



18 April 2017

Your Ref: SSI 6307
Our Ref: A17008046

Glenn Snow
Director, Transport Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Glenn,

WestConnex M4 East (SSI 6307)
Request for Modification
Condition of Approval B47 and amendment of 'tree' definition

1. Introduction

Roads and Maritime Services (RMS) is requesting a modification from the Department of Planning and Environment (DPE) to the Conditions of Approval (CoAs) in accordance with the requirements of section 115Zl of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The modification request relates to CoA B47 which requires a net increase in the number of replacement trees for those removed in order to implement the project.

CoA B47 states the following:

The SSI must be designed to retain as many trees as possible and provide a net increase in the number of replacement trees. In the event that trees are to be removed, then replacement trees are to be planted within, or in close proximity to, the SSI boundary. The location of the trees must be determined in consultation with the relevant council(s). The replacement trees are to have a minimum pot size of 75 litres.

RMS is also seeking to modify the definition of 'tree' included in the CoA in order to provide consistency between the CoAs and relevant management plans, including the Construction Flora and Fauna Management Plan (CFFMP).

Part A of this memo addresses the modification of CoA B47, whilst the modification of the 'tree' definition is set out in Part B.

PART A: Modification of Condition B47

2. Background

Construction of the project requires the removal of vegetation within the construction footprint for both operational infrastructure, construction work areas and temporary construction ancillary facilities. The Environmental Impact Statement (EIS) estimated that the construction of the M4 East project would result in the removal of approximately 16 ha of vegetation, comprising 13 ha of planted trees and screening vegetation from private properties, RMS road reserves and Council owner property, as well as around 3 ha of grassland with scattered trees in council reserves.

In accordance with section 4.4.1 of the approved CCFMP, the number (and species) of all trees cleared has been recorded and currently stands around 3,500, with only a small amount of vegetation still to be cleared.

The preliminary Urban Design and Landscape Plan has been prepared for the project and currently incorporates around 500 trees in 75 litre (L) pots within the project corridor, leaving approximately 3,000 trees to be planted in close proximity to the SSI boundary, as per the requirements of CoA B47.

3. Modification of CoA B47

3.1 Justification for modification of CoA B47

CoA B47 requires a net increase in the number of replacement 'trees', with these replacement trees to be planted within, or in close proximity to, the SSI boundary. This CoA also specifically requires the replacement trees to have a minimum pot size of 75L.

It is supposed that the intent of the specification of 75L pots is to ensure that, from both an ecological and amenity perspective, revegetated areas start at a point where they will have a more immediate impact than using seed, tube stock or small volume pots.

Discussions with the Project's horticultural consultant (Mr Stuart Pittendrigh) indicate that the use of various pot sizes at the time of planting, in addition to careful species selection, can result in a more naturalist style of planting arrangement at the time of installation. As the landscape establishes, the varying growth heights, structures and forms of planting add greater interest. As vegetation matures, plantings progress from their first adult form to mature trees supported by associated understorey layer/groundcover.

To achieve this layered affect, the species size should be varied at the time of planting. Optimum planting sizes to create a well-balanced display in community situations should commence with 25L stock, followed by 45L stock and, for instant impact, some 75L plantings. Use of these pot sizes is widely accepted as good planting layout at the time of installation to create a well-proportioned and balanced landscape setting. It is noted that a 'tree' can come from stock as small as an 150mm pot, with trees generally having a single self-supporting main stem. In the case of the tree replacement strategy, a tree (as opposed to a shrub or groundcover) will be determined by the species listed in accordance with the relevant specification.

From a horticultural perspective, it is a well-evidenced fact that smaller plants establish more readily than larger plants, as they often have less time to develop inferior roots and structural growth defects due to being held as containerised stock for too long.

In addition, there is a spatial issue relating to the area of land required for the provision of all replacement trees in 75L pots. The Project's horticulturalist suggests that an area of between 9m² and 25m² is recommended for one 75L pot (and although dependent on species, trees of these size would be expected to have a height of four to five metres).

To provide some context, it is noted that approximately 50% of the cleared trees (with a minimum height of three metres) were taken from the motorway reserve at the western end of the project, particularly in the vicinity of Homebush Bay Drive. The consultant ecologist noted that the planting in these areas 'comprised young trees which had not been appropriately spaced/tinned at growth intervals and were unsustainably dense'. The consultant ecologist noted that motorway reserves to the west of the project had an average of nine trees per 4m².

Allowing for replacement trees to be planted in close proximity to, the SSI boundary, not just within it, the provision of 3,500 trees in 75L pots planted in a viable and sustainable manner, would require an area of land that is not achievable in, or in close proximity to, the project footprint.

Further to this, consultation with affected Councils (refer 'Consultation' section below) indicates that the Councils have a preference for replacement plantings in a variety of sizes and not restricted to 75L pots.

3.2 Consultation

Consultation in regard to the CoA B47 has been undertaken with DPE, SOPA, Strathfield, Inner West and Canada Bay Councils. While the Project footprint includes land in Burwood and Auburn Local Government areas, no vegetation was removed within these Council areas as a result of the Project and therefore consultation has not been undertaken with these Councils.

