

NOTES

GENERAL

Read drawings in conjunction with the specification & details. Refer to drawings;

CD-2119-100 General Arrangement Plans

CD-2119-200 Planting Plans

CD-2119-800 Sections CD-2119-900 Landscape Details

Refer to Architect's and Engineer's Drawings for precise information regarding paving, finished levels, fences and drainage details.

SERVICES

Services to be confirmed on site. Before landscape work is commenced, Landscape contractor is to establish the positions of all service lines and protect them from damage during construction.

WORKING AROUND EXISTING TREES Excavation within existing trees Protection Zone is to be carried out by hand.

If any concentration of roots or roots with a diameter of 50mm or more are uncovered in the new formation zone the contractor is to obtain advice & direction from Project Arborist.

D	ISSUE FOR CONSTRUCTION	27.09.2022
C	ISSUE FOR CONSTRUCTION	19.08.2022
В	ISSUE FOR CONSTRUCTION	02.07.2021
А	ISSUE FOR INFORMATION	16.06.2021
ISSUE	DESCRIPTION	DATE

27.09.2022	
19.08.2022	
02.07.2021	
16.06.2021	
DATE	





MANANGLE FOOTBRIDGE

CLIENT MIRVAC

DRAWING

LANDSCAPE GENERAL ARRANGEMENT PLAN 01 DRAWING NUMBER ISSUE CD-2119-101 D

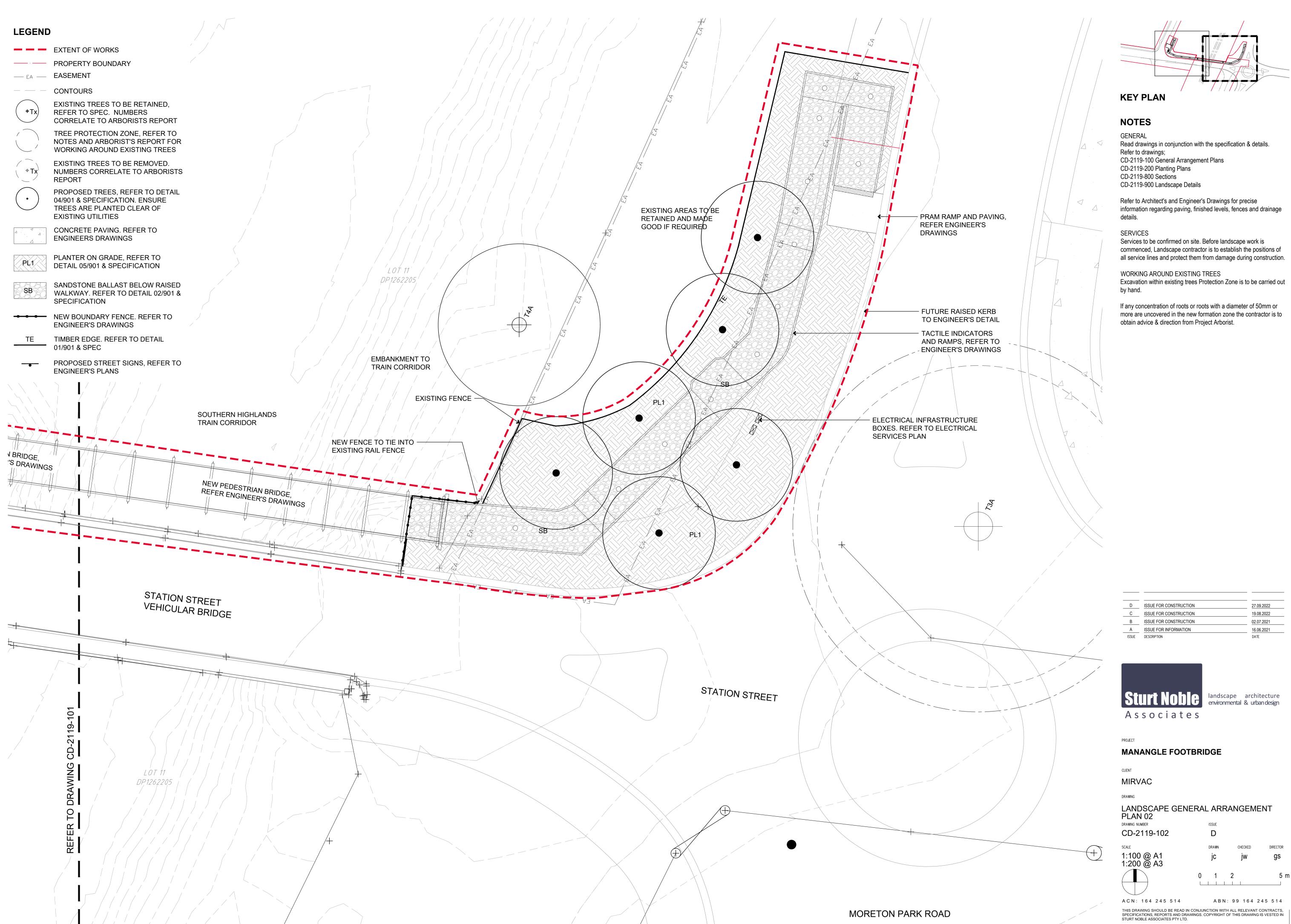


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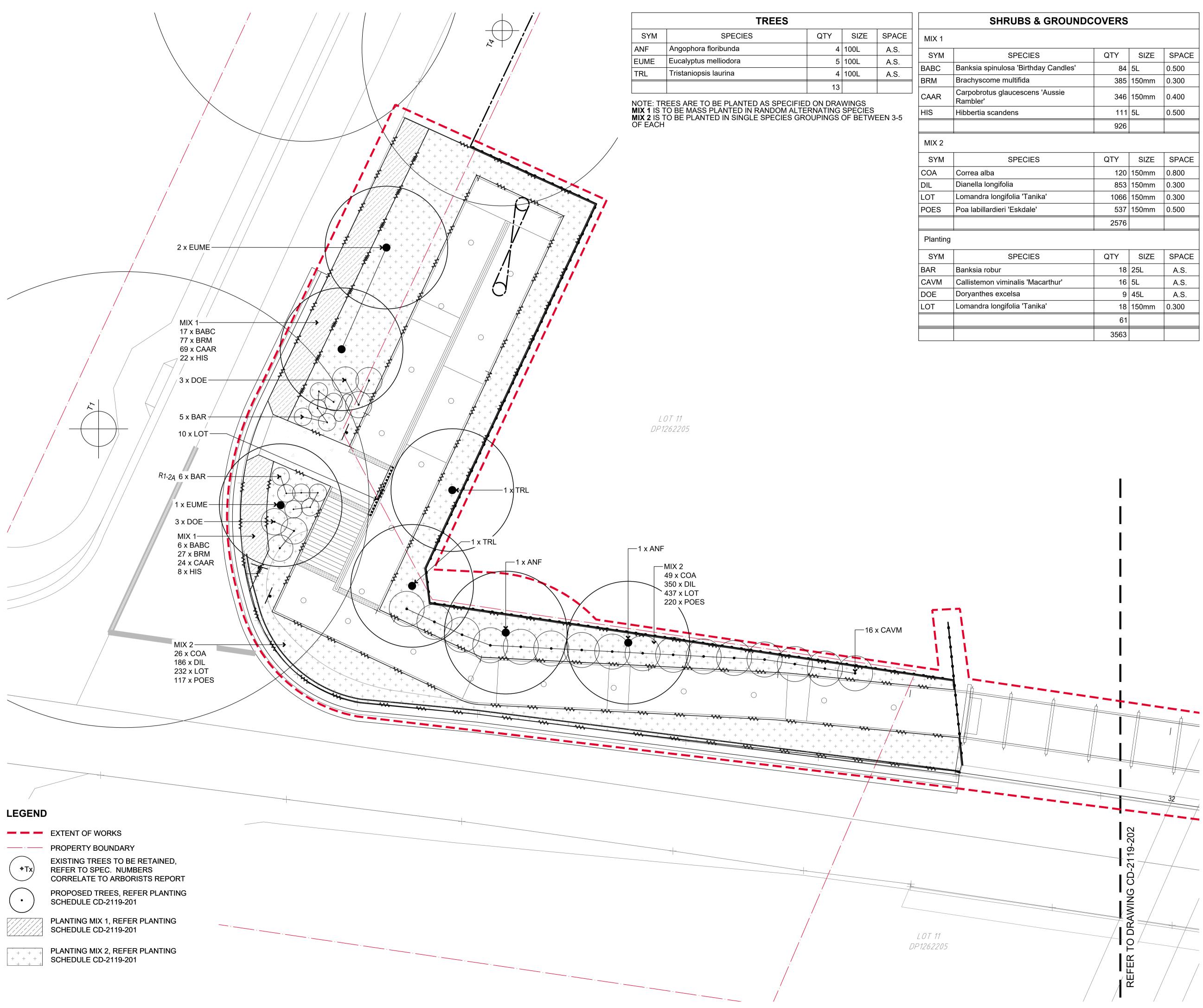
DIRECTOR

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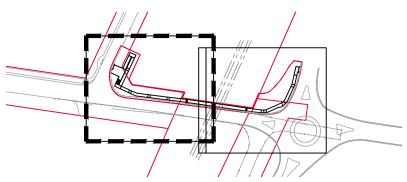


