

ದೂರವಾಣಿ /ಫ್ಯಾಕ್ಸ್ – 080-23343464 Email ID <u>–dcfurban82@yahoo.co.in</u>

ಕರ್ನಾಟಕ ಅರಣ್ಯ ಇಲಾಖೆ

ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿಯವರಕಛೇರಿ

ಬೆಂಗಳೂರು ನಗರ ವಿಭಾಗ, ಅರಣ್ಯ ಭವನ ಸಂಕೀರ್ಣ, 18ನೇ ಅಡ್ಡರಸ್ತೆ, ಮಲ್ಲೇಶ್ವರಂ, ಬೆಂಗಳೂರು - 560 003

Office of the Deputy Conservator of Forests

Bangalore Urban Division, AranyaBhavanCompus. 18th cross, Malleshwaram, Bangaloe-560003

No: A9/Tree Cutting /CR- 698/2021-22

22/22

Date: 10/06/2022.

Official Memorandum

- Sub: Permission for felling of trees at proposed Vellara Junction (Rashtriya Military School), for the Construction of Underground Metro Works of Phase- 2, Reach- 6 Underground Line.
- Ref:1. Hon'ble High Court Order dated: 18.11.2020 in WP 17841/2018
 - 2. Letter No: BMRCL/0163/P-2/CE-UG/RT-01/BBMP/2022/13470 dtd: 03-03-2022 of Chief Engineer, (UG-1), BMRCL, Bengaluru
 - 3. This Office Public Notice vide letter A9/Tree Cutting /CR-698/2021-22 dated: 11-04-2022.
 - 4. Letter No: RFO/K.R.Puram/tree cutting/CR-07/2021-22 O/o of The Range Forest Officer, K.R.Puram Range, Bangalore.
 - 5. Members Secretary and ACF BBMP, Bengaluru Letter No. /PR.18/2022-23 Dtd.08-06-2022 along with report and proceeding of Tree Expert Committee.

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Preamble:-

BMRCL submitted a fresh application dated 03-03-2022 read at ref (2) above seeking permission for removal of 7 trees infringing the Metro Rail Construction work of Underground Metro Works of Phase- 2, Reach- 6 Underground Line at Vellara Junction (Rashtriya Military School), at as per the directions issued by the Hon'ble High Court of Karnataka vide Order dated:18.11.2020 in WP No. 17841/2018 read at ref (1) above.

The processing and consideration of the application was taken up as per provisions of the Karnataka Preservation of Trees Act, 1976 (hereinafter mentioned as "the Act") and the Memorandum of Procedure (hereinafter mentioned as "the MOP") formulated by the Tree Expert Committee (hereinafter mentioned as "the TEC"). As stipulated under Section 8(3)(vii) of the Act, a public notice in Template No. 1 of the MOP was issued duly inviting the objections from the public, as the total number of trees proposed to be removed are more than 50, though the number at this location is 7 only. The public notice appeared Vijaya Vani and Indian Express newspaper on 15.04.2022. The details of the project area, Number of trees to be removed, GPS Co-ordinates and physical details of those trees were uploaded in the website of BBMP and also in Karnataka Forest dept Websites, as per the MOP.

In response to the public notice, there are no objections/suggestions received by the public for tree felling. Even though we have not received any objections/suggestions in all the cases of tree removal, the first attempt would be retention and translocation, as feasible and practical. Only thereafter, option of felling will be taken up. The proceedings of that consideration and comment were prepared on 27-04-2022, besides recording summary of the findings in Template No. 3 of the MOP.

As per BMRCL's application, there are 7 trees in the project area are sought to be removed. Detailed enumeration of each of those 7 trees in terms of location, physical parameters, health and defects, etc. 'was organized from the forest officers in Part-I of Template No. 2 of the MOP. Thereafter, the same was verified by the undersigned and a preliminary assessment in terms of possibility of onsite retention or translocation or felling along with justification was carried out through inspection of those 7 trees on 26.04.2022 and recorded in Part-II of Template No. 2.

The proceedings regarding consideration of the objections, tabular statement of the findings along with summary, detailed enumeration and preliminary assessment along with justification for each of the 42 trees, and information in Template No 2 and 3 were submitted vide letter dated 28.04.2022 for consideration by the TEC.

The TEC has submitted a detailed report dated 08.06.2022 giving their recommendations for felling of 7 trees with justification for each of them along with an abstract of the report in Template No. 4. It is noted from the report that the TEC carried out their activities in 4 stages, namely, (i) review of the application, objections received from the public and findings by the undersigned, (ii) review of preliminary assessment by the undersigned, (iii) their field inspection, and (iv) post inspection review and report preparation.

The TEC concluded that 7 trees need to be removed as they are falling within the following physical features of Metro Project.

Physical Features	Tree Numbers	Locatio of the trees
Escavation Work and Piling activity area	01, 02,03,04,05,06,07	At the premises of All Saints Church, Vellara
Finny activity area	Total – 07 Nos.	Junction.

