



# OLD GROWTH TREE MANAGEMENT PLAN

NZ Transport Agency Waka Kotahi  
Mill Road Stage 1

AUGUST 2026

## Contents

|     |                                                      |   |
|-----|------------------------------------------------------|---|
| 1   | INTRODUCTION .....                                   | 1 |
| 1.1 | Objective of the OGTMP.....                          | 1 |
| 2   | ROLES AND RESPONSIBILITIES .....                     | 2 |
| 2.1 | Key Roles.....                                       | 2 |
| 2.2 | Nominated Project Arborist .....                     | 2 |
| 2.3 | Works Arborist .....                                 | 2 |
| 3   | TREE REMOVAL.....                                    | 3 |
| 3.1 | Mana Whenua – offering of logs for repurposing ..... | 3 |
| 4   | TREE TOPPING AND PRUNING.....                        | 4 |
| 5   | REPORTING .....                                      | 6 |

## Copyright information

Copyright ©. This copyright work is licensed under the Creative Commons Attribution 4.0 International licence. In essence, you are free to copy, distribute and adapt the work, as long as you attribute the work to the NZ Transport Agency Waka Kotahi (NZTA) and abide by the other licence terms. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## Disclaimer

NZTA has endeavoured to ensure material in this document is technically accurate and reflects legal requirements. However, the document does not override governing legislation. NZTA does not accept liability for any consequences arising from the use of this document. If the user of this document is unsure whether the material is correct, they should refer directly to the relevant legislation and contact NZTA.

## QUALITY REVIEW AND APPROVAL RECORD

| Item                                  | Name                                 | Date        |
|---------------------------------------|--------------------------------------|-------------|
| <b>Prepared by:</b>                   | Matthew Paul, Peers Brown Miller Ltd | August 2026 |
| <b>Reviewed by:</b>                   | Chris Scrafton, Beca Ltd             | August 2026 |
| <b>Approved for<br/>lodgement by:</b> | Nicola Bishop, NZTA                  | August 2026 |

# 1 INTRODUCTION

This Old Growth Tree Management Plan (**OGTMP**) has been prepared for the Mill Road Stage 1 Project (**the Project**). The OGTMP applies to works within the Significant Ecological Areas (**SEAs**) at Cheesman's Bush and Puhinui Gully (also known as the Watercare Bush) as shown in **Figure 1**.

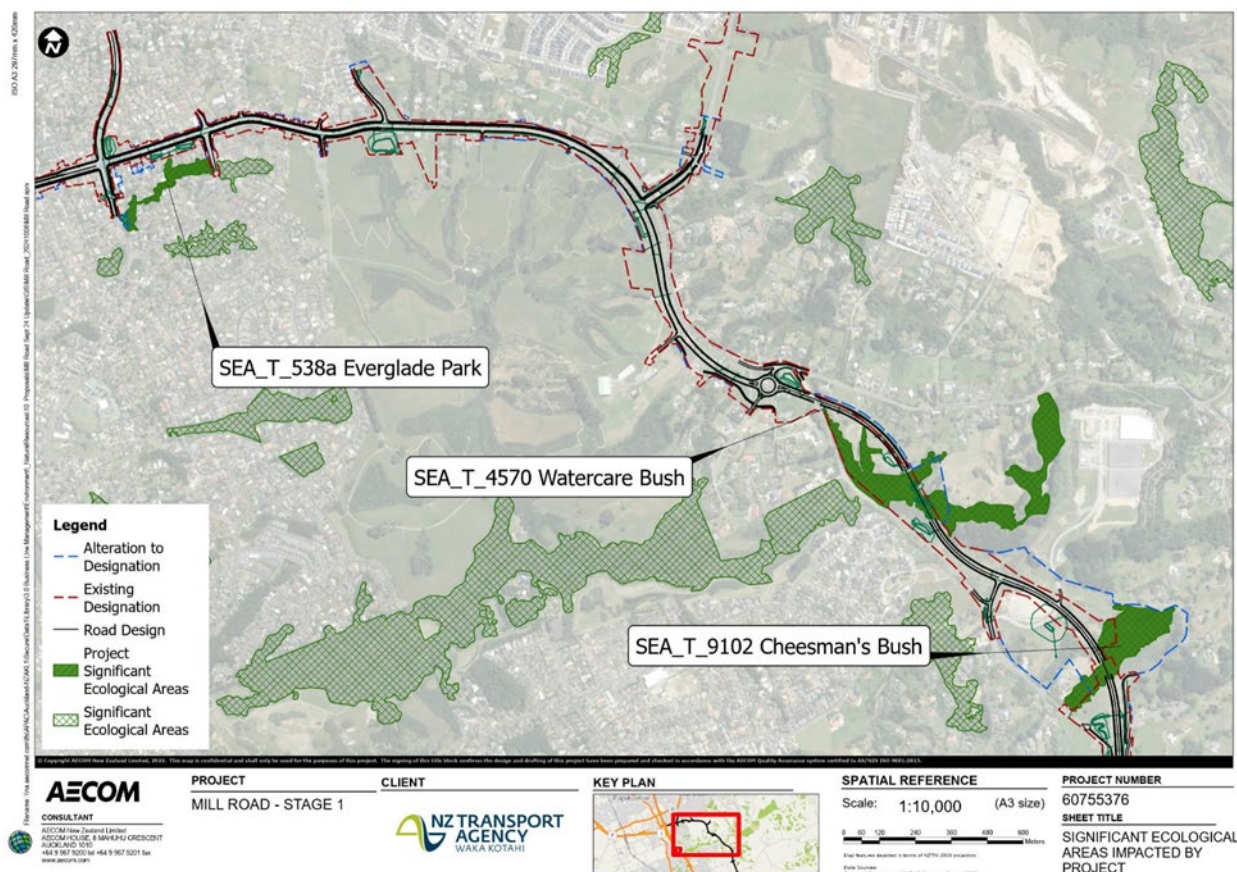


Figure 1 This OGTMP applies to the SEAs at Puhinui Gully/Watercare Bush and Cheesman's Bush. Although there is an area at Everglade Park which is an SEA, the location affected by the Project does not contain any Significant Trees and is not covered by this plan.

## 1.1 Objective of the OGTMP

The objective of the OGTMP is to, as far as practicable, manage adverse effects associated with the removal and alteration of Significant Trees on the SEAs at Cheesman's Bush and Puhinui Gully during construction of the Project.

In this OGTMP, the term '**Significant Tree**' includes all the trees identified in Table 1.

Table 1: Tree classification categories and descriptions

| Classification              | Description                                                                                                                          |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>Old growth / remnant</b> | At full expected Diameter at Breast Height ( <b>DBH</b> ) or more (>130cm DBH).                                                      |
| <b>Large</b>                | Trees that are close to full height, DBH, and crown size. Generally maximum DBH of 100-120 cm across species (81 – 130cm DBH range). |
| <b>Mature</b>               | Generally, DBH of up to 80 cm, considered mature in age based on species type (51 – 80cm).                                           |

| Classification                                                                       | Description                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Trees 225, 226, 227, 229, 254, 255, 300, 335, 345 (specific sub-mature trees)</b> | Specific sub mature trees that have been identified as significant because they are within the SEA, contribute to the structural diversity and arboricultural value of the old growth forest, and will support long-term canopy replacement. These trees are below 50cm DBH. |

This OGTMP should be read in conjunction with the Urban and Landscape Design Management Plan (**ULDMP**), the Terrestrial Management Plan (**TMP**) and the resource consent conditions for the Project.