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		TREES					SHRUBS & GROUND	COVERS	ì	
	SYM	SPECIES	QTY	SIZE	SPACE	MIX 1				
	ANF	Angophora floribunda	4	100L	A.S.	SYM	SPECIES	QTY	SIZE	SPACE
	EUME	Eucalyptus melliodora	5	100L	A.S.		Banksia spinulosa 'Birthday Candles'			_
	TRL	Tristaniopsis laurina	4	100L	A.S.	BABC	Brachyscome multifida		5L	0.500
						BRM CAAR	Carpobrotus glaucescens 'Aussie Rambler'		150mm 150mm	0.300
	MIX 1 IS	REES ARE TO BE PLANTED AS SPEC TO BE MASS PLANTED IN RANDOM A TO BE PLANTED IN SINGLE SPECIES		SPECIES		HIS	Hibbertia scandens	111	5L	0.500
	OF EACH	TO BE PLANTED IN SINGLE SPECIES {	GROUPINGS	OF BEIW	EEN 3-5			926		
/						MIX 2	-	_	-	4
						SYM	SPECIES	QTY	SIZE	SPACE
						COA	Correa alba	120	150mm	0.800
						DIL	Dianella longifolia	853	150mm	0.300
+ +						LOT	Lomandra longifolia 'Tanika'	1066	150mm	0.300
+ + + 7						POES	Poa labillardieri 'Eskdale'	537	150mm	0.500
7 + + + +								2576		
· + · + + · +						Planting)			•
						SYM	SPECIES	QTY	SIZE	SPACE
						BAR	Banksia robur	18	25L	A.S.
						CAVM	Callistemon viminalis 'Macarthur'	16	5L	A.S.
						DOE	Doryanthes excelsa	9	45L	A.S.
						LOT	Lomandra longifolia 'Tanika'	18	150mm	0.300
								61		
								3563		



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CD-2119-800 Sections

CD-2119-900 Landscape Details

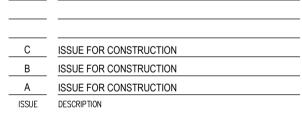
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PROJECT

MANANGLE FOOTBRIDGE

CLIENT MIRVAC

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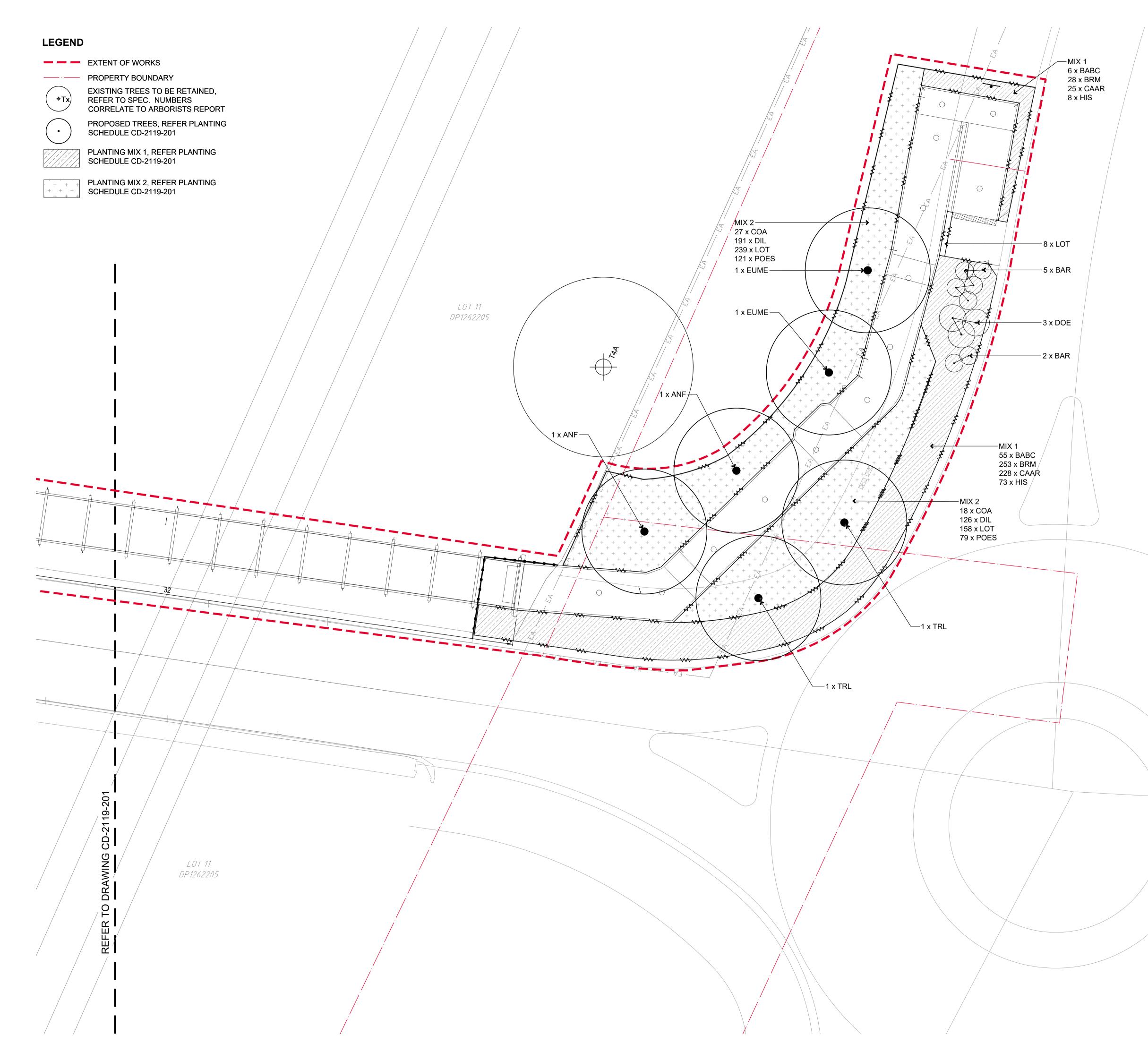
PLANTING PLAN 01

