



ARBORICULTURAL ASSESSMENT

Project:..... Lyford Reserve Track
Author:..... Adrian Lamont
Date: 12/6/17
Version:..... Final

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1.0 Executive Summary

- 1.1 Auckland Council Parks, in conjunction with the Sunnynook Community Association are proposing to upgrade part of the existing informal track network within Lyford Reserve, Sunnynook, by installation of timber-edged, compacted gravel paths. Resource Consent has been granted (Ref.: LUC600029741) for the track's construction, including removal of protected native understorey plants within the track footprint. However, it has been determined that additional vegetation removals (which are outside the scope of the existing consent) would be appropriate on safety grounds.
- 1.2 There are a large number of wattle and pine trees of varying stature growing adjacent to the track, many of which are in poor condition. It is proposed to remove such of these trees that pose an unacceptable risk to users of the track. Some pruning of trees to be retained is also proposed.
- 1.3 Some of the species identified for removal are well known to be naturalised in Auckland, however none are formally recognised as pest plants. Therefore the proposed tree removal and pruning will trigger the requirement for a Resource Consent for a *restricted discretionary activity*. In addition, approval will be required from the delegated asset manager for public trees (Auckland Council Parks' arborist).
- 1.4 Overall, it is assessed that the proposed tree removals will give rise to positive environmental effects provided that the measures recommended in this report are followed.



Fig.1: Site location

2.0 Scope of Report

- 2.1 Arb-Eco Limited have been commissioned to provide this arboricultural assessment of the proposal to remove trees from the site. It includes an inventory of the trees to be removed, a review of the relevant tree protection rules, an assessment of the potential adverse environmental effects of tree removal and suggests measures to minimise or mitigate any such effects.
- 2.2 This report may be submitted in support of an application for Resource Consent as well as an application for 'asset manager approval' from the delegated tree asset manager, Auckland Council Parks' arborist.
- 2.3 Assessment was carried out on 10/4/17 and 9/5/17 by visual tree assessment (VTA) from ground level. This is an industry accepted method of assessing the biological and mechanical condition of trees. Some defects or other conditions may not be identifiable by visual inspection, however no invasive testing or sampling was conducted as the VTA inspection gave no indication that this was warranted. Comments on tree condition relate only to observations at the time of inspection, however trees are dynamic, living organisms and their future performance will be subject to a range of factors including climactic conditions, management practices etc.
- 2.4 This report has been written with reference to the plan titled 'Lyford Reserve Track – Overall Plan', Drawing Number 414-100, Revision 2 provided by *Stellar Projects Limited*, dated 31/8/17, (an annotated version of which is contained in Appendix B) and an arboricultural report provided by Sean McBride of The Tree Consultancy Company dated 30th August 2016, which was submitted with the original application for track construction.
- 2.5 Any consent requirements or permits for any activity not directly relating to trees and vegetation are beyond the scope of this report.

3.0 Statutory Framework (Vegetation Protection)

- 3.1 This report has been compiled following the issue of the Auckland Unitary Plan - Operative in Part version (AUP-OP). There are no outstanding appeals with respect to any of the vegetation protection provisions within the AUP-OP, accordingly the provisions of this version of the plan are applicable and supersede any provisions contained in the legacy North Shore District Plan.
- 3.2 The protected trees that are proposed to be removed are growing on land zoned Open Space – Conservation. In addition, the works are to be undertaken (in part) within 10 metres of an urban stream. There are no other overlays or designations applicable to the site that would confer additional protection to the affected trees.
- 3.3 The proposal requires the removal of twelve protected trees or groups of trees and pruning of a further three protected trees (and removal of six unprotected trees or groups of trees) growing within the identified zones / landscape features listed in 3.2 above. Accordingly, Resource Consent is required for the following:
 - 3.3.1 Under Section E15.4.1(A19) of The Plan, vegetation alteration or removal within 10m of urban streams is a *restricted discretionary activity*.

A stream runs through the central part of the site, some of the trees to be removed are within 10m of it.

- 3.3.2 Under Section E.16.4.1 (A6) of The Plan, trimming or alteration of protected trees in open space zones that does not meet the standards set out in Section E.16.6.1 (incorrectly cross-referenced as E.16.6.2 in The Plan) is a *restricted discretionary activity*.

Branches over 100mm in diameter may be removed from one tree, exceeding the threshold within the referenced standards. (Pruning of the other two trees / tree groups is limited to removal of dead wood, a *permitted activity*).

- 3.3.3 Under Section E.16.4.1 (A10) of The Plan, removal of any tree growing in an open space zone that is greater than 4m in height or 400mm in girth is a *restricted discretionary activity*.

Twelve trees or groups of trees exceeding these size thresholds are proposed to be removed. Other trees to be removed are either under the size threshold or are dead.