## 2 ROLES AND RESPONSIBILITIES

### 2.1 Key Roles

The table below sets out the key personnel involved in the implementation and operation of the OGTMP and their roles and responsibilities.

| Name/Role                                            | Contact Details | Responsibility                                                                                                                       |
|------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mana Whenua – Kaitiaki / Project Partners</b>     | TBC             | Exercise kaitiaki responsibilities throughout the Project to manage cultural effects.                                                |
| <b>Nominated Project Arborist (Project Arborist)</b> | TBC             | Provides technical input into detailed design elements that may impact trees and vegetation, as outlined in Section 2.2.             |
| <b>Nominated Works Arborist (Works Arborist)</b>     | TBC             | Undertakes onsite arboricultural monitoring as required and provides advice and guidance to contractors, as outlined in Section 2.3. |
| <b>Environmental Lead</b>                            | TBC             | Oversees implementation of the OGTMP on site and undertakes environmental compliance auditing.                                       |

### 2.2 Nominated Project Arborist

A suitably experienced consultant arborist (**Project Arborist**) will be engaged by NZTA for the duration of works within the Cheesman's Bush and Puhinui Gully SEAs. The Project Arborist will be responsible for overseeing the:

- Removal of the trees identified in this OGTMP for removal;
- Monitoring and supervision of all pruning and topping of trees identified for pruning and trimming in this OGTMP; and
- Delineation of the Construction Footprint (as shown in Figures 4 and 5) and the dripline and rootzone of Significant Trees to be retained.

The Project Arborist will be suitably qualified and experienced in the preparation of technical reports (and hold a minimum Level 4 arboricultural qualification). They will also provide specialist input and assistance to the Works Arborist on site, where required.

### 2.3 Works Arborist

The Works Arborist will be present on site when works are undertaken within the areas addressed in this OGTMP. The Works Arborist will remain engaged until all works are complete, including any reinstatement works through to final soil remediation and/or planting.

While on site, the Works Arborist will:

- Physically mark trees for removal, pruning or topping and identify locations for tree protection measures where the dripline and rootzone of Significant Trees is within the Construction Footprint;
- Provide instructions on topping and/or pruning methods for retained Significant Trees identified in this OGTMP;
- Directly oversee all works within the dripline and rootzone of all retained Significant Trees during construction; and
- Advise on the appropriate management of roots encountered during construction, undertake root pruning where required, and install materials (such as hessian or wool mulch) to maintain moisture levels in exposed root areas during construction.

The Works Arborist will hold a minimum level 3 arboricultural qualification and be experienced in tree protection systems and construction methodologies. They will be responsible for implementing the OGTMP on site.

The Works Arborist will work in collaboration with the Environmental Lead and Kaitiaki to ensure sites are established in a manner that avoids or minimises adverse effects on retained trees, without compromising site safety.

### 3 TREE REMOVAL

A total of fourteen (14) Significant Trees are to be removed within the Cheesman's Bush and Puhinui Gully SEAs, as shown on Figures 4 and 5:

- Two (2) Significant Trees are located within the Puhinui Gully SEA; and
- Twelve (12) Significant Trees are located within the Cheesman's Bush SEA.

The process for seed collection within the Puhinui Gully and Cheesman's Bush SEAs is set out in the TMP and will be undertaken in consultation with Mana Whenua.

All other Significant Trees will be retained and managed in accordance with the requirements set out in this OGTMP.

#### **Within the Puhinui Gully SEA:**

Both trees within the Puhinui Creek SEA will be removed using low impact methods, such as crane or HIAB assisted removal.

#### **Within the Cheesman's Bush SEA:**

Two (2) trees (Tree 262 and Tree 288) within the Cheesman's Bush SEA will be removed using low impact methods, such as crane or HIAB assisted removal.

The remaining trees may be removed using conventional arboricultural measures, such as dismantling or mechanical extraction.

### 3.1 Mana Whenua – offering of logs for repurposing

The fourteen (14) Significant Trees from the Puhinui Gully and Cheesman's Bush SEAs will be offered to Mana Whenua for repurposing in accordance with the following requirements:

- Mana Whenua will be notified of the removal of any of the fourteen (14) Significant Trees (in their entirety) at least three months prior to their removal and the trees will be offered to Mana Whenua, with logs transported by NZTA to a location of their choosing within the Auckland region;
- If Mana Whenua choose not to accept the logs of the removed trees, these logs will be left in situ or retained within the Project area for use as ecological habitat; and
- Mana Whenua will have the opportunity to repurpose the removed trees for cultural expression within the Project area. This may include, for example, incorporating Mana Whenua values and

narratives through pou, art, sculptures and mahi toi.

## 4 TREE TOPPING AND PRUNING

Figures 4 and 5 show the Significant Trees within the Puhinui Gully and Cheesman's Bush SEAs that will require topping or pruning to create and maintain appropriate clearance around the bridge structures to:

- Enable the construction of the structures;
- Ensure that sightlines are maintained;
- Ensure that the potential failure of trees and branches does not pose a risk to road users; and/or
- Provide for maintenance of the structures.

Pruning and/or topping of trees within the SEAs will be limited to the Significant Trees identified on Figures 4 and 5 (**Managed Trees**). In total there are:

- Three (3) Managed Trees at Puhinui Gully (all are anticipated to survive); and
- Forty-eight (48) Managed Trees at Cheesman's Bush (see Table 3 below), of which:
  - Seven (7) Managed Trees are unlikely to survive;
  - Twenty-one (21) Managed Trees where survival is uncertain; and
  - Twenty (20) Managed Trees are anticipated to survive.

A clearance space of 2m beneath the bridge deck is required to allow for a platform to be attached to the underside of each bridge for under-structure inspection and maintenance (anticipated to include graffiti removal, bridge beam bearing inspections and replacements, and tree canopy management).

This space is referred to as the Bridge Maintenance Area and is illustrated on Figures 2, 3, 4 and 5 and extends 5m either side of the bridge abutments. Ongoing pruning and trimming of the canopy for maintenance will be limited to ensuring that the tree canopy does not extend into this zone.