The TEC has concluded that 7 trees are not suitable for the translocation as they have major defects or extraction of the root ball of adequate size is not practical. The TEC has accordingly recommended felling of those 7 trees.

The report of the TEC has been examined. The TEC has provided detailed specific justification for removal of each of the 7 trees, besides giving justification for felling of the trees in Part-III of Template 2 as well as in Appendix to its report. The undersigned concurs with the recommendations and justification of the TEC.

The final assessment of the undersigned has been recorded in Part-IV of Template No. 2. The felling of 7 trees are essential for implementation of the metro project, which seeks to build a sustainable public transport system. The adverse impact of the felling of trees will have to be mitigated by directing BMRCL to take up compensatory plantation in adequate number.

Hence, the following order.

<u>Order</u>

- 1. Permission is hereby granted for removal of Seven(7) trees by way of felling as listed with justification in Template No. 6 appended to this Official Memorandum as **Appendix 1**
- 2. This order will come into effect fifteen (15) days from the date of uploading of the order on the websites of BBMP and Karnataka Forest Department and serving by email on the petitioners in WP 17841/2018.
- 3. The order is subject to following directions to BMRCL.
 - A. Compensatory Plantation:
 - i. The BMRCL to arrange compensatory Afforestation of 70 tall and healthy saplings, i.e., @ 10 saplings for each tree removed within Six(6) months from the date of the removal.
 - ii. BMRCL to submit a plan for the compensatory plantation within Two(2) months from the date of this order.
 - B. Care & Maintenance of compensatory plantation, and their Reporting:
 - i. BMRCL should ensure proper and effective care and maintenance of the translocated trees and compensatory plantation for a period of Three(3) years.

ii. BMRCL should also submit reports regarding condition of the compensatory plantation every quarter for a period of Three(3) years to the undersigned and follow the appropriate recommendation of the Tree officer.

C. Storage & disposal of felled trees:

i. The extracted wood from 7 trees to be felled should be deposited at Jarakbande Kaval Tenkey Depot with the Bangalore Range Forest Officer, through the Range Forest Officer, K.R.Puram for disposal.

Sd/-Tree Officer & Deputy Conservator of Forests, Bengaluru Urban Division, Division.

Copy to:

- 1. Chairman, Tree Authority and Chief Conservator of Forests(Territorial),Bangalore for kind information.
- 2. Managing Director, BMRCL, 3rd Floor, BMTC Complex, Shanthinagara, Bengaluru 560027.
- General Manager, Social and Environment Management Unit, BMRCL, 5th Floor, BMTC Complex, Shanthinagara, Bengaluru -560027.
- 4. Sri Dattatraya T Devare, A-102 Natasha Golf View Apartments, Domlur Bengaluru– 560071, Petitioner in WP 17841/2018.
- 5. Bangalore Environment Trust, 10, Sirur Park B Street Seshadripuram Bengaluru 560020, Petitioner in WP 17841/2018.
- 6. Assistant Conservator of Forests, BBMP & Member Secretary, Tree Expert Committee appointed by Hon'ble High Court in WP 17841/2018.
- 7. Assistant Conservator of Forests, South Sub Division, Bangalore for kind information and necessary action.
- 8. Range Forest Officer, K.R.Puram Range, K.R.Puram for kind information and necessary action.
- 9. Range Forest Officer, Bangalore Range, Bangalore for kind information and to store the extracted wood for departmental disposal.
- 10. Office Copy.

Tree Officer & Deputy Conservator of Forests, Bangalore Urban Division, Bangalore

PARTICULARS ON TREES TO BE FELLED*

(to be prepared in compliance to Step 9 of the Memorandum of Procedure of TEC)

Name of the user agency	Bangalore Metro Rail corporation(BMRCL)
Purpose of the project	Construction of Underground Metro Works at Vellara Junction (Rashtriya Military School), for the Construction of Underground Metro Works of Phase- 2, Reach- 6 Underground Line.
Extent of the project area	-
Location of the project area	GPS Co-ordinates of the boundary
	Starting N-12 ⁰ 57'55.7" E-77 ⁰ 36'24.8"
	Ending N-12 ⁰ 57' 55.6" N-77 ⁰ 36'26.1"
Number of tree(s) enumerated in theproject area	7 Nos
Number of tree(s) recommended forfelling	7 Nos

* Note:

List of the trees to be felled containing details of kind / species, girth, height, GPS coordinates should be appended to this template. These details should be extracted from relevant parts of Template 2.

Date: 10,06.2022

Tree Officer & Deputy Conservator of Forests, Bangalore Urban Division, Bangalore



Trees Recommended for Felling

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Case / Application No: BMRCL/0163/P/2/CEUG/RT-01/BBMP/2022/13470 dt: 03.03.2022.

