

No.RW/NH-11044/1/98-DO-I

Dated, the 25th Septmeber, 1998

To

Secretaries of PWD of all States/UTs (dealing with National Highways); Director General Border Roads; Director General (Works), Central Public Works Department; Chairman, National Highways Authority of India

Subject : Plantation of trees on National Highways

I am directed to refer to this Ministry's letter No.NH-III/P/15/75 dated 20th May, 1976 (copy enclosed) and No.NH-III/P/15/75 dated 2nd March, 1979 (copy enclosed) wherein the State Governments etc. were requested to undertake plantation of trees on the National Highways on a large scale.

2. It may be stated that there is an urgent need to improve the "Green Cover" through plantation of trees in the country to save our environment. It has been the policy of the Central Government to plant trees along National Highways etc. In this connection Ministry's letter No. RW/NH-11052/5/95-DO. I dated 26.11.1996 also refers, wherein it has also been decided to permit Public Sector Corporation/reputed private companies/voluntary organisations to develop and maintain gardens/tree plantation/landscaping in vacant National Highway land on either side of the road/central verges/rotaries for beautification and prevention of encroachments.

3. In the light of the above, it is once again requested that State Governments should take up plantation along the National Highways on a large scale so as to increase the "Green Cover" to save our environment.

4. Plantation of trees of State Highways may also be undertaken as in the case of National Highways.

[Enclosure to Ministry's Circular No.RW/NH-11044/1/98 D.O.I dated 25-9-1998]

Copy of Ministry of Surface Transport (Roads Wing) letter No. NH III/P/15/75 dated 20th May, 1976 addressed to all State and Union Territory Governments (Departments dealing with National Highways).

Subject: Plantation maintenance and cutting of Trees on National Highway.

In supersession of all instructions issued vide circulars referred in the *Appendix I*, am directed to issue the following instructions on the subject mentioned above.

2. Plantation of Trees along National Highways

2.1. Location of trees

Trees should be placed at a minimum distance of 10-12 metres from the centre line of the extreme traffic lane to provide recovery area for the vehicle that runs off the road. A second row of tree 6 m further away will also be desirable and planted wherever possible. Preferably the first row of trees should consist of species with thick shade and other rows of vertical type providing thin shade. However, further road expansion programme should be kept in view while locating the trees.

2.2. Removal and plantation of trees

Existing trees should generally be preserved as far as possible and no indiscriminate felling of trees should be resorted while upgrading/widening and improving the highway. Trees located on roadway or embankment slopes have proved to be potential traffic hazard to vehicles going off the carrigeway and hitting against them. Therefore, wherever the trees on National Highways are either on the roadway itself or too close to it constituting safety hazard, these shall be replaced systematically by alternative plantation. The existing trees by the side of the roadway, which in the opinion of Engineer-in-Chief are serious threat to safety should be removed immediately, after obtaining the approval of competent authority (refer para 3). Other trees within 10 m of the centre line of extreme traffic lane should be removed gradually after planting alternative trees.

2.3. Wherever there is a possibility of (i) trees dying due to old age; (ii) removal for widening and improvement; (iii) removal for traffic safety, alternatives trees must be planted to replace them well in advance. While planting new trees, care should be taken to maintain lateral clearance mentioned in para 2.1.

2.4. **Temporary trees and shrubs**

Since permanent trees will take time to grow as an immediate measure quick-growing temporary trees may be planted in between the space for permanent trees which may be removed after the permanent ones have grown up.

2.5. **Selection of species of trees**

The spacing and type of permanent and temporary trees to be planted in any locality will depend on local conditions such as rainfall, climate type of soil etc. Selection of tree-species should, therefore, be carefully done with the advice of officers from horticulture or forest department. Age and the time at which the tree is transplanted from nurseries should be decided in consultation with horticulturist as small sapling generally have a high rate of fatality and their planting the flowering sub-trees and shrubs on the sides of road embankments in tune with an overall landscaping scheme prepared by landscape or horticulture experts.

