

Report of the Tree Expert Committee
regarding permission sought for by the General Manager,
Civil/Corridor 02, KRIDE, Bengaluru,
under Sections 8 (2) and 8 (3) (vii) of Karnataka Preservation of Trees Act, 1976

Application Nos : Original – KRIDE/BSRP/C-2/BBMP/055 dtd 17.10.2023
Revised – KRIDE/BSRP/C-2/BBMP/002 dtd 30.01.2024

**Project Area: Design and Construction of Elevated Viaduct of length 8.027
kms and AT-Grade Section of Length 17.551 kms of
Corridor 02, BSRP**

**Location: Along the existing Railway Track extending from Benniganahalli
Railway Station to Chikkabanavara Railway Station excluding
Station buildings**

Dated : May 2024

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Project Area : Design and Construction of Elevated Viaduct of length 8.027 kms and AT-Grade Section of Length 17.551 kms along the existing Railway Track extending from Benniganahalli Railway Station to Chikkabanavara Railway Station excluding Station buildings for Corridor 02 of BSRP

1. A proposal on the above mentioned subject was submitted by the General Manager, Civil/Corridor 02, KRIDE, Bengaluru under Sections 8 (2) and 8 (3) (vii) of Karnataka Preservation of Trees Act, 1976 to the DCF/Tree Officer, BBMP regarding removal of 1227 trees for Design and Construction of Elevated Viaduct of length of 8.027 Kms and AT-Grade Section of length of 17.551 Kms for KRIDE Project.

This is an additional proposal pertaining to Bangalore Suburban Railway Project, Corridor 02 involving 1277 trees of different species, of which the background is as follows.

Background

In this context, K-RIDE had submitted two applications earlier;

1. One application to the DCF, BBMP requesting for removal of 661 roadside trees and
2. Another application to the DCF, Bengaluru Urban Division requesting for removal of the 2495 trees standing inside the properties,
 - for laying out and construction of BSRP, Corridor 02 extending from Baiyappanahalli Railway Station to Chikkabanavara Railway Station, Bengaluru.

Further as per the PCCF, HOFF Order dtd 13.06.2022, the proposal which was submitted to the DCF, Bengaluru Urban Division by KRIDE was transferred to the fold of the DCF, BBMP, Forest Wing for further action. Apparently, the proposal of 2495 trees which was received from the DCF, Bengaluru Urban Division was divided into 02 Packages i.e., Package 01 - Extending from Baiyappanahalli Railway Station to Lottegollahalli Railway Station; and Package 02 - Extending from Lottegollahalli Railway Station to Chikkabanavara Railway Station.

Subsequently, all the three proposals were processed and taking into consideration the missing trees and unnumbered trees, necessary Official Memorandums were issued by the Tree Officer/DCF, BBMP

Name of the Proposal/project	No. of trees for Retention-on-site	No. of trees for Translocation	No. of trees for Felling	Total (Nos)
BSRP, Corridor 02 Extending from Baiyappanahalli Railway Station to Chikkabanawara Railway Station (Roadside trees)	315	58	268	641
BSRP, Corridor 02, Package 01 Extending from Baiyappanahalli Railway Station to Lottegollahalli Railway Station (Trees standing inside the properties)	123	73	1234	1430
BSRP, Corridor 02, Package 02 Extending from Lottegollahalli Railway Station to Chikkabanawara Railway Station (Trees standing inside the properties)	135	47	596	778
	573	178	2098	2849

Present Proposal

In the earlier TEC Meeting held on 25.01.2024 the Committee had sought clarification from the concerned KRIDE Engineers who were present during the TEC Meeting about the necessity for submission of the additional application for Corridor 02. Subsequently all the clarifications were submitted by the KRIDE to the Tree Officer/DCF, BBMP, Bengaluru.

2. The Tree Officer and Deputy Conservator of Forests, BBMP vide his letter dated 26.02.2024 submitted his findings on objections/suggestions received in response to the Public Notice issued by him along with preliminary assessment of trees related to application filed by the General Manager/ Civil/Corridor 02, KRIDE, Bengaluru pertaining to removal of 1227 number of trees, standing along the existing Railway Track extending from Bangalore Benniganahalli Railway Station to Chikkabanawara Railway Station excluding Station buildings for Corridor 02, BSRP - **Design and Construction of Elevated Viaduct of length of 8.027 Kms and AT-Grade Section of length of 17.551 Kms.** Further the KRIDE authorities have stated that the earlier applications did not include trees at few locations due to the entry restrictions as land acquisition process was in progress with Defence authorities and private owners. Additionally, the construction of double decker bridge at Mohan Kumar Road, Reconstructions of ROB's (02 Nos) with Approach Road, the construction of Approach Road to RUB to eliminate LC-6 are the new proposals as the private land acquisition was in progress for Yeshwanthpura Station locations. The submission was accompanied by the following documents.
 - i. A copy of the Application dated 17.10.2023 and 30.01.2024 received from the General Manager/Civil/Corridor 02 (Henceforth refereed as GM, C2), KRIDE, along with project particulars, map of the area and details of trees involved including their GPS coordinates.



- ii. A copy of the Public Notice dated 03.02.2024 issued by the Tree Officer & DCF, BBMP, a complete set of the objections/suggestions received from the public and a copy of the proceedings of the Tree Officer regarding consideration of those 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 (dtd 18.11.2023; 12.01.2024; 13.01.2024) containing tree details as furnished by Range Forest Officer and Part II (dtd 21.02.2024 & 22.02.2024) containing preliminary assessment of the Tree Officer for each of 1227 trees proposed for removal by the GM, Corridor 02, KRIDE.
- iv. An Abstract of the review of the GM, C2, KRIDE 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 along with his findings, and preliminary assessment of trees are attached to the Report as Annexure-1 to Annexure-3.

Review of the Application of the General Manager, Civil/Corridor 02, KRIDE, objections /suggestions in response to Public Notice, and findings of the Tree Officer:

3. The Application of the General Manager, Civil/Corridor 02, KRIDE, the Public Notice issued by the Tree Officer, all objections/suggestions received from public in response to that public notice, findings of the Tree Officer and his proceedings were perused systematically by the TEC in its Meeting held on **02.03.2024**. The TEC noted that the process prescribed in the MOP from Step-1 to Step-3 have been followed to the maximum extent possible under the existing circumstances by the Tree Officer.