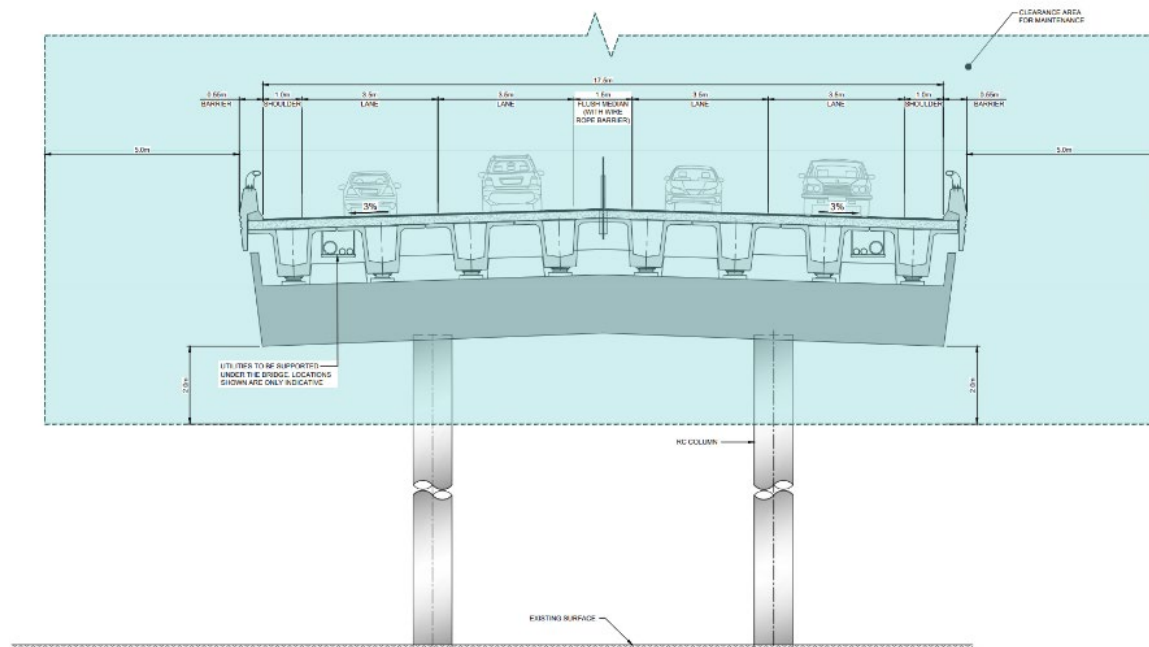


Figure 2 Image showing Bridge Maintenance Area for Puhinui Gully Bridge

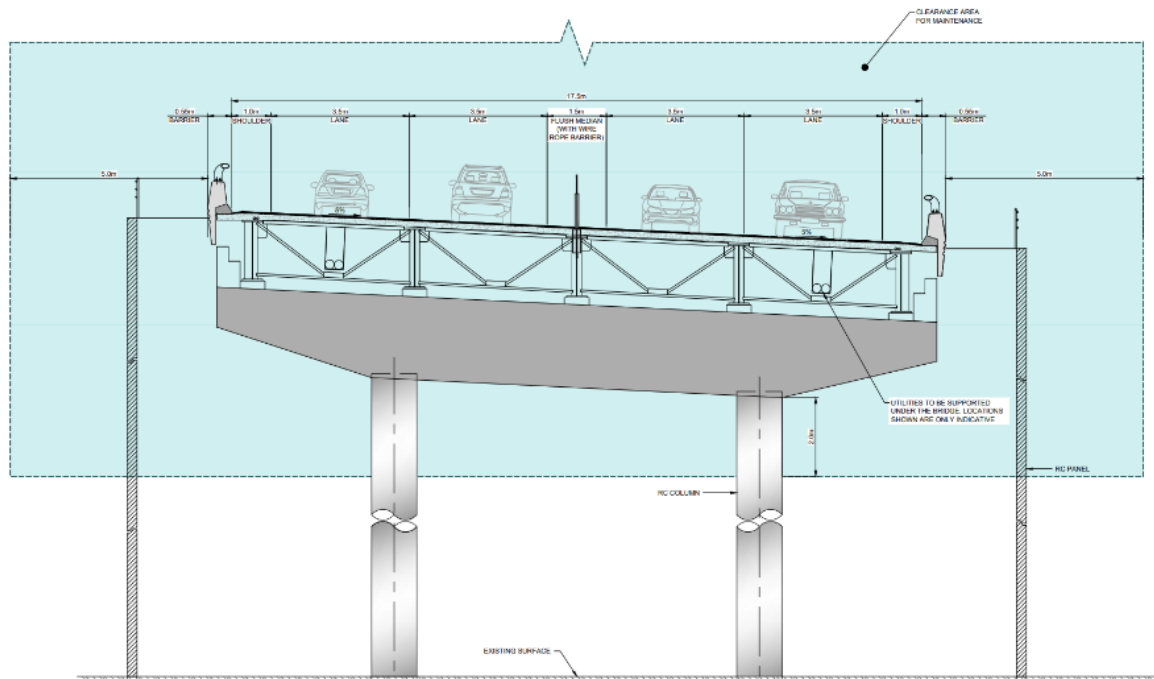


Figure 3 Image showing Bridge Maintenance Area for Cheesman's Bush Bridge

### Construction protocols: Puhinui Gully

Prior to the commencement of construction activities at Puhinui Gully, the Project Arborist shall:

- Oversee the survey of the Managed Trees to confirm pruning parameters to prevent encroachment into the Bridge Maintenance Area; and
- Clearly delineate the Construction Footprint and dripline and rootzone of Significant Trees to be retained. These areas are to be fenced or demarcated with spray paint by the Works Arborist.

During the construction period:

- All earthworks and heavy machinery shall be limited to the Construction Footprint (identified in Figure 4);
- No machinery shall operate within the high-quality SEA to the west of the bridge footprint; and
- Pruning shall be undertaken in accordance with best arboriculture practice under the direction of the Works Arborist.

### Construction protocols: Cheesman's Bush

Prior to the commencement of construction activities at Cheesman's Bush, the Project Arborist shall:

- Oversee the survey of the Managed Trees to confirm their final topping height and/or pruned shape to prevent encroachment into the Bridge Maintenance Area;
- Record the required reduction for each tree using laser technology (or similar methods providing the same level of accuracy), to inform the physical topping works to be implemented under the direction of the Works Arborist;
- Clearly delineate the Construction Footprint and the dripline and rootzone of Significant Trees to be retained. These areas are to be fenced or demarcated with spray paint by the Works Arborist;
- Approve mechanical construction plans (e.g. crane lift plans) where it is possible that Significant Trees will be impacted; and
- Recommend and oversee the implementation of shade emulating methods where practicable, such as shade cloth (or the use of similar methodologies), during the construction work period.

During the construction period:

- All earthworks and heavy machinery shall be limited to the Construction Footprint (identified in Figure 5); and
- Pruning shall be undertaken in accordance with best arboriculture practice under the direction of the Works Arborist.

All topped and pruned trees within Cheesman's Bush will remain in situ unless the Project Arborist determines that complete removal of a tree (which was not previously anticipated) is required for health and safety reasons (e.g. if a tree becomes stressed following topping/trimming and poses a safety risk to the operation of the road). Any such tree will then be offered to Mana Whenua in accordance with the process set out in Section 3.1 above.

### **Ongoing maintenance**

Following completion of construction of the bridge structures, the Managed Trees will be surveyed annually to confirm the extent of topping and/or pruning required to ensure that the canopy does not encroach into the Bridge Maintenance Area.

The annual Managed Tree survey will be undertaken by a suitably qualified and experienced arborist and will include recommendations for the pruning that is required to ensure that the Bridge Maintenance Area remains clear of vegetation.

A suitably qualified and experienced arborist will implement the pruning recommended above and ensure that:

- The understorey remains undisturbed when the pruning work is undertaken;
- Pruning work is undertaken manually from the ground on foot; or
- From the bridge maintenance platform attached to the underside of the bridge.

As part of the pruning process, the Managed Trees shall be inspected to confirm the condition of each tree. Any trees that have not survived or are in poor health will be left in situ unless they pose a health and safety risk to road users and/or people on the ground and need to be removed.