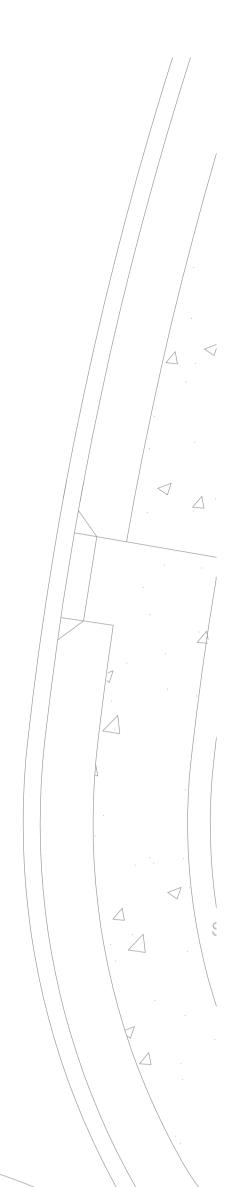
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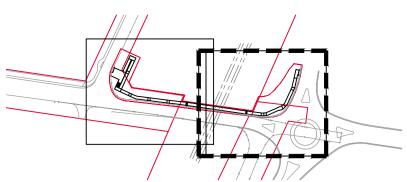


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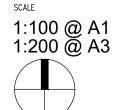
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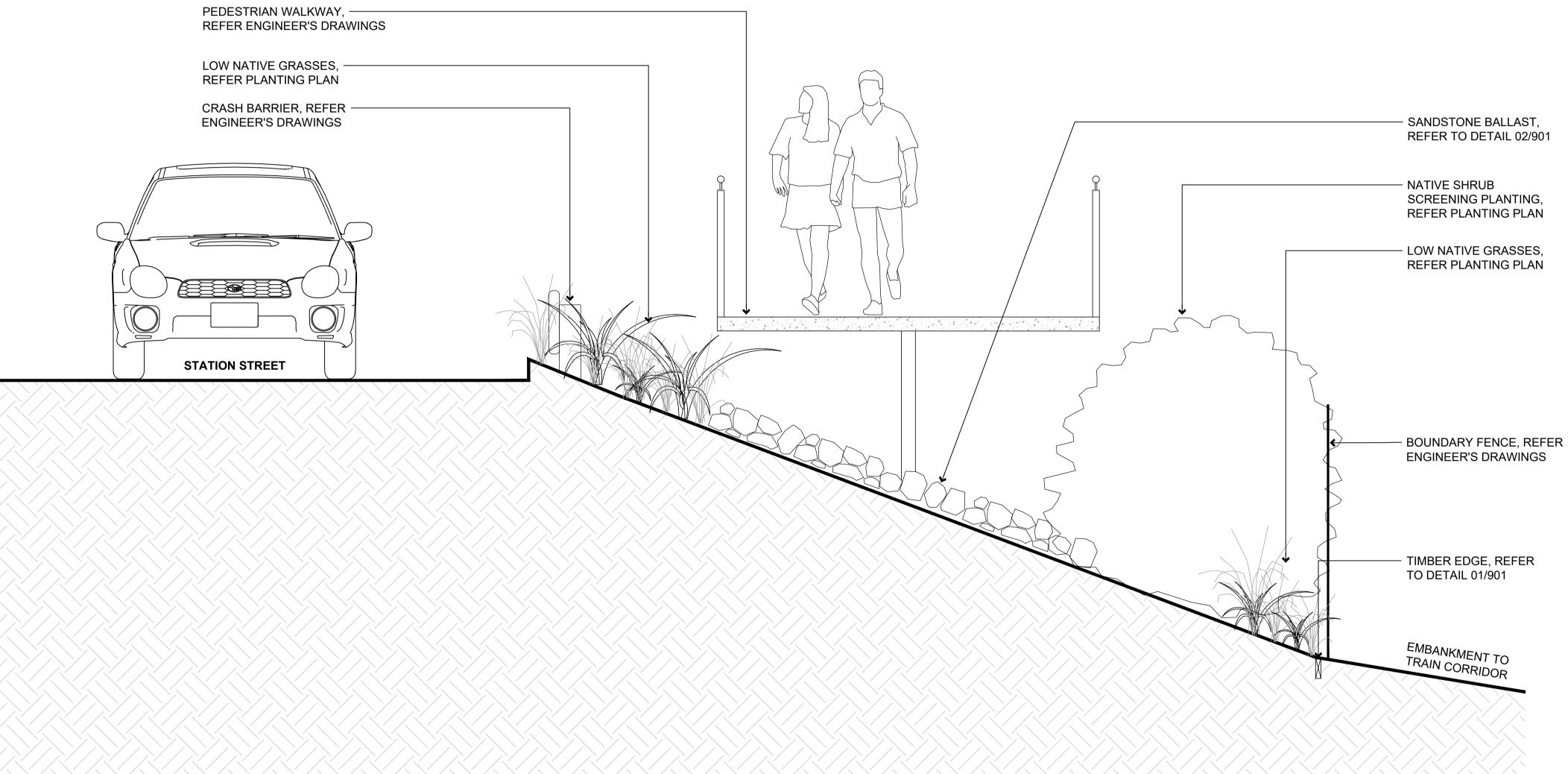
PLANTING PLAN 02