In this context, the Tree Officer has confirmed that no objection/suggestion has been received from the public in response to the said public notice. The Tree Officer has reported that even though no objections/suggestions have been received from the public, the procedures as stipulated under the Government Acts and Rules are being followed besides duly obeying the directives of the Hon'ble High Court of Karnataka. The Tree Officer has emphasized that the first priority of the Forest Authorities will be to save and retain more number of trees at the spot/site and in case that is not possible, the next option would be translocation of trees. The translocation of those trees will be done which fulfill the required criteria like having optimal girth, satisfactory status/health condition of the tree, feasibility of root-ball excavation of appropriate size and species suitability. Only as a last resort, felling of trees will be done. The Compensatory Afforestation is also stipulated through planting of saplings in the ratio 1:10 i.e., 10 saplings to be planted in lieu of each tree translocated/felled

After perusal of the documents, the GM, Corridor 2, KRIDE was instructed to submit some more details regarding the project including furnishing of the project layout plan and design, possibility of retaining the trees while executing the project and remarks necessitating the removal of affected trees.



4. Consequently, the KRIDE Engineers besides making presentation emphasized that the population of Bengaluru has been growing faster. There has been a phenomenal increase in number of vehicles as well, in the recent past due to rise in household incomes. In the absence of adequate public transport system, people are using personalized transportation modes which are not only leading to congestion on limited road network but also increasing environmental pollution. They informed that an average citizen of Bengaluru spends more than 240 hours stuck in traffic every year (Source: K-RIDE DPR and Social Impact Assessment and Environment Impact Assessment (SIAEIA) Report). Such delays result in loss of productivity, reduced ambient air quality, reduced quality of life, and increased costs for services and goods. Further BSRP is a new Suburban Railway Project envisaging construction of 4 dedicated Rail Corridors in a period of 6 years. It will link Bengaluru to its satellite townships, suburbs, surrounding areas and provide a mass rail based rapid transit system.

Review of Preliminary Assessment of Trees done by Tree Officer:

5. The TEC examined the preliminary assessment of trees submitted by Tree Officer, BBMP vide his letter dated 26.02.2024, including the statement exhibiting the tree details, preliminary assessment and justification for its on-site retention / translocation / felling. The TEC noted that the documentation of the tree 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.
6. 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 translocation. The felling should be the last option for those trees which cannot be retained on-site and are also not suitable for translocation. In order to fulfill this objective, the TEC resolved that it should make that assessment through the field inspection of each tree.

The TEC decided to verify the preliminary assessment by Tree Officer/DCF, BBMP and for that purpose intended to visit the Project Area for detailed field inspection.

7. 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:

8. The assessment of additional trees standing in the project area along the existing Railway Track extending from Benniganahalli Railway Station to Chikkabanavara Railway Station excluding Station buildings, Bengaluru for the proposed KRIDE BSRP, Corridor 02 project was carried out by the TEC on 18.03.2024, 19.03.2023, 20.03.2024, 21.03.2024 & 23.03.2024,

The concerned Representatives of KRIDE Authorities and Forest Officers of BBMP were present at the project area with all necessary documents.



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

- 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 as per provision under Section 8 (3) of the KPT Act, 1976.
- ii. Confirmation regarding those trees being inside the project area and standing at the construction activity sites/spots.
- iii. Review of preliminary assessment of trees as per the entries made by the Tree Officer in Template 2 Part-II.
- iv. Discussions with the KRIDE Authorities 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 its translocation/transplantation in case of retention-on-site 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:

Having completed the field inspection on the specified dates, the TEC met to review its findings and assessment and further to formulate its recommendations and prepare the Report.

9. Field Status:

The total trees standing at the project area as per KRIDE Application are 1227 in number and they are getting affected by the construction activities as stated by the KRIDE Authorities/Tree Officer.

Field Observation:

It has been noticed that there are 1227 enumerated additional trees standing in the project area extending from Benniganahalli Railway Station to Chikkabanavara Railway Station excluding Stations. The proposal relates to Design and Construction of Elevated Viaduct of length of 8.027 Kms and AT-Grade Section of length of 17.551 Kms of Corridor 02, BSRP. Besides this, the construction of proposed double decker bridge at Mohan Kumar Road, Reconstructions of ROBs (02 Nos) with Approach Road, the construction of Approach Road to RUB to eliminate LC-6 are the new proposals as the private land acquisition was in progress for Yeshwanthpura Station locations when the original proposal was being



scrutinized. The trees are standing at 15 locations coming under 03 BBMP zones viz., Dasarahalli Zone, RR Nagar Zone and East Zone.

During the course of TEC inspection, 54 unnumbered trees were identified standing at the project sites/areas. Therefore, all the above said 1227 + 54 = 1281 trees at the project area were assessed.

10. On-site Retention

As per field inspection, out of the total 1281 trees, 493 trees (473 Enumerated + 20 Unnumbered) have been identified to be considered for retention-on-site as they are not getting affected by the developmental/constructional activities.

11. Analysis of other trees

As verified during the field inspection, the remaining 788 trees (754 Enumerated + 34 Unnumbered) 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 KRIDE Letter No. KRIDE/BSRP/C-2/BBMP/006 dtd. 30.04.2024

Sl. No.	Physical feature	Details of Locations, Zonewise	Total trees
1.	Construction of Embankment for AT-Grade Alignment and LC-6	Mydarahalli (LC 06) Station, Dasarahalli Zone. (Between Tree No. 01 and Tree No. 91)	1. Tree Nos. 01 & 91 = 02 Nos 2. Tree No. 31 to Tree No. 46 = 16 Nos. 3. Tree No. 47 to Tree No. 89 = 43 trees Subtotal (a) = 61 trees (61 Enumerated)
2.	4088 ROB Reconstruction	Jalahalli to HMT (ROB 408/B), RR Nagar Zone (Between Tree No. 92 and Tree No. 182)	1. Tree No. 109 to Tree No. 118 = 10 Nos 2. Tree No. 154 to Tree No. 170 = 17 Nos. 3. Tree Nos 155/1, 155/2, 155/3, 155/4, 155/5, 159/1, 159/2 & 159/3 = 08 Nos. Subtotal (b) = 35 trees (27 Enumerated + 08 Unnumbered)
3.	410A ROB Reconstruction	Jalahalli HMT (ROB 410/A), Part I, RR Nagar Zone (Between Tree No. 183 and Tree No. 276) Jalahalli HMT (ROB 410), Part II, RR Nagar Zone (Between Tree No. UN 01 and Tree No. UN 15)	1. Tree No. 258 to Tree No. 266 = 09 Nos 2. Tree No. 267 to Tree No. 273 = 07 Nos. 3. Tree Nos 210, 219, 220, 221, 236, 263/1, 263/2, 263/3 = 08 Nos 4. Tree No. UN 01 to Tree No. UN 15 = 15 Nos Subtotal (c) = 39 trees (21 Enumerated + 18 Unnumbered)
4.	Construction of Viaduct for elevated alignment for Roads, Drains and for Boundary Wall	CQAE – Location 1 RR Nagar Zone (Between Tree No. 277 and Tree No. 778) CQAE – Location 2 RR Nagar Zone	1. Tree No 277 to Tree No. 293 = 17 Nos 2. Tree No. 310 to Tree No. 566 = 257 Nos 3. Tree No. 599 to Tree No. 700 = 102 Nos 4. Tree No. 703 to Tree No. 708 = 06 Nos. 5. Tree No 710 to Tree No. 723 = 14 Nos. 6. Tree No. 760 to Tree No. 777 = 18 Nos. 7. Tree No. 1002 to Tree No. 1006 = 05 Nos.