2.6. **Typical arrangement**

A general scheme of roadside plantation as suggested above is illustrated in the enclosed figure. The arrangement should be regarded as merely indicative and not definitive. These recommendations are meant to be applied not only to two-lane highways but also multi-lane highways. In the case of a 4-lane divided highway, the distances for alternative rows of trees given in para 2.1 should be reckoned from the nearest unidirectional carriageway. No indiscriminate felling of trees is resorted to at the time of upgrading a 2-lane road to 4-lane divided standards. As far as possible, the existing trees should be preserved by suitably locating the second carriageway within the available right-of-way by adopting a wide enough central verge.

2.7. **Set-back of trees on curves**

Experience has been that growth of thick vegetation close to the formation on inside of horizontal curve leads to serious reduction of sight distance and causes avoidable accidents with cattle/children suddenly emerging from the side. Uncontrolled trees/vegetation, may also affect visibility of traffic control devices and road signs. Therefore, in plain terrain a stopping sight distance of 170 m corresponding to the design speed of 100 km per hour may be ensured on all curved sections of national highways along the innermost lane. However where there are site restrictions this requirement may be as a special case, reduced to 120 m corresponding the design speed of 80 km per hour. The existing trees and vegetation on the sides have to be suitably thinned/trimmed, or even removed if necessary and a regular programme of pruning of the offending trees should be instilled as part of the maintenance operations.

2.8. **Landscaping of bridge approaches**

Bridges constitute an important part of the National Highway and as such landscaping scheme should incorporate them also. Shrubs and flowers should be planted around such structure to beautify the place and side slopes of approaches landscaped with some grassing/flowering trees/bushes. In this connection, the requirement of drainage, stability of slopes and traffic safety should be kept in view and given over-riding consideration.

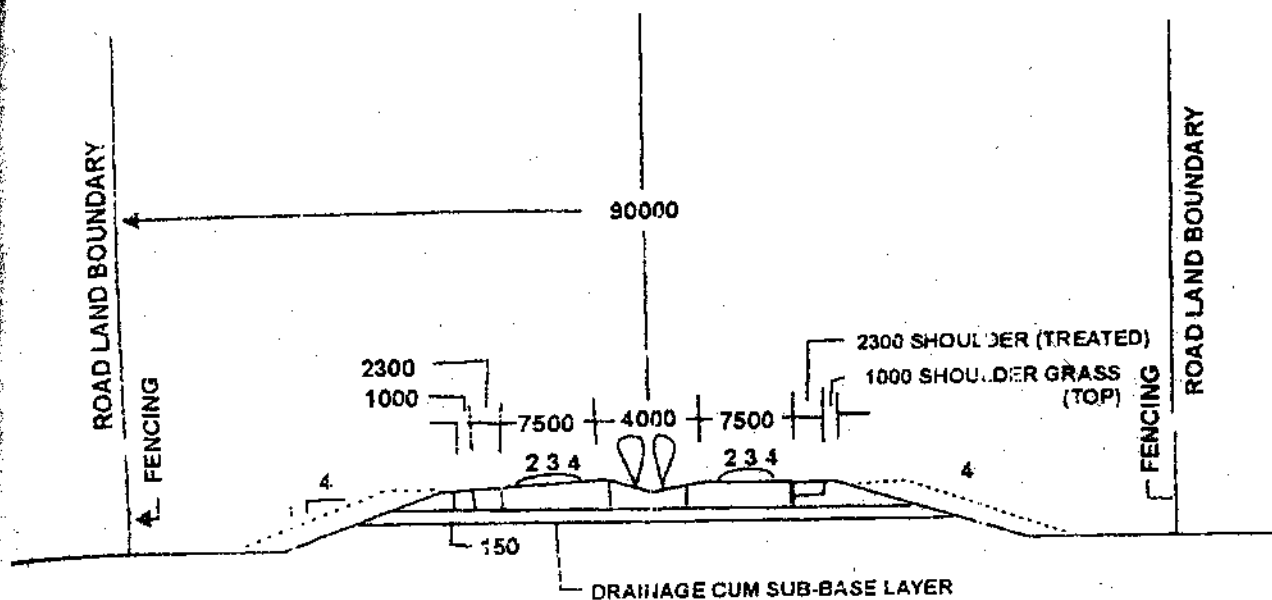
2.9. **Landscaping and gardening of traffic rotaries**