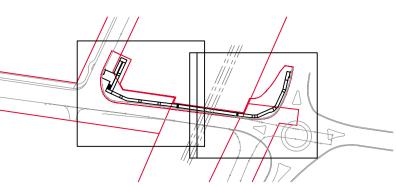
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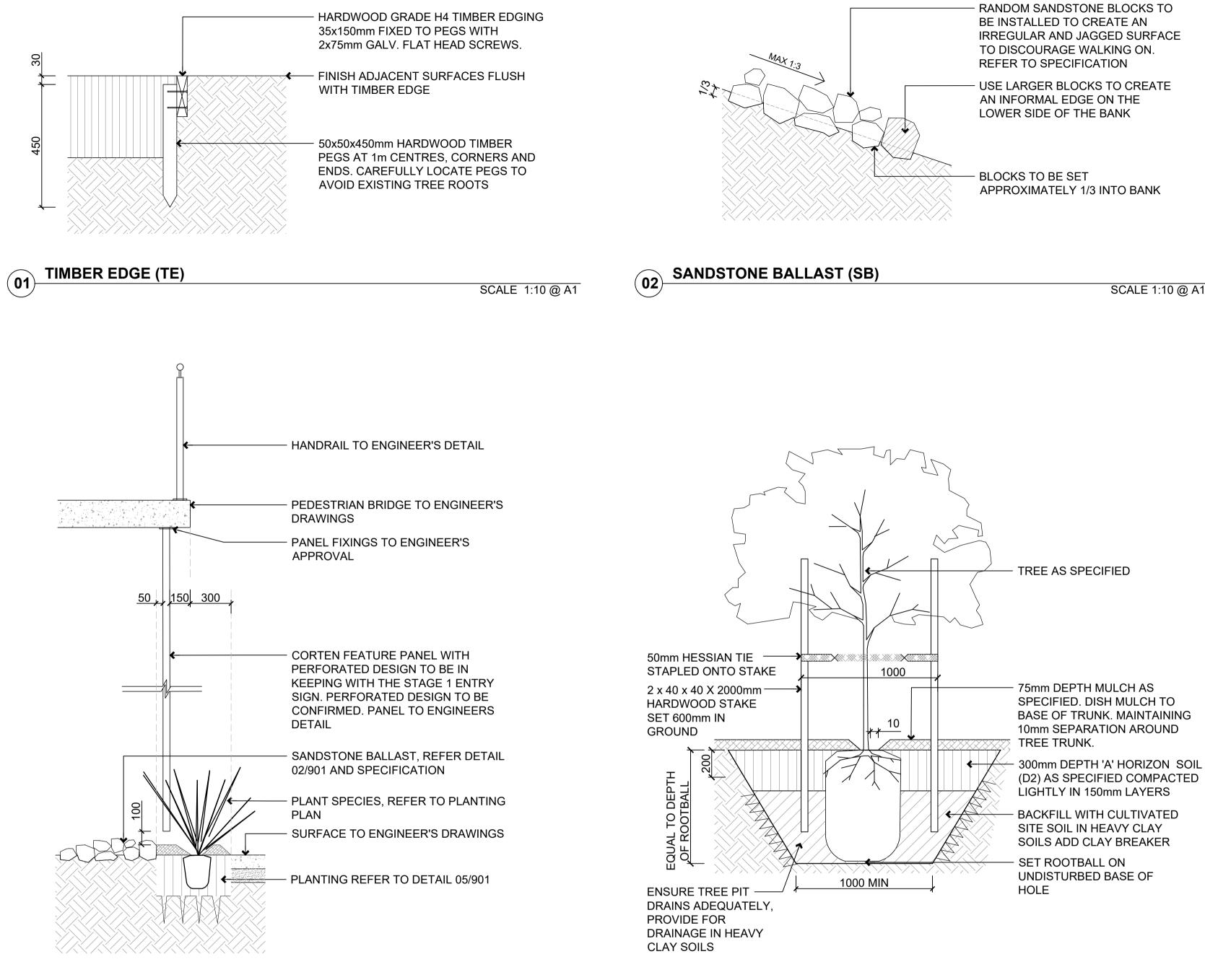
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LANDSCAPE SECTION