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		(Between Tree No. 1002 and 1054)	8. Tree No. 1008 to Tree No. 1022 = 15 Nos. 3. Tree Nos. 295, 297, 298, 300, 301, 302, 303, 304, 306, 569, 570, 571, 572, 574, 576, 577, 578, 579, 580, 581, 589, 590, 591, 592, 596, 734, 744, 745, 746, 1025, 1026, 1027, 1028, 1029, 1031, 1032, 1033, 1035, 1036, 1037, 1038, 1041, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1052, 1053 & 1054 = 50 Nos Subtotal (d) = 487 Nos (All enumerated)
5.	Construction of Viaduct for Elevated Alignment	Yeshwanthapura Station, Part I, RR Nagar Zone (Between Tree No. 779 and Tree No. 804)	Tree No. 779 to Tree No. 804 = 26 Nos. Subtotal (e) = 26 trees (All enumerated)
6.	Construction of Viaduct for Elevated Alignment – Double Decker Bridge	Mohan Kumar Road, Section III, Part 1, RR Nagar Zone (Between Tree No. 805 and Tree No. 854)	1. Tree No. 832 to Tree No. 849 = 18 Nos 2. Tree Nos 823, 824 & 854 = 03 Nos Subtotal (f) = 21 trees (All enumerated)
7.	Hebbal, LC-148 & 152 elimination by construction RUB and approach	Hebbal, Section III, Part II East Zone (Between Tree No. 855 and Tree No. 886) Hebbal, Section III, Part III East Zone (Between Tree No. 887 and Tree No. 963 with 03 more trees with Tree Nos. 904/1, 910/1 & 913/3)	1. Tree No. 855 to Tree No. 858 = 04 Nos 2. Tree No. 861 to Tree No. 867 = 07 Nos 3. Tree No. 871 to Tree No. 874 = 04 Nos. 4. Tree No. 878 to Tree No. 886 = 09 Nos 5. Tree Nos 855/1, 877/1, 903/1, 916, 917, 921, 922, 926, 927, 932, 933, 938, 939, 943, 954, 956, 957 = 17 Nos 6. Tree No. 890 to Tree No. 895 = 06 Nos. 5. Tree No. 900 to Tree No. 904 = 05 Nos. 6. Tree No. 907 to Tree No. 910 = 04 Nos. 7. Tree No. 959 to Tree No. 963 = 05 Nos. Subtotal (g) = 61 Nos. (61 Enumerated + 03 Unnumbered)
9.	Construction of embankment for AT Grade and ERS Wall	Banaswadi Defence Land, Part I, East Zone (Between Tree No. 981 and Tree No. 1001)	1. Tree No. 981 to Tree No. 997 = 17 Nos 2. Tree Nos 999, 1000 & 1001 = 03 Nos Subtotal (h) = 20 Nos. (All enumerated)
11.	Construction of embankment for AT Grade and ERS Wall	Banaswadi Defence Land, Part II, East Zone (Between Tree No. 1055 and Tree No. 1084)	1. Tree No. 1059 to Tree No. 1076 = 18 Nos 2. Tree No. 1077 to Tree No. 1084 = 08 Nos 2. Tree Nos 1055, 1056, 1057, 1076/7, 1076/8, 1083/1, 1083/2, = 07 Nos Subtotal (i) = 33 Nos (29 Enumerated + 04 Unnumbered)
12.	Construction of embankment for AT-Grade and ERS Wall	Banaswadi Defence Land, Part III, East Zone (Between Tree No. 1238 and Tree No. 1241)	1. Tree No. 1238 to Tree No. 1241 = 04 Nos. 2. Tree No. 1238/1 = 01 No. Subtotal (j) = 05 Nos (04 Enumerated + 01 Unnumbered)
Total			788 trees (754 Enumerated + 34 Unnumbered)

Since these 788 (754 Enumerated + 34 Unnumbered) trees are standing right in the construction zone and hindering the project activities, their removal becomes inevitable.

12. **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 788 trees is 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 of the tree health / tree defects, etc., as 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 of appropriate size;
- 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 multi-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..

Taking into consideration the above mentioned assessment attributes, the TEC found that there are totally 89 trees (88 enumerated trees and 01 unnumbered trees) at the said area which are found suitable for translocation.

Ultimately, the balance 699 (666 Enumerated + 33 Unnumbered) number of trees which were not found to be suitable either for retention on-site or for translocation, will have to be removed/felled for the implementation of the BSRP Project.

13. **Assessment of areas/sites for Translocation:**

After having completed the above assessment of trees at the project area, the Committee also inspected the following locations/areas which were identified by the KRIDE Authorities for translocation of trees and recommended by the Tree Officer as proposed areas for translocation of trees.

*Location 1: Vacant Railway land available near RR College,
Chikkabanavara, Bengaluru*

*Location 2: Vacant area available inside campus of CQAE,
Jalahalli, Bengaluru*

The Committee's remarks regarding the said two locations are as follows:



- i. Location Site No. 01: proposed for translocation of trees is located close to RR College. At the time of preliminary inspection, the top soil of the site was giving hard appearance due to the presence of compact construction debris materials which was further dumped with stones thereby deteriorating the state of the translocation site. The Proponent Agency was advised to remove the debris stones, work on the top soil, and make the land compatible for translocation of trees. Further when the site was inspected later on, the land was clean and leveled making it suitable for translocation of trees.
- ii. Location Site No. 02: proposed for translocation of trees is within the CQAE Campus. The vacant spaces available along the internal road and in the existing plantation area, are feasible for translocation of trees subject to non-interference to the standing trees..