The traffic rotaries and/or road margins of National Highways should always be kept tidy and pleasing by the department dealing with the National Highways. Under no circumstances the firms or individuals (private bodies) should be granted permission to develop and maintain the rotaries and/or road margins on National Highways.

3. **Maintenance and cutting of trees**

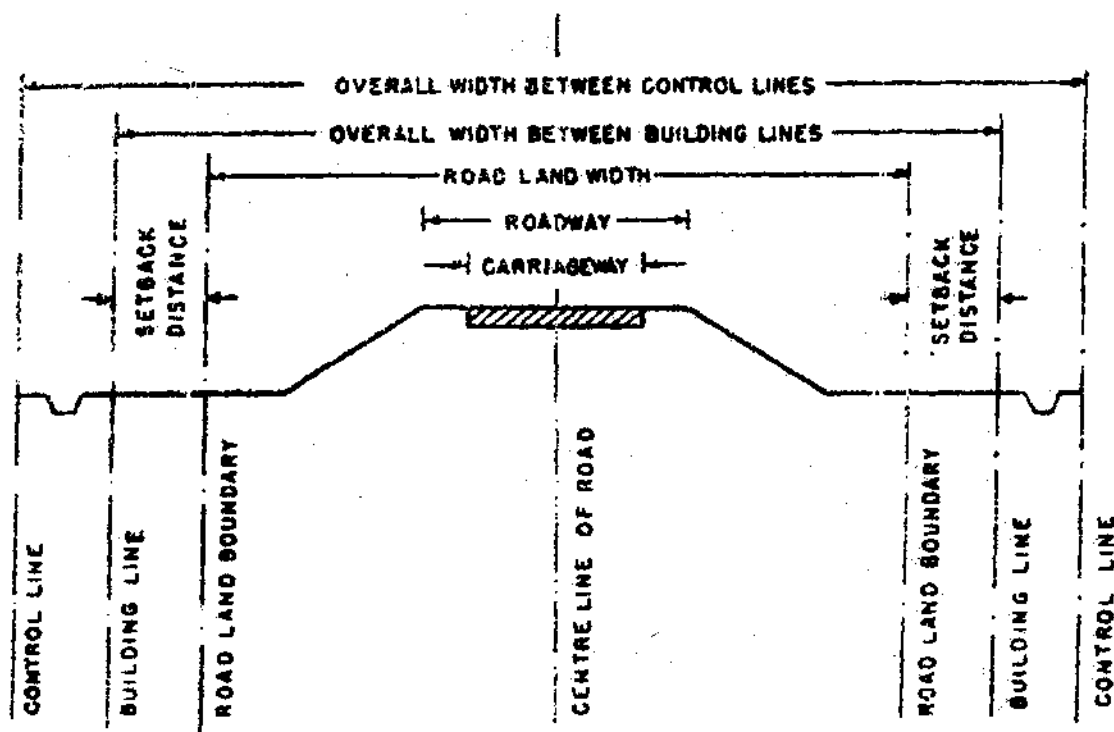
3.1. **Permission to cut trees**

Trees on National Highways are a natural asset paid for from National Highway Funds. These should not be cut or their branches lopped off indiscriminately without the prior approval of the competent authority.