Details of the consultation undertaken is provided in Table 1 below. It is noted that a DPE Compliance Officer has been in attendance at the majority of meetings with Council.

Table 1 Consultation

Date	Authority	Comment
01.09.2016	DPE	A meeting was held with DPE where SMC and CSJ tabled a report prepared by the consultant ecologist (EMM Consulting Pty Ltd), titled 'WestConnex Stage 1B - Removal and replacement of Trees' dated 1 September 2016. At this meeting, DPE agreed that the intention for the condition is that there are ultimately more trees planted that are taken out and that the replacement trees need to survive. The 75L pot size was stipulated to help the survival rate. DPE undertook to review the wording of CoA B47. The DPE Compliance officer noted that any re-worded condition needs to be enforceable.
20.09.2016	DPE	An email was issued by DPE containing revised wording of CoA B47 (as included below in the 'Proposed modification' section). The revised wording addresses the issues highlighted in the 'Justification for modification' section of this modification request and allows for greater flexibility.
23.06.2016	DPE	Site visit with DPE to Homebush.
21.07.2016; 20.09.2016 & 25.11.2016	Canada Bay Council	<ul style="list-style-type: none"> - Identified specific needs for replacement trees (ie. location, species and size (not limited to 50L pots)); - Expressed desire to see investment in regeneration programs such as the seed-banking regeneration scheme at Queen Elizabeth Park, Concord; - Have identified at least two regeneration projects – street

		<p>tree replacement program and St Lukes Park revegetation program – that they are keen for assistance with.</p> <ul style="list-style-type: none"> - Further discussion about progressing St Lukes was had at the most recent meeting, in addition to investigations about other potential revegetation strategies.
26.07.2016; 21.09.2016 & 30.11.2016	Strathfield Council	<ul style="list-style-type: none"> - Identified specific needs for replacement trees (ie. location, species and size (not limited to 50L pots)); - Further identification of opportunities required, once appropriate staff are briefed about the tree replacement strategy.
02.08.2016; 21.09.2016 23.11.2016 & 09.12.2016	Inner West Council	<ul style="list-style-type: none"> - Internal consultation will be required to progress opportunities but two areas may be the section of the Bay Run adjacent the Project and also the street tree planting strategy. - Given the recent amalgamation, further investigation will need to be done. - Relevant Council officers identified that a working group will be set up to further progress tree replacement strategy. - A number of opportunities have been identified by Council where they see potential to work with WestConnex to use the tree replacement strategy to enhance their own revegetation strategies. These include The Bay Run and street tree replacement/enhancement in Haberfield and Ashfield.

3.3 Proposed modification

Given the above, it is recommended that CoA B47 is amended in accordance with clause **115ZI** of the EP&A Act 1979, which states:

Modification of Minister's approval

(1) In this section:

Minister's approval means an approval to carry out State significant infrastructure under this Part, and includes an approval granted on the determination of a staged infrastructure application.

modification of an approval means changing the terms of the approval, including revoking or varying a condition of the approval or imposing an additional condition on the approval.

(2) The proponent may request the Minister to modify the Minister's approval for State significant infrastructure. The Minister's approval for a modification is not required if the infrastructure as modified will be consistent with the existing approval under this Part.

Note. Section 380AA of the Mining Act 1992 provides that a request for the modification of approval for State significant infrastructure for the mining of coal can only be made by or with the consent of the holder of an authority under that Act in respect of coal and the land concerned.

(3) The request for the Minister's approval is to be lodged with the Secretary. The Secretary may notify the proponent of environmental assessment requirements with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister.

(4) The Minister may modify the approval (with or without conditions) or disapprove of the modification.

In consideration of the consultation undertaken and the likely impacts resulting from the existing wording, it is recommended that CoA 47 be modified to the following:

The SSI must be designed to retain as many trees as possible and provide a net increase in the number of replacement trees. In the event that trees are to be removed, then replacement trees are to be planted within, or in close proximity to, the SSI boundary. The location of the trees must be determined in consultation with the relevant authority¹.

The replacement trees are to have a minimum pot size of 75 litres except where the plantings are proposed in accordance with a relevant authority's revegetation, street planting, landscaping and/or open space programs/plans (including Council-endorsed WestConnex 'Legacy' projects outside the project footprint associated with the M4 East project) that specify alternative pot sizes for trees. In such cases, the Proponent must submit to the Secretary for approval a Report which includes:

- *a copy of the relevant authority's revegetation program/plan;*
- *details on the proposed plantings (including type, size and location);*
- *details on how the relevant plantings meet the requirements of the relevant authority's revegetation program/plan; and*
- *documentation from the relevant authority that it is satisfied with the Proponent's proposed plantings.*

3.4 Impact of modification

The impact of the modification will not be significant in terms of changing the intent or requirements of the condition. The modified condition:

- will not result in the removal of any additional trees;
- remains enforceable, with the onus still on the proponent to provide details of compliance;
- retains the requirement for a minimum pot size of 75L where planting is not part of an endorsed program/plan; and
- provides for an alternative, more flexible way of providing replacement trees outside the SSI boundary that should result in a positive impact more in line with Council's vegetation program/plan.