Recommendations:

As expressed above, Location Sites No. 01 and 02 are recommended for translocation of trees subject to Soil Analysis Report. Land at Site No. 01 is an open railway area close to existing public road on either side. The land should be appropriately fenced/protected to avoid injuries or damages to the trees to be translocated by any external factor or anthropogenic impact.

The translocation of 89 trees has to be executed duly following the translocation guidelines formulated by UAS, Bengaluru.

14. Further the Committee reviewed the soil test analysis report of the above proposed translocation Site Nos. 01 & 02, as prepared by Department of Soil Science and Agricultural Chemistry, UAS, GKVK, Bangalore with the following inference and recommended by the Tree Officer and DCF, BBMP.

Railway Land, Near RR College, Chikkabanavara, Bengaluru

The soil provided for analysis is neutral in nature, normal in salt content with low range of organic carbon content. The soil recorded low range of Nitrogen and medium in Phosphorous and Potassium as per standards Hence judicious use of NPK fertilisers are recommended. With application of more manure and proper management of soil, it is suitable for tree transplanting.

CQAE Campus, Jalahalli, Bengaluru

The soil provided for analysis is Alkaline in nature, normal in salt content with medium range of organic carbon content. The soil recorded low range of Nitrogen and high in Phosphorous and Potassium as per standards. Hence judicious use of NPK fertilisers are recommended. With application of gypsum and proper management of soil, it is suitable for tree transplanting.

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15. In this context, the Tree Officer has stated that KRIDE Authorities have submitted KRIDE Letter No. *KRIDE/BSRP/C-2/BBMP/008 dtd 07.05.2024*, in which they have furnished the required particulars of the translocation areas identified besides mentioning the Specific Receptor Sites Coordinates for the 89 trees to be translocated.

The DCF in turn has submitted the complete details along with his recommendations to TEC which are enclosed at Annexure – 6.

16. The entire translocation details were reviewed by TEC. The KRIDE Authorities apprised that the exercise of demarcation of the boundary of the translocation areas and coordinates mapping of specific locations for the proposed tree receptor sites related to the said 89 trees to be translocated was carried out as per the established survey procedures. The Tree Officer and DCF, BBMP has recommended the receptor location sites as proposed by the KRIDE Authorities for the trees to be translocated

On enquiry with the KRIDE Authorities and the Tree Officer/DCF about the distance of the proposed translocation areas with respect to the places where the trees are standing at present, the Authorities remarked that the proposed translocation areas/sites as mentioned in the above para 13 are situated at a distance of about 05 to 06 Kms.

The Translocation Areas are falling in the BBMP jurisdiction where the provisions of KPT Act, 1976 are applicable.

17. The TEC deliberated and concurred with the recommendations of the Tree Officer and DCF, BBMP regarding the tree translocation area details including specific receptor sites coordinates.
18. The TEC opined that translocation of trees can be done in the proposed receptor sites after following the advice and procedure as rendered by UAS, Bangalore.
19. **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, softwood trees and trees suffering from defects /damages.

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 trees standing in the project area extending from
Benniganahalli Railway Station to Chikkabanavara Railway Station coming under
the Project for Design and Construction of Elevated Viaduct of length 8.027 kms and
AT- Grade Section of Length 17.551 kms) of Corridor 02, BSRP = 1281 Nos. of trees
(as per Field Observation)**

Sl. No.	Details of Locations, Zonewise	No. of trees recommended for Retention	No. of trees found suitable for Translocation	No. of trees recommended for Felling	Total
1.	Mydarahalli (LC 06 Station, Dasarahalli Zone. (Between Tree No. 01 and Tree No. 91)	31 trees (30 Enumerated + 01 Unnumbered)	09 trees (All enumerated)	52 trees (All enumerated)	92 trees (91 Enumerated + 01 Unnumbered)
2.	Jalahalli to HMT (ROB 408/B), RR Nagar Zone (Between Tree No. 92 and Tree No. 182)	64 trees (All Enumerated)	-	35 trees (27 Enumerated + 08 Unnumbered)	99 trees (91 Enumerated + 08 Unnumbered)
3.	Jalahalli HMT (ROB 410/A), Part I, RR Nagar Zone (Between Tree No. 183 and Tree No. 276)	78 trees (73 Enumerated + 05 Unnumbered)	03 trees (All enumerated)	21 trees (18 Enumerated + 03 Unnumbered)	102 (94 Enumerated + 08 Unnumbered)
4.	CQAE – Location i RR Nagar Zone (Between Tree No. 277 and Tree No. 778)	60 trees (All enumerated)	44 trees (All enumerated)	398 trees (All enumerated)	502 trees (All enumerated)
5.	Yeshwanthapura Station, Part I, RR Nagar Zone (Between Tree No. 779 and Tree No. 804)	-	-	26 trees (All enumerated)	26 trees (All enumerated)
6.	Mohan Kumar Road, Section III, Part I, RR Nagar Zone (Between Tree No. 805 and Tree No. 854)	29 trees (All enumerated)	02 trees (All enumerated)	19 trees (All enumerated)	50 trees (All enumerated)
7.	Hebbal, Section III, Part II East Zone (Between Tree No. 855 and Tree No. 886)	10 trees (08 Enumerated + 02 Unnumbered)	07 trees (06 Enumerated + 01 Unnumbered)	19 trees (18 Enumerated + 01 Unnumbered)	36 trees (32 Enumerated + 04 Unnumbered)
8.	Hebbal, Section III, Part III East Zone (Between Tree No. 887 and Tree No. 963 with 03 more trees with Tree Nos. 904/1, 910/1 & 913/3)	47 trees (46 Enumerated + 01 Unnumbered)	09 trees (All Enumerated)	26 trees (25 Enumerated + 01 Unnumbered)	82 trees (80 Enumerated + 02 Unnumbered)
9.	(Between Tree No. 964 and Tree No. 980)	These enumerated 17 trees have already been included under KRIDE Doubling Project. Hence not considered with this proposal.			
9.	Banaswadi Defence Land, Part I, East Zone (Between Tree No. 981 and Tree No. 1001)	05 trees (01 Enumerated + 04 Unnumbered)	14 trees (All enumerated)	06 trees (All enumerated)	25 trees (21 Enumerated + 04 Unnumbered)