Typical cross section of expressway

Notes: 1. All dimensions are in mm. 2. Dotted lines indicate future extension



Road land boundary, building lines and control lines

However, prior permission will not be necessary in certain special cases like when dry or dead trees are required to be removed for the safety of traffic or pruning of trees being done as a regular feature of maintenance programme. The work of cutting of trees should be carried out only by the authorised department. Competent authority for these purposes is the Director General (Road Development), Government of India, Ministry of Shipping and Transport (Roads Wing) or persons authorised by him on his behalf. The officers authorised by Director General (Road Dev.) to accord permission for specific cases of felling trees are mentioned as under:-

- (i) The Regional Officer of the Ministry, for the felling of trees (including cutting of branches) on the National Highways and the land appurtenant thereto, after satisfying himself that the need for such cutting/felling actually exists and arrangement has been made to plant new trees. Regional Officers shall submit a report of felling authorised by him to the Ministry soon after doing so.
- (ii) State Chief Engineer dealing with National Highway in cases can grant permission where cutting of only a few trees is involved and is considered inevitable e.g. where a power line crosses a National Highway at right angle or a single tree is to be cut because of its dangerous condition or its coming in the widened formation of the road. Chief Engineer shall also furnish to the Director General (Road Development) particulars of cuttings authorised by him immediately after he has issued the necessary authorisation to cut. These powers cannot be delegated by the Chief Engineer to lower formations. Where a whole line of trees has to be cut i.e. when an electric line has to travel parallel to an existing highway for a long distance, the case should continue to be referred to Director (General (Road Development) or the Regional Officer of the Ministry for approval.

3.3. When the plantation and maintenance of road side trees on National Highways has been handed over by the State Public Works Department to state Forest Department, the Chief Engineer concerned shall delegate his powers to the Chief Conservator of Forests who shall act as the competent authority for permitting felling of trees etc. The Chief Engineer in such cases shall communicate the contents of this letter to Forest Department for compliance and keep associated with them with regard to planning and implementation of proper road side plantation programme through periodical review (quarterly or half yearly) and intimate the progress in case of original works in the quarterly reports being furnished to this Ministry. The planning and implementation of landscaping work, however, shall remain with the State Public Works Department.

4. Maintenance of trees and plantation of new ones on existing roads should be done from funds allotted for maintenance and repairs of National Highways. In special cases original work sanctions could be considered for planting new trees on existing roads provided there is justification. These sanctions will be on the basis of detailed estimate. For bypasses and new constructions the project-estimates should provide for plantation and/or landscaping.

5. Revenues from Trees

Under Section 4 of the National Highways Act, 1956, the property of all land appurtenant to a National Highway and such structures, fences, trees, etc. mentioned in that section fall within that land, vests in the Central Government. As such, the receipt and revenues from avenue trees etc. should be credited to the appropriate central head of account.

6. It is requested that the circular may be brought to the notice of all concerned officers in the Public Works Department dealing with National Highways with instructions to comply with it.

Appendix

Copy of Ministry of Surface Transport (Roads Wing's) letter No. NH-III/P/15/75 dated 2nd March, 1979 addressed to all State and Union Territory Governments (Departments dealing with National Highways).

Subject : Plantation of Trees on National Highways

This Ministry's circular No. NH-III-P/15/75 dated 20th May 1976, had spelt out the policy regarding the plantation, maintenance and cutting of trees along National Highways and had stressed the need for further augmenting the roadside avenue trees. Subsequently in June 1978, the Hon'ble Minister for Shipping & Transport had also personally written to the P.W.D. Ministers stressing the need for landscaping along NHs and suggested plantation of fruit-bearing trees. Recently the Ministry of Agriculture and Irrigation, alarmed at the dwindling forest

resources in the country and resultant soil-erosion, has proposed the undertaking of an intensive programme of tree plantation along highways with the help of the State Forest Departments under State schemes of extensive forestry and economic plantations, as well as centrally sponsored social forestry programme. The proposal briefly is as under:-

- (i) The Public Works Departments may make roadside land available to the concerned Forest Department, for taking up suitable plantation programmes and management of the afforested lands including their fencing etc.
- (ii) State Forests Departments will declare the afforested areas as "Protected Areas" under Section 29 of Indian Forest Act, so that they have legal status to protect the plantations.
- (iii) Forest Departments will be responsible for raising the nurseries, plantations, and after care of the plants.