## **5 REPORTING**

A Tree Works Completion Report shall be prepared by the Project Arborist and provided to Auckland Council within twenty (20) working days following the completion of construction works at both Cheesman's Bush and Puhinui Gully.

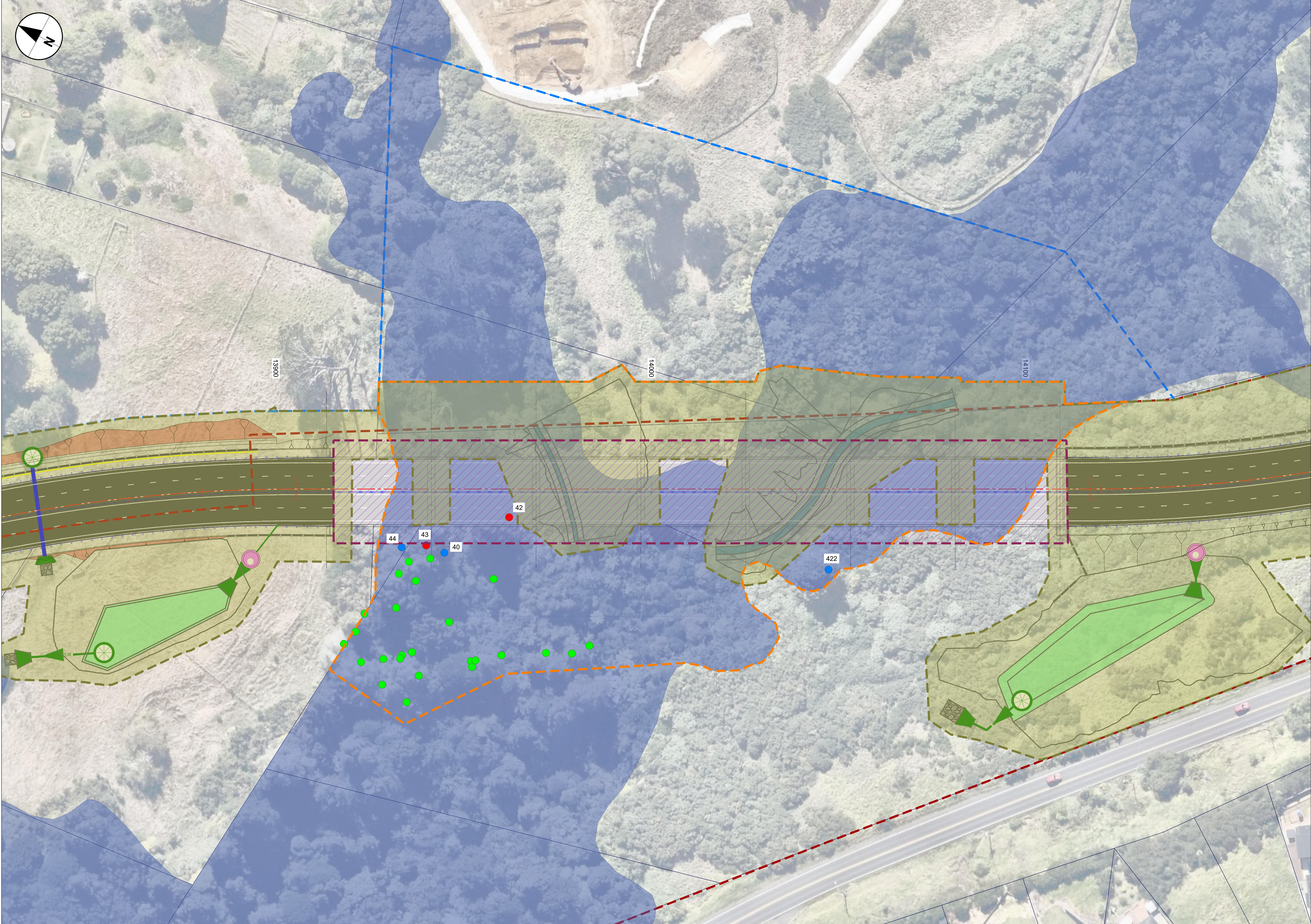
The Tree Works Completion Report shall include:

- (a) A summary of tree removal and pruning/topping undertaken;
- (b) Confirmation that the tree removal, pruning and topping has been undertaken in accordance with the measures contained within this OGTMP;
- (c) A description of the health of the Managed Trees;
- (d) Confirmation that the works in paragraph (a) above were completed under the direction of the Project Arborist; and
- (e) Details of any likely ongoing pruning/topping requirements.

## Puhinui Gully Bridge (38 Mill Road, 395A Redoubt Road)

*Table 2 Affected Significant Trees and Anticipated Works*

| Tree ID | Species   | DBH (cm) | Age Class  | Impact                                     | Comments                                                                                                                                               |
|---------|-----------|----------|------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 40      | Kahikatea | 43.2     | Mature     | Tree to be trimmed and expected to survive | Pruning is likely to be required as part of the Bridge Maintenance Area. The tree is expected to survive due to the low level of pruning anticipated.  |
| 43      | Kahikatea | 69.2     | Large      | Tree to be removed                         | Full removal is required as the tree is growing towards the bridge and poses a risk to the bridge structure.                                           |
| 44      | Kahikatea | 39       | Mature     | Tree to be trimmed and expected to survive | Pruning is likely to be required as part of the Bridge Maintenance Area. The tree is expected to survive due to the low level of pruning anticipated.  |
| 422     | Tōtara    | 212      | Old-growth | Tree to be trimmed and expected to survive | Pruning is likely to be required as part of the Bridge Maintenance Area. This tree is expected to survive due to the low level of pruning anticipated. |
| 42      | Kahikatea | 108.2    | Large      | Tree to be removed                         | Tree to be removed as it stands in footprint of proposed bridge.                                                                                       |



This drawing is confidential and shall only be used for the purpose of this project. The signing of this title block confirms the design and drafting of this project have been prepared and checked in accordance with the AECOM quality assurance system to ISO 9001.

CONSULTANT

**AECOM**

**Beca**

AECOM New Zealand Ltd  
NZ.B.N 9429032091335  
www.aecom.com

CLIENT

**NZ TRANSPORT**

**AGENCY**

WAKA KOTAHĪ

PROJECT

**Mill Road - Stage 1**

Consenting Design

**Roads of National Significance**

ISSUE/REVISION

|     |          |                 |
|-----|----------|-----------------|
| F   | 24.08.26 | FOR INFORMATION |
| E   | 04.06.26 | FOR INFORMATION |
| D   | 02.06.26 | FOR INFORMATION |
| C   | 07.05.26 | FOR INFORMATION |
| B   | 14.04.26 | FOR INFORMATION |
| A   | 20.03.26 | FOR INFORMATION |
| I/R | DATE     | DESCRIPTION     |