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10.	CQAE – Location 2 RR Nagar Zone (Between Tree No. 1002 and Tree No. 1054)	08 trees (All enumerated)	01 tree (All enumerated)	44 trees (All enumerated)	53 trees (All enumerated)
11.	Banaswadi Defence Land, Part II, East Zone (Between Tree No. 1055 and Tree No. 1084)	08 trees (01 Enumerated + 07 Unnumbered)	-	33 trees (29 Enumerated + 04 Unnumbered)	41 trees (30 Enumerated + 11 Unnumbered)
12.	CQAE – Location 3 RR Nagar Zone (Between Tree No. 1085 and Tree No. 1207)	123 trees (All enumerated)	-	-	123 trees (All enumerated)
13.	Yeshwanthapura Station, Part II, RR Nagar Zone (Between Tree No. 1208 and Tree No. 1237)	30 trees All enumerated)	-	-	30 trees All enumerated)
14.	Banaswadi Defence Land, Part III, East Zone (Between Tree No. 1238 and Tree No. 1241)	-	-	05 trees (04 Enumerated + 01 Unnumbered)	05 trees (04 Enumerated + 01 Unnumbered)
15.	Jalahalli HMT (ROB 410), Part II, RR Nagar Zone (Between Tree No. UN 01 and Tree No. UN 15))	-	-	15 trees (15 Unnumbered)	15 trees (15 Unnumbered)
	Total	493 trees (473 Enumerated + 20 Unnumbered)	89 trees (88 Enumerated + 01 Unnumbered)	699 trees (666 Enumerated + 33 Unnumbered)	1281 trees (1227 Enumerated + 54 Unnumbered)

Abstract

Sl. No.	Particulars	No. of trees
1.	Total No. of trees as per enumeration list	1227 Nos.
2.	During TEC inspection, another 54 trees were identified	54 Nos.
3.	Total trees assessed (Sum of Sl. No. 01 + Sl. No. 02)	1281 Nos (1227 Enumerated + 54 Unnumbered)
4.	No. of trees recommended for retention-on-site	493 Nos (473 Enumerated + 20 Unnumbered)
5.	No. of trees found suitable for translocation	89 Nos (88 Enumerated + 01 Unnumbered)
6.	No. of trees which can be permitted for removal	699 Nos (666 Enumerated + 33 Unnumbered)

The translocation of trees should be carried out by competent agencies following the guidelines formulated by UAS, GKVK, Bangalore.



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 made by the Tree Officer in compliance to the MOP;
- ii. Field inspection of the KRIDE project area to assess each and every tree and record the status of tree and recommendation for its on-site retention/ translocation/felling besides inspection of the proposed translocation areas as stated at para 13 above.

20. Directions to the General Manage, Civil/Corridor 02, KRIDE and DCF, BBMP

- a) The entire translocation process of trees has to be executed by KRIDE Authorities through the Competent Agencies which are experienced in such field operations under close supervision of the Tree Officer/DCF, BBMP.
- b) The TEC instructed that the concerned Officers of the KRIDE and DCF, BBMP should get closely involved in all the forestry works executed related to trees and saplings, maintain records pertaining to Translocation of Trees as well as Compensatory Afforestation.
- c) The KRIDE and DCF, BBMP are directed to properly document the translocation process which includes inter-alia location of the translocated trees, name and address of the Agency to whom the translocation work was entrusted, agreement between the Concerned Tree Translocation Agency and the KRIDE regarding the proper maintenance of the translocated trees for a period of three years.
- d) The KRIDE should be advised to raise Compensatory Afforestation on suitable lands in respect of trees to be removed both through the procedure of translocation and through the process of 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 KRIDE to the Tree Officer.
- e) 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.



21. Monitoring and Evaluation

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

22. Record keeping:

- i. The Tree Officer/DCF is advised to maintain full records of the GM, Civil/Corridor 02, KRIDE 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 TEC in Template No.4 and a detailed statement containing the recommendations with justification for each of the 1281 trees covered herein are appended as Appendix to this Report.


Member- Secretary

Tree Expert Committee &
ACF, Bruhat Bengaluru Mahanagara Palike,
Bengaluru.

Proceedings of the Tree Expert Committee Meeting held on 02.03.2024 in respect of review of the Application of the General Manager/Civil/Corridor-2, KRIDE for additional trees, BSRP, findings on Objections in response to Public Notice issued by the Tree Officer and Preliminary Assessment of trees by the Tree Officer & DCF, BBMP, Bengaluru.

Application No: Original – KRIDE/BSRP/C-2/BBMP/055 dtd 17.10.2023
Revised – KRIDE/BSRP/C-2/BBMP/002 dtd 30.01.2024

Project Area : Design and Construction of Elevated Viaduct of length 8.027 kms and AT-Grade Section of Length 17.551 kms along the existing Railway Track extending from Benniganahalli Railway Station to Chikkabanavara Railway Station excluding Station buildings for Corridor 02 of BSRP

1. The Tree Officer and Deputy Conservator of Forests, BBMP vide his letter dated 26.02.2024 submitted his findings on objections/suggestions received in response to the Public Notice issued by him along with preliminary assessment of trees related to application filed by the General Manager/Civil/Corridor 02, KRIDE, Bengaluru pertaining to removal of 1227 number of trees, standing along the existing Railway Track extending from Bangalore Benniganahalli Railway Station to Chikkabanavara Railway Station excluding Station buildings for Corridor 02, BSRP - **Design and Construction of Elevated Viaduct of length of 8.027 Kms and AT-Grade Section of length of 17.551 Kms.** Further the KRIDE authorities have stated that the earlier applications did not include trees at few locations due to the entry restrictions as land acquisition process was in progress with Defence authorities and private owners. Additionally, the construction of double decker bridge at Mohan Kumar Road, Reconstructions of ROB's (02 Nos) with Approach Road, the construction of Approach Road to RUB to eliminate LC-6 are the new proposals as the private land acquisition was in progress for Yeshwanthpura Station locations. The submission was accompanied by the following documents.
 - a. A copy of the Application dated 17.10.2023 and 30.01.2024 received from the General Manager/Civil/Corridor 02 (Henceforth refereed as GM, C2), KRIDE, along with project particulars, map of the area and details of trees involved including their GPS coordinates.
 - b. A copy of the Public Notice dated 03.02.2024 issued by the Tree Officer & DCF, BBMP, a complete set of the objections/suggestions received from the public and a copy of the proceedings of the Tree Officer regarding consideration of those 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 (dtd 18.11.2023; 12.01.2024; 13.01.2024) containing tree details as furnished by Range Forest Officer and Part II (dtd 21.02.2024 &



22.02.2024) containing preliminary assessment of the Tree Officer for each of 1227 trees proposed for removal by the GM, Corridor 02, KRIDE.