SI. No	Tre e No.	Name of the species	GB H (m)	Tota I heig ht (m)	TEC Recomme ndations	Tree Officer decision	Justification
1	1	Parkia (bigglandulo sa)	1.62	2.00	Felling	Felling	The tree standing in the project area earmarked for Metro Station connection the underground rails on either side. The tree in matured and standing close to each other and hence excavation of root ball of applicable size will not be possible. Thereby Transplantation Is meagre. Hence it is recommended for felling.
2	2	Parkia (bigglandulo sa)	1.76	2.50	Felling	Felling	The tree standing in the project area earmarked for Metro Station connection the underground rails on either side. The tree in matured and standing close to each other and hence excavation of root ball of applicable size will not be possible. Thereby Transplantation Is meagre. Hence it is recommended for felling.
3	3	Parkia (bigglandulo sa)	1.62	2.50	Felling	Felling	The tree standing in the project area earmarked for Metro Station connection the underground rails on either side. The tree in matured and standing close to each other and hence excavation of root ball of applicable size will not be possible. Thereby Transplantation Is meagre. Hence it is recommended for felling.
4	4	Atthi (<i>Ficus</i> <i>racemose)</i>)	2.05	2.50	Felling	Felling	The tree standing in the project area earmarked for Metro Station connection the underground rails on either side. The tree in matured and standing close to each other

							and hence excavation of root ball of applicable size will not be possible. Thereby Transplantation Is meagre. Hence it is recommended for felling.
	5A		1.60	2.00			The tree standing in the project area earmarked for Metro Station connection the underground rails on either
5	5B	Bela (Limonia acidissima)	1.50	2.50	Felling	Felling	side. The tree in matured and standing close to each other and hence excavation of root ball of applicable size will not be possible. Thereby Transplantation Is meagre. Hence it is recommended for felling.
	6A		1.14	2.50	Felling		The tree standing in the project area earmarked for Metro Station connection the underground rails on either side. The tree in matured and
	6B		1.30	2.50			
6	60	Honge Pongamia Pinnata)	0.75	2.50		Felling	standing close to each other and hence excavation of root ball of applicable size will not be possible. Thereby Transplantation Is meagre. Hence it is recommended for felling.
7	7	Ane thandi (Kigelia pinnata)	1.18	` 2.00	Felling	Felling	The tree standing in the project area earmarked for Metro Station connection the underground rails on either side. The tree in matured and standing close to each other and hence excavation of root ball of applicable size will not be possible. Thereby Transplantation Is meagre. Hence it is recommended for felling.

DATE: 10.06.2022

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Tree Officer & Deputy Conservator of Forests, Bangalore Urban Division , Bangalore Report of Tree Expert Committee regarding permission sought by BMRCL under Section 8 (2) and 8 (3) (vii) of Karnataka Preservation of Trees Act, 1976

Application No.: BMRCL/0163/P-2/CE-UG/RT-01/BBMP/2022/13470 dtd 03.03.2022

Project Area: Vellara Junction Metro Station coming under the Construction of Underground Metro Works of Phase 2, Reach 6, Underground Line, Bengaluru

Location: Vellara Junction Metro Station, Bengaluru Dated : June 2022 .

Report of Tree Expert Committee regarding permission sought by BMRCL under Section 8 (2) and 8 (3) (vii) of Karnataka Preservation of Trees Act, 1976.

Application No. : BMRCL/0163/P-2/CE-UG/RT-01/BBMP/2022/13470 dtd 03.03.2022

Project Area: Removal of Trees at proposed Vellara Junction Metro Station(Rashtriya Military School) for Construction of Underground MetroWorks of Phase 2, Reach-6 Underground Line.

- 1. With reference to the above cited BMRCL application and project area, the Tree Expert Committee (hereinafter mentioned as TEC) has carried out the works as per the process elucidated in the MOP (dated December 2020) submitted to the Hon'ble High Court of Karnataka on 09.12.2020.
- 2. The Tree Officer and Deputy Conservator of Forests, Bengaluru Urban Division vide his letter No. A9.tree cutting/BMRCL/CR-698/2021-22/723 dated 28.04.2022 has submitted his preliminary assessment of trees related to application filed by BMRCL pertaining to 07 number of trees standing at the area proposed for Vellara Junction Metro Station (Rashtriya Military School) for Construction of Underground Metro Works of Phase 2, Reach-6, Underground Line Bengaluru. The submission was accompanied by the following documents.
 - i. A copy of the Application dated 03.03.2022 received from CE, UG, BMRCL along with details and map of the area and details of trees involved including their GPS coordinates.
 - ii. A copy of the Public Notice dated 11.04.2022 issued by the Tree Officer & DCF, Bengaluru Urban Division, a complete set of the objections/suggestions received from the public and a copy of the proceedings dated 27.04.2022 of the Tree Officer regarding consideration of the objections/suggestions as per Section 8 (3) (vii) of the Karnataka Preservation of Trees Act, 1976 (Henceforth referred as KPT Act).
 - iii. Tree Assessment Forms in Template 2 with Part I (dated 07.04.2022) containing tree details as furnished by Range Forest Officer and Part II (dated 26.04.2022) containing preliminary assessment of the Tree Officer for each of 07 trees proposed for removal by BMRCL.
 - iv. Abstract of the review of the BMRCL application and preliminary assessment of trees by the Tree Officer in Template 3 Part I.
 - v. A statement prepared by Tree Officer showing the tree details along with preliminary assessment and justification for on-site retention/translocation/felling of trees.