2. In the Ministry's circular dated 20th May, 1976 referred to above, it was mentioned that where the plantation and maintenance of roadside trees on National Highways had been handed over to the State Forest Department, the Chief Engineer should communicate the contents of our circular to the Forest Department for compliance and maintain contact with them with regard to the planning and implementation of a proper roadside plantation programme through periodical reviews. Some State P.W.Ds. have already entrusted the plantation of roadside trees to Forests Departments and their experience has been quite happy. The Forest Departments are well versed in this task and they also have powers for protection of such plantation. It may, therefore, be advantageous to have a cooperative arrangement with them and get benefit of their expertise in raising of nurseries and plantation technology. An additional advantage would be that the Forest Departments will meet most of the extra cost involved from their own budgetary resources. No doubt there would be some difficulties of coordination and an agreed policy about the spacing, etc. of trees with respect to the road needs. With a view therefore to take a policy decision at the national level. I am to request you to kindly furnish the following information urgently to this Ministry:

- (i) How is the roadside plantation programme being managed in your State? Is it under the control of P.W.D. itself and whether they have a separate staff set-up for this purpose?
- (ii) If the plantation responsibility has been handed over to the Forest Department, how are the plantations being financed and whether the revenue from avenue trees is being credited to appropriate central head of account or not? Is the system working satisfactorily?
- (iii) Have any difficulties been encountered about the execution of road improvements involving afforested areas under the charge of Forest Departments? (For instance borrowing of earth, digging of roadside drains, cutting of trees to improve visibility etc).
- (iv) Has the P.W.D. been required to pay any compensation to the Forest Department for removal of trees in the NH land necessitated by road improvement work?
- (v) What are the views of the State P.W.D. about handing over the roadside land to the Forest Department for afforestation?

3. An immediate reply is requested as the matter is proposed to be discussed in detail at the next meeting of the Chief Engineers.

MINISTRY OF SURFACE TRANSPORT (ROADS WING)

NOTIFICATION

New Delhi, the 5th June, 1998

S.O. 490(E).-Whereas the Central Government has entrusted the stretch of NH-8 from km. 162.5 to km. 248 (kotputli- Jaipur Section) under Section 11 of the National Highways Authority of India Act, 1988 (68 of 1988) to the National Highways Authority of India, vide notification No. S.O. 638 (E) dated 4th September, 1997.

Now, therefore, in exercise of the powers conferred by Section 7 of the National Highways Act, 1956 (48 of 1956) read with rules 3 and 9 of the National Highways (Fees for the use of National Highway Section and permanent Bridge-Public Funded Projects) Rules, 1997 and sub-rule (1) of rule 3 of the National Highways (rate of fee Rules, 1997), the Central Government hereby notifies that there shall be levied fees and collected by the National Highways Authority of India through franchisee, on mechanical vehicles for the use of the said stretch of National Highway No. 8 at the rates specified in the schedule annexed hereto, namely:-

SCHEDULE

Rates of fee to be recovered from the users of stretch between km. 162.5 to km. 248 (Kotputli-Jaipur Section of NH-8)

Sl No.	Type of vehicle	Fee rate of vehicle for one way trip (Rs.)	
		upto 14-03-1999	for the period 15-3-1999 to 14-3-2000
1.	Car/Jeep/Van	35	40
2.	Light Commercial Vehicle	60	65
3.	Truck/Buses	100	110
4.	Heavy Construction Machinery & Earth Moving Equipment	260	280

Provided that any category of vehicle specified in this Schedule shall not include any vehicle on duty of Defence Department, Police Department, Fire-Fighting Department, Post and Telegraph Department, Central Government, State Government or Local Bodies and ambulances or funeral van.

[F.No. RW/NH-37011/7/97-DO]

A.D. NARAIN, Director General (Road Development) & Addl. Secy.