- d. An Abstract of the review of the GM, C2, KRIDE 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 by the Tree Officer/DCF and KRIDE Authorities.

2. The application of the GM, C2, KRIDE was reviewed by the Tree Expert Committee (mentioned as TEC henceforth) in its meeting held on 02.03.2024. The TEC observed that no objection/suggestion has been received in response to the said public notice.
3. In this context, the Tree Officer has confirmed that no objection/suggestion has been received from the public in response to the said public notice. The Tree Officer has reported that even though no objections/suggestions have been received from the public, the procedures as stipulated under the Government Acts and Rules are being followed besides duly obeying the directives of the Hon'ble High Court of Karnataka. The Tree Officer has emphasized that the first priority of the Forest Authorities will be to save and retain more number of trees at the spot/site and in case that is not possible, the next option would be translocation of trees. The translocation of those trees will be done which fulfill the required criteria like having optimal girth, satisfactory status/health condition of the tree, feasibility of root-ball excavation of appropriate size and species suitability. Only as a last resort, felling of trees will be done. The Compensatory Afforestation is also stipulated through planting of saplings in the ratio 1:10 i.e., 10 saplings to be planted in lieu of each tree translocated/felled.
4. The concerned Project Engineers of the KRIDE Authorities who were present during the meeting were advised to make a presentation regarding the project details, compulsions/necessity for removal of the trees given the project alignment and design, possibility of retaining the trees while carrying out the project construction activities and on other matters connected with the project.
5. The KRIDE Engineers besides making presentation emphasized that the population of Bengaluru has been growing faster. There has been a phenomenal increase in number of vehicles as well, in the recent past due to rise in household incomes. In the absence of adequate public transport system, people are using personalized transportation modes which are not only leading to congestion on limited road network but also increasing environmental pollution. They informed that an average citizen of Bengaluru spends more than 240 hours stuck in traffic every year (Source: K-RIDE DPR



and Social Impact Assessment and Environment Impact Assessment (SIAEIA) Report). Such delays result in loss of productivity, reduced ambient air quality, reduced quality of life, and increased costs for services and goods. Further BSRP is a new Suburban Project envisaging construction of 4 dedicated Rail Corridors in a period of 6 years. It will link Bengaluru to its satellite townships, suburbs, surrounding areas and provide a mass rail based rapid transit system.

The TEC considered the Abstract of the Review of the GM/CIVIL/Corridor 02, KRIDE Application by the Tree Officer on the basis of his preliminary assessment of trees in Template 3 Part I. The Committee examined the statement containing tree details, preliminary assessment/justification and noted the following recommendations made by the Tree Officer.

Sl. No.	Particulars	Number of trees
1.	Total trees standing in the Project Area	1227
2.	Trees recommended for retention-on-site	30
3.	Trees found suitable for translocation	21
4.	Trees recommended for felling	1176

6. 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.

The TEC decided to visit the Project Area and conduct the field inspection of the various spots/areas/sites.

The Tree Officer and the GM/CIVIL/Corridor 02, KRIDE were instructed to be present along with their subordinate Forest Officers and Engineers concerned at the project areas/spots at the time of field inspection with all necessary documents.


 Member-Secretary,
 Tree Expert Committee &
 ACF, Bruhat Bengaluru Mahanagara Palike
 Bengaluru

Proceedings of the Tree Expert Committee regarding Field Inspection of additional trees existing at the BSRP Project Area extending from Benniganahalli to Chikkabanavara excluding Station buildings, Bengaluru pertaining to Corridor-2, KRIDE, Bengaluru.

**Application Nos : Original – KRIDE/BSRP/C-2/BBMP/055 dtd 17.10.2023
Revised – KRIDE/BSRP/C-2/BBMP/002 dtd 30.01.2024**

Project Area: Design and Construction of Elevated Viaduct of length 8.027 kms and AT-Grade Section of Length 17.551 kms extending from Benniganahalli Railway Station to Chikkabanavara Railway Station excluding Station buildings, for Corridor 02 of BSRP

1. In furtherance of the proceedings of TEC Meeting held on 02.03.2024, the field inspection for assessment of additional trees standing in the project area extending from Benniganahalli Railway Station to Chikkabanavara Railway Station excluding Station buildings, Bengaluru for the proposed KRIDE BSRP project was carried out by the TEC on 18.03.2024, 19.03.2023, 20.03.2024, 21.03.2024 & 23.03.2024, . The concerned Forest Officers of BBMP and Engineers of KRIDE 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 of each tree.
 - ii. Confirmation regarding those trees being inside the project area and standing at the construction activity sites.
 - iii. Discussions with the KRIDE Authorities to explore possibility of carrying out the construction activities without or with lesser 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 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, softwood trees and trees suffering from defects / damages.

5. Field Status:

The total trees standing at the project area as per KRIDE Application are 1227 in number and they are getting affected by the construction activities as stated by the KRIDE Authorities/Tree Officer.

FIELD OBSERVATION

It has been noticed that there are 1227 enumerated additional trees standing in the project area extending from Benniganahalli Railway Station to Chikkabanavara Railway Station excluding Stations. The proposal relates to Design and Construction of Elevated Viaduct of length of 8.027 Kms and AT-Grade Section of length of 17.551 Kms of Corridor 02, BSRP. Besides this, the construction of proposed double decker bridge at Mohan Kumar Road, Reconstructions of ROB (02 Nos) with Approach Road, the construction of Approach Road to RUB to eliminate LC-6 are the new proposals as the private land acquisition was in progress for Yeshwanthpura Station locations when the original proposal was being scrutinized. The trees are standing at 15 locations coming under 03 BBMP zones viz., Dasarahalli Zone, RR Nagar Zone and East Zone.

During the course of TEC inspection, 54 unnumbered trees were identified standing at the project sites/areas. Therefore, all the above said $1227 + 54 = 1281$ trees at the project area were assessed.

6. On-site Retention

As per field inspection, out of the total 1281 trees, 493 trees (473 Enumerated + 20 Unnumbered) have been identified to be considered for retention-on-site as they are not getting affected by the developmental/constructional activities.

7. Analysis of other trees

As verified during the field inspection, the remaining 788 trees (754 Enumerated + 34 Unnumbered) 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 KRIDE Letter No. KRIDE/BSRP/C-2/BBMP/006 dtd. 30.04.2024.

