terms of diesel consumption and hauling capacity due to time saving in hauling with respect to the present condition of the road. Moreover this Project road will also provide a safe and fast access to of the forest officials, Increase in productivity with respect to time saved in travel and manpower hours saved are addressed. This NPV comes to Rs.513.82 Lakhs in 20 years @ 12% interest rate.
2	Benefits of economy	During and after the construction of Project road, local people and the industries situated in this area will be benefitted greatly. The construction of the road will provide a safe and fast transportation to people which in turn will accelerate the rate of growth in this area .Industries in this area will be benefitted by the construction of this road as it would prove to be a better transportation facility for them. Increase in District GDP/per capita income and saving in fuel costs would be a direct indicator for benefit to the economy. This comes toRs.12,334 lakhs at 12% NPV rates.
3	No. of Population benefitted	While overall the populations of Jharkhand state (3.29Cr.) will benefit from the project. Specifically, the population of districts West Singhbhum (15.02 Lakhs) through which the alignment passes will benefit largely. (Source: Census 2011, Jharkhand). More specifically the populations of the following blocks namely Sonua, Anandpur, Goilker, Gudri and Manonarpur will benefit. Population benefitted as on 2011for these 5 blocks would be 324546. Projected population based upon 2001-2011 population growth rates of 21.75% comes to 395135 in 2021.
4	Economic benefits due to direct and indirect employment due to the project	300 employees during the construction phase will be employed. During the construction period approx. 99000 man-days will be generated and after the construction indirect employment will be generated due to development of shop along the project road. 99000 man-days will be benefitted in terms of salary and wages @Rs.350/day =Rs.346.50 lakhs.
5	Economic benefits due to Compensatory afforestation	Considering the total forest diverted area for CA i.e. 18.28 ha and the NPV of forest the Economic benefit would be Rs.72 Lakhs ones the total CA is done and similar benefits are accrued as in forest areas.

Total benefit accrued due to the project at NPV is Rs13,263 lakhs.

^Note: A period of 20 years is considered as per SP-30 for calculating economic returns due to the project, Economic analysis of Highway projects for benefits calculation. Net present value of benefits is also calculated to compare the cost vs benefit at 12% interest rate. NPV included project construction cost.

Benefit-Cost Ratio = Net Benefit/Net Loss is 37.80:1 hence project is viable


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Considering the tangible benefits, the project is found to be viable. If considers the intangible benefits also, then the projects become even more viable and attractive.

Place: RANCHI
Date: 21/6/21

Er. Raghubansh Chaudhary
(Signature of User Agency) 21/6/21
Er. Raghubansh Chaudhary
Executive Engineer,
R. C. D. Road Division,
Manoharpur

Hitesh
Countersigned by
Divisional Forest Officer, Porahat Forest Division
DIVISIONAL FOREST OFFICER
PORAHAT FOREST DIVISION
CHATBASA

Annexures of CBA

West Singhbhum Census data and projection of population						
Blocks	Population 2011	Male	Female	House holds	Decadal Popl. GR	Projected Population 2021
Sonua	77,697	38,612	39,085	16,408	21.7500	94,596
Gudri	38,282	19,445	18,837	7,245	Annual GR	46,608
Goilkera	74,019	37,167	36,852	15,072	2.175	90,118
Anandpur	44,406	22,158	22,248	8,371		54,064
Manoharpur	90,142	45,471	44,671	18,260		1,09,748
Total 2011	3,24,546				Total popl.2021	3,95,135

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Increase in productivity attributable to the specific project

