

Your Ref.:
Our Ref. : ARQ/(C3)/(NE/2017/03)/M45/100/301428

3 May 2019

Environmental Protection Department
Environment Assessment Division
Metro Assessment Group
Kowloon Section (2)
27th floor, Southorn Centre,
130 Hennessy Road,
Wan Chai,
Hong Kong

Attn: Ms. HSU Ping Ping, Alice

Dear Madam,

**Environmental Permit No. EP-513/2016
Development of Anderson Road Quarry Site –
Road Improvement Works**

Revised Transplantation Proposal – 2 Nos. of *Aquilaria Sinensis* Trees (Tree Nos. R-T02142 and R-T02157)

During a recent joint site visit with representatives from HK Landscape, AECOM and Lam Env. Service Ltd. (the Environmental Team “ET”), it was revealed that significant amount of boulders was identified in the area around the captioned two *Aquilaria Sinensis* Trees (Tree Nos. R-T02142 and R-T02157) which are to be transplanted.

After a review by ET, it was considered that creation of root balls with reasonable size was impracticable under the current site condition. Therefore, ET has revised the Transplantation Proposal, in which, the aforementioned *Aquilaria Sinensis* Trees (Tree Nos. R-T02142 and R-T02157) should be removed instead of transplanted.

The Independent Environmental Checker (ANewR Consulting Ltd., IEC) was also consulted and has no objection to the revised Transplantation Proposal.

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Our Ref. : ARQ/(C3)/(NE/2017/03)/M45/100/301428

In this regard, I submit herewith 4 hard copies and 1 electronic copy of the following documents for your approval in accordance with the Condition 2.14b of EP-513/2016:

- ET's Updated Justification for Transplanting 2 Nos. *Aquilaria Sinensis* Trees (dated 16 April 2019) together with a table of "response to IEC's comments"
- IEC's confirmation letter (Ref.: HKCEDD12/50/105705) dated 17 April 2019

Yours faithfully,



Paul LEE
Chief Resident Engineer/ AECOM
Project Manager Delegate

Encl. (4 hard copies and 1 electronic copy)

c.c. *Project Manager* for this contract (CE/E2, CEDD)
Project Manager's Delegate, AECOM

- Attn: Mr. S K LEUNG
- Attn: Mr. Ivan TSANG


PL/CWC/SCCH/TF/CL/ki

- ET's Updated Justification for Transplanting 2 Nos. *Aquilaria Sinensis* Trees (dated 16 April 2019)
- Table of "responses to IEC's comments"



CONTRACT NO: NE/2017/03

**DEVELOPMENT OF
ANDERSON ROAD QUARRY SITE -
ROAD IMPROVEMENT WORKS**

**TRANSPLANTATION PROPOSAL –
UPDATED JUSTIFICATION FOR TRANSPLANTING 2 NOS. *AQUILARIA SINENSIS* TREES**

CLIENTS:

Civil Engineering and Development Department

PREPARED BY:

Jay WAN
Qualified Ecologist

CERTIFIED BY:

Sam LAM
Environmental Team Leader

Lam Environmental Services Limited

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DATE: 16 April 2019

Field Justification by Plant Specialist of the Environmental Team Regarding the Infeasibility of Transplanting the Two Mature *Aquilaria sinensis* Trees R-T02142 and R-T02157.

Background

According to the previous tree surveys and detailed vegetation survey report, the two mature *Aquilaria sinensis* trees, R-T02142 and R-T02157, were recommended for transplantation.

Transplantation proposal has proposed rootball diameter of R-T02142-(T) and R-T02157 at minimum 1500mm with a depth of 1000mm in balancing maximized root system thus post-transplantation survival against logistical practicality.

Field Justification

During a joint site visit with representatives from HK Landscape, AECOM and Lam Env. Service Ltd. on 20 March 2019, we revealed the site is full of boulders after clearance of dense ground vegetation has been carried out. Landscape Specialist Contractor has carefully dug up the top soil around core root zone, rocks/ boulders exposed in depth of a few centimetres (**Plate 1**). Due to this condition, it is impracticable to create a reasonable root ball size. Attempt has been made to remove some rocks/boulders, however, this would lead to excessive damage of the core root zone even root pruning is successful.