Copies of the public notice, proceedings of the Tree Officer regarding consideration of the objections and his findings, and preliminary assessment of trees are attached to the report as Annexure-1 to Annexure-3.

Review of the BMRCL application, objections/suggestions in response to Public Notice, and findings of Tree Officer:

- 3. The BMRCL application, public notice, all objections/suggestions received from the public, findings of the Tree Officer, and his proceedings dated 27.04.2022 were perused systematically by the TEC in its meeting held on **29.04.2022**. The TEC noted that the process prescribed in the MOP from Step-1 to Step-3 have been followed scrupulously by the Tree Officer.
- 4. The TEC observed that no objections/suggestions have been received in response to the said public notice. The Tree Officer remarked that even though no objections/suggestions have been received, but the first priority of the Forest authorities will be to save and retain more number of trees at the spot and in case that is not possible, the next option would be translocation of such trees which fulfill the desired criteria and felling of the trees has to be last resort. The Compensatory afforestation would involve planting of saplings duly following the norms of 10 saplings to be planted in lieu of each tree translocated/felled.
- 5. The Chief Engineer, Social and Environment Management Unit (SEMU), BMRCL and concerned Engineers of the project area were present during the meeting. They were asked to make a presentation regarding the project details, compulsions/necessity for removal of the trees given the project alignment, possibility of retaining the trees while carrying out the project construction.

Review of Preliminary Assessment of Trees done by Tree Officer:

- 6. The TEC examined the preliminary assessment of trees submitted by Tree Officer, Bengaluru Urban Division vide his letter dated 28.04.2022, including the statement exhibiting the tree details along with preliminary assessment and justification for their on-site retention/translocation/felling. The TEC noted that the documentation of the trees details in Template-2, Part-I and the preliminary assessment as per Template-2 Part-II has been done properly by the Forest Officers as envisaged in Step-4 & Step-5 of the MOP.
- 7. The TEC firmly deliberated that the first option should be to consider possibility of retention of trees at the site itself. The second option, in the event of retention not being possible and removal being necessary, should be to explore the suitability of trees for the translocation. The felling should be the last option for those trees which cannot be retained on-site and are also not suitable for translocation. The TEC decided to make that assessment through the field inspection of each tree and therefore it was necessary to verify the preliminary assessment as done by the Tree Officer, Bengaluru Urban Division and hence for that purpose decided to visit the Project Area for field inspection.

[∞]8. The proceedings of the TEC regarding the above-mentioned review as per Step-6 of the MOP are attached to this report as Annexure-4.

Field Inspection by TEC:

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9. The field inspection for assessment of trees standing in the project area (Vellara Junction Metro Station) for the BMRCL project was carried out by the TEC on 13.05.2022.

The Tree Officer and the Representatives of BMRCL were present at the project area with all necessary documents.

At the Project Area during the course of Field Inspection, the following activities were carried out by the TEC for assessment of each tree in the project area.

- i. Physical verification of the tree number and the associated information collected by the Forest Department Officers in Template 2 Part-I, including tree health / tree defects and general assessment of each tree.
- ii. Confirmation regarding those trees being inside the project construction activity area.
- iii. Review of preliminary assessment of trees made by the Tree Officer in the Template 2 Part-II.
- iv. Discussion with BMRCL Representatives to explore possibility of carrying out the construction activities without removal of trees, and identification of such trees which can be retained on-site.
- v. Assessment of the general conditions of the trees to decide the feasibility of their translocation/transplantation when retention-on-site was not possible.
- vi. Recording of TEC's remarks and recommendations for on-site retention / translocation / felling of trees as stipulated in Template 2 Part-III.

The Committee in its above set of activities was guided by the detailed procedure and prioritization formulated in Step-7 of the MOP.

The proceedings of the TEC regarding the field inspection are attached to this report as Annexure-5.

Post-inspection Review and Report Preparation:

10. Having completed the field inspection on 13.05.2022, the TEC met to review its findings and assessment and further to formulate its recommendations and prepare the report.

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11. Field Status:

The total numbers of trees standing at the project site are 07 in number and the same are getting affected by the construction activities as stated by the Proponent Agency/Tree Officer.

12. On-site Retention:

As per field inspection, out of the enumerated 07 trees, no trees have been identified to be considered for retention-on-site.

 As verified during the field inspection, the 07 trees will have to be suggested either for translocation or felling as they are standing within the proposed following physical features of the Project as per BMRCL letter no. BMRCL/SEMU/EO/2022-23/3198 dtd. 02.06.2022.