			Percapita income West Singhbhum	Rs.30546/ Annum 2018	Monthly Income base values
Sl.	YR.	VEHICLES	Hrs Saved/day	Total savings in man hours Rs.	2545.5
1	2013	1000	500.0	1749000	HOURLY INCOME
2	2014	1020	510.0	1783980	10.6
3	2015	1040	520.2	1819660	
4	2016	1061	530.6	1856053	
5	2017	1082	541.2	1893174	
6	2018	1104	552.0	1931037	
7	2019	1126	563.1	1969658	
8	2020	1149	574.3	2009051	
					Per Hr income/saving
9	2021	2297	1148.7	3965397	10.46
10	2022	2355	1177.4	4267758	10.98
11	2023	2414	1206.8	4593175	11.53
12	2024	2474	1237.0	4943404	12.11
13	2025	2536	1267.9	5320339	12.72
14	2026	2599	1299.6	5726015	13.35
15	2027	2664	1332.1	6162623	14.02
16	2028	2731	1365.4	6632523	14.72
17	2029	2799	1399.6	7138253	15.46
18	2030	2869	1434.6	7682545	16.23
19	2031	2941	1470.4	8268339	17.04
20	2032	3014	1507.2	8898800	17.89
21	2033	3090	1544.9	9577334	18.79
22	2034	3167	1583.5	10307605	19.73
23	2035	3246	1623.1	11093560	20.71
24	2036	3327	1663.6	11939444	21.75
25	2037	3410	1705.2	12849827	22.83
26	2038	3496	1747.9	13829626	23.98
27	2039	3583	1791.6	14884135	25.18
28	2040	3673	1836.3	16019050	26.43
29	2041	3765	1882.3	17240503	27.76
			Total	191340255	
			NPV @12% interest rate	₹ 5,13,81,592	
			In Lakhs	₹ 513.82	

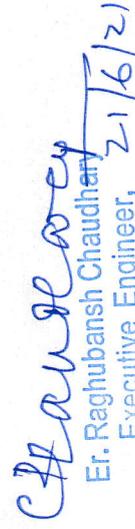
Raghubansh Chaudhary
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Benefits of economy

GDP BENEFITS AND FUEL SAVINGS										
Year	Vehicle numbers			Population growth	Per capita income Rs./year West Singhbhum	Rs.30546/-	GDP due to new road			Business as usual
	450	72	25				Per capita income growth @5%/annum	GDP Due to Road improvement	Per capita income BAU @ 4.90%	
2021	1410750	338580	70125	395135	30546	12069793710	30546	12069793710	30546	12069793710
2022	1438965	345352	71528	403729	32073	12948927309	32073	12948927309	32043	12936594998
2023	1467744	352259	72958	412510	33677	13892094802	33677	13892094802	33613	13865646270
2024	1497099	359304	74417	421482	35361	14903960257	35361	14903960257	35260	14861418056
2025	1527041	366490	75906	430650	37129	15989527463	37129	15989527463	36988	15928701940
2026	1557582	373820	77424	440016	38985	17154164669	38985	17154164669	38800	17072633616
2027	1588734	381296	78972	449587	40935	18403631138	40935	18403631138	40701	18298717604
2028	1620508	388922	80552	459365	42981	19744105621	42981	19744105621	42696	19612853732
2029	1652918	396700	82163	469356	45130	21182216915	45130	21182216915	44788	21021365533
2030	1685977	404634	83806	479565	47387	22725076639	47387	22725076639	46982	22531030665
2031	1719696	412727	85482	489995	49756	24380314409	49756	24380314409	49284	24149113530
2032	1754090	420982	87192	500653	52244	26156115559	52244	26156115559	51699	25883400230
2033	1789172	429401	88935	511542	54856	28061261627	54856	28061261627	54233	27742236030
2034	1824956	437989	90714	522668	57599	30105173770	57599	30105173770	56890	29734565517

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2035	1861455	446749	92528	534036	60479	32297959365	59678	31869975641
2036	1898684	455684	94379	545651	63503	34650461980	62602	34158741844
2037	1936657	464798	96267	557519	66678	37174315004	65669	36611877508
2038	1975391	474094	98192	569645	70012	39881999174	68887	39241186951
2039	2014898	483576	100156	582035	73513	42786904288	72263	42059322222
2040	2055196	493247	102159	594694	77188	45903395430	75803	45079843992
2041	2096300	503112	104202	607629	81048	49246883994	79518	48317286798
Total	36373815	8729716	1808055			559658283124.24		553046306386.66
NPV	₹ 1,21,28,366	₹ 29,10,808	₹ 6,02,872			₹ 1,52,22,91,66,835		₹ 1,51,01,17,49,793
	Total benefits	₹ 12,331				Improvement in GDP		
						₹ 1,21,74,17,043		
	Total Cost	351						
	Total benefits	₹ 13,263						
	CBR	37.80						


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TRAFFIC CENSUS DAILY TRAFFIC SUMMARY

Name of road: SONUA-PANSUA-LODHAI-GUDARI ROAD
 DATE: 17-12-13
 DIRECTION OF TRAFFIC: UP FROM (Place): GUDARI TO (Place): SONUA
 DIRECTION OF TRAFFIC: DOWN FROM (Place): SONUA TO (Place): GUDARI
 COUNT HOURS FROM: 0000 HRS. TO 2400 HRS.