DRAWING NUMBER	
CD-2119-801	
scale 1:20 @ A1	
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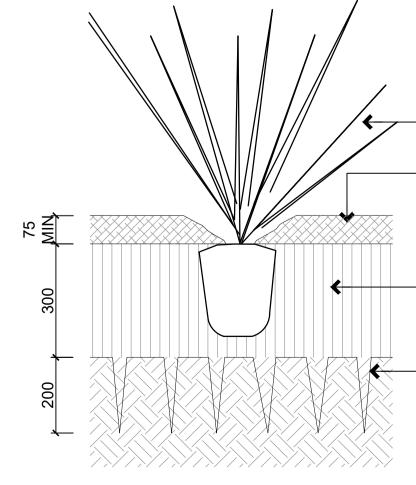




03 PERFORATED FEATURE PANEL

SCALE 1:20 @ A1

TYPICAL TREE PLANTING (04)-



PLANTING PLANS 75mm MULCH AS SPECIFIED. DISH MULCH AROUND PLANT MAINTAINING 10mm SEPARATION AROUND STEM OF PLANT.

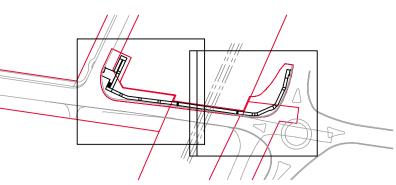
PLANT STOCK REFER TO

300mm 'A' HORIZON (D2) PLANTING SOIL. REFER SPECIFICATION

- CULTIVATE SUBGRADE AND AMELIORATE SUBGRADE AS SPECIFIED TO 200mm DEPTH

SCALE 1:10 @ A1

SCALE 1:20 @ A1



KEY PLAN

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SPECIFICATION

1. GENERAL

Read drawings in conjunction with the specification notes, Wollondilly Shire Councils Engineering Design Specification & details. Refer to: CD-2119-101 to 102 for Landscape Plans

CD-2119-201 to 202 for Planting Plans

CD-2119-801 for Sections CD-2119-901 to 902 for Details and the Specification

Refer to engineers Drawings for precise information regarding paving, finished levels, roadworks, kerbs, and drainage details.

2. SERVICES

Before landscape work is commenced, Landscape contractor is to establish the positions of all service lines and protect them from damage during construction.

3. TREE PROTECTION

Retain & protect all existing trees unless specifically noted for removal. Trees must not be removed or lopped or otherwise damaged, unless specified and approval to do so is given by the Superintendent. The existing soil level must not be raised or lowered around trees.

For existing trees to be removed, refer to the Arboricultural Impact Assessment Report, Station Street Footbridge, Menangle prepared by Sturt Noble Arboriculture.

4. WEED ERADICATION

Eradicate all weeds from planting areas prior to planting operations. Ensure that all weed growth has failed prior to commencement of soil works. Remove all weed material from site.

5. SETOUT

All setout to be approved by Superintendent prior to construction. Where no centres are shown for planting, space plants evenly to best fill the beds shown. No trees to be located within Telstra easement.

Refer to Engineers' Drawings for precise information regarding paving, finished levels, roadworks, fences and drainage details.

6. PLANT MATERIAL

Trees shall be grown and maintained to achieve compliance with NATSPEC - Specifying Trees; a guide to assessment of tree quality (2003) and AS2303:2015, Tree stock for landscape use.

Trees shall be inspected by the Landscape Architect upon delivery to ensure that they are true to species and conform to specification. Trees with the following defects will not be accepted; dry or damaged rootball, girdled roots, crown damage, pest / disease infestation, trunk damage or trees that are not self supporting.

7. SOIL

Site Topsoil 'A' Horizon: Provide sample of site topsoil for physical and chemical testing by soil testing laboratory. Allow for amelioration of site topsoil as recommended by the results of soil testing. Re-test soil to ensure it meets recommended physical and chemical properties.

Imported topsoil 'A' Horizon: Soil to be 'fit for purpose' equal to D2 Soil for Planting Areas described and specified in; Soils for Landscape Development by Simon Leake and Elke Haege. Soil shall be free from any material toxic to plant growth, stumps, roots, stones, clay lumps or other extraneous material. Imported soils shall be guaranteed to be free from noxious or troublesome weeds such as nut grass, water couch, mullumbimby couch, onion weed or oxalis. Should any such weeds appear in the grassed areas before the end of the Maintenance period, the Contractor shall eradicate same at the Applicants expense.

8. SOIL PREPARATION

The Contractor shall remove from site all builders' debris, surface stones, heaps of clay and any other material unsuitable for propagation of growth.

Tree Planting:

Excavate tree pit as shown on the detail. Backfill around rootball with soils as detailed. Refer to detail and planting specification.

Mass Planting:

Excavate planting areas to a depth of 300mm, to the locations and detail shown on the drawings. Cultivate subgrade to a depth of 200mm.