PROJECT NUMBER

60755376

SHEET TITLE

PUHINUI CREEK BRIDGE  
VEGETATION AREA IMPACT

SHEET NUMBER

60755376-SKE-LD-0102

SCALE

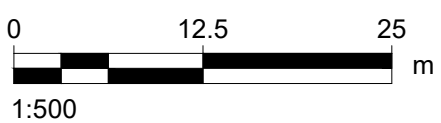


Figure 4 – Puhinui Gully bridge Significant Trees and potential impacts

## Cheesman's Bush Bridge

Table 3 Affected Significant Trees and Anticipated Works

| Tree ID | Species   | DBH (cm) | Age Class  | Impact                                                      | Notes / Management Measure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------|-----------|----------|------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 259     | Puriri    | 163.6    | Old-growth | <b>Tree to be removed</b>                                   | Removal is required as the existing tree stands directly within Construction Footprint for the main retaining wall construction and road alignment.                                                                                                                                                                                                                                                                                                                                                                                                            |
| 303     | Māhoe     | 91.2     | Old-growth | <b>Tree to be topped or trimmed - survival is uncertain</b> | This tree stands beneath the bridge deck near the centre of the final bridge span. Due to its height, topping will be required to facilitate installation of the bridge deck (and to ensure the tree's canopy is clear of the Bridge Maintenance Area). Māhoe are tolerant of heavy pruning and based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive but this tree is assessed as 'uncertain' so that all environmental factors can be assessed at the time of construction. |
| 282     | Taraire   | 106.2    | Large      | <b>Tree to be topped - survival is unlikely</b>             | Topping of this tree will be required as it is located within the Bridge Maintenance Area. Taraire have a low tolerance for heavy pruning and this tree is unlikely to survive in the long term.                                                                                                                                                                                                                                                                                                                                                               |
| 258     | Taraire   | 93.2     | Large      | <b>Tree to be removed</b>                                   | Heavy topping of this tree will be required as the tree is located beneath the bridge at its lowest point. It is also within the Construction Footprint for the bridge abutment. Taraire have a low tolerance for heavy pruning, therefore removal of this tree is required.                                                                                                                                                                                                                                                                                   |
| 307     | Puriri    | 90.6     | Large      | <b>Tree to be topped - survival is uncertain</b>            | A significant reduction will be required due to the tree's location within the Bridge Maintenance Area and proximity to the bridge edge. Extensive ongoing pruning will be required. Its long-term survival is assessed as 'uncertain'.                                                                                                                                                                                                                                                                                                                        |
| 342     | Tawa      | 64.6     | Large      | <b>Tree to be removed</b>                                   | This tree stands on the northern side of the proposed bridge and will be directly impacted by abutment construction within the Construction Footprint.                                                                                                                                                                                                                                                                                                                                                                                                         |
| 281     | Kahikatea | 62.2     | Large      | <b>Tree to be topped - survival is unlikely</b>             | This tree stands beneath and centrally within the proposed bridge alignment. Approximately 50% of the canopy will require removal                                                                                                                                                                                                                                                                                                                                                                                                                              |

|     |         |      |        |                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----|---------|------|--------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |         |      |        |                                                         | to accommodate the construction of the bridge deck. While kahikatea trees can tolerate some pruning, in this case the extent required is extensive and this tree is unlikely to survive in the long term.                                                                                                                                                                                                                                                                                              |
| 292 | Māhoe   | 51.2 | Large  | Tree to be topped or trimmed - survival is unlikely     | Located on the outer edge of the proposed bridge deck, approximately 50% of the tree canopy will need to be removed. While māhoe can tolerate heavy pruning, the extent anticipated is extensive and this tree has been assessed as unlikely to survive long term.                                                                                                                                                                                                                                     |
| 247 | Māhoe   | 34.2 | Large  | Tree to be topped or trimmed - survival is uncertain    | This tree stands beneath the western side of the main bridge deck. Due to the local topography, less height reduction is required, and as a smaller specimen (when compared to Tree 292), it is anticipated to tolerate a higher level of pruning. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain'. |
| 288 | Kanuka  | 33   | Large  | Tree to be removed                                      | This tree is located near the future northern abutment and will require removal. The entire canopy will be beneath the bridge and kanuka as a species is not known to tolerate heavy pruning.                                                                                                                                                                                                                                                                                                          |
| 284 | Mapou   | 29.4 | Large  | Tree to be topped or trimmed – tree expected to survive | This tree stands directly beneath the bridge near the northern abutment. While topping is anticipated, mapou as a species is tolerant of moderate levels of pruning. This tree is therefore likely to survive given the relatively low level of pruning anticipated.                                                                                                                                                                                                                                   |
| 336 | Taraire | 70.2 | Mature | Tree to be removed                                      | This tree stands on the northeast side of the proposed bridge and will be directly impacted by the Construction Footprint for the bridge abutment.                                                                                                                                                                                                                                                                                                                                                     |
| 250 | Taraire | 64.2 | Mature | Tree to be topped or trimmed - survival is unlikely     | Heavy topping of this tree will be required as the tree is located beneath the bridge at its lowest point. Taraire have a low tolerance for heavy pruning, therefore this tree has been assessed as unlikely to survive in the long term.                                                                                                                                                                                                                                                              |
| 257 | Taraire | 53.2 | Mature | Tree to be removed                                      | Tree 257 is located within the Construction Footprint for the southwest abutment. Taraire have a low tolerance for heavy pruning, and accordingly this tree will be removed as survival is unlikely.                                                                                                                                                                                                                                                                                                   |

|     |           |      |        |                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----|-----------|------|--------|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 277 | Kahikatea | 49.2 | Mature | Tree to be topped or trimmed - survival is uncertain | This tree is located beneath the bridge structure. Approximately 50% of the canopy will require removal to accommodate bridge construction. While kahikatea can tolerate some pruning, the extent required is substantial. The long-term viability of this tree is therefore uncertain.                                                                                                                          |
| 251 | Taraire   | 46.2 | Mature | Tree to be topped or trimmed - survival is uncertain | While this tree is partially located beneath the bridge, pruning can be limited to retain viability of this tree. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain' due to the level of pruning required.       |
| 279 | Tawa      | 40.6 | Mature | Tree to be topped or trimmed - survival is uncertain | While this tree stands beneath the bridge, the extent of pruning is likely to be tolerable given its size and the known tolerance of tawa trees for pruning. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain'. |
| 256 | Tawa      | 31.6 | Mature | Tree to be topped or trimmed - survival is uncertain | While this tree stands beneath the bridge, the extent of pruning is likely to be tolerable given its size and the known tolerance of tawa trees for pruning. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain'. |
| 252 | Tawa      | 30.6 | Mature | Tree to be topped or trimmed - survival is uncertain | While this tree stands beneath the bridge, the extent of pruning is likely to be tolerable given its size and the known tolerance of tawa trees for pruning. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain'. |
| 296 | Kohekohe  | 28.8 | Mature | Tree to be topped or trimmed - survival is uncertain | Kohekohe can tolerate some pruning. As this tree is located at the eastern edge of the bridge it is anticipated that light penetration will still occur and is likely to enable the survival of the tree. Based on the level of information that is currently available, it is likely that this tree will survive. However, a conservative approach has                                                          |