KILOMETERAGE OF COUNT STATION: 8+500
 PLACE OF COUNT STATION: JHUMPURA
 DISTRICT: CHAIBASHA STATE: JHARKHAND

Count Hours	Cars/Jeeps/Taxis/Vans/Three Wheelers (Auto Rickshaw)		Two Wheelers (Motor cycle/Scooter etc)		LCV (Commercial Vehicle e.g. Mini truck)		Mini Bus		Two axle Truck/ Tanker		Multi Axle Truck/ Trailer		Agricultural Tractor/ With Trailer		Cycle/ Other human powered Bullock Carts/ Horse Carts/ Other animal powered		Others (Specify)		Total for all vehicles for hour
	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	
0000-0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100-0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200-0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300-0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400-0500	1	0	10	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500-0600	1	1	9	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600-0700	3	2	11	10	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
0700-0800	2	3	14	12	0	0	0	0	0	1	1	0	0	0	0	0	0	0	37
0800-0900	2	5	16	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
0900-1000	3	2	12	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
1000-1100	2	3	12	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
1100-1200	1	4	9	11	0	0	0	0	0	1	1	0	0	0	0	0	0	0	67
1200-1300	0	2	10	8	0	0	0	0	0	1	0	0	0	0	0	0	0	0	63
1300-1400	3	1	13	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
1400-1500	4	0	16	16	0	0	0	0	0	1	1	0	0	0	0	0	0	0	64
1500-1600	5	2	18	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
1600-1700	3	1	24	9	0	0	0	0	0	1	0	0	0	0	0	0	0	0	67
1700-1800	6	0	15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74
1800-1900	2	2	16	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
1900-2000	1	0	18	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
2000-2100	1	1	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
2100-2200	0	1	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
2200-2300	0	2	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
2300-2400	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Total	41	33	223	202	0	0	0	2	10	11	0	0	0	0	0	0	0	0	12
Total (U&D)	74			425	0	0	4	21	0	0	0	0	14	17	190	206	10	0	16
													31	396	13	10	0	0	3
																			874

E.P. Raghunathan Chaudhary
 Deputy Engineer
 R. C. D. Road Division,
 Manoharpur

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TRAFFIC CENSUS DAILY TRAFFIC SUMMARY

DIRECTION OF TRAFFIC
DIRECTION OF TRAFFIC
COUNT HOURS FROM

Name of road: SONUA-PANSUA-LODHA-GUDARI ROAD
FROM (Place): GUDARI
TO (Place): SONUA
UP
DOWN FROM (Place): SONUA
0000 HRS. TO 2400 HRS.
TO (Place): GUDARI

DATE: 18-12-13

KILOMETERAGE OF COUNT STATION: 8+900
PLACE OF COUNT STATION: JHUMPURA
DISTRICT: CHAIBASHA STATE: JHARKHAND

Count Hours	Cars/Jeeps/Taxis/Van		Three Wheelers (Auto Rickshaw)		Wheeler (Motorcycle/Scooter etc.)		LCV (Commercial Vehicle e.g. Mini truck)		Mini Bus		Two axle Truck/Tanker		Multi Axle Truck/Tanker/Trailer		Agricultural Tractor/With Trailer		Cycle/Other human powered		Bullock Carts/Horse Carts/Other animal powered		Others (Specify)		Total for all vehicles for hour
	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	
0000-0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100-0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200-0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300-0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400-0500	1	1	10	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500-0600	1	2	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600-0700	2	3	11	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700-0800	3	1	14	6	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
0800-0900	5	2	16	8	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
0900-1000	1	1	12	7	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
1000-1100	2	6	12	6	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	41
1100-1200	3	3	9	8	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	51
1200-1300	6	5	10	9	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	55
1300-1400	5	3	14	6	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	53
1400-1500	3	1	18	8	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	71
1500-1600	2	0	12	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
1600-1700	1	1	14	15	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	51
1700-1800	2	0	18	5	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	52
1800-1900	3	1	21	6	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	58
1900-2000	4	0	19	8	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	57
2000-2100	1	1	0	9	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	62
2100-2200	1	1	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
2200-2300	0	2	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
2300-2400	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
Total	47	35	219	153	0	0	0	0	0	0	27	27	0	0	0	0	0	0	0	0	0	0	58
Total (U&D)	82		372		0	0	0	0	4	41	41	41	15	10	203	197	9	9	18	0	0	0	13

