

Otem Dai, IAS
Commissioner (PWD)



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NO. SPWD/W-413/SARDP-NE/2008-09

Date: 10th May 2008.

Dear Shri Kamlesh Kumar,

**Sub: Forwarding of Pre-Feasibility Report for Trans Arunachal Highway -
Sector : Seppa to Khodaso (110.45 / 94.15 km) – Regarding.**

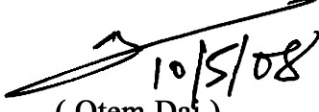
Ref: 1. Your letter No.12037/7/2008/Ar.P. NH-10 dtd. 04.02.2008.
2. CE,PWD, WZ ltr. No.CEAP(WZ)/NH-52(A)/2008-09/905-08 dtd. 9.5.2008.

In inviting a reference to your letter cited, I am enclosing herewith the Pre-Feasibility Report for the Sector from Seppa to Khodaso for a length of 110.45/ 94.15 km. of the proposed **Trans-Arunachal Highway** received from the Chief Engineer, Western Zone, PWD, Arunachal Pradesh vide the reference 2nd cited, in duplicate with soft copy for your further necessary action please.

The Pre-Feasibility Reports for the other sectors will follow in a few days time.

With Best Wishes.

Yours sincerely,

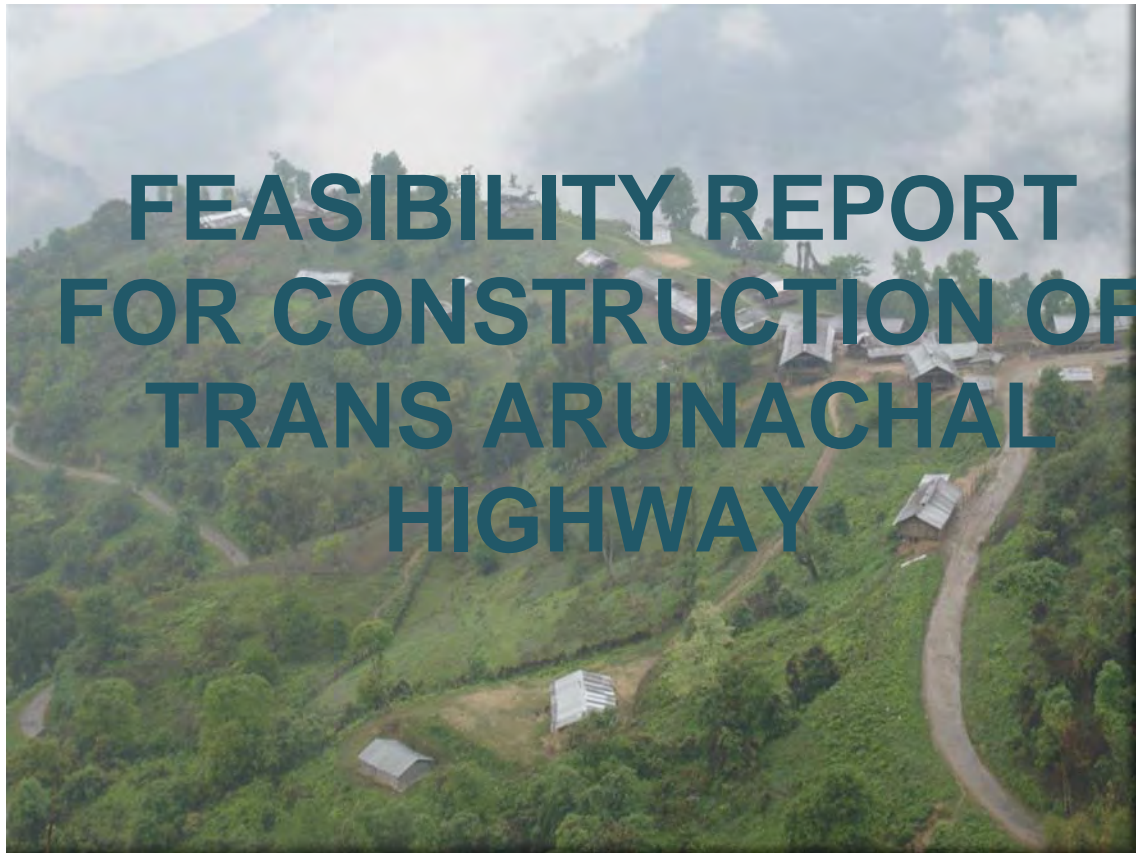

(Otem Dai)

**Encl. Pre-Feasibility Report -
2 hard copies and 1 soft copy.**

Shri Kamlesh Kumar,
Chief Engineer (P-10),
Ministry of Shipping, Road Transport & Highways,
Transport Bhawan,
1 – Parliament Street,
New Delhi – 1110001.