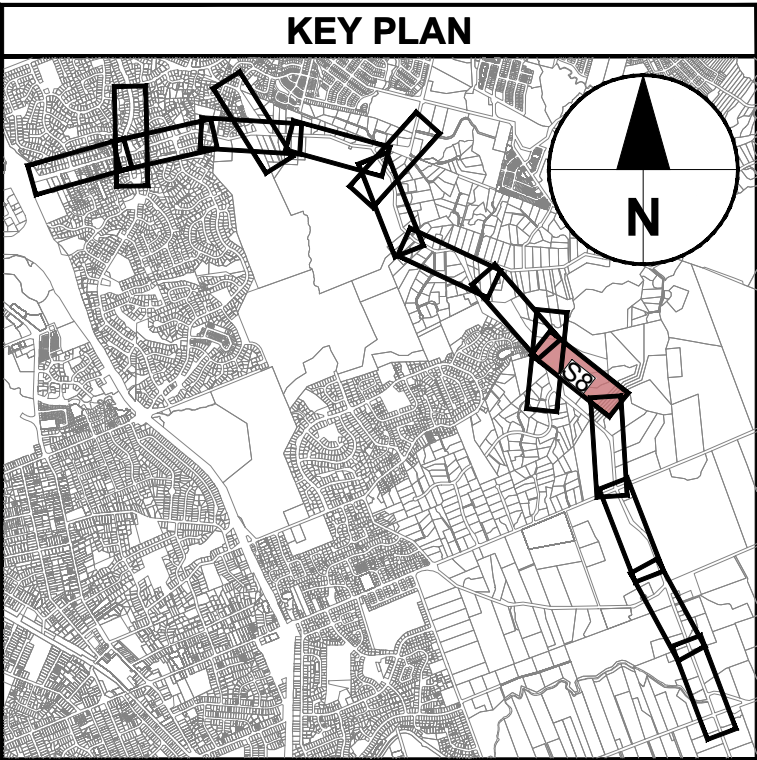
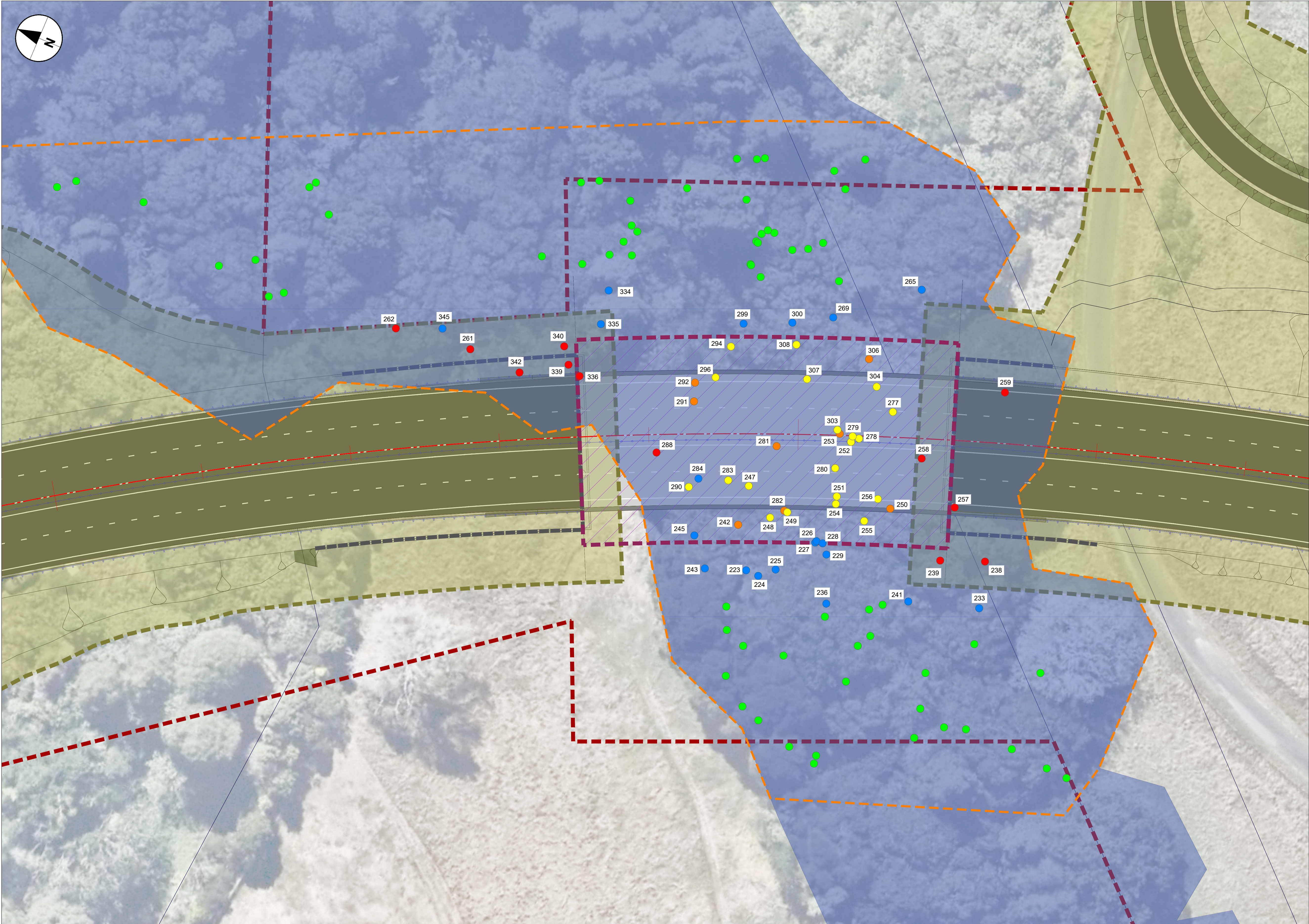
|     |          |      |        |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----|----------|------|--------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |          |      |        |                                                             | been adopted, and its survival has been assessed as being 'uncertain' due to the level of pruning required.                                                                                                                                                                                                                                                                                                                                                                                                    |
| 283 | Tawa     | 27.6 | Mature | <b>Tree to be topped or trimmed - survival is uncertain</b> | This tree is located directly beneath the bridge near the northern side. While tawa trees are tolerant of pruning to a degree, extensive height reduction will be required in this case. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain' due to the level of pruning required.                              |
| 304 | Kohekohe | 26.8 | Mature | <b>Tree to be topped or trimmed - survival is uncertain</b> | Kohekohe as a species can tolerate some pruning. Considering this particular tree is located at the eastern edge of the bridge it is anticipated that light penetration will still occur. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain'.                                                                  |
| 280 | Tawa     | 25.6 | Mature | <b>Tree to be topped or trimmed - survival is uncertain</b> | While this tree stands beneath the bridge, the extent of pruning is likely to be tolerable given its size and the known tolerance of tawa trees for pruning. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain'.                                                                                               |
| 278 | Māhoe    | 24.2 | Mature | <b>Tree to be topped or trimmed - survival is uncertain</b> | This tree stands beneath the western side of the main bridge deck, where the topography reduces the extent of height reduction required. As a smaller specimen (when compared to tree 292), it is anticipated to tolerate a higher level of pruning. Based on the level of information that is currently available, it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain' due to its location under the bridge. |
| 290 | Māhoe    | 24.2 | Mature | <b>Tree to be topped or trimmed - survival is uncertain</b> | This tree is located beneath the northwest side of the main bridge deck, in a position that will likely require less height reduction. As a smaller specimen, it is anticipated to tolerate a higher level of pruning. Based on the level of information that is currently available, it is likely that this tree will survive. However, a                                                                                                                                                                     |