- 3.4 Overall, taking into consideration the size and species of the subject trees, the site zoning and the relevant region-wide rules, it is assessed that the proposed activities in relation to trees are a *restricted discretionary activity*.
- 3.5 Notwithstanding the protection status of the trees, approval for any works that may affect these publically owned trees is required from the delegated asset manager (Auckland Council Parks' arborist). Parks' arborist has been advised of the proposal and have provided their approval, which is contained in Appendix C.

4.0 Proposed Works

- 4.1 There is an existing network of informal tracks within the reserve. It is proposed to upgrade some of these tracks to provide more useable connections through the reserve between Sunnynook Primary School to the south and the adjacent residential streets. The track construction itself and the removal of native understorey plants within its footprint is covered in the existing Resource Consent referenced in Section 1 above. Vegetation removals covered by that consent are limited to 'juvenile trees and shrubs' within the footprint of the track.
- 4.2 Subsequent to the issuing of the consent it has been identified that there are a large number of wattle and pine trees growing in close proximity to the sections of track to be upgraded, many of which are in poor structural and / or physiological condition, including ring-barked and fully dead trees. These represent a potential hazard to track users, which will worsen as they decline further in health and structural integrity and become more brittle, prone to failure, branch shedding etc. There are several instances of this having occurred already in vicinity to the track.
- 4.3 By constructing formal paths, Auckland Council Parks is recognising and to some extent encouraging the use of the track network. It is therefore appropriate at this time to undertake tree removals where necessary to reduce risk to track users to an acceptable level. In addition, in some instances trees that are not currently a significant risk are also proposed to be removed, as they are of exotic species capable of self-seeding (and considered undesirable in regenerating native bush) and their removal can be conducted as part of the overall felling operation without causing additional damage to understorey plants.
- 4.4 A survey of the sections of track to be upgraded has identified 21 trees or groups of trees to be removed or pruned. An inventory of these trees is contained in Appendix A, with their locations depicted on the plan in Appendix B.

- 4.5 Tree removal will be conducted by felling from the base in the case of smaller trees, or, where necessary to minimise damage to understorey plants, by sectional / controlled felling. A small tracked chipper, to be kept within the track footprint as far as possible, will be used to chip the brush on site. Larger tree stems will be cut up and left in a safe condition to rot down in situ.
- 4.6 Some damage to desirable native understorey plants is inevitable, but will be minimised by controlled felling and utilisation of the space created by felling of adjacent undesirable trees. An assessment of the amount of vegetation loss may be made following the felling operation and appropriate replacement planting carried out.
- 4.7 With one exception, pruning is limited to removal of dead wood from large trees overhanging the track. It is proposed, however, to remove a single over-extended and kinked limb that exceeds 100mm in diameter from a large pine (tree no.11).

5.0 Assessment

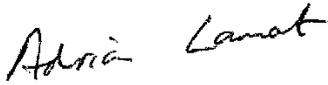
- 5.1 The trees to be removed are all of exotic species capable of self-seeding and may be considered inappropriate within regenerating native bush. Additionally, many of them are in poor and declining condition. In my opinion, their removal will have insignificant adverse effects on physical or visual amenity as they represent only a very small fraction of the vegetation within the site and there will be no adverse effects on soil stability or catchment quality. The removals will have positive long-term ecological effects through reduction in the seed-source of invasive species and by allowing for replacement planting and natural regeneration of native species.
- 5.2 Damage to regenerating understorey will be minimised as far as is safe and practical by use of controlled felling techniques and shall be confined to the immediate vicinity of the track. As discussed in the arboricultural report provided by Sean McBride referenced above, the reserve is largely devoid of mature specimens of native climax species, therefore any loss of native plants will be confined to young specimens of common pioneer species that are easily replaced and likely to regenerate naturally where space allows.
- 5.3 Overall, in my opinion the proposed tree removals will give rise to positive environmental effects, provided the recommendations in this report are followed.

6.0 Recommendations

- 6.1 Tree pruning and removals shall be limited to those itemised in the inventory contained in Appendix A.
- 6.2 All tree works shall be conducted by a suitably experienced and equipped, Council approved contractor.
- 6.3 Where safe and practical, controlled (sectional) felling techniques shall be used to minimise damage to native understorey plants.
- 6.4 Where accessible to a small tracked chipper, felled brush shall be chipped on site into piles. The chip may be used to mulch replacement plants.
- 6.5 Any brush or logs not able to be chipped shall be left in a safe condition to rot down in situ.

- 6.6 Following the felling operation, any cleared areas shall be replanted with small-grade plants of appropriate native species at a maxing spacing of 1 plant per square metre.
- 6.7 All replacement planting shall be carried out in accordance with correct arboricultural / horticultural practices. All replacement plants shall be maintained in accordance with correct practice for a minimum of one year after planting.

