Construction of New Six Lane Tunnel in Khambatki Ghat Section Name of the Project: Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

> Suhas D. Chitnis Project Director NHAI - PIU- Pune

NO VIOLATION OF FOREST CONSERVATION ACT, 1980

This is to certify that the work of Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra, not started in the forest area as well as in the non-forest area in village Vele of Taluka Wai and village Wanyachiwadi of Taluka Khandala of Satara district: and no violation of Forest Conservation Act, 1980 and or its guidelines have been committed. The work in the forest land will be started only after the approval of Ministry of Environment Forests and Climate Change of the Government of India..



Construction of New Six Lane Tunnel in Khambatki Ghat Section Name of the Project: | Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

ARCHEOLOGICAL IMPORTANCE CERTIFICATE

This is to certify that forest land diverted for the Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra. is not likely to affect any Monument or site of historical or Archeological importance in village Vele of Taluka Wai and village Wanyachiwadi of Taluka Khandala of Satara district.

> Project Director NHAI - PIU- Pune

	Construction of New Six Lane Tunnel in Khambatki Ghat Section
Name of the Project:	Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to
3,	Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-
	4 in the State of Maharashtra.

WILDLIFE CERTIFICATE PROJECT AREA NOT INCLUDED IN NATIONAL PARK, WILDLIFE SANCTUARY

This is to certify that, area proposed for Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4, section at village Vele of Taluka Wai and village Wanyachiwadi of Taluka Khandala of Satara district is not included in the area of any National park / Wildlife sanctuary.

Signature

Dy. Conservator of Forest Satara Division, Satara

Date:-

	Construction of New Six Lane Tunnel in Khambatki Ghat Section
Name of the Project:	Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to
	Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-
	4 in the State of Maharashtra.

DISTANCE OF PROJECT AREA FROM PROTECTED AREA

This is to certify that, the proposed project area of **5.9 Ha**. at Compartment No. 35 and 36 of village Vele Taluka Wai and Compartment NO- 797 and survey No- 472, 473 of village Wanyachwadi of Khandala Taluka in Satara district for the Construction of New Six LaneTunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 is beyond or not within 10 Km of the boundary of any protected area.

Signature

Dy. Conservator of Forest Satara Division, Satara

Date:-

	Construction of New Six Lane Tunnel in Khambatki Ghat Section
Name of the Project:	Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to
	Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-
	4 in the State of Maharashtra.

NON FOREST AREA IDENTIFIED FOR THE PROJECT IS NOT 'FOREST'

This is to certify that, Non-Forest Land identified for Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in district Satara is not virtue of application of section 35 of Private Forest Land 1975 and is not recognized as deemed Reserved Forest as well as not included in the area identified as "FOREST" as per the dictionary meaning of forest as intimated to the expert committee appointed under interim judgment of the Hon'ble Supreme Court dated 12/12/1996.

Signature

Dy. Conservator of Forest Satara Division, Satara

Date:-

Construction of New Six Lane Tunnel in Khambatki Ghat Section Name of the Project: Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH 4 in the State of Maharashtra.

NO OBJECTION CERTIFICATE OF M.D., F.D.C.M. FOR INVOLVEMENT OF THEIR AREA

Certified that there is no area of F. D. C. M. in the project areas involving forest as well as in the Non-Forest for the proposed Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in village Vele of Taluka Wai and village Wanyachiwadi of Taluka Khandala of Satara district.

Signature

Deputy Conservator Forest Satara Division, Satara

Date:-

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Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

NET PRESENT VALUE OF THE FOREST LAND

This is to certify that as per the guidelines for diversion of forest land for Non-forest purposes by the Ministry of Environment Forest and Climate Change Government of India circular No. 5-1/98-FC (PT-II) DATED18/2/2003, Project Director National Highways Authority of India, PIU- Pune is ready to deposit the sum against the Net Present Value for 5.9 Ha of forest land required in village Vele of Taluka Wai and village Wanyachiwadi of Taluka Khandala of Satara district for the Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Pune Section of NH-4 in the State of Maharashtra.

Suhas D. Chitnis Project Director NHAI – PIU- Pune

Name	of the	Pro	ect:

Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

NET PRESENT VALUE OF THE FOREST LAND

This is to certify that Ha. of forest land area required for the Construction of New Six
Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km
771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of
Maharashtra. lying in Compartment No
Wai and village Wanyachiwadi of Taluka Khandala of Satara district of
in ECO-Class consisting of Forest and has density type of FOREST.
It is also certified that the amount of Net Present Value of forest land calculated is for
Rs)
Is exactly as per the rates and calculation provided in the Government of resolution
No dated of Government of India.