|            |        |       |                     |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------|--------|-------|---------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            |        |       |                     |                                                             | conservative approach has been adopted, and its survival has been assessed as being 'uncertain' due to its location.                                                                                                                                                                                                                                                                                                                                                                  |
| <b>249</b> | Tawa   | 21.6  | Mature              | <b>Tree to be topped or trimmed - survival is uncertain</b> | While this tree may be retained, ongoing pruning and management will be required to ensure the tree's canopy is clear of the Bridge Maintenance Area, therefore a conservative approach has been adopted, and its survival has been assessed as being 'uncertain' due to its growing location.                                                                                                                                                                                        |
| <b>291</b> | Māhoe  | 18.2  | Mature              | <b>Tree to be topped or trimmed - survival is unlikely</b>  | Due to shading from the adjacent tree (Tree 292) and the overhead bridge structure, this tree is less likely to survive due to the fundamental change in lighting conditions.                                                                                                                                                                                                                                                                                                         |
| <b>253</b> | Māhoe  | 17.2  | Mature              | <b>Tree to be topped or trimmed - survival is unlikely</b>  | Due to shading from the adjacent tree (Tree 303) and the overhead bridge structure, this tree is less likely to survive due to the fundamental change in lighting conditions.                                                                                                                                                                                                                                                                                                         |
| <b>339</b> | Mapou  | 16.4  | Mature              | <b>Tree to be removed</b>                                   | This tree located within/directly adjacent to the Construction Footprint for the proposed abutment. Enabling works are expected in this location that will adversely impact this tree and require its removal.                                                                                                                                                                                                                                                                        |
| <b>254</b> | Tawa   | 22.6  | Specific sub-mature | <b>Tree to be topped or trimmed - survival is uncertain</b> | This tree is located adjacent to the bridge structure on the eastern edge at the midpoint. Ongoing pruning will be required to ensure the tree's canopy is clear of the Bridge Maintenance Area This tree is relatively small and considering the bridge height at this location it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain' due to the likely ongoing pruning requirements. |
| <b>255</b> | Tawa   | 16.6  | Specific sub-mature | <b>Tree to be topped or trimmed - survival is uncertain</b> | This tree is located adjacent to the bridge structure on the eastern edge at the midpoint. Ongoing pruning will be required to maintain clearance of the bridge structure due to the tree's growing location. This tree is relatively small and considering the bridge height at this location it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain' due to its location.              |
| <b>236</b> | Puriri | 126.6 | **Old-growth**      | <b>Tree to be trimmed and expected to survive</b>           | The trunk of this tree is set back from the bridge edge. However, the canopy extends some way eastwards towards the bridge edge and may require pruning to ensure the tree's canopy is clear                                                                                                                                                                                                                                                                                          |

|            |         |       |                |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|---------|-------|----------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            |         |       |                |                                                             | of the Bridge Maintenance Area. Based on the level of information that is currently available, it is likely that this tree will survive. However, this will need to be determined on site at the time of topping works when all environmental factors can be assessed.                                                                                                                                                                                              |
| <b>261</b> | Taraire | 122.2 | **Old-growth** | <b>Tree to be removed</b>                                   | This tree is located within the Construction Footprint for the northeastern abutment and will need to be removed.                                                                                                                                                                                                                                                                                                                                                   |
| <b>294</b> | Māhoe   | 38.2  | Large          | <b>Tree to be topped or trimmed - survival is uncertain</b> | This tree is located to the east of the proposed bridge and may require lateral pruning and possibly topping to ensure the tree's canopy is clear of the Bridge Maintenance Area. However, māhoe is a tolerant species and based on the level of information that is currently available, it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain' due to its location. |
| <b>248</b> | Taraire | 72.2  | Mature         | <b>Tree to be topped or trimmed - survival is uncertain</b> | This tree stands on the southwest outer edge of the bridge. Topping is anticipated to be required due to its close proximity to the bridge, but its ongoing survival is likely due to the availability of light and percentage of remaining intact canopy. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain' due to its location.                                                                          |
| <b>265</b> | Taraire | 69.2  | Mature         | <b>Tree to be trimmed and expected to survive</b>           | This tree is on the edge of the Construction Footprint and minor pruning is anticipated. Based on the level of information that is currently available, it is likely that this tree will survive.                                                                                                                                                                                                                                                                   |
| <b>233</b> | Taraire | 66.2  | Mature         | <b>Tree to be trimmed and expected to survive</b>           | The canopy of this tree extends into the Construction Footprint and minor pruning is anticipated. Based on the level of information that is currently available, it is likely that this tree will survive.                                                                                                                                                                                                                                                          |
| <b>306</b> | Taraire | 65.2  | Mature         | <b>Tree to be topped or trimmed - survival is unlikely</b>  | Heavy topping will be required due to the bridge being near its lowest point where this tree is located (southeastern side). Taraire has a low tolerance for heavy pruning. As such, survival is unlikely in this particular location.                                                                                                                                                                                                                              |
| <b>262</b> | Taraire | 64.2  | Mature         | <b>Tree to be removed</b>                                   | This tree stands directly adjacent to the Construction Footprint for the abutment and associated earthworks are anticipated to impact this tree. Considering the ongoing clearance requirements and the inability for taraire to adapt to ongoing pruning, the removal of this tree is proposed.                                                                                                                                                                    |

ISO A1 594mm x 841mm

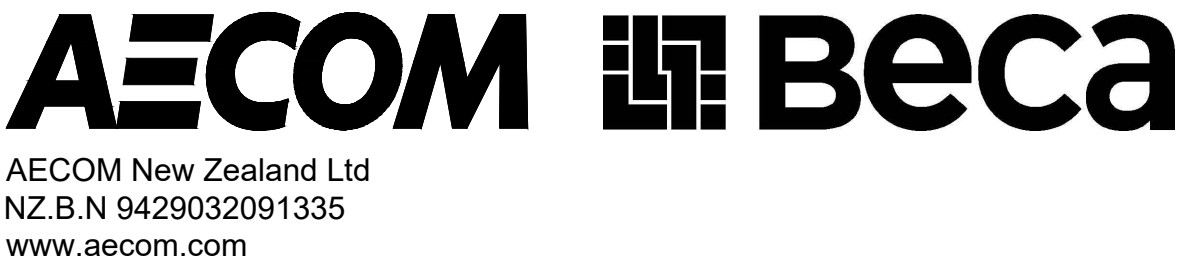
Last saved by: ARAMBULOEV(2026-08-24) Last Plotted: 2026-08-24  
Filename: C:\P\WORKING\AECOM\_AU\_NZ\DWG\60755376-SKE-LD-0101.DWG



- LEGEND:**
- CONSTRUCTION FOOTPRINT
  - MAINTENANCE ZONE
  - SEA AREA
  - TREES TO BE RETAINED AND UNAFFECTED BY THE PROJECT
  - TREES TO BE TRIMMED AND EXPECTED TO SURVIVE
  - TREES TO BE TOPPED OR TRIMMED WHERE SURVIVAL IS UNCERTAIN (REFER TO TABLE 3 OF THE OGMP FOR MORE DETAILS)
  - TREES TO BE TOPPED OR TRIMMED WHERE SURVIVAL IS UNLIKELY (REFER TO TABLE 3 OF THE OGMP FOR MORE DETAILS)
  - TREES TO BE REMOVED
  - EXISTING DESIGNATION BOUNDARY
  - PROPOSED ALTERATION TO DESIGNATION
  - DENOTES THE AREA OF NOTABLE TREES WITHIN THE AREA SURVEYED

This drawing is confidential and shall only be used for the purpose of this project. The signing of this title block confirms the design and drafting of this project have been prepared and checked in accordance with the AECOM quality assurance system to ISO 9001.