Sl No	Physical features	Tree Nos.	Location of Trees
1	Excavation Work and Piling Activity	01, 02, 03, 04, 05, 06 & 07 (Total 07 trees)	At the premises of All Saints Church, Vellara Junction

Since these 07 enumerated trees are standing right in the construction activity area and hindering the project activities, their removal becomes inevitable.

14. **Translocation:** The next option considered by the TEC in case of those trees which could not be retained-on-site was translocation.

Having concluded that the retention of the above mentioned 07 trees are not possible, the TEC chose the next option of translocation of trees and assessed the suitability of each of these trees. In doing so, the TEC considered the following conditions, in addition to verification and consideration of the tree health / tree defects, etc., recorded in the Template-2 Part-I.

- i. Proximity of tree to building structures, trunks proximity to the cement / concrete or tarred surface so as to examine the feasibility of extraction of root-ball;
- ii. The natural characteristics and aspects of species viz., ecologically and economically important species; species that could provide food (nectar, pollen, seeds and fruits) and nesting sources (materials and site) to various fauna.
- iii. The trees having below mentioned characteristics do not qualify for translocation.

Trees having forked trunk, major wounds on the trunk, debarking, physical damage on the bark, scar due to fire, damage (girdling), rotting due to fungal infection (fruiting bodies of fungus, rotten core, hollowness) or pest infestation (presence of holes and frass as evidence of insect infestation), and dead / dried major branches, etc..

iv. The availability of effective zone to extract the root-ball of sufficient size. The trees in the above category (iii) and those without adequate effective zone to extract the root-ball of sufficient size were specifically not recommended for the translocation

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Taking into consideration the above mentioned assessment attributes, the TEC found that there are no trees standing at the project area which are suitable for translocation.

Hence the total 07 number of trees were not found to be suitable either for retention onsite or for translocation, and hence will have to be felled.

- 15. Recommendations of TEC: The TEC carried out a thorough and multipronged scrutiny of all the trees to make its recommendations regarding:
 - a) Trees which could be saved by retaining on-site as it is;
 - b) Trees which should be translocated depending upon their general condition as assessed and ecological importance, in the event of (a) above not being possible;
 - c) Trees recommended for removal in the event of (a) and (b) not being possible including the trees which are silviculturally matured or softwood trees and trees suffering from defects /damages.
- 16. Following is the summary of recommendations of the Committee based on the remarks as expressed in the Template-2 Part-III of each tree.

Total number of trees standing in the Project Area at Vellara Junction Metro Station as per Field Inspection = 07 trees

Particulars	Total No. of trees
Total number of Trees examined/observed	07 Nos.
Number of Trees for felling	07 Nos.

In finalizing its report, the TEC has been guided by the process highlighted in Step-8 of the MOP, namely:

- i. Meticulous scrutiny of recommendations by the Tree Officer in compliance to the MOP;
- ii. Field inspection to assess each and every tree and record the status of tree and recommendation for its on-site retention/translocation/felling.

22. Directions to BMRCL and DCF, Bengaluru Urban Division

- a) The TEC instructed that the concerned officers of BMRCL and DCF should get closely involved in the entire field operations related to trees and saplings, maintain records pertaining to Compensatory Afforestation both in respect of the works already executed and to be executed henceforth.
- b) BMRCL should be advised to raise Compensatory Afforestation on suitable lands in respect of trees to be removed by the process of translocation or felling. For each tree removed, 10 Nos. of tall healthy saplings should be planted and properly maintained.

for a period of 3 years. Periodic status reports must be submitted by BMRCL to the Tree Officer. It should be ensured that the greenery of Bengaluru is preserved and enhanced through effective maintenance of planted saplings, translocated trees and standing trees under all circumstances.

23. Monitoring and Evaluation

Quarterly progress reports have to be submitted by the BMRCL to the Tree Officer who shall regularly monitor and evaluate the maintenance and protection works for conducive growth of saplings planted and trees translocated.

24. Record keeping

- i. The Tree Officer is advised to maintain full records of the BMRCL application, its processing, field inspection, etc., for a minimum period of 3 years. The information collected in various templates as suggested in the MOP, especially Template-2 Part-1 to IV, should be maintained carefully.
- ii. An abstract of the recommendation of the TEC in Template No. 4 and a detailed statement containing the recommendations with justification for each of the 07 trees covered herein are appended as Appendix to this report.

Member - Secretary, TEC & Assistant Conservator of Forests, Bruhat Bengaluru Mahanagara Palike, Bengaluru.