Copy to :

1. PS to HM (PWD)
2. The Chief Engineer (WZ), PWD
- ✓ 3. The Chief Engineer (EZ, R&B), PWD



FEASIBILITY REPORT FOR CONSTRUCTION OF TRANS ARUNACHAL HIGHWAY

**SECTOR: SEPPA TO KHODASO
(110.45 KM)**



**PUBLIC WORKS DEPARTMENT
ARUNACHAL PRADESH**

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CHAPTER - 1

EXECUTIVE SUMMARY

CHAPTER 1 : EXECUTIVE SUMMARY

- 1.1 The proposed Trans-Arunachal Highway for a total length of 1811 Km shall pass through 12(twelve) districts, namely Tawang, West Kameng, East Kameng, Papum Pare, Lower Subansiri, Upper Subansiri, West Siang, East Siang, Lower Dibang Valley, Lohit, Changlang & Tirap. (Refer Fig. 1.1).

The Highway will provide inter district road connectivity within the State, without having to traverse through the “bandh” afflicted state of Assam, which is the route presently being followed for inter-district road connectivity.

- 1.2 The present report covers the road corridor of Seppa to Khodaso for a length of 110.45 Km in East Kameng district (Refer Fig. 1.2 & 1.3). This road is presently a single lane ODR standard road constructed in the eighties and nineties by BRO through funding by North Eastern Council (NEC). The road had been taken over by PWD in mid nineties.

- 1.3 The road is deficient on many engineering parameters. The road has sharp curves/zigs at various stretches. Formation has been damaged at different locations due to land slides and erosion of soil on valley sides. A number of slab culverts have damaged parapets, eroded foundations, collapsed wing walls, weak abutments etc. The black topped surface has been worn out over the years, and 90% of the carpeted road is damaged. The bridges are temporary bailey bridges, the decking of which are damaged in majority of them.

- 1.4 The Salient features of the proposed up-gradation are as below:

- 1.4.1. The road shall have a formation width of 12 m, with a ROW for 24 m.
- 1.4.2. The Highway shall be designed for National Highway standard for 2-lane, with a carriageway width of 7 mtr. with flexible pavement.
- 1.4.3. The total length of existing road is 110.45 Km. However, there is scope for reducing the road length by 16.30 Kms, with a new alignment in between chainages 20 to 59.30 Km, reducing the overall road length to approx. 94.15 Kms.

- 1.4.4. Overall, existing road gradient is good, and shall not require re-grading, save in few minor stretches.
- 1.4.5. The existing culverts and bridges are all single lane, narrow, inadequate and in poor condition. These shall require re-construction and replacement with permanent structures for double lane specification. There shall be 9 (nine) minor bridges of total span 191.51 mtrs, and slab culverts for 5 nos per Km is proposed.
- 1.4.6. The existing retaining & breast walls are likely to be totally damaged during widening of formation. These shall require to be reconstructed. Retaining & Breast walls of varying heights are proposed for a length of 100 mtrs per Km.
- 1.4.7. Construction of pavement for the total length with proper design, after necessary soil, material and aggregate tests, shall be done. Camber/crossfall of 2.5% for pavement and a slope of 3.5% shall be considered for drainage of shoulders.
- 1.4.8. The main quarry for aggregates and sand shall be Kameng river, which is located near Seppa the district headquarters, and is at the initial chainages of the road. There are small rivulets along the alignment where minor quantities of shingles and sand shall be found. Roadside quarries for stone aggregates can be identified at few stretches on the road. However, the main quarry shall be Kameng river.
- 1.4.9. Though no major landslide areas exist, there is a couple of minor landslide and sinking areas. Rehabilitation works by constructing retaining walls for stability of hill slope is proposed.
- 1.4.10. The land use pattern along the road alignment shows that the land available is either mainly used for traditional agriculture & horticulture activities or is unclassified State forest (USF) areas, belonging to the local tribal people. In some areas, especially at Lumdung (at 21.00 km), Sede (at 29.70 km), Palin(at 32.60 km), Pijirang(at 42.00 km), Veo(at 46.90 km), Taroyar(at 51.00 km), Passa(at 69.50 km), Rilloh(at 74.00 km) there are built-up areas on either side of existing road. Compensation for land acquisition and demolition of existing structures need to be considered during execution works.

1.4.11. Provision for payments of compensatory afforestation and Net Present Value (NPV) to the Forest Department has been included in the project, as it is mandatory to get Forest clearance for road projects.

1.5 Based on the Survey carried out, the total cost of construction including centage charges (but excluding land acquisition & compensation costs) has been worked out to be as follows :

- a) Up-gradation of road as per existing alignment (110.45 Km) :Rs.46360.90 Lakhs.
- b) Up-gradation of road with new alignment (94.15 Km) Rs. 39071.24 Lakhs.

1.6 The project is proposed to be completed in four financial years as below :

2008-09	:	10%
2009-10	:	35%
2010-11	:	35%
2011-12	:	20%

1.7 The project is proposed to be undertaken and completed with setting up of Project Implementing Unit (PIU), the cost of which is proposed to be met up from the 9% supervision charges.