CONSULTANT



CLIENT



PROJECT



ISSUE/REVISION

| ISSUE/REVISION | DATE     | DESCRIPTION     |
|----------------|----------|-----------------|
| F              | 24.08.26 | FOR INFORMATION |
| E              | 04.06.26 | FOR INFORMATION |
| D              | 02.06.26 | FOR INFORMATION |
| C              | 07.05.26 | FOR INFORMATION |
| B              | 14.04.26 | FOR INFORMATION |
| A              | 20.03.26 | FOR INFORMATION |
| I/R            | DATE     | DESCRIPTION     |

PROJECT NUMBER

60755376

SHEET TITLE

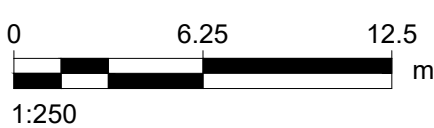
CHEESMANS BUSH BRIDGE  
VEGETATION AREA IMPACT

SHEET NUMBER

60755376-SKE-LD-0101

Figure 5 – Cheesman's Bush bridge Significant Trees and potential impacts

SCALE



|     |         |      |        |                                                                |                                                                                                                                                                                                                                                                                                                                                                        |
|-----|---------|------|--------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 239 | Taraire | 63.2 | Mature | <b>Tree to be removed</b>                                      | This tree stands directly adjacent to the Construction Footprint for the abutment and associated earthworks are anticipated to impact this tree. Considering the ongoing clearance requirements and the inability for taraire to adapt to ongoing pruning, the removal of this tree is proposed.                                                                       |
| 245 | Taraire | 63.2 | Mature | <b>Tree to be trimmed and expected to survive</b>              | This tree is located near the northwest outer edge of the bridge. While pruning is anticipated due to its close proximity, survival is expected due to the availability of light and the percentage of canopy that will be able to be left intact.                                                                                                                     |
| 238 | Taraire | 56.2 | Mature | <b>Tree to be removed</b>                                      | This tree stands directly adjacent to Construction Footprint for the, with earthworks anticipated in close proximity to this tree. Taraire do not adapt well to ongoing pruning, and so this tree will be removed.                                                                                                                                                     |
| 242 | Taraire | 53.2 | Mature | <b>Tree to be topped or trimmed - survival is uncertain</b>    | This tree stands on the northwest outer edge of the bridge. Pruning is required due to its close proximity to the bridge, but ongoing survival is expected due to the availability of light and percentage of remaining intact canopy. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain' due to its location. |
| 223 | Taraire | 51.2 | Mature | <b>Tree to be topped or trimmed – tree expected to survive</b> | This tree stands some distance to the west of the proposed bridge. As the canopy extends some way east, pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available, it is likely that this tree will survive.                                                          |
| 299 | Taraire | 48.2 | Mature | <b>Tree to be trimmed and expected to survive</b>              | This tree stands some distance to the east of the proposed bridge. As the canopy extends some way east, pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available, it is likely that this tree will survive.                                                          |
| 228 | Taraire | 44.2 | Mature | <b>Tree to be trimmed and expected to survive</b>              | This tree stands to the west of the proposed bridge. As the canopy extends some way east, pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive.                                         |
| 224 | Taraire | 42.2 | Mature | <b>Tree to be trimmed and expected to survive</b>              | This tree stands some distance to the west of the proposed bridge. As the canopy extends some way east, pruning may be                                                                                                                                                                                                                                                 |

|     |           |      |        |                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----|-----------|------|--------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |           |      |        |                                                      | required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on level of information that is currently available, it is likely that this tree will survive.                                                                                                                                                                                                                                                                                   |
| 334 | Kahikatea | 40.2 | Mature | Tree to be trimmed and expected to survive           | This tree stands some distance to the east of the proposed bridge. As the canopy extends some way west, pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available, it is likely that this tree will survive.                                                                                                                                                        |
| 308 | Tawa      | 35.6 | Mature | Tree to be topped or trimmed - survival is uncertain | This tree is located within the Bridge Maintenance Area and is likely to require pruning. As the canopy extends some way west, pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available, it is likely that this tree will survive. However, a conservative approach has been adopted, and its survival has been assessed as being 'uncertain' due to its location. |
| 243 | Puriri    | 34.6 | Mature | Tree to be trimmed and expected to survive           | This tree is located to the west of the proposed bridge. As the canopy does extend eastwards towards the bridge, pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive.                                                                                                                |
| 269 | Kahikatea | 32.2 | Mature | Tree to be trimmed and expected to survive           | This tree stands some distance to the east of the proposed bridge. As the canopy does extend some way west, pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available, it is likely that this tree will survive.                                                                                                                                                    |
| 241 | Māhoe     | 21.2 | Mature | Tree to be trimmed and expected to survive           | This tree stands some distance to the east of the proposed bridge. As the canopy does extend some way west, pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive.                                                                                                                     |
| 340 | Māhoe     | 21.2 | Mature | Tree to be removed                                   | Removal is required as this tree is located in the Construction Footprint for the northern bridge abutment.                                                                                                                                                                                                                                                                                                                                                          |

|            |           |      |                     |                                                   |                                                                                                                                                                                                                                                                                                                                                                                                |
|------------|-----------|------|---------------------|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>226</b> | Taraire   | 36.2 | Specific sub-mature | <b>Tree to be trimmed and expected to survive</b> | This tree stands immediately to the west of the proposed bridge. Pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available, it is likely that this tree will survive.                                                                                                                         |
| <b>229</b> | Taraire   | 33.2 | Specific sub-mature | <b>Tree to be trimmed and expected to survive</b> | This tree stands to the west of the proposed bridge. Pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive.                                                                                                      |
| <b>227</b> | Taraire   | 32.2 | Specific sub-mature | <b>Tree to be trimmed and expected to survive</b> | This tree stands to the west of the proposed bridge. Pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on level of information that is currently available, it is likely that this tree will survive.                                                                                                                                         |
| <b>225</b> | Taraire   | 23.2 | Specific sub-mature | <b>Tree to be trimmed and expected to survive</b> | This tree stands to the west of the proposed bridge. Pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive.                                                                                                      |
| <b>300</b> | Kahikatea | 22.2 | Specific sub-mature | <b>Tree to be trimmed and expected to survive</b> | This tree stands some distance to the east of the proposed bridge. As the canopy does extend to the west, pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available, it is likely that this tree will survive.                                                                                |
| <b>335</b> | Kahikatea | 20.2 | Specific sub-mature | <b>Tree to be trimmed and expected to survive</b> | This tree stands to the east of the proposed bridge and near the northeastern corner of the new northern abutment. As the canopy does extend to the west, pruning may be required to ensure the tree's canopy is clear of the Bridge Maintenance Area. Based on the level of information that is currently available (e.g. species characteristics), it is likely that this tree will survive. |
| <b>345</b> | Kahikatea | 20.2 | Specific sub-mature | <b>Tree to be trimmed and expected to survive</b> | This tree stands to the east of the northern abutment. Works are anticipated in close proximity to this tree as part of earthworks and may require pruning. Based on the level of information that is currently available, it is likely that this tree will survive.                                                                                                                           |