Proceedings of Tree Expert Committee Meeting dated 29.04.2022 in respect of review of BMRCL Application, findings on Objections in response to Public Notice and Preliminary Assessment of Trees by Tree Officer & DCF

Application No. BMRCL/0163/P-2/CE-UG/RT-01/BBMP/2022/13470 dtd 03.03.2022

Project Area: Removal of Trees at Vellara Junction Metro Station (Rashtriya Military School) for Construction of Underground Metro Works of Phase 2, Reach-6 Underground Line

- The Tree Officer and Deputy Conservator of Forests, Bengaluru Urban Division vide his letter No. A9.tree cutting/ BMRCL/CR-698/2021-22/723 dated 28.04.2022 has submitted his preliminary assessment of trees related to application filed by BMRCL pertaining to removal of 07 numbers of trees standing at the site of proposed Vellara Junction Metro Station (Rashtriya Military School) pertaining to Construction of Underground Metro Works of Phase 2, Reach-6 Underground Line Bengaluru. The submission is accompanied by following documents.
 - a. A copy of the Application dated 03.03.2022 received from CE, UG, BMRCL along with details and map of the area and details of trees involved including their GPS coordinates.
 - b. A copy of the Public Notice dated 11.04.2022 issued by the Tree Officer & DCF, Bengaluru Urban Division, a complete set of the objections/suggestions received from the public and a copy of the proceedings dated 27.04.2022 of the Tree Officer regarding consideration of the objections/suggestions as per Section 8 (3) (vii) of the Karnataka Preservation of Trees Act, 1976 (Henceforth referred as KPT Act).
 - c. Tree Assessment Forms in Template 2 with Part I (dated 07.04.2022) containing tree details as furnished by Range Forest Officer and Part II (dated 26.04.2022) containing preliminary assessment of the Tree Officer for each of 07 trees proposed for removal by BMRCL.
 - d. Abstract of the review of the BMRCL application and preliminary assessment of trees by the Tree Officer in Template 3 Part I.
 - e. A statement prepared by Tree Officer showing the tree details along with preliminary assessment and justification for on-site retention/translocation/felling of trees.

The very purpose of issue of Public Notice provides a structured way of obtaining concerns / objections of the public and to consider them carefully.

- 2. The application of CE, UG, BMRCL was reviewed by the Tree Expert Committee (mentioned as TEC henceforth) in its meeting held on 29.04.2022. The TEC also examined the statement prepared regarding the objections/suggestions received from the public, remarks and findings of the Tree Officer in respect of each objection, and proceedings dated 27.04.2022 of the Tree Officer regarding consideration of those objections.
- 3. The TEC observed that no objections/suggestions have been received in response to the said public notice. The Tree Officer remarked that even though no objections/suggestions have been received, but the first priority of the Forest authorities will be to save and retain more number of trees at the spot and in case that is not possible, the next option would be translocation of such trees which fulfill the desired criteria and felling of the trees has to be last resort. The Compensatory afforestation would involve planting of saplings duly following the norms of 10 saplings to be planted in lieu of each tree translocated/felled.
- 4. The Chief Engineer, Social and Environment Management Unit (SEMU), BMRCL and concerned Engineers of the project area were present during the meeting. They were asked to make a presentation regarding the project details, compulsions/necessity for removal of the trees given the project alignment, possibility of retaining the trees while carrying out the project construction.

He emphasized that Metro Project being a mass rapid transit system, seeks to set-up a convenient, efficient, safe and sustainable mode of public transport. Its benefits include a shift from private modes of transport to public transport, and thereby a significant reduction in use of private vehicles, other things remaining unchanged. Such modal shift is estimated to have a significant reduction in pollution in the project area. (Reference: "Note on Potential Reduction in Pollution" based on iDeCK's study on "Economic Analysis for 2A and 2B Corridors of Bangalore Metro" Annexure-6).

5. The TEC considered the Abstract of the Review of the Application by the Tree Officer and his preliminary assessment in Template 3 Part I. The Committee examined the detailed statement containing tree details along with preliminary assessment/justification and noted the following recommendations made by the Tree Officer.

07 Nos	Trees assessed in the Project Area
07 Nos	Trees recommended for felling

The TEC also perused the preliminary assessment of each tree in Part-I & II of Template 2. The TEC noted that the Tree Officer has personally inspected each tree before forming his preliminary assessment.

6.

The TEC decided to visit the project area and scheduled the field inspection of the various sites/ areas.

The Tree Officer and the Representatives of BMRCL were asked to be present at the Project Area at the time of field inspection along with all necessary documents.