Vegetation clearance also revealed that there is a significant level difference at four directions of the core root zone, making a highly uneven rootball for a mature tree to be transplanted at an up straight position (**Plate 2 & 3**). R-T02157 is even growing in crevices between two large rocks (**Plate 3**).

Conclusion

Under such above-mentioned conditions and Clause 2.6 (b) of Development Bureau's Guidelines on Tree Transplanting (2014) stating "*Larger trees need bigger root ball to encompass more roots to ensure adequate re-growth, as well as anchorage and stability. Transplanting may not be recommendable for situation where a reasonable root ball size cannot be achieved...A larger root ball is recommendable for more mature trees to enhance better recovery after transplanting...Trees growing on slopes, retaining walls or areas where formation of a root ball of reasonable size is not practicable are considered not transplantable.*", root pruning would be very challenging among underground boulders; core root zone would be damaged in greater extent even root pruning is successful. Also there will be insufficient soils to form a good rootball. Post-transplantation survival rate for R-T02142-(T) and R-T02157 would then be greatly reduced. Therefore transplantation of these two trees may not be a good option upon feasibility and estimated survival rate.

Subsequently, R-T02142-(T) and R-T02157 would have to be removed due to direct conflict with currently proposed construction works.

Plate 1



Boulders exposed under top soil at the site



Boulders observed at core root zone of R-T02142-(T)



Underground rock observed near root collar of R-T02142-(T)



R-T02157 is growing between two large rocks

Plate 2.



Boulders and difference in ground level observed at 4 directions within core root zone of R-T02142-(T).

Plate 3.



Boulders and difference in ground level observed at 4 directions within core root zone of R-T02157.

<u>Comments from IEC on 16 April 2019</u>			<u>Responses to comments on 16 April 2019</u>
Item	Section	Comments	
1	Field Justification	After "rocks/boulders exposed in depth of a few centimeters" Please include that due to this condition, it is impracticable to create a reasonable root ball size.	The sentence is included.
2	Field Justification	After "rocks/boulders exposed in depth of a few centimeters" Information should be included regarding the attempt to remove the rocks/boulders and whether this would lead to the damage of the core root zone as mentioned in the conclusion.	Such information is added.
3	Organization of the proposal	Instead of presenting the guidelines in one paragraph, please incorporate them into the proposal followed with justification and evidence to further show whether the conditions in the guidelines have been met.	The guidelines are incorporated.

- IEC's confirmation letter (Ref.: HKCEDD12/50/105705)

dated 17 April 2019

ANEWR

Civil Engineering and Development Department
New Territories East Development Office
Suite 1213 Chinachem Golden Plaza
77 Mody Road
Tsim Sha Tsui East
Kowloon

Your reference:

Our reference: HKCEDD12/50/105705

Date: 17 April 2019

Attention: Mr Leung Siu Kau, Kelvin

BY POST

Dear Sirs

Agreement No. EDO/04/2017

Independent Environmental Checker (IEC) for Development of Anderson Road Quarry Site
– Road Improvement Works

Transplantation Proposal – Updated Justification for Transplanting 2 Nos. *Aquilaria Sinensis* Trees

We refer to the emails on 8, 14 and 16 April 2019 from Environmental Team, Lam Environmental Services Limited attaching a Transplantation Proposal – Updated Justification for Transplanting 2 Nos. *Aquilaria Sinensis* Trees for the captioned project.

We have no further comment and hereby verify the abovementioned Transplantation Proposal – Updated Justification for Transplanting 2 Nos. *Aquilaria Sinensis* Trees in accordance with Clause 2.14b & 2.15 of the Environmental Permit no. EP-513/2016.

Should you have any queries, please do not hesitate to contact the undersigned or our Ms Angie Chan on 2618 2831.

Yours faithfully
ANEWR CONSULTING LIMITED



Adi Lee

Independent Environmental Checker

LYMA/CWA/lhmh

cc AECOM head office – Mr Ivan Tsang (email: ivan.tsang@aecom.com)
AECOM – Mr Brad C W Chan (email: c3-srec4@arqaecom.com)
Lam Environmental Services Limited – Mr Sam Lam (email: kclam@lamenviro.com)

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