¹ It is noted that the word 'authority' has been used in place of 'council' as land within the Sydney Olympic Park is in close proximity to the SSI boundary and the condition should not preclude discussions with other relevant authorities, such as Sydney Olympic Park Authority.

PART B: Amendment of 'tree' definition

4. Background

As stated above, RMS is also seeking to modify the definition of 'tree' included in the CoAs in order to provide continuity between the CoAs and relevant management plans, including the CFFMP. In accordance with the definitions of SSI 6307, a 'tree' is 'as defined in the relevant council's Tree Preservation Order'. Given the project is spread across five Local Government Areas (LGAs), this results in significant variation in the definition of what constitutes a 'tree' for the purposes of the project.

4.1 Justification for modification of the definition of 'tree'.

In the definitions of SSI 6307, a 'tree' is 'as defined in the relevant council's Tree Preservation Order' (TPO) (refer Table 1).

Table 2 Definitions of 'tree'

Authority	Definition	Source
Ashfield Council ¹	A long lived, woody perennial plant with a single or relatively few main stems or trunks and a more or less distinctly elevated crown, the main criterion being 'form' rather than 'size'.	Ashfield Council Tree Preservation Policy, October 2013
Auburn Council ² (no clearing)	Indigenous, endemic or exotic species which have a height of 3.5 m or greater; or a canopy spread of 4m or greater; or a trunk diameter of 400 mm or greater measured at 1.5 m from the base of the tree; this includes all mangroves, bushland and heritage trees identified in the Local Environmental Plan (LEP).	Auburn Council Tree Preservation Development Control Plan 2010
Burwood Council (no clearing)	A woody perennial plant equal to or exceeding four (4) meters in height with a trunk diameter equal to or exceeding 150 mm measured at a distance of 1.4 m above ground'.	Burwood Council Development Control Plan 2013
Canada Bay Council	A perennial plant with at least one self-supporting woody or fibrous stem'.	Canada Bay Council Tree Preservation Order Policy 2006
Strathfield Council	A perennial plant (single or multi-stemmed) with a height equal to or exceeding four (4) meters'.	Strathfield Council Tree Management Consolidated Development Control Plan 2005
Australian Standards	Long lived woody perennial plant greater than (or usually greater than) 3 m in height with one or relatively few main stems or trunks (or as defined by the determining authority).	AS4970-2009 Trees (s1.4.6)

Notes: 1. Recently amalgamated into the Inner West Council, however the provisions of the Tree Preservation Policy currently still apply.
2. Recently amalgamated into the Cumberland Council, however the provisions of the Tree Preservation Policy currently still apply.

As evidenced in Table 2, the project is spread across five Local Government Areas (LGAs), meaning there is significant variation in the definition of what constitutes a 'tree' for the purposes of the project.

Given the variation and difficulty in ensuring that each individual definition was correctly applied to vegetation across the project, the contractor adopted the conservative Australian Standard AS4970-2009 definition for all impacted trees. This more conservative definition accommodates all the various requirements of the different TPOs and includes non-native species, but excludes any species listed under the *Noxious Weed Act 1993* (NW Act). It was therefore considered the best suited definition to ensure that all 'trees' were identified and recorded consistently across the project and regardless of LGA boundaries. For this reason, the AS4970-2009 definition was included in the CFFMP.

Because of the inconsistency set out above, we have taken the more conservative approach of adopting the AS4970-2009 definition and for that reason, the 'tree' definition should be amended to ensure consistency with CoAs and relevant management plans.

4.2 Consultation

Following post-approval discussions with DPE, it was mutually agreed that a more consistent definition would be appropriate.

4.3 Proposed modification

Therefore, to ensure continuity between the conditions of consent and post-approvals compliance, the 'tree' definition in SSI 6307 be amended as follows:

'Tree' is as defined in Australian Standard AS4970-2009 **or** the relevant council's Tree Preservation Order.

4.4 Impact of modification

As a result of the utilisation of the Australian Standard, the project has recorded and will consequently replace a higher number of trees than had it recorded tree numbers based on the TPO definition.

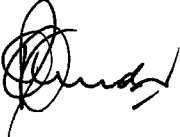
5. Conclusion

The revised wording of CoA B47, as developed in liaison with the DPE, is considered appropriate in continuing to maintain the intent of the condition while providing the flexibility required to achieve a more desired, sustainable and effective outcome.

The amendment of the tree definition ensures continuity between the CoAs and post-approvals compliance and is therefore considered necessary.

Should you have any queries in relation to this matter, please contact David Kelly on 0407 239 667 or at david.kelly@westconnex.com.au.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Philip Knudsen', with a stylized flourish at the end.

Philip Knudsen
Project Director WestConnex Delivery Interface Office