Sl. No.	Physical feature	Details of Locations, Zonewise	Total trees
1.	Construction of Embankment for AT-Grade Alignment and LC-6	Mydarahalli (LC 06) Station, Dasarahalli Zone. (Between Tree No. 01 and Tree No. 91)	1. Tree Nos. 01 & 91 = 02 Nos 2. Tree No. 31 to Tree No. 46 = 16 Nos. 3. Tree No. 47 to Tree No. 89 = 43 trees Subtotal (a) = 61 trees (61 Enumerated)
2.	4088 ROB Reconstruction	Jalahalli to HMT (ROB 408/B), RR Nagar Zone (Between Tree No. 92 and Tree No. 182)	1. Tree No. 109 to Tree No. 118 = 10 Nos 2. Tree No. 154 to Tree No. 170 = 17 Nos. 3. Tree Nos 155/1, 155/2, 155/3, 155/4, 155/5, 159/1, 159/2 & 159/3 = 08 Nos. Subtotal (b) = 35 trees (27 Enumerated + 08 Unnumbered)

3.	410A ROB Reconstruction	Jalahalli HMT (ROB 410/A), Part I, RR Nagar Zone (Between Tree No. 183 and Tree No. 276) Jalahalli HMT (ROB 410), Part II, RR Nagar Zone (Between Tree No. UN 01 and Tree No. UN 15)	1. Tree No. 258 to Tree No. 266 = 09 Nos 2. Tree No. 267 to Tree No. 273 = 07 Nos. 3. Tree Nos 210, 219, 220, 221, 236, 263/1, 263/2, 263/3 = 08 Nos 4. Tree No. UN 01 to Tree No. UN 15 = 15 Nos Subtotal c = 39 trees (21 Enumerated + 18 Unnumbered)
4.	Construction of Viaduct for elevated alignment for Roads, Drains and for Boundary Wall	CQAE – Location 1 RR Nagar Zone (Between Tree No. 277 and Tree No. 778) CQAE – Location 2 RR Nagar Zone (Between Tree No. 1002 and 1054)	1. Tree No 277 to Tree No. 293 = 17 Nos 2. Tree No. 310 to Tree No. 566 = 257 Nos 3. Tree No. 599 to Tree No. 700 = 102 Nos 4. Tree No. 703 to Tree No. 708 = 06 Nos. 5. Tree No 710 to Tree No. 723 = 14 Nos. 6. Tree No. 760 to Tree No. 777 = 18 Nos. 7. Tree No. 1002 to Tree No. 1006 = 05 Nos. 8. Tree No. 1008 to Tree No. 1022 = 15 Nos. 3. Tree Nos. 295, 297, 298, 300, 301, 302, 303, 304, 306, 569, 570, 571, 572, 574, 576, 577, 578, 579, 580, 581, 589, 590, 591, 592, 596, 734, 744, 745, 746, 1025, 1026, 1027, 1028, 1029, 1031, 1032, 1033, 1035, 1036, 1037, 1038, 1041, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1052, 1053 & 1054 = 53 Nos Subtotal (d) = 487 Nos (All enumerated)
5.	Construction of Viaduct for Elevated Alignment	Yeshwanthapura Station, Part I, RR Nagar Zone (Between Tree No. 779 and Tree No. 804)	Tree No. 779 to Tree No. 804 = 26 Nos. Subtotal (e) = 26 trees (All enumerated)
6.	Construction of Viaduct for Elevated Alignment – Double Decker Bridge	Mohan Kumar Road, Section III, Part I, RR Nagar Zone (Between Tree No. 805 and Tree No. 854)	1. Tree No. 832 to Tree No. 849 = 18 Nos 2. Tree Nos 823, 824 & 854 = 03 Nos Subtotal (f) = 21 trees (All enumerated)
7.	Hebbal, LC-148 & 152 elimination by construction RUB and approach	Hebbal, Section III, Part II East Zone (Between Tree No. 855 and Tree No. 886) Hebbal, Section III, Part III East Zone (Between Tree No. 887 and Tree No. 963 with 03 more trees with Tree Nos. 904/1, 910/1 & 913/3)	1. Tree No. 855 to Tree No. 858 = 04 Nos 2. Tree No. 861 to Tree No. 867 = 07 Nos 3. Tree No. 871 to Tree No. 874 = 04 Nos. 4. Tree No. 878 to Tree No. 886 = 09 Nos 5. Tree Nos 855/1, 877/1, 903/1, 916, 917, 921, 922, 926, 927, 932, 933, 938, 939, 943, 954, 956, 957 = 17 Nos 6. Tree No. 890 to Tree No. 895 = 06 Nos. 5. Tree No. 900 to Tree No. 904 = 05 Nos. 6. Tree No. 907 to Tree No. 910 = 04 Nos. 7. Tree No. 959 to Tree No. 963 = 05 Nos. Subtotal (g) = 61 Nos. (61 Enumerated + 03 Unnumbered)
9.	Construction of embankment for AT Grade and ERS Wall	Banaswadi Defence Land, Part I, East Zone (Between Tree No. 981 and Tree No. 1001)	1. Tree No. 981 to Tree No. 997 = 17 Nos 2. Tree Nos 999, 1000 & 1001 = 03 Nos Subtotal (h) = 20 Nos. (All enumerated)
11.	Construction of embankment for AT Grade and ERS Wall	Banaswadi Defence Land, Part II, East Zone (Between Tree No. 1055 and Tree No. 1084)	1. Tree No. 1059 to Tree No. 1076 = 18 Nos 2. Tree No. 1077 to Tree No. 1084 = 08 Nos 2. Tree Nos 1055, 1056, 1057, 1076/7, 1076/8, 1083/1, 1083/2, = 07 Nos Subtotal (i) = 33 Nos (29 Enumerated + 04 Unnumbered)

12.	Construction of embankment for AT-Grade and ERS Wall	Banaswadi Defence Land, Part III, East Zone (Between Tree No. 1238 and Tree No. 1241)	1. Tree No. 1238 to Tree No. 1241 = 04 Nos. 2. Tree No. 1238/1 = 01 No. Subtotal (j) = 05 Nos (04 Enumerated + 01 Unnumbered)
		Total	788 trees (754 Enumerated + 34 Unnumbered)

Since these 788 (754 Enumerated + 30 Unnumbered) trees are standing right in the construction zone and hindering the project activities, their removal becomes inevitable.

8. Translocation:

The next consideration for the Committee was to identify the trees out of the above 788 trees standing in the Construction Zone, which are fit and suitable 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., as 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 of appropriate size;
- 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 multiforked 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 root-ball 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. Considering the required attributes, the Committee after assessment found that 89 trees. (88 enumerated trees and 01 unnumbered tree) standing at the project area can be considered as feasible for translocation to suitable places.