E. Jagdish Chandra
R.C.D. Road Division,
Manoharpur

Engineer
21.6.21

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DATE: 16-12-13

Name of road: SONUA-PANSUA-LODHAI-GUDARI ROAD
 KILOMETERAGE OF COUNT STATION: 8+900
 PLACE OF COUNT STATION: JHUMPURA
 DISTRICT: CHAIBASHA STATE: JHARKHAND

DIRECTION OF TRAFFIC FROM: GUDARI TO (Place): SONUA
 DIRECTION OF TRAFFIC TO: SONUA FROM (Place): GUDARI
 COUNT HOURS FROM: 0000 HRS. TO 2400 HRS.

Count Hours	Cars/Jeeps/Taxis/Van/Three Wheelers (Auto Rickshaw)		Two Wheelers (Motor Cycle/Scooter etc)		LCV (Commercial Vehicle e.g Mini truck)		Mini Bus		Truck/ Tanker		Multi Axle Truck/ Trailer Tanker		Agricultural Tractor With Trailer		Cycle/ Other human Powered		Bullock Carts/Horse Carts/Other animal powered		Others (Specify)		Total for all vehicles for hour
	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	
0000-0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100-0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200-0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300-0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400-0500	1	0	12	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500-0600	1	1	11	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600-0700	3	2	14	12	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0700-0800	2	3	18	15	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0800-0900	2	6	20	18	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0900-1000	3	2	15	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000-1100	2	3	15	16	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1100-1200	1	5	11	14	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0
1200-1300	0	2	12	10	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1300-1400	3	1	16	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400-1500	5	0	20	20	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1500-1600	6	2	23	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600-1700	3	1	31	11	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
1700-1800	7	0	19	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800-1900	2	2	20	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900-2000	1	0	23	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000-2100	1	1	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100-2200	0	1	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200-2300	0	2	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300-2400	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	44	35	280	251	0	0	0	4	21	10	11	0	0	14	17	236	259	13	10	0	3
Total(U&D)	79	531			0	0	4	21	31	485	23	1184									1184

Er. Raghubansh Chaudhary
 Executive Engineer
 R.C.D. P. S. Sonua

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DIRECTION OF TRAFFIC: UP FROM (Place): GUDARI TO (Place): SONUA
 DOWN FROM (Place): SONUA TO (Place): GUDARI
 COUNT HOURS FROM 0000 HRS. TO 2400 HRS.

Count Hours	Cars/Jeeps/Taxis/Vans (Auto Rickshaw)		Two Wheelers (Motor cycle/Scooter etc)		LCV (Commercial Vehicle e.g. Mini truck)		Mini Bus		Two axle Truck/ Tanker		Multi Axle Truck/ Trailer/ Tanker		Agricultural Tractor With Trailer		Cycle/ Other human Powered		Bullock Carts/HorseCarts/Other animal powered		Others (Specify)		Total for all vehicles for hour
	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	
0000-0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100-0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200-0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300-0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400-0500	1	1	12	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500-0600	1	2	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600-0700	2	3	14	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700-0800	3	1	19	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800-0900	6	2	20	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900-1000	1	1	15	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000-1100	2	7	15	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100-1200	3	3	11	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200-1300	7	6	12	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300-1400	6	3	18	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1400-1500	3	1	23	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500-1600	2	0	15	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1600-1700	1	1	18	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700-1800	2	0	23	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800-1900	3	1	27	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900-2000	5	0	24	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000-2100	1	1	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100-2200	1	1	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200-2300	0	2	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300-2400	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	51	37	276	188	0	0	2	4	14	28	0	0	0	0	0	0	0	0	0	0	0
Total(U&D)	88		464		0	0	4		42	28	0	0	0	25	10	254	246	9	18	0	0
																500					1141