Please contact me at adrian@arbeco.co.nz or on 027 58 58 587 if any further comment is required.



Adrian Lamont
Arb-Eco Limited

Appendix A

Tree Inventory

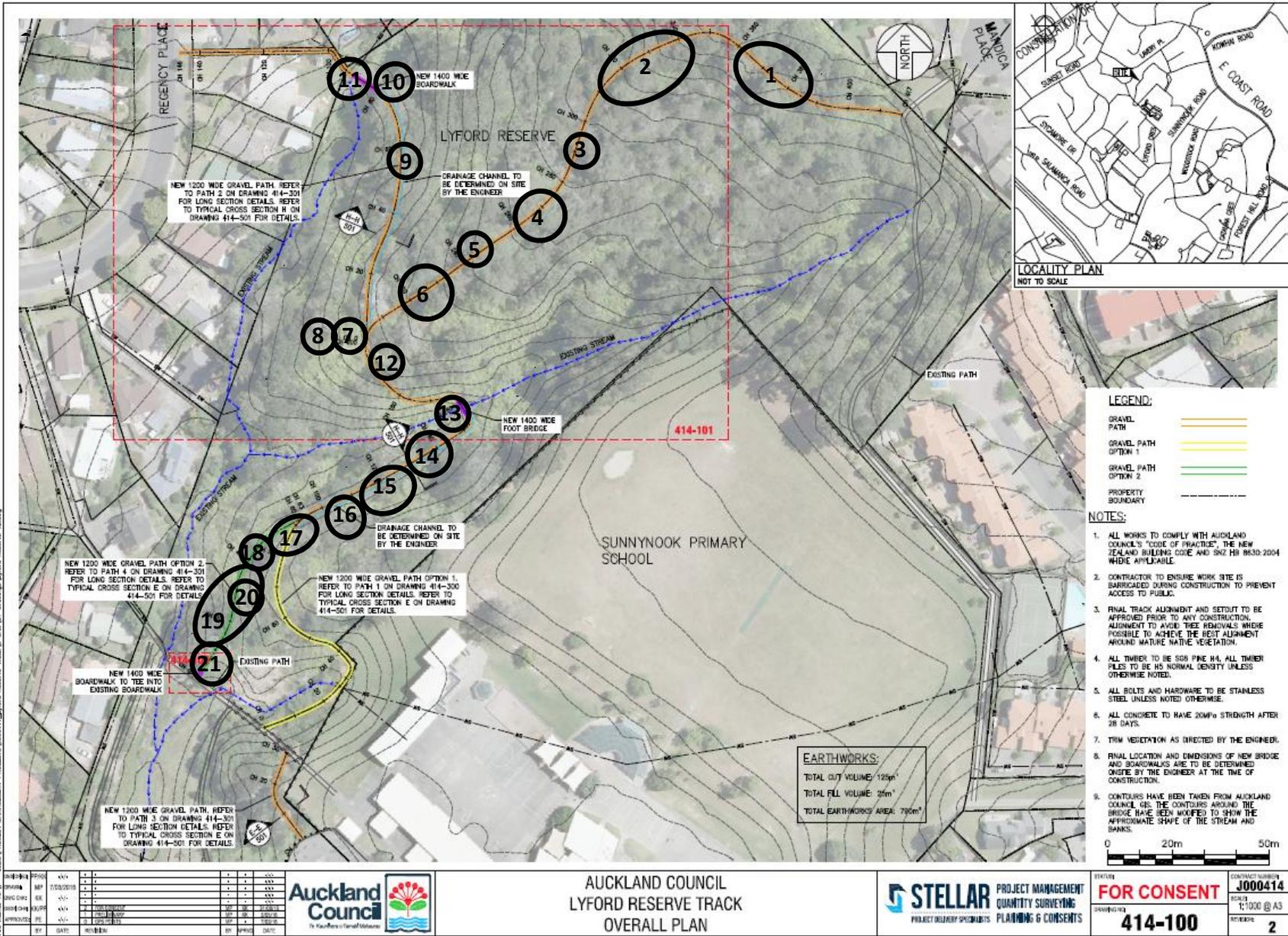
#	Species	Remove / Prune	Resource Consent required	Comments
1	Wattle and pine	Remove	Yes	Group of approx. 20 black wattles, mostly under 8m, in generally poor condition adjacent to proposed track, to be removed. Several maritime pine present, space available to fell the smallest (approx. 10m) into area of wattles with minimal damage to desirable plants, as well as single dead pine in track footprint.
2	Wattle X 3, pine	Remove	Yes	One dead wattle in proposed track footprint, others in poor condition and close to proposed track.
3	Pine	Remove	No	Standing dead pine close to proposed track.
4	Pine X 5	Remove	Yes / no	Standing dead or moribund pines within fall distance of proposed track.
5	Wattle	Remove	No	Single dead 10m wattle over proposed track.
6	Wattle	Remove	Yes	Group of small – medium sized wattles (mixed group of Sydney golden wattles and black wattles), including a large specimen within proposed track footprint with severe lean along track alignment.
7	Wattle	Remove	No	Large dead wattle at proposed track intersection. Decayed and brittle canopy overhangs track.
8	Pine	Remove	No	Standing dead pine stem in fall distance of track.
9	Pine	Prune	Yes	Remove deadwood from very large pine where over proposed track alignment.
10	Pine X 2	Remove	No	Two standing dead pines, very slender and tall, within group of large healthy pines.
11	Pine	Prune	Yes	Large pine overhanging track, lowest branch kinked, overextended, to be pruned.
12	Wattle	Remove	Yes	Sydney golden wattle with poor structure and leaning over track alignment.
13	Wattle	Remove	Yes	Medium sized wattle in poor condition and leaning over track, immediately next to creek.
14	Pine X 2	Remove	Yes	Pines in poor condition, one very large, declining health and structural integrity, over path.
15	Wattle and acmena	Remove	Yes	Mixed group of small specimens within / close to proposed track alignment.
16	Wattle	Remove	Yes	Large black wattle set back from but leaning over track.
17	Wattle	Remove	Yes	Grove of medium to small wattles, within or close to track. Clearance will allow for revegetation planting.