Do not rip or machine cultivate within the root zone of existing trees or existing vegetation, cultivate these areas by hand. Remove all building rubble and extraneous material.

Notify Superintendent of all soil and drainage conditions encountered during soil works and planting operations which the contractor considers detrimental to plant growth. Include a proposal for correction for approval before proceeding with work.

Turf Areas:

Regrade & rip existing subsoil to on the contour to a depth of 200 mm. Where site topsoil is available: Spread 100mm of ameliorated site topsoil & 50mm sandy loam to turf areas. Where no site topsoil is available: Spread 150mm sandy loam to turf areas.

After spreading the topsoil, it shall then be firmed, levelled and trimmed so that the finished surface of the topsoil conforms to the design levels and grades unless otherwise specified or directed.

Topsoiled areas, when finished, shall present smooth surfaces free of stones, lumps of soil and shall be gradually blended into adjoining undisturbed ground to the satisfaction of the Council Engineer.

Weed removal is to be undertaken on topsoiled area, after finished levels are established and a sufficient period has elapsed to allow any weed regrowth to occur.

9. PLANTING

Obtain plants from approved suppliers. Order early enough to ensure that specified plants are available for planting at the correct times. No extension of time will be granted because of late ordering. Furnish proof of ordering if requested.

Order sufficient quantities to allow for plant failures. Replace any plants that fail or are damaged at any stage of the work under the contract.

It is the Contractor's responsibility to provide quality control on all plant stock delivered to site and ensure it complies with the following. Reject any plants not complying and notify the Superintendent.

- tube.
- planted in the open will not be accepted.
- rootbound.
- spread will be rejected. conditions existing at the site.

Protect plants at all times from sun or drying winds. Plants that cannot be planted immediately on delivery shall be kept in the shade, well protected and adequately watered. Plants shall be handled in such a manner to avoid any damage to the plant. After removing plant from container, scarify side of rootball to prevent rootbound condition.

The Contractor shall excavate a hole 0.4-metre diameter by 0.6-metre deep for each tree or shrub to be planted, and if in the opinion of the Superintendent/Council the excavated material is unsuitable for tree growth, it shall be spread evenly and neatly over the adjoining areas, and any stones larger than 50mm shall be removed from the site.

Notify Superintendent of all soil or drainage conditions encountered during planting operations which the Landscape Contractor considers detrimental to plant growth.

The hole shall then be filled with approved soil suitable for tree growth and this shall be lightly tamped until 0.3-metres from surface, flooded with water and allowed to settle before planting takes place.

Sixty (60) grams of an approved slow release fertiliser shall be placed in the bottom of the hole immediately prior to planting and covered with a 10mm layer of topsoil.

The trees and/or shrubs shall be thoroughly watered in the containers before planting begins. Remove container taking care not to disturb the roots. When the plant is in its final position in its hole or bed the top soil level of the plant root ball shall be level with the finished surface of the soil surrounding the hole or beds. Plants shall be placed in the centre of the hole and plumb.

Backfill with approved soil mixture / filter medium, lightly tamp down the mixture and water to eliminate air pockets. Finish soil as a saucer 50mm deep and 400mm diameter around tree trunk. Fertiliser of an approved Nitrogen, Phosphoric Acid and Potash Compound type with an analysis of 10:3.9:6.2 respectively shall be lightly raked into the planting area at the rate of 30-grams per plant.

The Contractor shall provide and fix two (2) 40mm x 40mm stake 2-metres long driven 600mm into the ground and with hessian ties shall securely tie each plant in a workmanlike manner without damage to the plant.

After planting, each plant shall be immediately watered by the Contractor, who shall ensure that sufficient watering is carried out to keep the soil moist for the period of the project, including the maintenance period.

Any tree with a weak, thin trunk not capable of supporting itself when planted in the open will not be accepted. All nursery stock selected shall be street tree form with a single dominant leader. The street tree form must be maintained during the construction and maintenance period, with the eventual outcome to produce street trees with a 2.5m - 3m clear trunk canopy for handover.

For the whole period of the project, including the Maintenance Period, the Contractor shall keep the area within 500mm radius of the plant free of all grass and weed growth and shall maintain a fine tilth on the surface. The Contractor shall ensure that plants are kept free of insect and fungus attack and at the end of the maintenance period shall give an additional application of fertiliser as above specified at the rate of 60-grams per plant followed by watering. Plants shall have a healthy and vigorous appearance at the time of final completion.

Any plants which die or are vandalised either during the period of the contract or during the Maintenance Period shall be immediately replaced with plants of the same species in accordance with the requirements of this specification

10. DRAINAGE Refer to Engineers' drawings for drainage details. Notify Superintendent of all soil or drainage conditions encountered during planting operations which the Contractor considers detrimental to plant growth. Include a proposal for the correction for approval before proceeding with work.