KILOMETERAGE OF COUNT STATION: 8+900
 PLACE OF COUNT STATION: JHUMPURA
 DISTRICT: CHAIBASHA STATE: JHARKHAND

Number of Days: 56
 Name of Road: SONUA-SONUA-LORD-BH-GUDARI ROAD

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E. P. Choudhary
 Executive Engineer,
 R. C. D. Road Division,
 Manoharpur

DIRECTION OF TRAFFIC UP FROM (Place): GUDARI
 DIRECTION OF TRAFFIC DOWN FROM (Place): SONUA
 COUNT HOURS FROM 0000 HRS. TO 2400 HRS.

Name of road: SONUA-PAJAJA-LODHAI-GUDARI ROAD
 TO (Place): SONUA
 TO (Place): GUDARI

KILOMETER OF COUNT STATION :
 PLACE OF COUNT STATION :

DISTRICT : CHAIBASHA STATE : JHARKHAND
 JHUMPURA

Count Hours	Cars/Jeeps/Taxis/Van/Three Wheelers (Auto Rickshaw)		Two Wheelers (Motor cycle/Scooter etc.)		LCV/Commercial Vehicle e.g. Mini truck		Mini Bus		Two axle Truck/ Tanker		Multi Axle Truck/ Trailer		Agricultural Tractor/ With Trailer		Cycle/ Other human Powered		Bullock Carts/Horse Carts/Other animal powered		Others (Specify)		Total for all vehicles for hour
	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	
0000-0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100-0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200-0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300-0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400-0500	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500-0600	0	0	12	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600-0700	3	2	14	12	0	0	0	0	0	0	0	0	0	0	11	15	0	0	0	0	44
0700-0800	2	3	18	15	0	0	0	0	0	0	0	0	0	0	7	14	2	0	0	0	41
0800-0900	2	6	20	18	0	0	0	0	0	0	0	0	0	0	10	18	0	0	0	0	61
0900-1000	3	2	15	20	0	0	0	0	0	0	0	0	0	0	7	20	0	0	0	0	65
1000-1100	2	3	15	16	0	0	0	0	0	0	0	0	0	0	6	23	2	0	0	0	79
1100-1200	0	5	11	14	0	0	0	0	0	2	0	0	0	0	11	16	2	0	0	0	73
1200-1300	0	2	12	10	0	0	0	0	0	0	0	0	0	0	7	24	0	0	0	0	69
1300-1400	3	0	16	23	0	0	0	0	0	0	0	0	0	0	15	27	2	0	0	0	74
1400-1500	5	0	20	20	0	0	0	0	0	0	0	0	0	0	7	10	0	0	0	0	41
1500-1600	6	2	23	18	0	0	0	0	0	2	0	0	0	0	23	11	0	0	0	0	78
1600-1700	3	0	31	11	0	0	0	0	0	0	0	0	0	0	27	15	0	0	0	0	91
1700-1800	7	0	19	6	0	0	0	0	0	0	0	0	0	0	24	14	0	0	0	0	87
1800-1900	2	2	20	7	0	0	0	0	0	0	0	0	0	0	15	11	0	0	0	0	73
1900-2000	0	0	23	10	0	0	0	0	0	0	0	0	0	0	31	12	0	0	0	0	78
2000-2100	0	0	0	11	0	0	0	0	0	0	0	0	0	0	15	14	0	0	0	0	60
2100-2200	0	0	0	12	0	0	0	0	0	0	0	0	0	0	16	15	0	0	0	0	66
2200-2300	0	2	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
2300-2400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	12
Total	38	29	280	251	0	0	0	0	0	2	2	0	0	0	234	259	8	4	0	0	1125
Total(U&D)	67	531			0	0	0	0	4	6	7	11	18	493	12	0	0	0	0	0	1125

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Er. Raju Prakash Chatterjee
 Executive Engineer
 R. C. D. Road Division,
 Manoharpur

195

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DIRECTION OF TRAFFIC UP FROM (Place): SONUA, PANASHA, LODHAL, BURIA, ...
 DIRECTION OF TRAFFIC DOWN FROM (Place): SONUA, PANASHA, LODHAL, BURIA, ...
 COUNT HOURS FROM 0000 HRS. TO 2400 HRS.