Signature

Dy. Conservator of Forest Satara Division, Satara

Date:-

Name	of	the	Proi	ect:

Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

CERTIFICATE FOR THE EXEMPTION OF ENVIRONMENTAL CLEARANCE

As per Ministry of Environment Forests and Climate Change (MoEF&CC) notification S.O No -1533, issued on 14th Sept'2006 and as per the amended Notification of the MoEF&CC on 22nd August 2013 the project highway does not attract prior Environmental Clearance from MoEF&CC as the length of the project highway is less than 100 km.

Suhas D. Chitnis Project Director NHAI – PIU- Pune

Date:-06-03-2017 **Place:-** Pune

Enclosed

1. Notification of MoEF & CC

Name of the Project:

Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

UNQUALIFIED COMMITMENT CERTIFICATE

It is the commitment of Project Director, National Highways Authority of India, PIU- Pune that it would pay such amount as decided by the Govt. of Maharashtra required to defray the cost on:

- a) Compensatory afforestation as per Govt. Instructions.
- b) Clearance and removal of vegetative growth on the forest land.
- c) Net Present Value (NPV) as per the existing guidelines
- d) Fencing expenditure

Suhas D. C Project Director

NHAI - PIU- Pune



Name of the Project:

Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

NO OBJECTION CERTIFICATE FROM THE GRAM SABHA

As per Ministry of Environment Forests and Climate Change (MoEF & CC), F. C. Division notification dated 5th February 2013, F. No – 11- 9/98 – F C (pt) the project highway does not attract resolution from the Gramsabha for the Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

Suhas D. Chitnis Project Director NHAI – PIU- Pune

Date:-06-03-2017 Place:- Pune

Enclosed:

1. Notification of the MoEF & CC

Name	of the	Dwai	not.
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Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

PROVIDING FACILITY

Certified that the project authority agrees to provide Octroi free services to Forest Department vehicles and provide Check Naka at Octroi booth on highway.

Suhas D. Chitnis Project Director NHAI – PIU- Pune

Name of the Project:

Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST AREA

In the Kambhati Ghat section, the existing two lane road on LHS is passing through 2 lane tunnel constructed during four laning of Pune - Satara section and the two lane road on the RHS is passing through ghat portion.

The existing NH-4 from Pune Satara already widened to 6 lane Highway to meet traffic demand, except existing two lane tiunnel in Khambatki ghat. This exisitng two lane tunnel is going to become a bottleneck in in near future as the traffic on the Highway is about 46000 PCU. Widening of existing two lane tunnel is not feasible

Further, the improvements proposed as part of six laning for the RHS carriageway is not completley eliminating all the geometric deficiencies in the alignment, as it is following the existing ghat road. Also, it is not possible to improve the right carriageway to desired geotric standards due to existing ghat.

Considering these difficulties for improvement of exisiting alignment of Left and Right carraigway, NHAI desired to construct separate 6 lane tunnel with improved geometry on west side of the existing left carriageway alignment. The approaches of tunnel will smoothly merge with existing 6 lane on Satara side at Ex. Km 771.730 (design Km 771.730) and on Pune side at Ex. Km 782.000 (design Km 778.190). As the forest area/Khambatki ghat spread across the existing alignment, it invitable to cross the forest area in this section.

Hence, there is no suitable alternate land is possible other than locating the 6 lane tunnel in the village Vele of Taluka Wai and villages Wanyachiwadi and Khandal of Taluka Khandala in Satara district of Maharastra.

Suhas D. Chitnis Project Director NHAI – PIU- Pune

Date:-06-03-2017

Place:- Pune

Name	of the	Project:

Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

ALTERNATIVES EXAMINED

Certified that all alternatives have been examined in detailed and come to a conclusion that the proposed alternative is most suitable from forestry point of view, rest all other alternatives are rejected.

Signature

Deputy Conservator Forest Satara Division, Satara

Date:-

Name of the Project:

Construction of New Six Lane Tunnel in Khambatki Ghat Section Including Approaches from Ex. Km. 771.730 (Design Km 771.730) to Ex. Km.782.000 (Design Km 778.190) in Pune - Satara Section of NH-4 in the State of Maharashtra.

ALTERNATES EXAMINED

1	Item	Alternate -I	Alternate -II	Alternate -III
2	Lenght of the proposed alignment	5.729 km	5.458 km	6.460 km
3	Extant of fresh forest area to be diverted	6.3 Ha	13.5 Ha	5.9 Ha
4	Density of Forest	5 %	5 %	5 %
5	NPV involved as per the cost – Benifit analysis	399.231 lakh	855.495 lakh	373.883 lakh

Based on the above analysis, Alternate – III was found to be more suitable from forest conservation point of view. Hence Alternate – III has been finalized.

Suhas D. Chitnis Project Director NHAI – PIU- Pune