#	Species	Remove / Prune	Resource Consent required	Comments
18	Pine	Remove	Yes	Small tree in preferred track alignment.
19	Wattle	Remove	No	Group of approx. 12 standing dead wattles, some ring barked.
20	Pine	Prune	Yes	Three medium sized pines holding deadwood over track, remove dead wood.
21	Pine	Remove	Yes	Two small pines near track intersection. Good access for removal.

Appendix B

Tree Location Plan

(Locations approximate)



File Name: A:\PROJECT\MANAGEMENT\PROJECTS\414-Lyford Reserve Track\3_040\20-2024\Lyford Reserve_02.dwg
 User: J...
 Date: 11/10/2024 10:50:00 AM

NO.	REV.	DATE	BY	CHKD.	DESCRIPTION
1	1	11/10/2024	J...	J...	ISSUED FOR CONSENT
2	1	11/10/2024	J...	J...	ISSUED FOR CONSENT
3	1	11/10/2024	J...	J...	ISSUED FOR CONSENT
4	1	11/10/2024	J...	J...	ISSUED FOR CONSENT
5	1	11/10/2024	J...	J...	ISSUED FOR CONSENT
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7	1	11/10/2024	J...	J...	ISSUED FOR CONSENT
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AUCKLAND COUNCIL
 LYFORD RESERVE TRACK
 OVERALL PLAN



STATUS:	FOR CONSENT	CONTRACT NUMBER:	J000414
DATE:	11/10/2024 @ A3	PROJECT:	414-100
REVISION:	2		

Tree location (Source: Auckland UP map viewer)

Appendix C
Parks Arborist Approval

Official use only

To be filled in by council arborist advisor

Asset owner approval is granted subject to the following requirements:

1. The applicant shall be directly responsible for all costs associated with the proposed works.
2. The applicant must engage a Council approved contractor to carry out the tree removal and tree pruning works. This must be carried out in accordance with current best arboricultural and safety practices.
3. All works shall be carried out in strict accordance with the recommendations and methodologies provided within the arboricultural memo provided by Arbeco dated 26/05/2017.
4. Within the next planting season immediately following the tree removal, the applicant shall ensure that colonising or enhancement planting is carried out in the areas of the tree removal. This planting shall be in accordance with the Auckland Council Native forest restoration guide.
<http://www.aucklandcouncil.govt.nz/EN/environmentwaste/coastalmarine/Documents/nativeforestrestorationguide.pdf>
5. The planting shall have aftercare maintenance and pest plant control carried out for a minimum period of two years following the planting.

Please note asset owner approval does not allow you to proceed until you have all of the relevant consent approvals required for your project. A copy of this form should be held on site at all times.

I agree to the requirements set out by the Auckland Council asset owner

Agent: Name _____ Date _____
Signature _____
Address: _____
Contact details: _____

Property Owner: Name _____ Date _____
Signature _____
Address: _____
Contact details: _____

Contractors: Name _____ Date _____
Signature _____
Address: _____
Contact details: _____

Auckland Council
Environment and Programmes
Senior Arboriculture and Eco Specialist



Steve Krebs