KILOMETERAGE OF COUNT STATION: 8+900
 PLACE OF COUNT STATION: JHUMPURA
 DISTRICT: CHAIBASHA STATE: JHARKHAND

Count Hours	Cars/Jeeps/Taxis/Vans/Three Wheelers (Auto Rickshaws)		Two Wheelers (Motor cycle/Scooter etc.)		LGV (Commercial Vehicle e.g. Mini truck)		Mini Bus		Two axle Truck/ Tanker		Multi Axle Truck/ Trailer/ Tanker		Agricultural Tractor/ With Trailer		Cycle/ Other human Powered		Bullock Carts /Horse/Carts/Others animal powered		Others (Specify)		Total for all Vehicles for hour
	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	U	D	
0000-0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100-0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200-0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300-0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400-0500	1	1	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500-0600	1	2	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600-0700	2	3	10	7	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
0700-0800	3	1	12	6	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
0800-0900	5	2	14	7	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
0900-1000	1	1	11	6	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0
1000-1100	2	6	11	6	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0
1100-1200	3	3	8	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200-1300	6	5	9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1300-1400	5	3	12	8	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0
1400-1500	3	1	16	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500-1600	2	0	11	6	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0
1600-1700	1	1	12	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700-1800	2	0	16	5	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0
1800-1900	3	1	18	6	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1900-2000	4	0	17	7	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
2000-2100	1	1	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100-2200	1	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200-2300	0	2	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300-2400	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	35	194	139	333	0	0	0	2	14	27	0	0	0	0	0	0	0	0	0	0	0
Total (U&D)	82						4		41		0		25		357		18		0		860

Signature: *[Handwritten Signature]*
 Executive Engineer,
 R. C. D. Road Division,
 Manoharpur

WEEKLY TRAFFIC SUMMARY

Name of road: SONUA-PAANSUA-LODHA-GUDARI ROAD
 FROM (Place): GUDARI TO (Place): SONUA
 DIRECTION OF TRAFFIC UP DOWN
 COUNT HOURS FROM 0000 HRS. TO 2400 HRS.
 DATE: 17-12-13 TO 23-12-13
 KILOMETERAGE OF COUNT STATION: 8+900
 PLACE OF COUNT STATION: JHUMPURA
 DISTRICT: CHAIBASHA STATE: JHARKHAND

DATE	HOUR	DATE	HOUR	FAST / POWER DRIVEN VEHICLES										SLOW VEHICLES			REMARKS
				CARS/JEEPS/TAXIS/MAN WHEELERS(AUTO RICKSHAW)	TWO WHEELERS(MOTORCYCL E/SCOOTER)	LCV(Light Commercial Vehicles e.g. Mini truck)	BUS	TWO AXLE TRUCK/TANKER	MULTI AXLE TRUCK /TRUCK TRAILER/TANKER	AGRICULTURAL TRACTOR WITH TRAILER	CYCLE/CYCLE RICKSHAW/OTHER HUMAN POWERED VEHICLES	BULLOCK CARTS/HORSE CARTS/OTHER ANIMAL POWERED	OTHERS (Specify)				
03-Jan	07:00	04-Jan	07:00	74	425	0	4	21	0	31	396	23	0				
04-Jan	07:00	05-Jan	07:00	82	372	0	4	41	0	25	400	18	0				
05-Jan	07:00	06-Jan	07:00	79	531	0	4	21	0	31	495	23	0				
06-Jan	07:00	07-Jan	07:00	88	464	0	4	42	0	25	500	18	0				
07-Jan	07:00	08-Jan	07:00	67	531	0	0	4	0	18	493	12	0				
08-Jan	07:00	09-Jan	07:00	82	333	0	4	41	0	25	357	18	0				
09-Jan	07:00	10-Jan	07:00	46	496	0	0	2	0	10	460	6	0				
TOTAL FOR THE WEEK				518	3152	0	20	172	0	165	3101	118	0				
AVERAGE DAILY TRAFFIC FOR THE WEEK				74	450	0	3	25	0	24	443	17	0				