11. Ultimately, the balance 699 trees (666 Enumerated + 33 Unnumbered), which could neither be retained-on-site nor translocated, were recommended for felling as a last resort.

12. The assessment with justification for each tree was recorded as stipulated in Part-III of Template 2.

13. Following is the summary of recommendations of the Committee,

**Total trees standing in the project area extending from
Benniganahalli Railway Station to Chikkabanavara Railway Station
coming under the Project for Design and Construction of Elevated Viaduct
of length 8.027 kms and AT- Grade Section of Length 17.551 kms)
of Corridor 02, BSRP = 1281 Nos. of trees
(as per Field Observation)**

Sl. No.	Details of Locations, Zonewise	No. of trees recommended for Retention	No. of trees found suitable for Translocation	No. of trees recommended for Felling	Total
1.	Mydarahalli (LC 06 Station, Dasarahalli Zone. (Between Tree No. 01 and Tree No. 91)	31 trees (30 Enumerated + 01 Unnumbered)	09 trees (All enumerated)	52 trees (All enumerated)	92 trees (91 Enumerated + 01 Unnumbered)
2.	Jalahalli to HMT (ROB 408/B), RR Nagar Zone (Between Tree No. 92 and Tree No. 182)	64 trees (All Enumerated)	-	35 trees (27 Enumerated + 08 Unnumbered)	99 trees (91 Enumerated + 08 Unnumbered)
3.	Jalahalli HMT (ROB 410/A), Part I, RR Nagar Zone (Between Tree No. 183 and Tree No. 276)	78 trees (73 Enumerated + 05 Unnumbered)	03 trees (All enumerated)	21 trees (18 Enumerated + 03 Unnumbered)	102 (94 Enumerated + 08 Unnumbered)
4.	CQAE – Location 1 RR Nagar Zone (Between Tree No. 277 and Tree No. 778)	60 trees (All enumerated)	44 trees (All enumerated)	398 trees (All enumerated)	502 trees (All enumerated)
5.	Yeshwanthapura Station, Part I, RR Nagar Zone (Between Tree No. 779 and Tree No. 804)	-	-	26 trees (All enumerated)	26 trees (All enumerated)
6.	Mohan Kumar Road, Section III, Part I, RR Nagar Zone (Between Tree No. 805 and Tree No. 854)	29 trees (All enumerated)	02 trees (All enumerated)	19 trees (All enumerated)	50 trees (All enumerated)
7.	Hebbal, Section III, Part II East Zone (Between Tree No. 855 and Tree No. 886)	10 trees (08 Enumerated + 02 Unnumbered)	07 trees (06 Enumerated + 01 Unnumbered)	19 trees (18 Enumerated + 01 Unnumbered)	36 trees (32 Enumerated + 04 Unnumbered)
8.	Hebbal, Section III, Part III East Zone (Between Tree No. 887 and Tree No. 963 with 03 more trees with Tree Nos. 904/1, 910/1 & 913/3)	47 trees (46 Enumerated + 01 Unnumbered)	09 trees (All Enumerated)	26 trees (25 Enumerated + 01 Unnumbered)	82 trees (80 Enumerated + 02 Unnumbered)
9.	(Between Tree No. 964 and Tree No. 980)	These enumerated 17 trees have already been included under KRIDE Doubling Project. Hence not considered with this proposal.			
9.	Banaswadi Defence Land, Part I, East Zone (Between Tree No. 981 and Tree No. 1001)	05 trees (01 Enumerated + 04 Unnumbered)	14 trees (All enumerated)	06 trees (All enumerated)	25 trees (21 Enumerated + 04 Unnumbered)
10.	CQAE – Location 2 RR Nagar Zone (Between Tree No. 1002 and Tree No. 1054)	08 trees (All enumerated)	01 tree (All enumerated)	44 trees (All enumerated)	53 trees (All enumerated)
11.	Banaswadi Defence Land, Part II, East Zone (Between Tree No. 1055 and Tree No. 1084)	08 trees (01 Enumerated + 07 Unnumbered)	-	33 trees (29 Enumerated+04 Unnumbered)	41 trees (30 Enumerated + 11 Unnumbered)
12.	CQAE – Location 3 RR Nagar Zone (Between Tree No. 1085 and Tree No. 1207)	123 trees (All enumerated)	-	-	123 trees (All enumerated)

13.	Yeshwanthapura Station, Part II, RR Nagar Zone (Between Tree No. 1208 and Tree No. 1237)	30 trees All enumerated)	-	-	30 trees All enumerated)
14.	Banaswadi Defence Land, Part III, East Zone (Between Tree No. 1238 and Tree No. 1241)	-	-	05 trees (04 Enumerated + 01 Unnumbered)	05 trees (04 Enumerated + 01 Unnumbered)
15.	Jalahalli HMT (ROB 410), Part II, RR Nagar Zone (Between Tree No. UN 01 and Tree No. UN 15))	-	-	15 trees (15 Unnumbered)	15 trees (15 Unnumbered)
	Total	493 trees (473 Enumerated + 20 Unnumbered)	89 trees (88 Enumerated + 01 Unnumbered)	699 trees (666 Enumerated + 33 Unnumbered)	1281 trees (1227 Enumerated + 54 Unnumbered)

Abstract

Sl. No.	Particulars	No. of trees
1.	Total No. of trees as per enumeration list	1227 Nos.
2.	During TEC inspection another 54 trees were identified	54 Nos.
3.	Total trees assessed (Sl. No. 01 + Sl. No. 02)	1281 Nos (1227 Enumerated + 54 Unnumbered)
4.	No. of trees recommended for retention-on-site	493 Nos (473 Enumerated + 20 Unnumbered)
5.	No. of trees found suitable for translocation	89 Nos (88 Enumerated + 01 Unnumbered)
6.	No. of trees which can be permitted for removal	699 Nos (666 Enumerated + 33 Unnumbered)

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

In pursuance to the stipulations as mentioned in KPT Act 1976, KRIDE Authorities should take up Compensation Afforestation by planting of 7880 numbers of tall, healthy saplings at suitable places in lieu of 788 trees to be felled/translocated involved in KRIDE Project for Design and Construction of Elevated Viaduct of length 8.027 kms and AT-Grade Section of Length 17.551 kms extending from Benniganahalli Railway Station to Chikkabanavara Railway Station excluding Station buildings for Corridor 02 of BSRP.


 Member - Secretary,
 Tree Expert Committee &
 ACF, Bruhat Bengaluru Mahanagara Pallike,
 Bengaluru.