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Member-Secretary, TEC & Assistant Conservator of Forests, Bruhat Bengaluru Mahanagara Palike Bengaluru

Proceedings of Tree Expert Committee regarding Field Inspection of trees existing at the Project Area pertaining to proposed Vellara Junction Metro Station (Rashtriya Military School) for Construction of Underground Metro Works of Phase 2, Reach 6, Underground Line

Application No. BMRCL/0163/P-2/CE-UG/RT-01/BBMP/2022/13470 dtd 03.03.2022

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Project Area: Removal of Trees at proposed Vellara Junction Metro Station (Rashtriya Military School) for construction of Underground Metro Works of Phase 2, Reach-6 Underground Line

- 1. In furtherance of the proceedings of TEC meeting held on 29.04.2022, the field inspection for assessment of trees standing in the area at proposed Vellara Junction Metro Station, Bengaluru related to Construction of Underground Metro Works of Phase 2, Reach 6, Underground Line, Bengaluru was carried out by the TEC on 13.05.2022. The Tree Officer and the Representatives of BMRCL were present at the site.
- 2. The following activities were carried out by the TEC for each tree assessed.
 - i. Physical verification of the tree number and the associated information collected by the Forest Department Officers in Template 2 Part I, including tree health / tree defects and general assessment.
 - ii. Confirmation regarding those trees being inside the project construction activity area.
 - iii. Discussion with the BMRCL Authorities to explore possibility of carrying out the construction activities without removal of trees, and identification of those trees which can be retained on-site.
 - iv. Review of preliminary assessment made by the Tree Officer in the Template 2 Part II.
 - v. Assessment of the general conditions of the trees to decide the feasibility of tree translocation in the event of retention-on-site not possible.
- 3. The Committee in its above set of activities was guided by the detailed procedure and prioritization formulated in Step 7 of the Memorandum of Procedure (MOP).
 - 4. The Committee carried out thorough and multipronged scrutiny of all the trees to make its recommendations regarding:
 - a) Trees which could be saved by retaining on-site as it is;
 - b) Trees which should be translocated depending upon their general condition as assessed and ecological importance, in the event of (a) above not being possible;
 - c) Trees recommended for removal in the event of (a) and (b) not being possible including the trees which are silviculturally matured or softwood trees and trees suffering from defects / damages.

5. Field Status:

The total trees standing at the project site are 07 in number and the same are getting affected by the construction activities as stated by the Proponent Agency/Tree Officer.

FIELD OBSERVATION

6. On-site Retention

As per field inspection, out of the enumerated 07 trees, no trees have been identified to be considered for retention-on-site.

 As verified during the field inspection, the 07 trees will have to be suggested either for translocation or felling as they are standing within the proposed following physical features of the Project as per BMRCL letter no. BMRCL/SEMU/EO/2022-23/3198 dtd. 02.06.2022

SI. No.	Physical features	Tree Nos.	Location of Trees
1	Excavation Work	01, 02, 03, 04, 05, 06 & 07	At the premises of All Saints
	and Piling Activity	(Total 07 trees)	Church, Vellara Junction

Since these 07 enumerated trees are standing right in the construction activity area and hindering the project activities, their removal becomes inevitable.

- 8. The next consideration for the Committee was to identify the trees out of the above 07 trees standing in the Construction Zone, which are fit for translocation. While making recommendations for translocation of the trees, the Committee considered the following conditions, in addition to the tree health / tree defects etc., recorded in the Template 2 Part I.
 - i. Proximity of tree to building structures, trunks proximity to the cement / concrete or tarred surface so as to examine the feasibility of extraction of root-ball;
 - ii. The natural characteristics and aspects of species viz., ecologically and economically important species; species that could provide food (nectar, pollen, seeds and fruits) and nesting sources (materials and site) to various fauna.
 - iii. The trees having below mentioned characteristics do not qualify for translocation.

Trees having forked trunk, major wounds on the trunk, debarking, physical damage on the bark, scar due to fire, damage (girdling), rotting due to fungal infection (fruiting bodies of fungus, rotten core, hollowness) or pest infestation (presence of holes and frass as evidence of insect infestation), and dead / dried major branches, etc.

- 9. For the trees having the potential for translocation, availability of effective zone to extract the rootball of sufficient size was also assessed. The trees in the above category (iii) and those without adequate effective zone to extract the root-ball were specifically not recommended for the translocation.
- 10. Ultimately the trees, which could neither be retained-on-site nor translocated, were recommended for felling as a last resort.
- 11. The assessment with justification for each tree was recorded as stipulated in Part-III of Template 2.

12. Following is the summary of recommendations of the Committee as recorded in the Template 2 Part III.

Particulars	No. of trees
Total Trees examined/observed	07 Nos.
Trees recommended for felling	07 Nos.

Total trees standing at the proposed Construction Zone of Vellara Metro Station Bengaluru = 07 Nos.

13. A statement containing recommendations and justification along with the tree details is appended to these proceedings.

In pursuance to the instructions as mentioned in KPT Act 1976, the BMRCL should take up Compensatory afforestation by planting of 70 saplings (a) 10 saplings for each of 07 trees to be felled.

Member - Secretary, TEC & Assistant Conservator of Forests, Bruhat Bengaluru Mahanagara Pallike, Bengaluru.