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R. R. Chandra
 Er. Raghubansh Chaudhary
 Executive Engineer,
 R. C. D. Road Division,
 Manoharpur

21.6.24

VEHICLE TYPE		NO.	COMMERCIAL VEHICLE S > 3 TON	EQUIVALENCY FACTOR	TOTAL TRAFFIC IN PCU
(a) CARS/JEEPS/TAXIS/VANS/THREE WHEELERS(AUTO RICKSHAW)		74		1	74
(b) TWO WHEELERS, MOTORCYCLE/SCOOTER)		450		0.5	225
(c) LCV (Light Motor Commercial Vehicles e.g. Mini trucks)		0	0	1.5	0
(d) BUS		3	3	3	9
(e) TWO AXLE TRUCK/TANKER		25	25	3	75
(f) MULTI AXLE TRUCK / TRUCK TRAILER		0	0	6	0
(g) AGRICULTURAL TRACTOR WITH TRAILER		24	24	4.5	108
(B)					
(a) CYCLE					0
(b) BULLOCK CARTS/HORSE DRAWN CART/ OTHER ANIMAL DRAWN VEHICLES		443		0.5	222
(C) OTHERS VEHICLES IF ANY, PLEASE SPECIFY		17		8	136
		0			
TOTAL					849

Present PCU = 849
 Construction period = 1 years (12 months)
 Design life = 15 years
 Projected PCU = $849 \times (1 + 5/100)^{(2.0+15)}$ =

1944.778 .So it is qualified for intermediate lane.


 Er. Raghubarsh Chaudhary
 Executive Engineer,
 R. C. D. Road Division,
 Mangalore.

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Query No. 4 – Large area of Reserved Forest is proposed for diversion a proper justification along with the volume of the traffic survey for the requirement of 16 m ROW for the purpose of reconstruction of the proposed road.

– इस कार्य के निमित्त वर्ष 2012–13 में Seven day Traffic Census कराया गया था (Traffic Census Report संलग्न)। यातायात गणना के अनुसार पथ पर कुल PCU – 849 थीं। Traffic growth rate $r = 5\%$ एवं पथ का Design Life – 15 साल लेने के पश्चात् पथ के Design के Life के अन्त में $Traffic = 849 (1+0.05)^n$

Project Completion Year – 2022-23

$$n = 10 + 15 = 25 \text{ Year}$$

$$= 849 (1+5/100)^{25}$$

$$= 2875 > 1500 \text{ PCU}$$

Hence, it qualifies for Intermediate Lane Construction.

Intermediate lane construction के लिए Road way width 9.00 meter एवं Carriageway width 5.5 m है। पथ निर्माण में Ordinary Guard Level से कम से कम 1.00 मीटर ऊँचाई पथ का Structural Component GSB Lay करने का प्रावधान है, जिसे Typical Cross-Section के माध्यम से दर्शाया गया है Embankment के Stability के लिए Natural Slope 1:2 रखा गया है (Typical Cross-Section संलग्न)। जिससे पथ में Intermediate lane में भी पुल-पुलिया का न्यूनतम चौड़ाई 12.00 मी० रखना है, जिसका निर्माण 16.00 मीटर से कम चौड़ाई Right of way में करना असम्भव है। इसके अतिरिक्त पुल-पुलिया निर्माण के दौरान Diversion का भी निर्माण करना पड़ता है (Typical Cross-Section TC-02 attached)।

सोनुवा-पनसुवा-लोढ़ाई-गुदड़ी पथ Left Wing Extremism (LWE) क्षेत्र में पड़ता है। Both directions में निर्वाध Traffic आवागमन के लिए न्यूनतम 5.50 मीटर Carriageway की आवश्यकता है। इसके अतिरिक्त सारी Utilities Service Lines यथा- Telephone Cables/ Mobile Cables, High Tension Cables, Water Supply Pipe Lines इत्यादि पथ निर्माण की भूमि से गुतरती है। इसलिए 16.00 मी० Right of way इस पथ के निर्माण के लिए न्यूनतम भूमि की आवश्यकता है।