11. ROOT BARRIERS 50mm below finished levels.

Root Barrier: 600mm Root Stop high density root barrier as supplied by Arborgreen Landscape Products or equal and approved by Superintendent.

a. Trees shall be grown and maintained to achieve compliance with NATSPEC - Specifying Trees; a guide to assessment of tree quality (2003) and AS 2303:2015, Tree stock for landscape use. b. Plants shall be grown and maintained to achieve compliance with Natspec guide - "Purchasing Landscape Trees - a guide to assessing tree quality" 1996. Particularly, trees must be self-supporting and the height above soil level must be between 1.5 - 2.5 times the height of the

c. All plants shall have a normal habit of growth and shall be sound, healthy, vigorous and free from insect infestations. Any tree or shrub with a weak, thin trunk not capable of supporting itself when

d. Plants shall have been grown in containers of the size stated on drawings, and shall have sufficient roots to hold earth together intact after removal from containers without being

Plants shall have large healthy root systems, with no evidence of root curl, restriction or damage. Plants that meet the measurements specified but do not possess a normal balanced height and

g. Plants shall be hardened off, not soft or forced, and suitable for planting in the natural climate

Install root barriers along the rear of the kerb, along the edge of adjacent concrete footpaths and to screen services as directed by Superintendent. Barrier to be installed to minimum depth 600mm and

12. TIMBER EDGE

Install hardwood timber edging of planting as shown on drawings, to the location shown on the drawings. Edging shall be flush with adjacent turf levels.

Type: 50 x 125mm hardwood

Fixing: 450 x 50 x 50mm hardwood timber pegs at minimum 1m centres, and at all corners & joins. Pegs to be secured to edging by two galvanised screws per peg.

13. SANDSTONE BALLAST

Install sandstone ballast to all accessible areas under the elevated walkway as shown on drawings. Install the sandstone blocks to ensure a rough surface is created to discourage access. Use larger blocks to create an edge along the low side of the slope and set approximately 1/3 of the block into the bank as shown in the detail.

Type: Sandstone Random Dimensions

Size: Varies Supplier: ANL (Ph: 13 14 58) Minimum depth of ballast layer to be no less than 100mm

14. MULCHING

At completion of planting all planting beds shall be mulched. Install 75mm depth mulch equal to ANL Forest Blend to areas indicated on the drawings. Place after the preparation of the planting bed, planting and all other work. Place mulch completely clear of plant stems with a minimum of 10mm bare soil showing all around plant stem base, and rake to an even surface flush with the surrounding finished levels.

15. MAKING GOOD

Make good all turf areas damaged during construction works.

16. PERFORATED FEATURE PANEL

Feature panel to be fixed to the raised walkway as shown on the plans. The panel is to create a feature at the Stevens Road entry and to restrict access to the underside of the walkway. Feature panelis to be in keeping with the Stage 1 entry sign.

Panel material: Corten steel

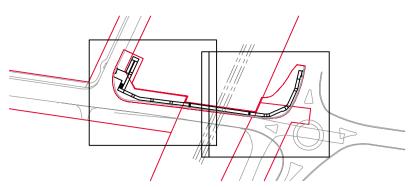
Panel fixings: To engineers approval Perforated design or pattern: TBC

17. MAINTENANCE

Maintain the works in good condition for the maintenance period. Works shall include but not be exclusive to weeding, checking and making good of irrigation, drainage and tree ties, application of fertiliser, removal of litter from plant beds and replacement of dead and dying plants.

Maintain all plants and planted areas in optimum growing condition and appearance.

- a. Water all plants as required to ensure active growth keeping areas moist but not saturated. It will be the Contractors responsibility to obtain exemption from water restrictions for general watering and establishment of plants. Watering to be undertaken in accordance with restrictions.
- b. Apply maintenance period fertiliser in accordance with the manufacturer's specifications. Exercise proper caution and take measures necessary to avoid plant burn. c. Keep planting areas free of weeds and undesirable grasses. Remove the entire root system.
- Dispose of all weeds in appropriate containers. d. Each area shall be kept clear of fallen leaves, branches and rubbish. Any soil erosion or
- subsidence shall be made good immediately. e. Inspect all plants for disease or insect damage weekly. Treat affected material immediately.
- Remove damaged or diseased growth from plants. g. Immediately replace any failed or damaged plants. Replacement shall be of equal size and
- species as the original plant(s). h. Reset to proper grades or upright position any plants that are not in their proper growing position.
- Stakes and ties shall be adjusted or replaced as required. Once trees are established all ties and support stakes are to be removed.
- Prior to the completion of the maintenance period all trees are to be crown lifted to a minimum clear trunk height of 2.5m unless agreed to by Council. Crown raising ratio is not to exceed a 50% clear trunk to 50% canopy.
- k. Pruning Plants: Prune plants to repair mechanical damage, promote dense hedge growth, to improve plant shape and form, or to clear footpaths. When branch cuts are directed, these shall be made close to and parallel to the main trunk and carefully finished to ensure guick callousing. An approved dressing shall be applied to all cut surfaces in accordance with the printed recommendations of the manufacturer.



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