

## Tree Cutting for Metro 3 Alignment, Stations and TBM Shafts

- A. 1. Number of trees impacted as per EIA report by RITES (Sep.2012): 589  
 2. Number of trees impacted as per updated EIA report by GC (Jan. 2016): 4255  
 (Please refer <https://www.mmrcl.com/en/documents/545/EIA%20Report>)  
**3. Tree impacted as per Contractor submission to Tree Authority: 3891**  
 4. Reduction in number of trees in contractor proposal to tree authority against GC survey: 364 less

### 5. Details of Trees impacted (Excluding CarDepot)

S.No	Tree Details	Numbers
i.	Trees to be retained	1090
ii.	Trees to be Transplanted	1727
iii.	Trees to be Cut	1074
iv.	Compensatory Tree Plantation for iii above @ 3 trees to be plant for each to be cut	3222
v.	Additional trees to be planted after project work completion	2801#

(# Please refer

<https://www.mmrcl.com/en/documents/1601/Undertaking%20given%20by%20MMRC%20to%20High%20Court>)

- B. **Metro rail project does not attract provisions of EIA notification 2006. This has been Considered by MOEF to MMRC vide letter dated 20.11.2015** (Please refer <https://www.mmrcl.com/en/documents/1600/MoEF%20to%20MMRC%20under%20EIA%20Notification%2C%202006>)
- C. The EIA report of Sep. 2012 by RITES was not mandatory for obtaining Govt. of India approvals for the Project. It was part of submissions to JICA seeking financial assistance and was also reviewed by JICA's Social and Environment Assessment Mission. In case of DMRC, JICA has considered financial assistance even when 55,000 number of trees were to be affected
- D. **The EIA report** prepared by RITES in Sep. 2012 was based on broader issues. At this point of time detailed engineering of the project was not done. The detailed Engineering assessment, construction methodology, station designs, entry and exit points were finalized by General Consultants. As per GC report (Jan. 2016) trees impacted are to be 4255. Thereafter, contractors did the final detailing of the execution plan of the station construction activities, as per which number of tree along the whole alignment for station construction activity comes out to be 3891 which shows reduction in 364 number of trees.
- E. MMRC established **Environmental division** comprising Senior DGM(Environment), Environmental Scientists & Horticulturist. GC also has a separate team of Environment experts and scientists. Both the teams of MMRC & GC supervise all

environmental aspects including, tree cutting & tree plantation activities as per the standard guide lines and contractual provisions.

- F. **Procedure for obtaining permission from tree authority** for tree cutting and tree transplantation is stipulated by Tree Authority. Stages of such procedure are shown as below:

**Stages in Approval Process by Tree Authority**

<b>Stages of Tree Authority Approval</b>	
<b>Stage I</b>	Submission of application to respective Dy. Superintendent of Garden Zonal office
	Scrutiny of proposal by concerned Assistant Superintendent of Garden/Horticulture Assistant /Junior Tree Officer
<b>Stage II</b>	Site inspection by concerned officer of respective ward of MCGM
	Submission of inspection report by MCGM Zonal office
	Receipt of approval from Superintendent of Garden /Tree Officer
<b>Stage III</b>	Inspection and Remarks of Tree Authority members
<b>Stage IV</b>	Advertisement in local Newspapers and Display of Notice on each tree for public information
<b>Stage V</b>	Hearing before Superintendent of Garden on Objections / Suggestions filed by the Citizens
<b>Stage VI</b>	Inclusion of Proposal in Tree Authority Meeting Agenda
<b>Stage VII</b>	Post Approval of Tree Authority – Payment of Processing fees and Deposition of Fee
<b>Stage IX</b>	Receipt of Approval from MCGM

- Proposal of tree cutting, tree plantation and transplantation is reviewed by tree officers of MCGM before granting final permission

- G. **Tree cutting/Transplantation activity is being monitored by** the Team of Environmental Experts of GC, Environment division of MMRC, Tree Officers of MCGM & High Court appointed Committee in the following manner.

- Officers of the Environment Cell visiting the sites of respective packages where Tree Cutting, Preparation for Transplantation of Trees & Transplantation in progress. During the visit appropriate guidance is provided to the Contractor/Sub-contractor engaged in the activity. Shortcomings observed are brought to the notice for improvement in the practices. It is also ensured that Trees earmarked for cutting/ Transplantation are cut/ Transplanted as per permission granted by Tree authority. A Checklist is prescribed on procedure to be followed which would be confirmed by Horticulturist of the Contractor, Site Inspector of GC and Station

Manager/Site in Charge of the Contractor by Signing it. Tree Officer of Concerned ward, MCGM is Visiting Various Sites of Tree Cutting, Preparation for Transplantation of Trees & Transplantation site and verifying the practices adopted and ensuring as to whether the trees cut / Transplanted are in consonance with the permissions granted by Tree authority.

- Committee of Two officers Nominated by Hon'ble High Court have visited to all 26 stations. Officers of Environment Cell, Respective Packages of MM RC, GC and Tree officer of MCGM remained present during the visit. The committee is verifying the fact that only those Trees are cut /transplanted which are permitted for cutting Transplantation by the Tree authority of MCGM.
- H. All the 7 packages contractors have submitted **Method Statements** to GC for review and approval. GC has reviewed and issued no objection with certain comments.
- I. **Credentials of tree Transplanting (and cutting) agencies** appointed by contractor have been reviewed and approved by GC. The credentials reviewed include the experience of the agency, qualification of the staff, availability of skilled man power and availability of necessary equipment with the agency.
- J. GC has organized two workshops (26<sup>th</sup> Oct. and 16<sup>th</sup> Dec. 2016) for all the 7 package contractors staff handling tree proposals and MMRC officials along with GC project staff. The objective is to bring in awareness on the tree approval process and guidelines for tree protection on site, tree transplantation.
- K. **Metro-3 will take off 5.54 lakh vehicle trips from the road in 2031 and save fuel consumption to the tune of 2.95 lakh liters perday.**
- L. **The 2801 (impacted) trees will reduce emission (CO<sub>2</sub>) absorption by 61 ton/year. However once operational, Metro-3 will reduce the emission of CO<sub>2</sub> and Green house gases to the tune of 9907 ton/ year. For the same environmental benefit City would require to plant more than 3.5 Lakh trees which require 500 ha. land.**
- M. As per the latest tree census, there are more than 26 Lakhs trees in Mumbai and only 2801 trees are getting impacted by Metro-3 corridor stations.
- N. The decision to appoint Arborist was a proactive decision taken by MMRC in December, 2016. To ensure that all contractors' follow appropriate and scientific methods of tree transplantation and achieve better survival rate, an expert Arborist has been appointed by GC and mobilized to provide advice to the tree contractors (Sub Contractors) of the main civil contractors. A training session/workshop has been conducted on 12<sup>th</sup> June 2017.