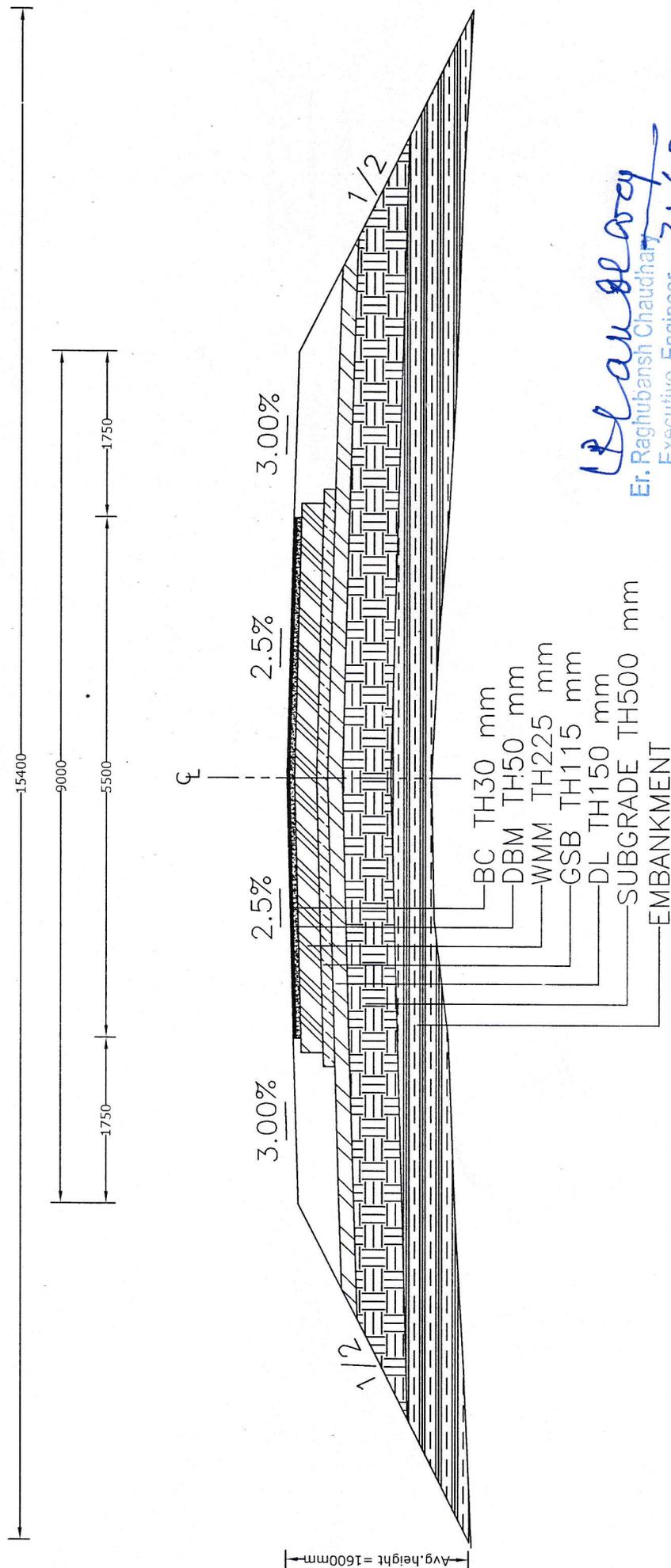
Raghubansh Chaudhary

Er. Raghubansh Chaudhary
Executive Engineer,
R. C. D. Road Division,
Mancharpur

21/6/21

TCS-01.

TYPICAL CROSS SECTION 01 (For Road Works)



R. C. D.
Er. Raghubansh Chaudhary
Executive Engineer, 21.6.21
R. C. D. Road Division,
Manoharpur

(23)

Query No. 5 – As per submitted KML, forest land proposed for diversion is calculated as 15.585319 ha instead of 18.28 ha. Correct KML file of the forest land proposed for diversion is required.

–पथ निर्माण कार्य के लिए वास्तविक हस्तांतरण की आवश्यकता 18.28 हे० है, तदनुसार KML फाइल में आवश्यक सुधार कर दिया गया है। संशोधित KML की सॉफ्ट कॉपी संलग्न किया जा रहा है।

Chandray
Er. Raghubansh Chaudhary 21/6/21
Executive Engineer,
R. C. D. Road Division,
Manoharpur