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TEC Recommendations and Justifications for Retention/Translocation/Felling

Application No.: BMRCL/0163/P-2/CE-UG/RT-01/BBMP/2022/13470 dtd 03.03.2022

Project Area:Vellara Junction Metro Station coming under the
Construction of Underground Metro Works of Reach 6,
Phase 2, Reach 6, Underground Line, Bengaluru

SI. No.	Tree No.	Tree Name	Girth (Mtr)	Height (Mtr)	Tree Description	TEC remarks
1	1	Parkia biglandulosa	1.62	2.00	Tree is standing in the project area earmarked for Metro Station connecting the underground rails on either side. The tree is matured and standing close to each other and hence excavation of root ball of applicable size will not be possible. Thereby transplantation is meagre. Hence it is recommended for felling	Felling
2	2	Parkia biglandulosa	1.76	2.50	Tree is standing in the project area earmarked for Metro Station connecting the underground rails on either side. The tree is matured and standing close to each other and hence excavation of root ball of applicable size will not be possible. Thereby transplantation is meagre. Hence it is recommended for felling	Felling
3	3	Parkia biglandulosa	1.62	2.50	Tree is standing in the project area earmarked for Metro Station connecting the underground rails on either side. The tree is matured and standing close to each other and hence excavation of root ball of applicable size will not be possible. Thereby transplantation is meagre. Hence it is recommended for felling	Felling

					Tree is standing in the project area earmarked for Metro Station	***** * ·
4	4	Atthi (Ficus racemosa)	2.05	2.50	connecting the underground rails on either side. The tree is matured	Felling
					Hence it is recommended for felling	
5	5 5A	Bela (Limonia acidissima)	1.60 1.50	2.00 2.50	Tree is standing in the project area earmarked for Metro Station connecting the underground rails on either side. The tree is matured, forked with weak unions due to accumulated barks. Hence it is recommended for felling	Felling
6	6 6A 6B	Honge (Pongamia pinnata)	1.14 1.30 0.75	2.50 2.50 2.50	Tree is standing in the project area earmarked for Metro Station connecting the underground rails on either side. The tree is matured, forked with weak unions due to accumulated barks. Hence it is recommended for felling	Felling
7	7	Ane thandi (Kigelia pinnata)	1.18	2.00	Tree is standing in the project area earmarked for Metro Station connecting the underground rails on either side. The tree is matured. Hence it is recommended for felling	Felling

Ω Member Secretary – TEC, ACF, BBMP BENGALURU

<u>Part II</u>

(to be prepared in compliance to Step 6 of the Memorandum of Procedure of TEC)

Remarks* of TEC on the day of TEC meeting:

(* Note: Including those on objections received in response to the public notice)

The contents of the Public Notice issued by the Tree Officer and proceedings prepared by the Tree Officer in response to the objections /suggestions/remarks arising out of the said Public Notice were read before the Committee. The Tree Officer apprised that no objections/suggestions/remarks have been received in response to the said public notice. Even though no objections/suggestions have been received, the TEC instructed the Tree Officer and his subordinates that first priority should be to consider possibility of retention of trees at the site itself. The second option, in the event of retention not being possible and removal being necessary, should be to explore the suitability of trees for the translocation. The felling should be the last option for those trees which cannot be retained on-site and are also not suitable for translocation.

After due deliberations, the Tree Expert Committee also directed the Tree Officer that at the time of execution of the project work, if any constructive objections/suggestions are received from the public, the same has to be considered. If the nature of the objection/suggestion is of technical in nature, the same can be referred to CE (UG 1), BMRCL for perusal and further action. If the objection/suggestion is concerning the subject matter of trees, the Tree Officer has to discuss the matter with his field staff and come to some amicable conclusion which should be of overall best interest.

The Tree Assessment Forms submitted by the Tree Officer were also perused.

The Tree Expert Committee decided to visit the site and conduct detailed spot inspection of the area.

Member Secretary of TEC &

Date: 29.04.2022

Member Secretary of TEC & Assistant Conservator of Forests BBMP, Bangalore



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TEMPLATE No. 4

ABSTRACT OF TEC REPORT

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(to be prepared in compliance to Step 8 of the Memorandum of Procedure of TEC in consideration to the details documented for each tree in Template No. 2 and abstract in Template No.3)

Name of the user agency	Bangalore Metro Rail Corporation Limited
Purpose of the project	Vellara Junction Metro Station coming under the Construction of Underground Metro Works of Reach 6, Phase 2, Reach 6, Underground Line
Extent of the project area	13. 39 Kms
Location of the project area	Vellara Junction Metro Station Start Point Lat: N 12° 57'55.7 Long : E 77° 36' 24.8" End Point Lat: N 21° 57' 54.7 Long : E 77° 36' 25.7
Number of tree(s) enumerated in the project area	07
Number of tree(s) proposed for removal by user agency	07
Overall opinion on objections from the public	No objections But the main criteria is to save maximum number of trees and considered the constructive views of the public
Number of tree(s) recommended for on-site retention	-
Number of tree(s) recommended for transplantation / translocation	_
Number of tree(s) recommended for felling	07

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Member-Secretary - TEC & Assistant Conservator of Forests, BBMP, Bengaluru



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